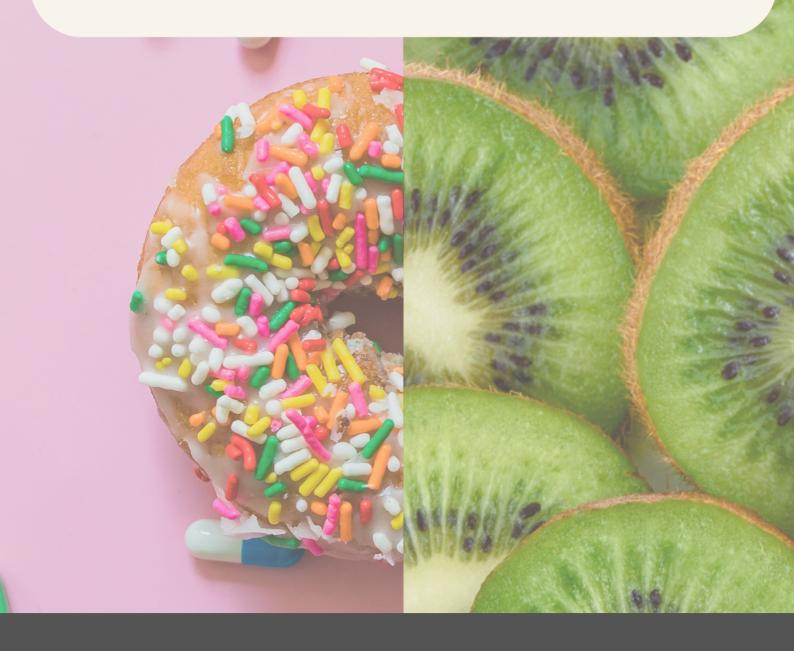
MASTER THESIS REPORT



Annemarie Keller

Erasmus University Rotterdam

Hospital Food Transition

A qualitative study on drivers and influences of stakeholders on healthy food policies in the Leiden University Medical Centre

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Erasmus University Rotterdam

Master Thesis

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A qualitative study on drivers and influences of stakeholders on healthy food policies in the Leiden University Medical Centre

Author: Annemarie Keller (641299)

Coach: Dr. Corinna Frey-Heger

Co-reader: Dr. Yan Bai

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MSc Global Business & Sustainability

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II. DECLARATION OF AUTHORSHIP

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III. ABSTRACT

Introduction: Imbalanced diets and climate change both have the potential to cause many health risks and premature mortality worldwide. Yet, food policies in hospitals don't seem to take health into account much at all. Although people go to the hospital to feel better, legumes, fruits and vegetables are rarely included sufficiently in hospital meal plans. This leaves an unrealized potential of introducing healthier diets, such as the planetary health diet into the space of healthcare. In this study, ways of changing these policies are explored by using insights about attitudes and influence of various stakeholders in the Leiden University Medical Centre (LUMC).

Methodology: This research follows a qualitative, cross-sectional design consisting of 10 indepth, semi-structured interviews among stakeholder groups from the LUMC.

Results: The findings from the field research and theoretical insights concluded that the food transition can primarily be driven through organizational support, governmental guidelines, staff training and perceived benefits, while budgetary and logistical challenges as well as opposition among staff members hinders the development. When looking at the different stakeholders, employees of the LUMC are particularly important in driving the food transition, and especially those that possess both the power and legitimacy such as doctors, dieticians, and the hospital board need to be convinced of the transition.

Keywords: healthcare, health, food policies, stakeholder theory, food transition, sustainability, protein transition, semi-structured interviews, theoretical sampling

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Annemarie Keller

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1. INTRODUCTION

Hospital food is often associated with pictures of bland dishes, fatty snacks and sugary treats from a vending machine (Mohindra et al., 2021). Patients go to the hospital to get better - yet, food policies don't seem to take health into account much at all (Freedhoff & Stevenson, 2008). Legumes, fruits and vegetables are rarely included sufficiently in hospital meal plans or canteens although healthcare professionals have long advocated for their health benefits (Benton et al., 2022; Freedhoff & Stevenson, 2008). Moreover, while one might think that adults working or being treated at the hospital should be able to make informed choices by themselves, Freedhoff & Stevenson (2008) argue that this is often not the case. The amount of fat, calories or salt is often underestimated by consumers leading to them (unknowingly) choosing unhealthy options.

This development does not only negatively influence the health of patients (Springmann et al., 2018) but also has consequences for the environment (European Commission, n.d.; Fresán & Sabaté, 2019). The global food sector is responsible for around 25% to 30% of greenhouse gas (GHG) emissions worldwide (Our World in Data, 2021). However, also the impact of the healthcare sector should not be neglected. It is estimated that it is responsible for more than four percent of CO2 emissions worldwide (Bawden, 2021) and, if healthcare would be a nation, it would be the seventh largest producer of GHG emissions (Sherman et al., 2019). In a study by Tennison et al. (2021) in England, the authors found that the largest part of emissions (62%) in healthcare is made up by supply chain activities of which around 10% (or 1.5 MT CO2) are caused by food and catering (see Figure 1 on the following page). Certainly, it can be seen that the catering services in hospitals could play a significant role in lowering the GHG emissions of hospitals, especially in considering

that changes toward a more sustainable diet would also improve patients' health through added health benefits and a lower impact from climate change related factors.

To illustrate, when increasing healthiness of the diet, for instance by reducing the amount of red meat consumed to the recommended amount, health risks are reduced (Richi et al., 2015) and GHG emissions associated with diets also decline (Conrad et al., 2023). Healthy diets such as the planetary health diet put more focus on vegetables, legumes, and plant-based protein, rather than animal products which

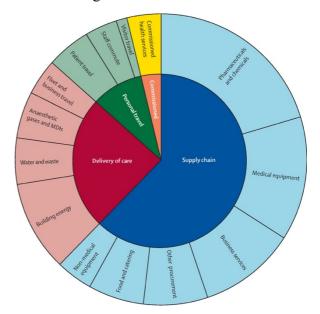


Figure 1. Contribution of different sectors to the greenhouse gas emissions of the NHS England, Source: Tennison et al., 2021

brings benefits to human and planetary health through nutritional benefits and lower GHG emissions (Shepherd, 2020). Therefore, while this study focussed mainly on healthy diets, a connection between healthy and sustainable diets can still be established and it can be implied that, though indirectly, both concepts go hand in hand to a certain degree. Therefore, while keeping in mind the interrelation with sustainability, this research explored the benefits of a healthy diet and the way to implement them.

The Leiden University Medical Centre (LUMC) also recognized the problems with health and sustainability in their food and catering services and launched the Groen en Gezond (Translation: Green and Healthy) program in its canteens. From labeling unhealthy options to introducing meat-free days or stopping the sale of sugary soft drinks and offering free water instead, the hospital tries to make sustainable, healthy options the norm (RIVM, n.d.)

However, this development has not been accepted without resistance. Hospital staff, doctors, nurses, patients and visitors all have a stake in the food served within hospitals and changes are often met with resistance. A vegetable soup with 'too many vegetables', a nut bar with 'not enough sugar' and many more examples illustrate some of the complaints which were received by the food service staff (R. van den Berg, personal communication, January 25, 2023).

Therefore, this research investigated the different stakeholder's perceptions and influences, as well as barriers and drivers regarding the food transition within the LUMC for the commissioner Medical Delta. Although current research advocates for healthy and sustainable diets in hospitals (such as studies done by McGain et al. (2009) or Moseley & Behrens (2020)), the body of literature focusses mostly on drivers such as staff support and education and barriers such as increased prices and decreased priority while not accounting for differences between the relevance of this among stakeholder groups.

As this research argues, taking a stakeholder theory lens is vital when attempting to change food policies in hospitals. Yet, existing research on stakeholder theory in the healthcare context is quite limited and does not draw conclusions on how to deal with these stakeholders, which is something this study was able to give recommendations on. In addition, existing research deals predominantly with countries such as the United States, Australia, and the United Kingdom with researched focussed on the Netherlands or the European Union (EU) only making up a marginal part of this. Given the importance of reducing dietary GHG emissions for the well-being of our planet and the impact it can have on human health (European Commission, n.d.), it is crucial to recognize the importance of hospital meal plans in this context. Current research, however, does not provide sufficient input to successfully conduct this change.

Therefore, this research aimed to fill the gap through a qualitative study on the perceptions and influence of different stakeholders on the food transition as well as enablers and barriers related to it by stakeholder group. Through this, the research question *How can insights into the perception and influence of stakeholders lead to healthy policy change in a hospital's dietary policy*? was answered. Besides the theoretical input, ten qualitative, semi-structured interviews with employees from the LUMC selected through theoretical sampling hereby acted as input. The exploratory approach combined with an analysis using a Grounded Theory approach allowed the researcher to weave back and forth between data collection and analysis provided valuable insights which expanded on the existing theory.

These in-depth interviews revealed a need to pay attention to the different needs of the present stakeholder groups and also implied the different implications the perceptions and influence of stakeholders have on the drivers and barriers in changing policies. The differences between stakeholders revealed drivers that can be salvaged in future changes of the food policies at the LUMC and also have wider implications for food policy change in hospitals through taking a stakeholder lens.

Through this, this study contributes to two bodies of literature. Firstly, to sustainability in the health sector and secondly, to stakeholder theory. More fundamentally, this study invites food policy makers in healthcare to engage in stakeholder management and recognize the differences between stakeholder groups.

2. THEORY

2.1 The value case for a planetary health diet

Imbalanced diets are responsible for many health risks worldwide and can lead to, among other health risks, obesity and malnutrition (Springmann et al., 2018). Scholars have long been advocating for plant-based diets to improve overall human health (Alsaffar, 2016; Fresán & Sabaté, 2019), and cardiovascular health (Satija & Hu, 2018) as well as to reduce premature mortality (Springmann et al., 2018).

However, nutrition practices worldwide are not only affecting our health but also the state of our planet (European Commission, n.d.; Fresán & Sabaté, 2019). Animal-derived foods are resource intense and their production is contributing to climate change, land degradation and water use. In turn this pattern leads to food insecurity and further strains on our planet, for instance in terms of GHG emissions (Fresán & Sabaté, 2019) which could be reduced through a plant-based diet (Springmann et al., 2018).

Due to the apparent connection between human and planetary health, sustainable and healthy diets have gained a lot of attention in the medical field due to their benefits on patients, employees, and the environment. In particular, the planetary health diet stands out due to its focus on vegetables, fruits, whole grains and plant-sourced proteins (Shepherd, 2020). While animal products are not strictly forbidden in this diet, they are reduced to a minimum, along with added sugars. This greatly reduced GHG emissions. Additionally, through following this diet, the burdens on human as well as planetary health can be lowered significantly (Shepherd, 2020), showing that health and sustainability can be combined when it comes to food. The following paragraphs will therefore illustrate a value case for healthy and sustainable foods in hospitals regarding health, ecological and financial factors.

With climate change greatly threatening human health (European Commission, n.d.), Moseley and Behrens (2020) argue that hospitals should not only consider the health of patients but also the well-being of the planet when drawing up their meal plans. According to the authors, a diet with a high amount of legumes, vegetables and fruits can support both factors at the same time by increasing the health of patients and also lowering GHG emissions, which reduces the strain on the planet. Adding to the debate, McGain et al. (2009) argues that those working in healthcare adhere to the principle of not causing harm to their patients which should also extend to the planet. Yet, hospitals often serve sugary and processed meals to patients, visitors, and employees.

Having said that, sustainable diets are often found to be more costly than unhealthy diets (Lee et al., 2022; Perignon et al., 2016). In a nationwide study in Brazil, Verly-Jr et al. (2022) concluded that a healthy and sustainable diet led to a cost increase of up to 24%. On the other hand, Bernstein et al. (2010) argue that even without increasing the cost of the diet, large improvements can already be made. Similarly, Perignon et al. (2016) found a decrease of dietary GHG emissions by one third to come with virtually no additional costs while still being nutritional. Therefore, it seems that significant progress can already be made without large price increases.

Additionally, when looking at the matter from another perspective, it becomes visible why even increased spending can still be justified. From a true cost accounting approach, sustainable diets seem to be substantially cheaper than conventional diets. A study in Italy found a potential saving of 741 euros per year per person if environmental, health and socioeconomic costs are considered (Minotti et al., 2022).

Based on this value case, the health sector needs to move away from their traditional approaches to nutrition "if the world is to meet the nutritional needs of a continuously growing global population faced with constant crises and change while safeguarding the health of the planet for current and future generations" (Guinto et al., 2022, p. 1). The planetary health diet seems to be better for human health and planetary well-being while still

being financially viable. Nevertheless, while there are several drivers that support this transition, researchers have also identified various barriers that make the transition to sustainable diet policies in hospitals difficult. The following two sections will therefore explore these two opposing standpoints in detail.

2.2 Drivers of sustainable food policies in hospitals

When investigating drivers of environmentally sustainable hospital food services,
Carino et al. (2021) found that values within the hospital and conditions from government
were powerful drivers in adopting more sustainable food policies in hospitals. Moreover, the
developments were often enabled internally through the dedication of personnel, leadership
support and perceived benefits, and externally through examples of other hospitals and
requirements from governments. Similarly, Buller et al. (2022) identified governmental
targets, organizational support, staff knowledge and staff training as drivers of
implementation in regard to organic foods in hospitals. Lastly, successful implementations of
policy changes have been previously seen in Australia (Moseley & Behrens, 2020), the US
(Benton et al., 2022) and the United Kingdom (McGain et al., 2009; Pencheon, 2018) who
identified factors such as policies and guidelines as important drivers (Moseley & Behrens,
2020). From this it can be concluded that drivers of sustainable food policies in hospitals are
primarily governmental guidelines (Benton et al., 2022; Buller et al, 2022; Carino et al.,
2021; Moseley & Behrens, 2020), staff and leadership support (Buller et al, 2022; Carino et
al., 2021), and perceived benefits (Carino et al., 2021).

2.3 Barriers against sustainable food policies in hospitals

When looking at barriers against sustainable food policies in hospitals, Carino et al. (2021) states that they are induced by the opposition of staff members and the insufficiency of policies. Furthermore, the price premium required to switch to sustainable foods as well as the changes required regarding production requirements and routines in the kitchen prevented the implementation of healthier and more sustainable foods (Buller et al., 2022). In their systematic review, Buller et al. (2022) also argue that concerns with supply security and food quality make the transition difficult. This shows that the implementation of sustainable diets in hospitals is primarily prevented by lack of staff support or policies (Carino et al., 2021) as well as concerns with cost and labour increases and food quality decreases (Buller et al, 2022).

2.4. A stakeholder theory perspective

After exploring planetary health diets in detail, it is crucial to understand the different stakeholder groups within the hospital to inform the further research to be conducted using stakeholder theory. This is because the current theory suggests that there is a difference in barriers and enables when it comes to dietary changes in hospitals. To exemplify, the catering staff faces different challenges than the board of directors due to their varying levels of power to change policies on their own or in conjunction with other stakeholders. However, current literature does not contain sufficient information on the different stakeholders in research, especially in the context of food policies or policy change. Therefore, this section will now provide an account of existing research which will later be enhanced in the results and discussion section.

A stakeholder is commonly defined as "any group or individual who can affect or is affected by the achievements of the organization's objective" (Freeman, 1984; as cited in

Friedman & Miles, 2006). In the healthcare context, Schiller et al. (2013) identifies seven main stakeholder groups in the healthcare context: "(1) Public, (2) Policy makers and governments, (3) Research community, (4) Practitioners and professionals, (5) Health and social service providers, (6) Civil society organizations, and (7) Private business" (p.6) which can then be further broken down into categories.

Moreover, in an article by Khosravi & Izbirak (2019), the authors identify suppliers, employees, patients, patient relatives, and the government as stakeholders in healthcare and also recommends the division into internal and external stakeholders. Therefore, it can be concluded that the stakeholders in healthcare for the context of this research are suppliers, employees, patients, the government, the public and the research community. Certain categories, such as employees, can be broken down into sub-categories which is not done in existing research.

Based on the stakeholder analysis model by Mittchel et al. (1997), these stakeholders can also be assigned to eight categories based on their power, legitimacy, and urgency.

Government. Starting with the government, they have the power and legitimacy to introduce policies regarding healthcare that hospitals in the country need to abide by. Should they prove to recognise urgency, they can be considered a definite stakeholder. Through this, they have the ability to drive the food transition via the introduction of new policies and guidelines and can even guide the most powerful stakeholders in hospitals such as the top management in their decision making.

Suppliers. Suppliers can assert power on the hospital through pricing and their offer. While it is generally possible for the hospital to switch suppliers, there are certain rules for this in healthcare which can make it difficult. In the case of food however, they have less influence then for medical devices as it is a lot less specialised and more competitive.

Therefore, they are more of a dormant stakeholder and were not deemed of particular relevance in this study.

Employees. The category of employees in a hospital can be broken down into four categories: hospital board, doctors, nurses, and catering staff / support staff. Firstly, the hospital board has a significant amount of power in a hospital and can aid the transition in gathering organisational and leadership support, by introducing new policies or by making the necessary budget available. Due to their high amount of legitimacy and their ability to recognise urgency, they are a definite stakeholder.

Secondly, doctors generally possess a lot of legitimacy and power depending on the field they are trying to influence. If they recognise the urgency, they are a definite stakeholder, otherwise a discretionary one. They can support the transition through increasing organisational support and researching a value case or hinder it through opposition.

Moreover, nurses hold a similar position to doctors in their power, legitimacy and urgency making them either a definite or discretionary stakeholder. Through their actions, they can either increase or decrease organisational support.

Lastly, catering and support staff is in direct contact with all other stakeholders. In the case of catering staff, they are also often subject to feedback from these stakeholders on the food options. Although they do possess the legitimacy to introduce changes and recognise the urgency of the situation, they are ultimately bound to decisions by the management in regard to budget and policies which makes them a dangerous stakeholder. They can, however, support the transition by educating other stakeholders, and laying out a convincing plan for changes required to food production.

Patients. Patients generally have the power to demand changes either through voting with their bill or actively voicing their opinion and also generally recognises urgency.

However, they do not possess the required legitimacy by themselves. This makes them a

dependent stakeholder as they also do not have the ability to directly influence the drivers and barriers of the food transition.

Research community. The research community consists of some doctors doing research, as well as students studying at the hospital in case it is an academic hospital. Students and researchers have a relatively high amount of legitimacy as they are doing research at the hospital and / or working there. If there is a large research community, this can also underline their legitimacy. Furthermore, they can also recognize the urgency of the issue despite their lack of power to drive changes. This makes them a *dangerous stakeholder*. During the transition, this stakeholder group can support the change via increasing the knowledge of other stakeholders through training, researching a value case and by increasing overall organizational support.

The public. The public has the ability to hold hospitals responsible for their actions and demand changes should they not be happy with the course the hospital is taking. However, as they lack the legitimacy to make changes on their own, often do not recognise the urgency and don't have the ability to directly influence the food transition, they are a dormant stakeholder. Therefore, they were not included in the further part of the study to a significant extent.

2.5 Conclusion

From this, it can be seen that there is still a lot of research to be done in regard to transitioning to healthy food policies in hospitals. Existing studies are still in early stages and have primarily been conducted outside the Netherlands and the EU. Furthermore, based on the drivers and barriers identified in this literature review, policies, members of the hospital and benefits of healthy diets should be taken into account when investigating dietary policy transitions in Dutch hospitals. However, the existing research gives a rather basic account of

stakeholders in the healthcare context. Certain categories, such as employees, can be broken down into sub-categories as their power, legitimacy and urgency is unlikely to be the same. This is not currently done in existing research. Further, the body of literature does not take support staff, such as food service staff, into account although they are vital to changing food policies.

During the field research, the perceptions, influences, and barriers of the identified stakeholders of the LUMC were therefore be explored and relevant stakeholders in the context of this transition were studied further. Through this, a new lens will be provided for stakeholder theory through providing the added insights from the healthcare and food policy context.

3. METHODOLOGY

3.1 Research design

The following section will cover the research design of the project. Starting with philosophy and approach of the research, this section will move on to the research strategy and lastly, the purpose of the research will be discussed.

Gaining a contextual understanding of perceptual differences among stakeholders of the LUMC regarding the food transition as well as the influence of these stakeholders on the matter was at the core of this research, which led to the choice of a qualitative research design. Moreover, as the research on the food transition in hospitals is still rather small - especially when looking at the Netherlands - qualitative insights are needed to inform policy change to the dietary policy of hospitals. Therefore, by using a qualitative research design different factors were explored, and the required detailed insights provided. A further argument for qualitative research arises as Bell et al. (2019) characterizes research which develops theory throughout the research process rather than being formulated a priori as qualitative.

Furthermore, data collection was done through a preliminary literature review on existing research as well as through the semi-structured interviews conducted. This was chosen as the focus as the type of insights needed was clear. Additionally, this form allowed some structure and facilitated the comparison of participants while it still gave participants the freedom to mention unknown aspects about the topic. The interviews were conducted in person whenever possible, however a telephone or online interview option were implemented in case the interviewee preferred it, or when it was not feasible to travel to the participants location due to time or budget constraints as well as other unforeseeable risks. Even though this presented some drawback such as the absence of body language (in phone interviews) or connection issues, the comfort of participants during the interview was of importance. In

addition, the feeling of too much effort being required to participate was reduced through offering this flexibility.

Lastly, a choice was made against focus groups as individual rather than group perspectives and feelings were to be captured. In addition, focus groups presented a considerable organizational challenge within the time and scope of this research.

3.1.1 Research philosophy & approach

Firstly, this research followed an inductive approach which involved developing a theory by using the findings rather than formulating hypothesis a priori (Bell et al., 2019).

Furthermore, both objectivism and constructionism were considered as ontological positions before conducting this research. However, constructionism was ultimately chosen as a stance as it, unlike objectivism, accounts for the influence of social interactions on social phenomena and acknowledges that these are constantly changing (Bell et al., 2019). Although problems with generalization can arise in this method, the influence of people was expected to be discovered within the study making constructionism relevant, nevertheless.

As a consequence of this choice, the epistemological position of interpretivism was chosen which is concerned with gaining an understanding of the drivers and processes behind behavior as well as with discovering the differences between individuals (Bell et al., 2019). As the research aimed to get insights into the differences between stakeholders and their influence on policy making, this aligned with the research goals.

3.1.2 Research strategy

Regarding the research strategy, this project followed a cross-sectional approach which involves the assessment and comparison of a group of people at one point in time and the use of interviews or focus groups in qualitative research (Bell et al., 2019). The group of

people hereby constituted of stakeholders in the LUMC. In order to gain in-depth insights into the differences between stakeholders within policy change in hospitals, the research focused on one hospital - namely the Leiden University Medical Centre - and examined different stakeholders within its scope. A choice was made against other types of research strategies as the project did not involve experimental manipulation or a long scope of time as found in longitudinal studies.

3.1.3. Research purpose

Furthermore, the study had a quite exploratory approach as new theory still needs to be developed (Saunders et al., 2012) and since the study followed an inductive approach in which a specific case is used to make broad generalizations. Although some theory is already known, there are still a lot of gaps, especially when it comes to applications within the Netherlands or even Europe. This open approach was also displayed in the interview guide (see Appendix 1) which allowed spontaneous insights to arise while still providing a basic structure.

3.2 Performed research activities

In the following section, the way in which the research activities contributed to answering the research questions will be described. Starting with a description of the sampling method used, this section moves on to examining the data collection and data analysis procedure in detail.

3.2.1 Sampling methods and respondents

As a sampling method, this study made use of a type of purposive sampling called theoretical sampling. This approach is characterized by an iterative nature in which the researcher weaves back and forth between data collection, coding of interviews and data analysis until they reach theoretical saturation. In addition, the research questions are taken into account when sampling with this method (Bell et al., 2019).

As the nature of the research was qualitative, probability sampling was not chosen as it is inappropriate for the research design (Bell et al., 2019). While this decision negatively impacted the generalisation and external validity of the study, this is less important in a qualitative research design according to Bell et al. (2019).

Within the study, the sampling method chosen meant that participants were selected based on whether or not they were employed by the Leiden University Medical Centre, and their role within this environment (such as doctor, nurse or supporting staff) until all categories were saturated. Furthermore, the selection of respondents was made using the network of the study's commissioner as well as through the employee data bases of the Leiden University Medical Centre.

3.2.2 Data collection

In order to produce in-depth, qualitative insights, data was collected by means of a preliminary study of literature as well as semi-structured, qualitative interviews with different stakeholders within the LUMC.

To understand previous developments and current trends within the area of food transition and policy change in hospitals, the literature study supported the researcher in gaining first theoretical ideas and helped in deciding which insights are still missing and furthermore, it informed the interview guide.

After studying the literature, ten semi-structured interviews were conducted between the 14th of April and 10th of May 2023 with different stakeholders in the hospital. The interviewee group included five doctors, one nurse, two dieticians, one employee from the

food service department, and a member of the Board of Directors. Among the doctors, one was employed in the gynecology department, two in the cardiology department and two in the endocrinology department. Although questions differed slightly for the different stakeholders, the general topics covered during the interview were the same to facilitate the comparison of groups.

3.2.3 Pilot interviews

Before starting the interview phase, a pilot interview was conducted with two members of the catering staff in the LUMC. Based on this, the researcher was able to revise the interview guide and refine the questions to ask in the official interview round. Furthermore, as the participants were also able to give valuable input into the perceptions of other stakeholders due to their communication with them.

3.2.4 Data Analysis

After data collection, the conducted interviews were analyzed by means of the Grounded Theory (GT) approach. As mentioned earlier in this chapter, this allowed weaving back and forth between data collection, coding and data analysis (Bell et al., 2019). Through the coding process consisting of three steps - open, axial and selective coding - emerging concepts and categories were defined throughout the entire research process. Moreover, GT involved the use of theoretical saturations whereby sampling continued until all data categories were saturated as well as the use of constant comparison in which codes were compared to attain theoretical ideas (Bell et al., 2019).

Throughout the different rounds of analysis, which consisted out of the three steps of coding, the researcher went back to the theoretical findings and the interview findings. After coding the interviews using open codes or concepts close to the actual content such as

'Introduction healthy snacks', 'Food policies important' or 'Large organization makes changes difficult'. This reduced the chunk of data and allowed the researcher to focus on the most relevant information. These were summarized into categories through axial coding by drawing connections between the codes. Categories included 'Organisational', 'Food policies' and 'Increase healthy options' and were constructed using insights from the theoretical findings and logical connections between codes. During the last step of coding in grounded theory, selective coding, five core categories were introduced. These grouped the categories found in axial coding into the pillars 'Current situation', 'Perception', 'Influence', 'Enablers' and 'Barriers' and are related to the theoretical insights. These also helped in guiding the structure for the findings section and ultimately made up the components needed to answer the research question.

Although this data analysis method has been subject to criticism such as whether it results in actual theory and due to the large amount of time spent transcribing (Bell et al., 2019), this method was chosen as it allows benefits such as the deep immersion into the research topic and as it creates rich data.

3.3 Critical Methodological Evaluation

3.3.1. Used methods and sampling

As this study followed a theoretical sampling approach, the researcher was able to conduct the data collection and analysis in an iterative way. New theoretical hunches and concepts that were brought up in another interview were therefore able to be explored further in future interviews. In addition, sampling was able to be conducted based on emerging theoretical ideas and came to a halt when the data across all categories became saturated and the interviews yielded no new information.

Nevertheless, the choice of purposive sampling and more specifically theoretical sampling also limited the ability to generalize the findings of the study to the entire population. In contrast to probability sampling, where each member of the population is equally likely to be part of the sample (Bell et al., 2019), this is not the case in theoretical sampling.

Moreover, the sample is unlikely to be representative. Within the sample of interviewees, there is no equal division between stakeholders, as there are more doctors than any other stakeholder group represented in the interviewee group and further, the proportions of the actual population was not taken into account during the sampling process. These factors lead to the fact that the findings cannot be applied to other hospitals, for instance in the Netherlands or abroad.

3.3.2 Data collection process

During the data collection process, the researcher made use of a scheduling tool allowing interviewees to book a time in the researcher's schedule at their own convenience. Furthermore, the interviewees were able to choose their preferred method of conducting the interview. This process proved to be very efficient, resulted in no cancellations or no-shows, and led to interviewees feeling comfortable during the interviews with their chosen method. Out of the ten interviews, two were conducted via the phone, five via online services such as Zoom and Microsoft Teams and three in-person at the LUMC.

However, as the interviews were conducted in English, which was neither the native language of the interviewees, nor of the participants, this might have resulted in errors due to language barriers. To overcome this and make the interviewees more comfortable, the researcher encouraged the interviewer to say words they don't know in Dutch to make them more comfortable. Those words were later translated by the interviewer to ensure less errors.

Lastly, due to ethical concerns and the difficulty of access, patients of the LUMC were not interviewed as part of this research. Based on the insights from the remaining interviewees and the stakeholder analysis conducted, it is not expected that this stakeholder group is very impacted by the barriers and drivers.

3.3.3 Credibility of the research findings

Due to the qualitative research approach and the use of semi-structured interviews, the analysis of findings relied heavily on the interpretations and subjective judgements of the researcher. While this means that the research findings' credibility can be seen as critical, this is a natural risk occurring with this matter of data collection and was outweighed by the potential to gain in-depth insights into the perceptions and experiences of the various stakeholder groups. In addition, findings from the field research align with the theoretical insights which increases the confidence in the findings.

Furthermore, during the interviews, interviewer effects might have played a role in influencing the interviewees. To ensure this effect stays marginal, the interview guideline was drawn up which gave consistency in structure and wording during all interviews conducted. Adding to this, the problem of meaning, where the interpretation of concepts varies between the researcher and interviewee might have influenced the findings. As difficult concepts such as the planetary health diet were defined by the researcher, this effect should have a low influence.

Finally, as this research was qualitative and used a purposive sampling method, it cannot be inferred to be representative of the population. This issue with external reliability is a common issue with this type of research and, as specified by Bell et al. (2019), qualitative research is not intended to represent an entire population.

4. ANALYSIS OF RESULTS

This chapter aims to describe the findings of the 10 analysed interviews and provides the basis to answer the research question *How can insights into the perception and influence of stakeholders lead to healthy policy change in a hospital's dietary policy?*

As a starting point for the research, an overview of the current situation of the food services in the LUMC was constructed using the accounts of the interviewees. This showed that while some changes toward more healthy food have already been made, there is still a lot of room for improvement. By looking at past changes and asking interviewees of their perception about previous changes and the current situation, the researcher was able to assess the general perception among stakeholder groups, their perceived influence and the drivers and barriers present. It became clear that there are certain drivers that can facilitate policy change such as staff support and other factors, which includes barriers such as logistics and budget, have the potential to slow or even hinder the change. Stakeholder theory provided an input across the various insights and allowed differences in perception as well as drivers and barriers by stakeholder group to be discovered. Working with the drivers and barriers per stakeholder group as well as taking account their perceptions and influences is therefore key to successful policy change.

The analysis is based on the results of the theoretical orientation and the findings of the interviews which can be found in the coding scheme (Appendix 3) and will be of use in Chapter 5 which will contrast the results with previous theory and give recommendations on the business problem.

4.1 Results on the current food policies at the LUMC

In this section, an overview of the current food landscape at the LUMC will be given based on the interviewees' account. This enabled the researcher to gain an understanding of

the current situation, built a basis for understanding the perceptions of stakeholders and furthermore, helped in identifying drivers and barriers to changes in the food landscape in the past.

4.1.1 Current food choices available

In the field research phase, it quickly became clear that there are three main consumer groups for the food services at the LUMC. The patients staying in the ward, employees of the hospital and visitors or patients not staying overnight – the patients staying in the hospital hereby have a separate system to get food then the other two consumer groups.

Looking at the food services in the ward, patients have the ability to choose options for dinner from a menu. There is the option to order a predetermined chef's menu or to pick components of the meal separately to cater to individual diets or preferences as illustrated by Interviewee 2.

Interviewee 2 (Food services): "If you choose to get the chef's menu, you get the chef's menu that we serve without salt, less fat and vegetarian. If you don't like that, you have the choice for every a few components like meat, potatoes, sauce, the types of things that you can choose from five different choices. Except for the protein we have. We have meats, fish, and vegetarian."

For the other meals of the day, patients can choose, for instance, bread or cornflakes for breakfast and lunch as well as some snacks for in the afternoon and evening.

Interviewee 7 (Dietician): "In the morning the patients that are on the clinical departments can choose breads. Besides crackers. We have cornflakes. Well, that kind

of products and of course we have cheese and ham, chocolate pasta, peanut butter and for the drink. We have milk, karnemelk, chocolate milk, juices. [...] And for lunch, we have the same products as at the learned of at breakfast."

Interviewee 5 (Nurse): "In the afternoon, the kitchen people [...] walk by the patients for another round of coffee or tea or some sodas, and then in the evening around eight o'clock they walk by again."

Furthermore, there is a restaurant for all other consumer groups. Generally, this canteen offers options such as sandwiches, salads, fried food, snacks, cakes, and warm meals. However, there are some options that stand out in relation to this study which have been mentioned by nearly all interviewees. These are the salad bar which allows consumers to make their own salad and the absence of fried options – both things have been mainly received positively. According to the interviewees, the only deep-fried option regularly available in the restaurant are 'kroketten'.

Interviewee 4 (Doctor, Endocrinology): "[...] the salad bar is most prominent now in the middle of the food restaurant."

Interviewee 6 (Doctor, Endocrinology): "But you can get chips and and kroketten and all kinds of bad stuff as well."

4.1.2 Previous changes to the food choices

Moreover, during the interviews it became clear that the food services at the LUMC have gone through quite some changes already in the past years which also have helped this study in assessing which methods work in the specific environment. The changes have mostly been dealing with making the food services healthier, but also food waste and sustainability

were considered. Asking the interviewees to describe some of the changes they saw in the past, provided a basis for the remaining sub-sections necessary to answer the research question.

The most frequently named change is the vast reduction of deep-fried options.

According to several interviewees, the LUMC used to be a hospital which served a lot of fries and unhealthy options, but these have been greatly reduced and the remaining ones have been made less visible.

Interviewee 1 (Doctor, Cardiology): "The deep-fried options were tapered down.
[...] They were put more out of sight."

Interviewee 2 (Food services): "but they changed that as well. You don't have any snacks, like fries."

Interviewee 4 (Doctor, Endocrinology): "Yeah, I think they have a very wide range of options. They sort of blocked the less healthy options a bit more since maybe one or two years. [...] So it used to be a very big fried items corner, you know, and only so well basically, all these snacks and, and, and chips, but they... I think you'll even have to order them now. There are only a few kroketten in there."

In addition, all interviewees have recognised that the food options offer an increasing amount of healthy options in recent years.

Interviewee 9 (Doctor, Cardiologist): "We are trying to improve the choices and to let people make more healthy choices."

Interviewee 1 (Doctor, Cardiologist): "Healthiness has improved over the last four years."

Interviewee 6 (Doctor, Endocrinology): "A lot has changed. So, a lot of things have become more healthy."

The same change can also be observed in the patient food services as described in an interview by a nurse:

Interviewee 5 (Nurse): "In the morning, lunch, of course and dinner, around five o'clock in between there are very healthy snacks. [...] they are very healthy and with extra protein in it."

In addition, changes in other areas can be observed. Namely, the number of vegetarian options has been increased and patients with special dietary requirements due to an illness or surgery are catered to separately.

Interviewee 1 (Doctor, Cardiology): "There's usually like two vegetarian options to fish options, some meat options as well."

Interviewee 7 (Dietician): "We have some adjusted menus for some patients. So for example, patients who had upper GI surgery, we have a special diet. Well, it's it's a diet that is easily digestable. So we have some adjusted menus. For some of the patients but not two diets for the whole hospital."

Looking at all the changes that have previously occurred, interviewees had the general impression that while there is already a transition toward healthy food, this change is going quite slow and has also been less present in recent months.

Interviewee 1 (Doctor, Cardiology): "Some changes have been done, have been made. But it is fairly slow going."

Interviewee 4 (Doctor, Endocrinology): "I think I think the transition is already there if I understand this correctly."

Interviewee 6 (Doctor, Endocrinology): "A year or so I do not notice very much change anymore, unfortunately, because some things cannot be improved, I guess. But it's always you know, there's always tension because there are commercial interests."

4.2 Results on the stakeholders in the LUMC

When looking at the empirical case, the stakeholder groups identified within the LUMC are the Dutch government, the hospital board, catering staff, doctors, nurses, patients, visitors, the local population of Leiden, Students at the LUMC and organizations like Medical Delta. Following the identification, these groups were analysed following the model proposed by Mittchel et al. (1997), which assigns stakeholders to eight distinct categories depending on their levels of power, legitimacy, and urgency. In addition, insights from the interviews were used to provide further information about the different stakeholders and the following sections utilize these findings in answering the research question. Based on this typology, stakeholder relationships can be managed in a better way. For the resulting VREN diagram refer to Appendix 2.

Dutch Government. The Dutch government is responsible for nationwide policies in the Netherlands and has the power to enforce them in addition to their legitimacy as they are elected by the Dutch population to represent them in these matters. Through ministries such as the health, wellbeing and sports ministry, the Dutch government is able to introduce new policies or agreements. For instance, an accord for healthier living has been signed last year which establishes goals regarding overweight and mental health in the Netherlands

(Ministerie van Volksgezondheid, Welzijn en Sport, 2022). This also illustrates that they recognize the urgency of the situation and makes them a *definite stakeholder* according to the classification of Mittchel et al. (1997).

Hospital board. The board of the LUMC has a relatively large amount of power within their organization. Despite regulations from the government, they can guide decisions around the LUMC and, depending on their interests and priorities, decide to move further with sustainable initiatives or not. As can be seen in initiatives such as Groen en Gezond illustrated earlier, the board does support these initiatives and therefore has a quite high level of urgency. Lastly, they have a lot of legitimacy within the LUMC due to their authority and possibility to influence decision making. Therefore, the hospital board of the LUMC is a definite stakeholder.

Catering staff. Unlike other stakeholders, the catering staff is in direct contact with all stakeholders of the LUMC. Whether it is a patient getting a meal plan, a visitor grabbing a snack or a doctor buying lunch, the catering department gets feedback from all sides. This gives them a high amount of legitimacy. In addition, they also recognize the urgency which can be seen in the initiatives they have started within the LUMC and also their interest in supporting this research with their input. However, as they are bound to policies and decisions of the hospital board as well as the opinions of other stakeholders to a large extent, they do not possess a lot of power. Therefore, they are a *dangerous stakeholder*.

Doctors. Doctors generally have a lot of legitimacy within the LUMC due to their position of authority. However, this level of legitimacy can differ depending on whether they are e.g. a specialist or not. Furthermore, doctors have a large amount of power as, especially specialists, can decide on some rules within their department and they can also come to staff such as the catering department to demand changes. If doctors recognize the urgency, they

can be classified as a *definite stakeholder*, otherwise they can be classified as a *discretionary* stakeholder.

Nurses. Similarly to doctors, nurses have legitimacy when it comes to dietary policies as they are in direct contact with patients and have an education and authority in the field. They also have power to drive changes (although perhaps less than other stakeholders) and lastly, they also have the ability to recognize urgency. If they do so, they can be classified as a *definite stakeholder*, and if they do not, as was the case in this study, they can be classified as a *discretionary stakeholder*.

Patients of the LUMC. Patients of the LUMC have the power to demand and influence changes to the dietary policies. To exemplify, they are able to choose vegetarian or plant-based meals during their stay at the hospital or bring their interests to the catering staff or another entity that will address their concerns. However, they are dependent on the legitimacy of other stakeholders in their claims as they do not necessarily possess it on their own. Moreover, this stakeholder also recognizes the urgency of dietary policies as it is related to their wellbeing and recovery.

Local population of Leiden and visitors of the LUMC. The local population has the ability to assert power, especially if they form groups or initiatives. However, this stakeholder alone does not have the legitimacy to carry out their own agenda unless they partner up with other stakeholders such as NGOs or get support by a large part of the population. If they recognize the urgency of the issue with dietary policies in the hospital, they can be classified as a *dependent stakeholder*, otherwise (and more commonly) they are a *dormant* one.

Students at the LUMC. Students studying at the LUMC have a relatively high amount of legitimacy as they are doing research at the LUMC and / or working there. There is also a large number of students at the LUMC which further underlines their legitimacy.

Furthermore, they also recognize the urgency of the issue despite their lack of power to drive changes. This makes them a *dangerous stakeholder*.

Medical Delta. As the last identified stakeholder and case holder of this research, Medical Delta has recognized the urgency of the situation as they constantly aim to drive sustainable changes at the LUMC (Medical Delta, 2019). Due to their alliances with universities, scientists, organisations and parties within the LUMC (Medical Delta, 2019), they also have a high level of legitimacy to drive these changes. Due to their connections and position within the LUMC they possess power, however, this is generally less than other stakeholders. This makes them a *dangerous stakeholder*.

4.3 Results on the perception of food policies at the LUMC

After analyzing the current situation and the stakeholders present in the hospital, it was vital to gain a more in-depth insight into the different stakeholder groups. In the following, the perception toward the food policies at the LUMC will be presented based on the different stakeholders interviewed. This allows to draw conclusions on how changes in the past and presence were perceived and what priorities the stakeholder groups have.

4.3.1 Importance of food policies among stakeholders

During the interviews, it became clear that not all stakeholders interviewed assigned the same importance to food policies in the LUMC. Firstly, doctors, dieticians and catering staff gave a high importance to food policies. This was usually due to a focus of patient and planetary health as the interviewees made a connection between these factors and diets.

Interviewee 9 (Doctor, Cardiology): "I think that is extremely important. Yeah, the less meat, the better. I mean, that is a common thing. Everybody knows that. The footprint of meat production is enormous as compared to plant-based foods."

Interviewee 1 (Doctor, Cardiology): "I care mainly for a for patient health.

Planetary health comes close seconds in that regard."

This is important to note as doctors and dieticians are a definite stakeholder with enough power, legitimacy, and urgency to influence changes. Gaining their favor to conduct future changes is therefore vital. In addition, catering staff is a dangerous stakeholder as they are not able to conduct all desired changes due to organizational limitations. During future changes, the perceptions of this stakeholder should be accounted for as they can otherwise get dissatisfied and endanger the course of the change.

Interestingly, these stakeholder groups were also the ones that expressed a preference for more vegetarian or plant-based options in the LUMC's food services, or even a completely vegetarian offer.

Interviewee 8 (Doctor, Gynocology): "I think it's better to have a vegetarian restaurants because then the supply is broader. I've always found for vegetarian food that there is much more choice to eat. Now they have meat and they have a choice of non meat. But if there is no meat, they make a broader like..."

Interviewee 9 (Doctor, Cardiology): "Yeah, it would be plant-based. Plant-based diet, healthy, regional, and also surrounded with education towards the consumers."

Furthermore, during the interviews, the board of directors found food policies important mainly in regard to promoting patient health, while other factors did not play a

significant role. However, it was also recognised by this stakeholder that a healthy hospital requires a holistic view on all areas of the hospital rather than just looking at food.

Interviewee 10 (Board of Directors): "I take it from a little bit different angle. So when you come here into the hospital, the first thing you see is these automatic machines where you can buy drinks. [...] Number two is... This hospital is the best hospital, I think, in the world to be reached by public transport. But we also have one of the largest facilities for parking your car here. [...] So, when you think about health and about the impact on planets and about public transport and everything, I think you should not focus only on food but also on movement and things like that."

This is vital in the context of this research as the Board of Directors is the stakeholder with the most power in the LUMC. Although they are bound by, for instance, organizational culture and governmental policies, they have the most power to conduct changes if desired. Convincing them of the change is therefore important to reduce organizational barriers such as management approval and budgets as they can choose not to approve changes that do not fit their current course of action.

Lastly, nurses were more interested in the patient's wellbeing and the daily activities they need to get done rather than food policies.

Interviewee 5 (Nurse): "I'm a nurse, but I do administration. I do IT, I do everything [...] so we don't want to mess up with the food."

In this study, nurses can therefore be considered a more discretionary stakeholder as they do not seem to understand the urgency of the situation. When changing food policies, engaging in measures such as educating this stakeholder can therefore help in gaining support of the change or at least reduce resistance.

4.3.2 Perceptions planetary health diet among stakeholders

The study also revealed varying perspectives among stakeholders regarding the implementation of a planetary health diet in a hospital setting. The dietician manager expressed that it was not yet time to make significant changes, and other parties needed to make changes first.

Nurses, on the other hand, showed more interest in the patients' overall well-being, including daily activities that needed to be done, rather than implementing food policies as described in the previous section. This is in line with their discretionary position in the stakeholder diagram as they do not recognize urgency. Doctors and dieticians, however, saw only benefits in introducing this type of diet for patient and planetary health but identified potential logistical issues. This also reflects their position as a definite stakeholder in a way that they recognize the urgency and have the power and legitimacy to support upcoming changes.

Interviewee 1 (Doctor, Cardiology): "Wholly agree with that. [...] In all parts. It's better for planet health. Yes, it's better for the budget of the hospital because meat is more expensive. And it's better for the patients, visitors, employees, and hospital."

Interviewee 6 (Doctor, Endocrinology): "I would see only benefits. I think, it would benefit the patients it would benefit the staff, it would benefit students, it would benefit everyone and it would also benefit the planet. So, if that could be established, I would be very, very happy."

Interviewee 7 (Dietician): "If the patients will get more fibre, I think that is for most of the patients a benefit. But products that contain a lot of fibres, sometimes is not so easy to ingest and so you need to have a balance between that I think."

The board of directors highlighted a holistic perspective on health, with the overall image of the hospital regarding health being the most critical factor as indicated previously. From a stakeholder lens, understanding this is crucial as the board of directors has perhaps the most power and legitimacy of all stakeholders interviewed, and in addition, enough urgency to drive these changes. However, their focus lies on other topics which makes convincing them of the change vital.

Overall, these findings suggest that implementing a sustainable plant-based diet in a hospital setting requires a consideration of multiple perspectives and stakeholder interests.

Some of the interviewees also stressed that people do not want to feel like something is taken from them and expected resistance should the hospital go fully vegetarian, for instance.

Interviewee 1 (Doctor, Cardiology): Well, it's a change. And change is always a challenge. So people will miss options. They were previously enjoying and see that as a loss.

Interviewee 2 (Food services): "I'm, I am positive about the food transition. But I'm not somebody who says, no, no meat only plant based. [...] So I don't think you can say no meat anymore or so. They say 50:50, 80:20 I don't know anymore."

Interviewee 3 (Dietician): "I'm an adult and I can decide what I want to eat and whether I want to choose something which is healthy or a little bit less healthy."

Interviewee 6 (Doctor, Endocrinology): "Well, I know that quite a few colleagues of mine, actually, were disappointed that for example, the pancakes with sugar, were

not no longer available. And also, the I think the Kroketten are less available nowadays and some people are really disappointed."

4.4 Results on the perceived influence of interviewees on food policies

The following section will deal with the perceived influence the interviewees feel they have toward influencing food policies at the LUMC before presenting findings on the influence the interviewees assign to other stakeholders. Through this, the power and legitimacy of the different stakeholders was able to be assessed with more confidence and inferences about some of the drivers and barriers can be made.

4.4.1 Perceived influence among stakeholders

In regards to the perceived influence among stakeholders, it was found that individuals who had previously exerted influence on food services or were in a position to do so, believed that they possessed a high level of influence. When comparing this with the stakeholder matrix, it can be seen that these are also the stakeholders that possessed legitimacy and urgency. Furthermore, these individuals tended to be the most motivated, confident, and engaged in making changes.

Interviewee 2 (Food services): "I have great influence."

Interviewee 6 (Doctor, Endocrinology): "I had many talks. Well, that's a couple of years ago, but that since then a lot has changed. [...] And I do feel that I have had quite some influence on what happened in our kitchen."

Interviewee 9 (Doctor, Cardiology): "I think I have a rather big say in it."

Conversely, nurses reported feeling a lack of influence over food services which corresponds to their position as a discretionary stakeholder

Interviewee 5 (Nurse): (Do you feel like you have any influence in changing [the food policies]?) No, no.

Additionally, doctors who had previously experienced unsuccessful attempts to influence food services perceived their influence to be mediocre or even small. This suggests that not all doctors have the same amount of power and legitimacy, though no relevant connections between specializations could be found in this study.

Interviewee 4 (Doctor, Endocrinology): "There is a colleague of mine. [...] I think he's actively, actively working together with the [...] I think he is influential and maybe as one of the few people here but uh, no, I don't see any influence on me."

Interviewee 8 (Doctor, Gynocology): "It looks like zero? Well, I'm in a little bit of a position but for example, I wrote to the, the Board of Directors, I said, why don't you make a vegetarian restaurant here as first academic hospital and they said: No, we're not gonna do that."

4.4.2 Perceived influence of others

During the interviewees, other parties which hold a lot of influence where often mentioned. In particular, the Board of Directors and the kitchen staff have a reputation among the interviewee group of possessing a lot of influence on food policies.

Interviewee 1 (Doctor, Cardiology): "If the Board of Directors says you have to do this, it goes a lot faster."

Interviewee 6 (Doctor, Endocrinology): "By far the most the most important source of change is the kitchen staff. They are you know, they're so they are convinced that they need to offer more healthy food. And, and that's the reason why it changes slowly but surely."

Interviewee 7 (Dietician): "In most of the hospitals, it will be the head of the department nutrition from the kitchen. [...] We're not the person who will decide it essentially."

Interviewee 6 (Doctor, Endocrinology): There's also the Board of Directors of the hospital that can listen. And [...] I guess, in the last couple of years, our board allowed the kitchen to diminish the fast food section to make it smaller. But I know that many years ago, there was also they tried to do that and then the board of directors said no. [...] And so this has changed also the - Our board is convinced that we need to eat more healthy, so that's important as well."

Looking at the Board of Directors, the origin of this impression is clear as they formally possess the most power and legitimacy within the organization. Meanwhile, the impression of the kitchen staff having more influence is likely due to their direct connection to the food services as, to outside observers, it appears that all changes originate from them. When taking the larger picture into account, this might imply that some parties in the hospital have a larger influence than other stakeholders, which makes convincing them even more crucial if a transition is desired.

4.4.3 Efforts to increase influence

Furthermore, efforts were seen among the interviewees to increase their influence.

This mainly presented itself in doctors, dieticians and food service employees. For instance, interviewees described that they give patients information to take home, give feedback on the food services, engage in nudging efforts or conversations about the topic with other healthcare professionals.

Interviewee 1 (Doctor, Cardiology): "We highlighted the healthy options in the choices for patients with an 'Ik kies bewust', which translates to 'I choose consciously' for a healthy decision."

Interviewee 9 (Doctor, Cardiology): "Then when people were discharged, they got two recipes and a packet of herbs without salt."

Interviewee 9 (Doctor, Cardiology): "We ask our colleagues to take 60 seconds of the consult time, that could be 10 minutes or 50 minutes, to talk about including food."

Interviewee 4 (Doctor, Endocrinology): "If I don't like the food, I'll tell them. If I like the food, I'll tell."

When looking at the VREN diagram, this could entail that these stakeholders possess a high level of urgency and are trying to increase their power and legitimacy to make their desired changes happen.

4.5 Results on barriers against the food transition

The following section will describe the identified barriers against the food transition at the LUMC and, in the final paragraph, draw implications for the different stakeholder

groups interviewed. The previous section hereby provides an input into this discussion and aid in answering the research question.

To begin with, the interviewee group frequently mentioned the opposition of staff members and patients, as well as a lack of budget, as significant barriers towards implementing sustainable food practices. This is especially dangerous for a potential transition as certain stakeholders, such as doctors, have both the power and legitimacy in the LUMC to oppose changes and influence others. Other stakeholders that show resistance, such as patients, are more limited in their influence as they can mostly make their opinion known by the choices they make when buying food or by choosing a different hospital to be treated at.

Interviewee 2 (Food services): (Q: Which stakeholder group in your like perception is the most resistant toward it? Is it the employees or the visitors?) "Yes. Employees and the doctors."

The literature also identified the opposition of staff members as a potential barrier (Carino et al., 2021), making the field research results consistent with the theoretical findings. However, it is important to note that the literature does not distinguish between the types of staff members, or stakeholders in this definition, while the findings of this study point to significant differences between groups.

In addition to staff opposition, Carino et al. (2021) mentions insufficient policies as a barrier. The interviewees also experienced similar things as there is, for instance, no formal position that ensures the healthiness of the food in the LUMC. Rather, experts among the employees are approached and asked for their input as illustrated by Interviewee 3. However,

they also stressed that it is sometimes difficult to respond to specific requests that fail to account for the bigger picture. Further, engaged stakeholders with knowledge in nutrition such as dieticians make sure that their advice is heard and that they are involved in the food policies.

Interviewee 1 (Doctor, Cardiology): "I think two years ago now, there wasn't a dietician on there to check for healthiness of the diet, or one of the dietitians that wanted to help. We made sure she got a spot on that. On those meetings. She's now in the meetings with the kitchen to choose the menu, which is also a great change."

Interviewee 3 (Dietician Manager): "They asked me a few years ago from what is healthy and what is unhealthy. I tried to explain them, because you can't say from one product they want, they want a kind of list. So this is healthy. It is unhealthy. Yeah. And that's very difficult for us to say that about one product. You can't say a kroket example is unhealthy. It's impossible. It's what you eat in all day, week, or year."

In an interview with the Board of Directors, it was mentioned that the many opinions of the different stakeholders often make it difficult to initiate or follow through with change.

If policies are introduced, the environment needs to be prepared as well.

Interviewee 10 (Board of Directors): "Like I said, you can just go as fast as your surroundings. And the larger the organization, the more opinions you have."

Moreover, in line with Buller et al. (2022), interviewees also identified the changes required to production and kitchen routines as a challenge as they stressed that logistical challenges might arise if the food services in the LUMC transition toward more healthy and

fresh foods. For instance, fresh ingredients such as vegetables expire more quickly than frozen meat products and, if the transition is made gradually and a higher variety of products is required, it will cause additional work for the purchasing department.

Interviewee 1 (Doctor, Cardiology): "I think the logistics is also a really big part.

Because [The deep fried options], you can save it in the freezer for like 15 years, it won't change, you can still get it out cooking. And most of the plant based options are fresh vegetables that have an expiration date of about, I don't know, a week, I think.

So, I think there's a big challenge to get it there to keep it fresh to estimate how much will be needed for the restaurant."

Interviewee 7 (Dietician): "It should be possible, but there are some problems with the logistic. So, for example, one group will receive the normal rice and the other group we will receive the other rice. And so you need two products of a lot of products. So that's for the incoop (purchasing department), it's sometimes a problem."

Additionally, the higher prices of sustainable foods emerged as another commonly cited barrier as also found by Buller et al. (2022). However, some stakeholders stressed that there is a potential to save money when cutting down on expensive items like meat, suggesting that the increased costs are not as significant as assumed.

Interviewee 1 (Doctor, Cardiology): "And then again, money, money is always a problem, because it cost a bit more."

Interviewee 6 (Doctor, Endocrinology): "But it's always you know, there's always tension because because there are commercial interests. I'm not sure how that works in our hospital. I must say I don't know where the money goes that is made by the

cafeteria. I think it's the hospital that actually they get the money [...] So, you know, there's always a balance between what people buy or want to buy and health because unfortunately, so many people want to buy the fast food, so I know that they're there that it has been difficult to diminish."

Other relevant findings were the lack of prioritization of the healthy food transition. Frequently, interviewees mentioned that they would like to put more effort into driving or supporting changes but do not have enough time next to their usual or expected duties.

Interviewee 1 (Doctor, Cardiology): "But they have their regular activities, their regular duties. So, they do everything they do outside of their home function. So, there's not I think there's not really someone in the hospital [...] that is just hired to make sure diets are healthy."

Interviewee 6 (Doctor, Endocrinology): "Why does this go so slowly? I think, I think money is one thing but it's not the only thing certainly not the only thing. It's also perhaps any change takes time. And it takes effort, and it needs attention. And we are so busy. You know changing is something that you have to make time for. And, and that's something that is also in the way."

Although this factor is not explicitly found in the theory, it appears to be very relevant in the case of the LUMC. Interestingly, the concerns with decreased food quality as a barrier found by Buller et al. (2022) could not be confirmed in this case. Rather, the interviewee group reported that food quality increased when changes were made.

Interviewee 2 (Food services): "And now we cook less, we cook fresh, we have the time to make a good quality."

Interviewee 4 (Endocrinology): "I have to say that the dinners are also much better than it used to be."

Overall, these findings highlight the complexity of a food transition and the need for comprehensive policies and strategies that address the concerns of all stakeholders involved. It is also evident that the findings from the interviews largely align with the theory identified in the literature review. However, the findings also expand on the literature through the added stakeholder perspective. When looking at barriers such as staff opposition, this study suggests that it is crucial to look at the different employee groups individually to identify barriers per stakeholder group. In addition, the added layer of influence and perception allows each stakeholder group's power, legitimacy and urgency to be assessed while also evaluating the different barriers identified by the literature in the context of the LUMC. Through this, the price increase and quality decreases mentioned in the literature where actually found to be less relevant while a lack of prioritization or available time to conduct the change were found to have more relevance in the LUMC. As a final step in this sub-section, the barriers will now be put into the context of the stakeholder groups.

Firstly, doctors and nurses perceive the lack of prioritization and budgetary constraints as the most common barrier. These barriers prevent them from taking the desired actions to drive or support changes to the food services as they do not have the power to change these factors. This is likely due to the fact that while they do possess power, legitimacy and urgency, other stakeholders possess more power that results in these barriers.

On the other hand, the food service staff is most concerned with barriers regarding logistics, budgets, and food quality, as they need to keep to the budget available to them and

need to make sure that the process is efficient. Again, this implies that the food service staff does not have as much power as other stakeholders which they rely on to get the budget and other necessary resources.

Moreover, the hospital board deals mainly with barriers on an organizational level such as budgetary constraints. Although they are essentially responsible to assign the budgets, they have to make decisions that will ensure the financial sustainability of the LUMC, much like any organization. However, they do possess more power to make changes that other stakeholders which appears to not be fully salvaged.

Lastly, all stakeholder groups interviewed face barriers from resistance to change, in the form of doctors, other employees and patients resisting a food transition at the LUMC. Naturally, it is difficult to make policy changes that are met with harsh resistance, meaning that opportunities that arise need to be salvaged. Nevertheless, the perspectives of the stakeholder groups interviewed provide valuable input here. While doctors and dieticians seemed to be mostly inclined to support past and future changes, nurses showed more concerns about this.

4.6 Results on potential enablers of the food transition

In the following section, (potential) enablers of the food transition will be presented while drawing on the insights from the theory and past changes made in the LUMC alongside the findings from the conducted interviews.

The findings from both theory and field research highlight several important factors that drive the adoption of sustainable food policies in hospitals. From the theory perspective, Carino et al. (2021) and Buller et al. (2022) found that governmental guidelines, organizational support, staff knowledge and training, and perceived benefits were powerful enablers. These were all discussed with the interviewee group as well.

Firstly, governmental guidelines are a significant opportunity for the healthy food transition. According to the interviewees, the LUMC is subject to the 'Preventieakkord' and the 'Green Deal' which drives healthier and more sustainable food (policies) at hospitals around the Netherlands. These initiated by the government hold the LUMC accountable and give clear guidelines which already resulted in changes made and helps in convincing various, perhaps skeptical, stakeholders of the transition. Doctors, dieticians, and food services employees welcomed this governmental influence during the interviews as it brings legitimacy and power to the discussion due to the Dutch government's position as a definite stakeholder.

Interviewee 1 (Food services): "It's also from the government - Preventieakkord.

And they say what we have to do they also go to the protein transition. So that's what we are working on in the hospital."

Interviewee 6 (Doctor, Endocrinology): "I think in the end, I strongly believe that we need rules. That we need rules that the Green Deal should be, you know, there should be laws telling us you should do that. Because if you don't make rules people will stay very reluctant to take unpopular decisions."

Besides governmental guidelines, there is also other external support in the form of an Alliance of hospitals working together to bring healthier food services to the hospital and exchanging findings among each other.

Interviewee 1 (Food services): "There is an alliance now for healthy diets in hospitals. So that's some external that's this is the hospitals working together to make diet healthier for patients."

Secondly, internal support was also found to be relevant in the context of this case. In addition to the internal initiative 'Puur LUMC' which drives healthy and sustainable food policies within the hospital as a response to the Green Deal, there are many staff members supporting the transition. Especially dieticians, doctors and specialists have shown to be keen on driving and supporting the change. In addition, as an academic hospital, the LUMC has the potential to educate students about healthy diets as well, as outlined by an interviewee from the Board of Directors.

Interviewee 1 (Doctor, Cardiology): "So we have a dietician that wants to change something. She has a colleague, also the dietician wanted to change some things, a lot of specialists and doctors also want to change some things."

Interviewee 10 (Board of Directors): "And the students themselves, I'm in the process to engage them in more healthier food, more diverse food recognizing that a toasty ham, is not very good for Muslims."

In this context, it is relevant to note that those stakeholder groups willing to support the change already posess power, legitimacy, and urgency as they are definite stakeholders. This can certainly help in driving the transition.

Moreover, related to the nature of their profession, food assistants and dieticians have quite some influence in guiding patients' choices toward more healthier food options which shows their power and legitimacy as outlined in the VREN Diagram.

Interviewee 1 (Doctor, Cardiology): "And the food assistants, they come to pick up the orders right from the patients. And they usually steer patients into one direction or another, they have quite some influence in what they choose."

Interviewee 3 (Dietician Manager): "When it's concerned so to offer our patients in related to their diet and their nutritional needs, we have quite some influence."

Thirdly, further insights from a theoretical point of view include staff knowledge and training as a driver as illustrated by Buller et al. (2022). This is something that the LUMC is already trying to implement as they are educating their food assistants and other food services staff about healthy diets and how to nudge people toward healthy options and inform patients and visitors about them. In addition, this measure can help in increasing the level of urgency among stakeholders.

Interviewee 2 (Food services): "We did some trainings for how do you do it? How do you tell the people. [...] "That's what we try to learn them in some trainings from what can you say, if you can explain why we do this, then they'll maybe understand it. If you can't explain, then you don't know what to say."

Several interviewees, especially doctors also found education very important in conducting change to healthy foods. For instance, when dealing with patient or visitor resistance, education can support the transition.

Interviewee 9 (Doctor, Cardiology): "Also surrounded with education towards the consumers. So, just providing the stuff, but also talking to them about them. So, letting them know what is good and why are these things. [...] So, they can take this

knowledge home and do it themselves. [...] Enormously important. Often overlooked element."

Interviewee 10 (Board of Directors): "Well, first you have to educate your population to see that this is important. And that you are not there to try to make their life less easy or less pleasant. First you have to educate and then you can implement."

Fourthly, perceived benefits can positively drive changes as outlined by Carino et al. (2021). In the LUMC, a strong value case can be constructed to convince stakeholders. A transition to healthy food would bring benefits for patient and planetary health, have budgetary benefits and reduce food waste which can also counteract some of the barriers.

Interviewee 1 (Doctor, Cardiology): "But those people have chronic diseases and healthy diet just helps a lot for those people. And those people are mostly the ones to with an unhealthy diet upon admission to the hospital. [...] But I think most patients, we did some research, and I think 95% of all, basically and hospital would abide very well with a healthy diet."

Interviewee 6 (Doctor, Endocrinology): "So, so I think it's a fantastic piece of work. And it's really remarkable what they, what they calculated there and, and I think that to save the planet and to save our own health, we really need to make that transition."

Interviewee 1 (Doctor, Cardiology): "It's better for the budget of the hospital because meat is more expensive"

Overall, the findings indicate that a combination of factors, including governmental guidelines, staff and leadership support, and education can drive the adoption of more sustainable and healthy food policies in hospitals. Moreover, some amount of change has

already been conducted in the LUMC, meaning they can draw on past experiences.

Especially stakeholders in the food services, board of directors, doctors and dieticians show great support of the transition toward healthy food and would be keen to support further efforts. However, these findings also underline the importance of dealing with the present stakeholder groups in a different way. While definite stakeholders such as doctors and the Board of Directors can salvage their power and legitimacy in gathering staff and leadership support as well as in pushing education efforts. Other more discretionary stakeholders need help in reaching the required level of urgency and could be used as a lever when being subject to the education efforts outlined. Lastly, dangerous stakeholders such as the food service staff can draw on those stakeholders with significant power to further draw the changes.

The interviews showed that a vision of the optimal food services in the LUMC is already forming among the stakeholder groups. Now it is up to these very groups to salvage the opportunities outlined in this section to make this a reality.

5. DISCUSSION

In this chapter, a discussion about the study of influencing the change of a dietary policy in the LUMC will be provided. Based on the findings of the theoretical findings and the qualitative semi-structured interviews, an answer to the research question *How can insights into the attitudes and influence of stakeholder groups lead to sustainable policy change in a hospital's dietary policy?* was formulated. Moreover, this section will discuss recommendations on the best way to utilize these findings in practice to change the dietary policies in the LUMC.

5.1 Discussion on the theoretical findings

When studying dietary policies in a medial context, building a strong value case is vital in order to be able to convince stakeholders of the need to change them. Next to health risks, obesity and malnutrition (Springmann et al., 2018), diets can improve cardiovascular health (Satija & Hu, 2018), making them closely related to the health sector. The case of the planetary health diet is a particularly appealing concept as it not only focusses on human health, but also on planetary health. This is important as climate change is also affecting human health worldwide through heatwaves and food insecurity (European Commission, n.d.). During the interviews, stakeholders were therefore asked about the planetary health diet in general but also about potential barriers or opportunities they anticipate, should the LUMC adopt it in their policies. This provided great insights into aspects in the value case in need of strengthening, such as the correlation between health and diets or the ease of implementation. Moreover, different stakeholder groups were asked for their input which indicated slight difference between them in certain aspects.

Another topic of interest in this study were the drivers and barriers of sustainable food policies in hospitals. These were discovered using a combination of theoretical insights, and accounts of the interviewee group. Starting with the drivers, the theory highlights three main factors that drive the policies being governmental guidelines, staff and leadership support as well as perceived benefits. Other factors include staff training and examples from other hospitals leading the way Carino et al., 2021). Using these insights, interviewees were asked to indicate benefits of the planetary health diet such as patient health, lower GHG emissions and budgetary benefits and also give an account of the change process and food policies to date. This allowed the researcher to understand present drivers in the hospital and identify areas open for improvement and opportunities to salvage further. Furthermore, all factors found in the theory were confirmed by the findings.

Moving on to the barriers, Carino et al. (2021) identifies lack of staff support and policies in a hospital setting when implementing new dietary policies. During the research, interviewees were therefore asked about their own efforts toward changing food policies and whether they would be open to support other colleagues in their efforts, should they be asked to do so. This allowed an insight into the amount of staff support these changes have, or could potentially have. In addition, an account of the food policies was able to be constructed using the research findings. Further research from Buller et al. (2022) also establishes concerns with cost and labor increases and food quality decreases as barriers. To discover whether these barriers are also present at the LUMC, the interviewee group was asked about potential drawbacks of changing food policies which indeed confirmed the theoretical findings for the largest part. Especially lack of staff support and policies emerged as an important barrier to consider, while findings on the barriers of cost and labor increases and food quality decreases were divided.

Another relevant aspect to this study was the identification of stakeholders regarding their power, legitimacy and urgency based on the model introduced by Mittchel et al. (1997). Definite stakeholders in the LUMC hereby include the Dutch government and the hospital board. Doctors and nurses are a definite or discretionary stakeholder, depending on whether they recognize urgency or not. Lastly, patients and visitors were identified as dependent or dormant stakeholders while the catering staff is a dangerous stakeholder. To get a better understanding of the three factors among the interviewees, the stakeholders interviewed were asked to give an account of their perceived influence (relating to the power aspect in the Venn Diagram) as well as an indication of whether their efforts resulted in any changes (relating to the power and legitimacy aspect). Lastly, they were asked about their opinion on the current food policies which allowed an assessment of the urgency they recognize. Based on this, stakeholders could be assigned to a category with increased confidence and recommendation on how to deal with the different groups in the best way can be given.

Finally, the conceptual model should consider the additional insights gained from the interviewee group toward drivers and barriers, which is crucial in answering the research question.

5.2 Discussion on the research question

The first sub-section of the results section presented the results about the current food policies at the LUMC as well as previous changes made based on the information received by the interviewee group. From these findings, it became clear that there are three target groups for the food services – patients in the wards, hospital employees and day visitors or patients with a separate system for in-ward patients.

Both systems of offering food have made some changes regarding the healthiness of the food and allow all consumers to choose based on their own preference. For instance, the number of deep-fried options has been greatly reduced and unhealthy snacks are not sold anymore in favour of healthier alternatives and a salad bar. The goal of these changes was primarily to improve the healthiness and sustainability of these options and to decrease food waste. This is therefore in line with the planetary health diet, especially considering that the number of vegetarian dishes has increased since the change started. However, the interviewee group also mentioned that the change is going at a rather slow pace and that efforts have seemingly decreased in recent months.

Furthermore, the second sub-section drew a picture of the perception of food policies by the different stakeholders. Firstly, the interviewees were asked about the importance food policies at the LUMC have to them. Doctors, dieticians, and catering staff gave a high importance, indicating that they recognise the urgency when looking at the Venn Diagram (Mittchel et al., 1997). The board of directors considered food policies more from a health-related angle rather than other factors and stressed the importance of other factors in this regard. Moreover, nurses assigned a low importance to food policies as they were more concerned with daily activities, pointing toward a low sense of urgency. In addition, when asked about perceptions of the planetary health diet, the division of stakeholders was the same which implies consistency.

In the third sub-section, more information is given on the different stakeholders of the LUMC based on their power, legitimacy, and urgency. This supported the further findings and allowed some implication about the relevance of the interview insights for the empirical case and body of literature.

Moving on to the fourth section which dealt with the perceived influence of the stakeholder groups, a connection between the perceived influence and the success of previous efforts was suggested by the findings. Those stakeholders which tried to change the food policies and got a positive response from the system usually assigned themselves a high

influence, while those that received a negative influence tended to assign themselves a medium or even low influence. This shows not only the importance of staff dedication but also how crucial leadership support is in driving changes to food policies as suggested by Carino et al. (2021). In addition, these insights also helped in assessing the power and legitimacy dimension of the Venn Diagram and supported the identification of crucial stakeholders that need to be convinced when starting the transition. These are the Board of Directors and the kitchen staff which were also identified by other interviewees as having a high influence over decision making in the food policies.

Regarding barriers against the food transition, the interviewees were most concerned with the opposition of staff members, as well as budgetary and logistical challenges. These factors were also found in the theory (Buller et al., 2022; Carino et al., 2021). While not mentioned explicitly in the theory, a significant barrier in the LUMC is the prioritisation of the healthy food transition. Rather than opposing to changes, staff members do not have the ability to sacrifice enough time to support efforts due to their regular duties. In this way, the findings extend on the theory by finding an additional barrier related to organisational factors. In addition, the research showed that budgetary concerns may be given too much weight in the discussion. While it is commonly believed in the LUMC that the food transition will cost the hospital more money, several interviewees stressed that reducing, for instance, the consumption of meat would actually require a lower budget.

These mentioned barriers are of varying importance to the stakeholders. While doctors and nurses are often blocked in their efforts through a lack of prioritization or budget, food service staff deals with barriers in logistics, budget, and food quality. Moreover, the Board of directors deals with the barriers on a more organizational level. Finally, all stakeholder groups deal with resistance to change. This is especially dangerous from a definite stakeholder such as doctors and less dangerous from a dependent stakeholder like

visitors as they have less legitimacy within the organization. However, this aspect is relevant to note as it adds another layer to the theoretical findings. The findings of the study imply that not all stakeholder groups deal with the barriers in the same way. Furthermore, the differing levels of power, legitimacy and urgency suggest that it is vital to understand which stakeholder groups are opposing or supporting the transition. To exemplify, if an opposing stakeholder has a low amount of power this is less likely to hinder the transition than if a stakeholder group with a high amount of power works against the transition.

The last sub-section of the results chapter gives an account of potential enablers of the food transition. Through asking interviewees about their experience with past and current changes as well as potential benefits of changing the dietary policies. Important factors that were highlighted in both the theory and field research are governmental guidelines, organizational support, staff knowledge and training as well as perceived benefits.

While governmental guidelines can support or prevent changes, they can also assist motivated stakeholders to strengthen their goals and are of high importance to the Board of Directors and, if concerned with food such as the Green Deal, for the catering staff as well. Organizational support can also help stakeholders in gaining support of their vision and bringing about change as information can be communicated more efficiently. During the interviews, dieticians and doctors have shown to be the most supportive of the changes in the past, and the potential ones in the future. This operates in favour of the transition as they are definite stakeholders. In addition, education is something that the LUMC is already trying to implement in the changes they make and an effort that can help to increase the urgency levels in more discretionary stakeholder groups. However, the hospital currently faces challenges in making these offers impactful as participation rates in trainings or knowledge trainings are rather low. Adding to that, increasing the perceived benefits of healthy food has shown

impactful both in the research by Carino et al. (2021) and the interviews. A value-case such as the one established in the study therefore might help in gaining support for the transition.

Overall, while the findings were mostly in line with the studied literature, the added perspective of stakeholder theory provides a valuable expansion of the theory. By considering the different levels of power, legitimacy and urgency of the stakeholder groups, hospitals can more efficiently manage the different barriers and salvage the opportunities. For instance, while education efforts should be focussed on stakeholder groups with less urgency, staff support can be gathered mostly in those groups with high levels of urgency. Nevertheless, while it may be easier to convince stakeholder groups that possess urgency, other stakeholders should not be left behind.

Lastly, some factors found to be significant in the literature such as price increases and quality decreases associated with the food transition were not found to be significant in the empirical case. On the other hand, a lack of prioritisation proved to be important and requires consideration. In conclusion, the findings of this study both confirmed the theory and expanded on it, leading to valuable implications for the empirical case and the field of food policy change through a stakeholder theory lens.

Overall, this study has significantly enriched stakeholder theory. While adding more context to the field of healthcare and stakeholder theory, a need to divide stakeholder groups identified by theory further was found through the interviews. For instance, the category of employees has proved not to be sufficient and needs further (sub-)categories such as doctors, nurses, and food support staff. Further, this research provided input into a Dutch context of stakeholder theory in healthcare which was not addressed in existing research.

5.3 Recommendations for the LUMC

Based on the results and conclusions, several action-based recommendations on the optimal way of conducting the food transition in the LUMC can be given to the commissioner.

Firstly, the LUMC is advised to consider implementing the planetary health diet in their catering services. This diet has been positively received by the majority of the interviewee group who saw mainly benefits in it and said they would support its potential introduction. The hospital should therefore consider the value-case of following this diet, especially due to the benefits it can bring for patient and planetary health.

At the same time, it is recommended for the LUMC to improve their stakeholder management. Several interviewees, who were not yet involved in the food transition voiced their interest in this research, or the participation in focus groups around the topic should they be approached. While it has been shown during the research that interviewees who successfully drove changes were also more invested in the food policies, this can also be a good way to increase the organizational support for the change, which has been found to be an enabler. In addition, increased involvement can also help in reducing the resistance to change while at the same time communicating the relevance and benefits of healthy food policies to the different stakeholder groups considering their priorities and concerns. The value-case constructed in this study can be used as input to communicate the benefits.

As a part of this, the LUMC can also enhance the impact of educational initiatives by increasing participation rates in trainings and knowledge sessions related to healthy food.

Furthermore, comprehensive and engaging educational programs targeting different stakeholder groups, such as doctors, nurses, and catering staff, can be developed to enhance their understanding of the benefits of healthy eating and the importance of food policies. This

can also be used to educate patients about the efforts and also help in convincing stakeholders with lower levels of urgency.

Thirdly, the LUMC should consider collaborating with external stakeholders. By leveraging governmental guidelines and initiatives, such as the Green Deal, as well as alliances with other hospitals, the LUMC's goals to promote healthy and sustainable food options can be strengthened. Moreover, partnerships with external organizations, such as local farms or suppliers of organic produce can enhance the availability of high-quality and nutritious food options while also working on logistical issues.

Lastly, there are certain barriers that need to be overcome from an organizational perspective. To conduct the change, resources need to become available – namely budget and prioritization. While it may be a larger expense in the short term, introducing healthier and plant-based alternatives can save the LUMC costs in the long term through reducing expensive ingredients like meat. Therefore, the budget to conduct these changes needs to be made available. Further, it is important to prioritize the transition. Currently, employees mainly engage in these activities besides their usual responsibilities which means that they do not have enough time to dedicate to making a real impact. By, for instance, creating a project group, dedicating a certain number of hours a week on implementing the change, or implementing a formal position dedicated to ensuring the healthiness of food at the LUMC, the change can be organized more efficiently, and the subject will get the priority it needs.

By implementing these four recommendations, LUMC can make significant progress in its healthy food transition and create a supportive environment that promotes the well-being of patients, employees, and visitors while aligning with the principles of sustainability and planetary health.

6. CONCLUSION

Based on the problem formulated by the commissioner Medical Delta, this research project began with an intensive study of available literature to inform the further research, the research question as well as the interview guide. By means of a further theoretical orientation and qualitative semi-structured interviews, the research question was answered by analyzing the most relevant findings using a Grounded Theory approach and comparing them to existing research. However, although this research contributed to the existing literature and was able to give actionable recommendations to the LUMC, there are limitations and implications for further research to consider when looking at these findings. These will be explored in the remaining two sections of this chapter.

6.1 Limitations of this study

As discussed in Chapter 3.3, the research sample is not representative of the population. Although different stakeholder groups are represented in the sample, the number of participants is not equal across the groups and furthermore, the division does not represent the actual population. However, since the research had the goal of achieving data saturation, this was prioritized, and some stakeholder groups required a bigger sample then others. This also limits the ability to generalize the findings, especially due to the use of purposive sampling. Findings can therefore not simply be applied to other (non-academic) hospitals.

Moreover, the findings of the study can be criticized in their credibility. Due to the nature of the research, the analysis relied on the interpretations of the researcher which might have influenced the findings. However, this is to be expected within qualitative research and furthermore, the alignment of the findings with the theory gives confidence in the findings.

Furthermore, the study faces limitations due to translation issues. Since the researcher was not fluent in Dutch, interviews were conducted in English which might have made interviewees less comfortable during the interviews or less likely to share certain information. To deal with this, the interviewees were encouraged to use Dutch expressions whenever they were unsure about the translation. To ensure the comfort of the interviewees, some interviews were also conducted via (video) calls if preferred, even though this brought drawbacks in assessing the body language and sometimes resulted in connection issues.

Lastly, also ethical limitations played a role in the study. Due to the need to guarantee confidentiality and the limited number of employees at the LUMC, only necessary data such as the general position and department was collected from the interviewees. This way, interviewees were able to stay as anonymous as possible while keeping data such as gender and age anonymous as they were not thought to be relevant in the context of the study. However, this might have resulted in the researcher not accounting for variables that would have been relevant if included in the research context.

6.2 Implications for further research

While this study provided valuable insights into a currently undertheorized topic and was able to expand on existing theory, the findings are also limited to a single hospital in the Netherlands. Therefore, it is advisable to repeat this study with other (non-academic) hospitals to be able to make inferences about other hospitals or even the whole country. The findings of this study could also inform a quantitative questionnaire which can ensure a wider application of the findings.

Furthermore, the success of application of the enablers discovered in this study, should be researched further within the context of the LUMC or another hospital to discover the best way to implement them. This is due to the fact that enablers such as nudging require

a variety of factors to be considered which went beyond the scope of this research. Having said that, a study on this particular issue is currently being conducted at the LUMC as part of the Sustainable Hospitals thesis lab this research was a part of.

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APPENDIX 1 INTERVIEW GUIDE

Opening. Good afternoon, I am Annemarie Keller, and I am a Master's student in Global Business & Sustainability Student at Erasmus University Rotterdam. Thank you for taking the time to meet with me today, I imagine as a nurse you are quite busy. For my Master's thesis, I am conducting interviews with different stakeholders in the LUMC to find out more about their perspective on the food policies and a possible transition to sustainable foods.

The interview will take about 45 minutes and I will take notes to be able to follow-up on what you said. In addition, this interview will be tape recorded for my own use. This will not be shared with anyone. Is that alright with you? Do you have any questions for me before we start? Before we start, I would quickly like to test the quality of the tape recording. Maybe you can tell me about your favourite meal.

Topic 1: Current Situation

Q1 Can you tell me more about the food options at the hospital you are working or being treated at?

Alternative formulation

- What kinds of food are offered at the LUMC?
 Follow-up
- How do you feel about these options?
- Employees: How do your patients/clients feel about these options?
- Employees: How do your colleagues feel about these options?

Topic 2: Planetary Health Diet

Q2 Are you familiar with the planetary health diet?

Alternative formulation

- Do you know what a planetary health diet is?
- Give definition if they are not familiar
 Follow-up
- Could you describe it?
- What benefits do you see regarding this diet?
- What drawbacks do you see regarding this diet?

Q3 How would you feel if the LUMC would adopt such a diet in their policy?

Alternative formulation

- Would you approve if the LUMC would adopt such a policy?
 Follow-up
- What benefits or drawbacks do you see in the LUMC adopting such a diet in their policies?
- How important is the food policy at the LUMC to you?

Topic 3: Influence regarding food transition

Q4 How do you feel about your influence in regard to driving change to the food policy?

Follow-up

- Have you tried influencing the food policy at the LUMC?
- If yes: How did you do this and how did it go?
- If no: Why not?

Q5 When I talk about the food transition in the LUMC, what do you think about? Alternative formulation / Follow-up

• How do you feel about the food transition at the LUMC?

Q6 How would you feel if a colleague came up to you and started talking about their desire to get the food transition started?

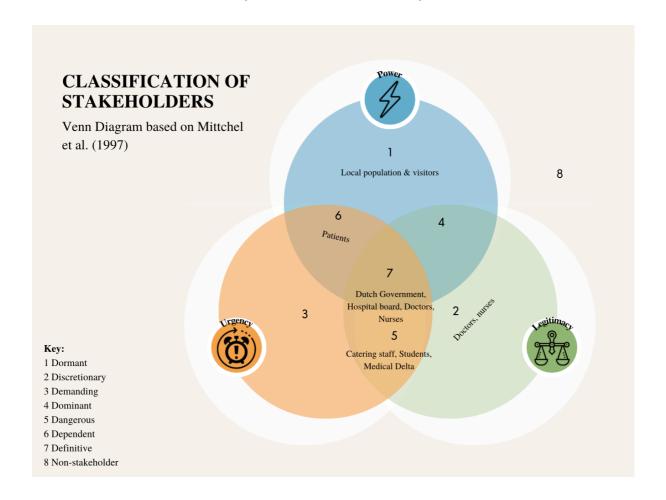
Alternative formulation

- What do you think when someone would start talking about the food transition?
 Follow-up
- Do you know why you feel this way?
- Could you describe why this is how you feel?

Ending. We have now reached the end of our interview and I would like to thank you for taking your time. Do you have any more remarks? How was your experience? Was everything clear?

Great to hear. If you have any additional comments or questions for me, you can get in touch via email.

APPENDIX 2 CLASSIFICATION OF STAKEHOLDERS (VREN DIAGRAM)



APPENDIX 3 CODEBOOK

Quotes are not mentioned in this overview as it would make the codebook unnecessary long. Therefore, quotes are only mentioned in the main part of this report when relevant.

Open	#	Axial	Selective
Food choices	7	Current choices	Current
Patients are given chef's menu	2		situation
Patients can choose their own diet	4		
Three target groups for food services	1		
Deep fried options less visible	4	Decrease unhealthy	
Less deep-fried options	8	options	
Food options more healthy	2	Increase healthy	
Healthiness of food improved	1	options	
Highlight healthy options	1		
Introduction healthy snacks	2		
Introduction salad bar	5		
More healthy options	5		
Traffic light concept for healthiness	2		
indication			
Vegetarian option available	1		
Vegetarian options	1		
Changes come from top management	2	Origin of change	
Adjusted menus for special cases	1	Other changes	
Better food portion size	1		

Different dietary options available	1		
Experiments with pricing	1		
Seasonal menu	2		
A lot has changed in recent years	2	Speed of change	
Change took a few months	1		
Drastic changes in visitor restaurant	2		
Less changes in recent months	1		
Quick change due to pressure	1		
Reactionary approach	1		
Slow change	5		
Transition already started	1		
Food policies important	3	Food policies	Perception
		•	1
Mismatch between perceived and actual	1	Knowledge	1
Mismatch between perceived and actual knowledge about healthy food among	1	-	
	1	Knowledge	1
knowledge about healthy food among	1	Knowledge	
knowledge about healthy food among patients		Knowledge behaviour gap	
knowledge about healthy food among patients Desire for healthier lifestyle	1	Knowledge behaviour gap	
knowledge about healthy food among patients Desire for healthier lifestyle Dietitians satisfied with food choices	1	Knowledge behaviour gap	
knowledge about healthy food among patients Desire for healthier lifestyle Dietitians satisfied with food choices Happy with food options	1 1 3	Knowledge behaviour gap	
knowledge about healthy food among patients Desire for healthier lifestyle Dietitians satisfied with food choices Happy with food options Most people seem happy about the options	1 3 4	Knowledge behaviour gap	
knowledge about healthy food among patients Desire for healthier lifestyle Dietitians satisfied with food choices Happy with food options Most people seem happy about the options Positive evaluation	1 1 3 4	Knowledge behaviour gap	

Unaware of resistance to changes	1		
Complaints	2	Negative opinions	
Complaints	2	Negative opinions	
Oversupply of food	1		
Soft drink machines are annoying	1		
Time in hospital will not change lifestyle	1		
in long-term			
Too many options	1		
Unhappy with changes	3		
Unhappy with food options	2		
Big changes are needed	1	Perceptions about	
Wants change to be broader	1	change process	
Wants change to go faster	1		
Positive attitude toward plant-based food	1	Planetary health	
transition		diet	
Agrees with introduction of planetary	2		
health diet			
Supports adoption of planetary health diet	2		
Preference for vegetarian options	6	Vegetarian options	
Encourages healthcare professionals to talk	1	Efforts to increase	Influence
about healthy lifestyle		influence	
Gets asked for input in food services	1		
Gives feedback about food	1		
Influence at home	1		

1		
1		
1		
5	Perceived influence	
1		
1		
1		
1		
5		
3	Perceived influence	
3	(others)	
3		
2		
1		
1		
1	Acceptance of	Enablers
2	change	
5		
1	Collaboration	
4		
3		
2	Education	
4		
1		
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 5 Perceived influence 1 1 1 5 3 Perceived influence 3 (others) 3 2 1 Acceptance of 2 change 5 1 Collaboration 4 3 2 Education 4 4

Importance of education	1	
Food policies are getting stricter	1	External
Green Deal	2	
Influence of society	1	
Preventieakkord	1	
Voeding Centrum NL	1	
A lot of colleagues want to drive change as	1	Internal support
well	1	internal support
	0	
Actively supports introduction of healthy	8	
options		
Chronic disease departments more likely to	1	
drive change		
Dieticians influence patient choices	1	
Food assistants have influence on patient's	2	
choices		
Most change is driven internally	1	
Speaks up for healthy options	1	
Would be open to working with others on	4	
change		
Would support healthy food transition	6	
		N. 1.
Nudging efforts	6	Nudging
Positive results of nudging efforts	4	
Artificial Intelligence	2	Opportunities
Budget is there	1	

Communication	1	
Convenience	1	
Culture	2	
Diversity	1	
Focus on outside image of hospital	3	
Focus on plantbased	3	
Give patients info to take home	1	
Holistic perspective on health is important	2	
Local supply	1	
Make healthy options more visible	1	
Make unhealthy options less attractive	1	
Marketing	2	
Momentum for change present	1	
One hospital should lead the way	1	
Options need to be attractive	3	
Organizational culture	3	
Patients wanted healthy option	1	
Prioritise non-processed foods	1	
Replace options so people do not miss	1	
them	1	
	1	
Tasting helps		
Vegetarianism	6	
Would be open to weekly vegetarian day	1	

Almost all patients would benefit from	1	Value Case	
healthy diet			
Better food quality	3		
Budgetary benefits	1		
Chronic diseases more linked to healthy	1		
diet			
Correlation between diet and health	2		
Environment more convincing than health	1		
Focus on patient health	9		
Focus on planetary health	5		
Food waste reduction	2		
Health benefits	4		
Healthy has better image than vegetarian in	1		
hospital			
Hospital should advocate for healthy	4		
lifestyle			
Importance of protein intake	5		
Process Efficiency	1		
Quality improvement	1		
Reducing waste	1		
Sustainability benefits	1		
Budgetary constraints	9	Budget	Barriers
Higher prices	2		
Change is difficult	4	Change process	

Different approaches needed for patient	6		
groups			
Slow progress	3		
Lack of interest in education	1	Communication	
Unclear communication	3		
Places next to hospital offer unhealthy	1	Environment of	
options		hospital	
Different measurement points needed	1	Lack of knowledge	
Direct correlation between health and diet	1		
is missing			
More research is needed	1		
Patients do not understand correlation	1		
between diet and health			
Strong arguments are needed for	1	Lack of value case	
convincing			
Feasibility	1	Logistical	
Logistical challenges	4		
Product management	2		
Blameshifting	2	Organisational	
Decision making process	1		
Dieticians not involved in food policies	2		
Large organisation makes changes difficult	1		
No formal position to ensure healthiness of	1		
food			

Colleagues do not have time to make	1	Prioritisation	
changes			
Different priorities	4		
Effort required	1		
More important patients eat than what they	3		
eat			
Time constraint	4		
Advice not always followed	1	Resistance	
Attitude of people needs to be changed	1		
Change cannot be too bold	1		
Doctors most resistant	1		
Employees most resistant	1		
Food preferences	5		
Older people more resistant	1		
People crave unhealthy foods	1		
People fear change	1		
People feel like something is taken from	9		
them			
People need options	5		
Resistance to change	6		
Too early for change	1		

APPENDIX 4 INTERVIEW TRANSCRIPTS

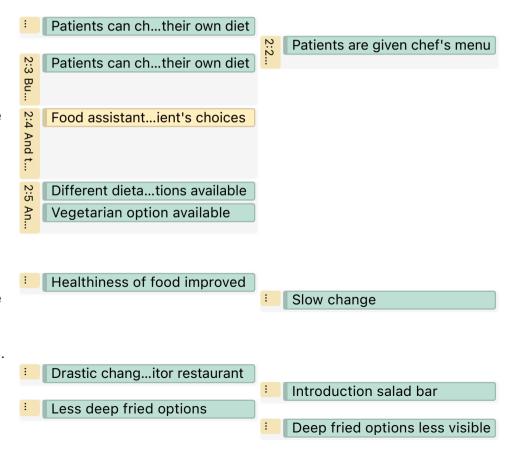
Interview 1: Doctor, Cardiology

- Q: Could you tell me more about the food options at the LUMC?
- 4 A: For patients are the restaurant or both?
- 6 Q: Both.

9

11

- A: Yeah, I'm actually writing a paper about it now. But what do you want to know in general terms about the healthiness or about the? What they offer?
- 10 Q: Yeah, yeah. How healthy you, yeah.
- A: I think the main thing is for patients, I think when they're when they're admitted to the hospital, they get menus on the rooms. And they can choose their own diet.
- And the selection is usually a daily menu of the chef. Yep. So there is a pre pre made meal. But you can also pick your own components of a meal, and just make your own meal what you think is healthy, but I think most people choose one of the chef options. And the food assistants, they, they come to pick up the orders, right from the patients?
- And they usually steer patients into one direction or another, they have quite some influence in what what they choose.
- So that's about how it works. And I think the options are very, many so there's usually like two vegetarian options to fish options, some meat options as well.
- And then, of course, your carb options and your vegetable options and your salad set of options. So it's actually quite varied. healthiness has improved over the last four years... slowly but steadily, I think I think they can still improve on some aspects.
- And mostly, it's it's pretty good now. And for the restaurant services in the hospital. So for patients, visitors and employees.
- They've also made made some drastic improvements with, among others, the salad bar, which is, which is pretty good, I think. And the deep fried options were tapered down.
- 19 So they were put more out of sight. And you have to wait for



•	your, your cook and so to speak.	: D	Deep fried options less visible		
20	So so they didn't work on it, but they haven't did the deep fried options haven't disappeared yet.				
21	And I think the most difficult thing in there is that the prices have gone up as well. So it's pretty expensive to buy your salad or	2:1	Higher prices		
	they did they try something with the prices of the deep fried	2:14	Experiments with pricing		
	options to to increase the price of the deep fried options and	4 t			
	decrease the price of the salad. Doesn't have much effect yet, but I will say I don't eat there very much.				
22	but I will say I don't eat there very much.				
23 24	Q: Okay. And how do you feel about the options in general?				
25 26	A: Pretty good.	: P	Positive opinios in restaurant		
27	Q: Okay. And do you notice any? You know, you mentioned there were changes in recent years? Do you notice any change in the perceptions of people around you like maybe colleagues or also patients? Or visitors?				
28	A: Yeah, colleagues, colleagues, mostly, it's because I have	N	Actively supphealthy options		
29	been fighting for healthier options in both the patient patient	6	actively suppHealthy options		
	services and the restaurant. So I get a lot of colleagues that say	*		2:1	People feel likken from them
	they took my, this option away or, or mostly a lot of people that	2:18	Most people sut the options	:	
	say they're very happy with the salad bar or the healthy vegetable options.	3 3 			
30	vegetable options.	·			
31	Q: Okay, so mainly positive.				
32					
33	A: mainly positive, yeah.				
34 35	Q: Okay. That's great.				
36	Q. Okay. That's great.				
37	A: But also that's because the restaurant hasn't made the option	2:1 P	People feel likken from them		
	yet to just remove the deep fried options. I think if they do that,	19 B			
00	there'll be some more negative.	:			
38 39	Q: Yeah, I can imagine.				
40	a. roan, roan inagino.				
41	A: Yeah, but they haven't done that yet.				

44

A: No, not yet. But I can imagine something like the diet with less impact on carbon dioxide.

46

Q: Yes, so basically, it's a diet that focuses on mainly vegetables, whole grains and plant source proteins. They're still animal products in it, but they're kind of reduced as well as like additives such as sugar and that's supposed to yet and one hands help the planet to lower the carbon dioxide a bit, but also be healthier for the people consuming the diet. Would you see any benefits for that? If the LMC would adopt such a policy in their food policies or such a diet.

48

A: Definitely, yeah, definitely. Yeah. Wholly agree with that.

50

1 Q: Okay, in what way?

52

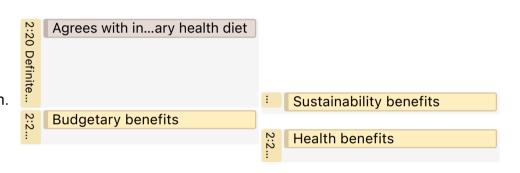
A: In all parts. Actually in three parts. It's better for planet health. Yes, it's better for the budget of the hospital because meat is more expensive. And it's better for the patients, visitors employees and hospital.

54

Q: Okay. And what kind of challenges would you see in implementing that?

56

A: Well, it's a change. And change is always a challenge. So people will miss options. They were previously enjoying and see that as a loss. And I think the logistics is also a really big part. Because the deep - I again, the deep fried options, you pull it out of the freezer, you put it into the fryer, you get it out, it's done. You can save it in the freezer for like 15 years, it won't change, you can still get it out cooking. And all the most of the plant based options are fresh vegetables that have an expiration date of about, I don't know, a week, I think. So I think there's there's a big challenge to get it there to keep it fresh to estimate how much will be needed for the restaurant.



Change is difficult

Logistical challenges

had I think the logist...

People feel lik...ken from them

58 Q: Hmm. 59 60 A: And maybe in preparation and taste is also more difficult. 2:28 A... Feasibility Because deep fried options are what the body wants and what we all like. So it might be more difficult to make that feasable. 62 Q: Yeah. Okay. But in general, I hear that you would approve if the LUMC word move towards those options. Okav. 64 A: Pretty much. 66 Q: And would you say that food policies at LUMC are important to you? 68 A: Yeah. 69 Q: Okay, and how do you feel about your influence and driving 2:29 Oka... Mediocre influence change to those policies? 72 A: very mediocre. I've done my best for the past three to four 2:3 Actively supp...healthy options years. And some changes have been done, have been made. Slow change But it's fairly slow going. It's very minimal changes at the time. 2:32 Slow change You know, you propose a big change, they insert only a fraction - of what you what you propose. 74 Q: Could you give some examples of things that you maybe tried? 76 A: Yeah, of course, we usually react. And so the first thing is that Reactionary approach we reacted to diet. So we saw the patients received fruit salads Support introd...ealthy dessert for dessert, I think the great option... aside from the bit too much sugar, but compared to the rest of great options, but they couldn't be ordered without which cream on top. It just couldn't be that you had a fruit salad with whipped cream or you didn't have a food salad at all. And most people that ordered it didn't Patients wante...healthy option 2:35 And... want - just one of the healthy desserts and do once a whipped cream on it. But you couldn't order it so we there was some feedback to the kitchen. They change that after a few months. Change took a few months

So pretty long time. But there's one change. We saw a menu there was I published an article on that that was devastating. They gave patients the cardiology ward so people that just had a myocardial infarction they gave them a hamburger with Yeah, and yeah you'll already cringe But it gets worse. Hamburgers with bacon and cheese.

78

79 Q: Oh.

80

A: And next to some deep fried potato wedges on a white bun so no fibre in there whatsoever. The vegetables or how do you get a big old so they which is not that bad, but the freshness and the vitamins were all long gone. And on top of that there was a slice of carrot cake with whipped cream. That was the meal they were offering so we we actually went to the board of directors with this and they they pretty quickly changed it by the way the kitchen to remove that option. Even though the patients were enjoying that, but I think that's the signal we need to give in this hospital. So that's one of the changes and furthermore, we added some unsalted nuts to the lunch menu that you you are able to ordered and some flexible... and so snack cucumber, tomatoes. That's what the snacks to the menu...

82 83

Q: Hm.

84

A: And the last two years we're busy trying to just change the menu so that the healthy options are way more upfront. Healthy options... choose healthy options if you want you've been through something else but choose healthy options.

86

Q: How do you imagine that? How do you imagine that happening?

88

A: What we did - so we changed the menus. The menus are normally the daily chef menu and we put a healthy menu on there. We highlighted the healthy options in the choices for patients with a 'Ik kies bewust', which translates to 'I choose consciously' for a healthy decision, you know.

Change took a few months

2:37 Th

2:39 So

Introduction healthy snacks

Quick change due to pressure

Hospital shoul...ealthy lifestyle

2:38

2:40 And...

Make healthy...ns more visible

2:41 The me...

Q: okav. 92 A: we highlighted the healthy options. We put a sticker over all Make unhealt...less attractive Highlight healthy options 2:43 We the really attractive looking sugary desserts with a sticker file and choose a fruit salad or to some voghurt with nuts or muesli or fruit. We educated the food assistants, the people who Educate food assistants actually steer the choices of patients. We put some posters in the in the clinical Ward, we changed the food service cart, from the dark blue to a vegetable lined to get some priming intubations for vegetables. And we gave patients an Information 2:45 Give patients i...to take home folder. And some recipes with some spice mixes sodium free spice missing mixes upon discharge. 94 Q: Mhm. 95 96 A: So that was actually pretty big. But that we I'm just now writing up the results of this study. And they the patients were 2:46 And... Positive result...udging efforts actually choosing more side salads, or fruit salads as dessert or vegetarian options, because those were highlighted and more fish options. 98 Q: Okay. 99 100 A: This is pretty good. 101 102 Q: Interesting, and very good as well. Yeah. And you mentioned for example, that when you wanted them to change the menu, like from the hamburger, or from the whipped cream that sometimes it takes a long time. Is that a common barrier that you face? That it just takes a lot? Time constraint 2:47 T... 104 A: Definitely. Yeah, definitely. 105 106 Q: Yeah. What do you what do you think that comes from? Do you think that stems from like, internal sources or? 108 A: Think just the mechanics of a big organisation, the decision Decision making process

making and the logistics of a big organisation. Because

someone has to oversee the decision that was to be made, a lot

of people have to have to see it and make the decision to go healthier. And if the Board of Directors says you have to do this, it goes a lot faster. Just the kitchen, has to decide something. And then there needs to be budget. The new things need to be ordered the old things don't have to be boarded anymore. So I think it's there. So I think budgetary, logistics and decision making.

Board of directors has power

Budgetary constraints

Budgetary constraints

Kitchen has d...making power

Q: Okay. And would you say that the changes that, for example you are proposing or your colleagues are proposing our those changes towards healthy diets always like coming from internal sources?

112 113

110

A: What do you mean internal origin.

114

115 Q: Like from within the hospital or so also external like the government or something that interferes?

116

A: I have not seen any external interference or no... the government doesn't really seem to care what happens when we give even though maybe some quite... no I do not think they don't really have any influence. Or there is an alliance now for healthy healthy diets in hospitals. So that's some external that's this is the hospitals working together to make diet healthier for patients.

2:52 I hav...

Alliance for healthy hospitals

Most change i...riven internally

Not aware of...ental influence

118

119 Q: Okay.

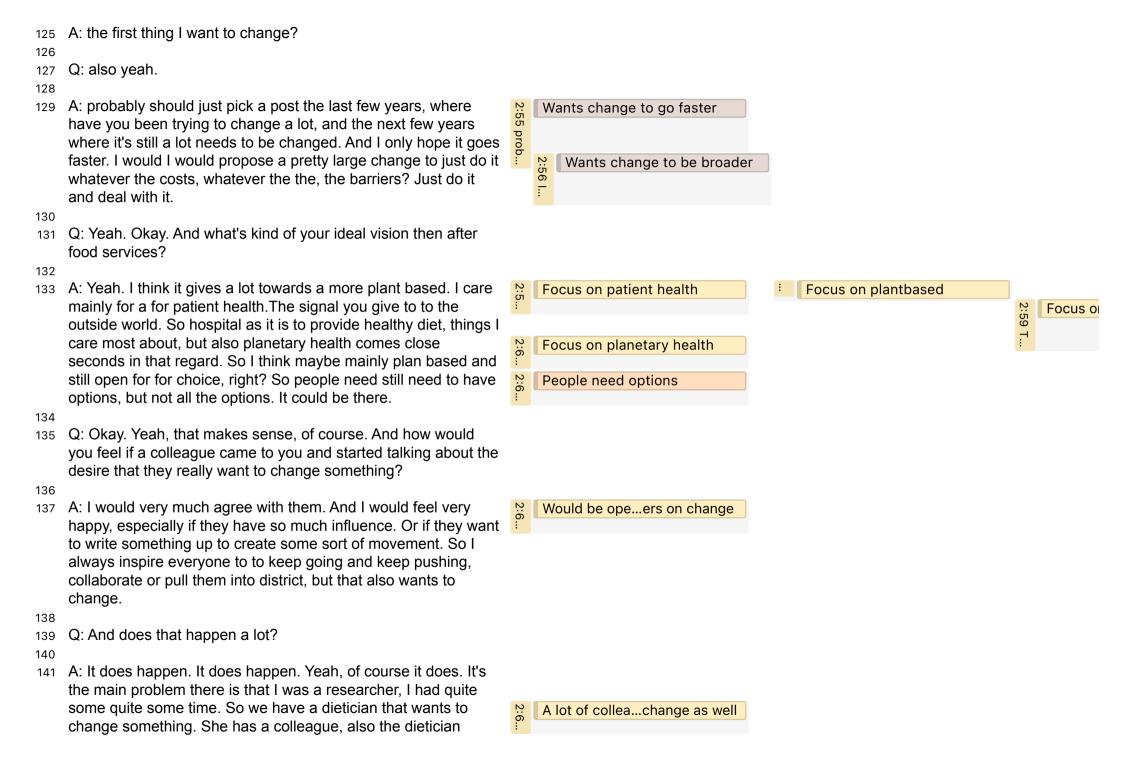
120

A: But mostly it's internal. So it's either the food assistants and we have a very active dietician that that sees what what patients get for dinner. We act upon that. So it's mainly internal and some some specialists also remark on what people get to eat in the hospital and then put it up the chain towards the kitchen or to a board of directors.

2:54 But mostly...

Q: Okay, yeah. Yeah, that makes sense. And when I talk about food transition and the LUMC What's the kind of the first thing that you think about?

122



wanted to change some things, a lot of specialists and doctors also want to change some things, but they have their regular activities, their regular duties. So they do everything they do outside of their home function. So there's not I think there's not really someone in the hospital. That is, which is weird. I think that is just hired to make sure diets are healthy. And very healthy. But also patient. Yeah. We still weird, right? Yeah. meals for 1000 people a day. No one cares what it is. There is however, a dietitian on board to check for allergies. Because that's the main problem. You don't want to give peanut allergy peanuts to Santa Clarita Valley, right. So there's someone that checks very much on allergy. That's a dietician on board the meetings about what what's the menu should look like what should be on the menu. But up till I think two years ago now. there wasn't a dietician on there to check for healthiness of the diet, or one of the dietitians that wanted to help. We made sure she got a spot on that. On those meetings. She's now in the meetings with the kitchen to choose the menu, which is also a great change.

142

143 Q: Okay, so is it then that people don't really have time besides their normal duties? Or...

144

A: that's a barrier, yeah.

145146

47 Q: And then Would it help if they say, maybe, oh, we're gonna hire like someone else, or everyone gives like 5% of their time weekly to work on something like that. Do you think that would work?

148

49 A: There's multiple, multiple ways that it could work, but the people that want to change some things should be given the time to change something.

150

151 Q: Yeah.

152

A: And if the time goes out of the work hours of a certain department, that department needs to be compensated so you can hire someone else.

A lot of collea...change as well

2:64 but t...

Colleagues do...make changes

2:65 But up till I...

No formal pos...thiness of food

Q: Yeah. Okay. And do you see that there is maybe specific departments in which those changes are desired within the hospital or specific stakeholder groups? Or is it really varied?

156 157

A: Well, there is a difference within the hospital. The chronic diseases are I think the ones so cardiovascular disease, diabetes, cancers, most most cancers, cancers could have difficult area. But those people have chronic diseases and healthy diet just helps a lot for those people. And those people are mostly the ones to with an unhealthy diet upon admission to the hospital. So those people, those really have a big stake in healthier diets, but the oncology department again, so they can see... also has a big stake in protein and energy and rich diets for people with a cancer that are deadly very heavily to their different stakes. But I think most patients, we did some research, and I think 95% of all, basically and hospital would abide very well with a healthy diet. And the other 5% oil are to the malnourished group, so to speak, today should be protein and energy arranged.

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Q: Okay. And then where do you think the kind of the barriers come from? Like, I hear like a lot of like, that a lot of colleagues want to transition transition patients? If you would give them the option, they wouldn't mind either. Why do you say... Why do you think it's not happening yet? Not fully.

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A: Good question. I think partially because it's a change, and people always fear change it in a bit. And it's also a loss, right? So so some options of the menu will be lost. So you're gonna disappoint a few people. And I think the system doesn't really want to disappoint people. And maybe even that the evidence is difficult. Because if you can say, look, there's a lot of drug treatments, right. So if you say you're if you give this drug to a patient, he lives a year longer. Okay, then you give them the drug, if it doesn't cost a billion pounds per pill, but you give them the drug. But with a healthy diet in a hospital, you can't say if you implement this plant based planetary health oriented diet in a hospital, your patients will live a year longer. You don't have

Chronic disea...o drive change

Chronic disea...to healthy diet

Chronic disea...to healthy diet

Almost all pati...m healthy diet

People fear change

2:71 And maybe even t...

Direct correlat...diet is missing

People feel lik...ken from them

correlat diet is missing

the evidence. So that also makes it difficult. You have to 2:72 Y... Strong argum...for convincing convince them in many other ways. There's also a barrier and you've mentioned it, that's guite a big one. Q: Yeah. A: And then again, money, money is always a problem, because **Budgetary constraints** it cost a bit more. Q: Yeah. Okay, so the value case is not really convincing yet. then. A: Yeah, depending? I think I think it is. But you have to really be in the field. Q: Yeah. A: And there's a lot of things we don't know yet. Q: Yeah, of course. A: So I think if that would be stronger, it will be easier. But I also More research is needed think it's very difficult to make it stronger. Q: Yeah, yeah. There's still a lot of research missing as well. A: Yeah, right. Yeah. But I think if one if one hospital will just make a humongous 2:75 One hospital s...d lead the way change, and then for the better right for humanitarian patient, 2:76 healthy diets, and then get patient satisfaction measured. You'll Different mea...points needed be you'll be a long way. But you also need to have some some You'l... harder endpoints than just based on satisfaction. You need something regarding health or weight or illness. I think they've moved make it easier but I think the change will come anyway. I Momentum fo...hange present

Direct correlat...diet is missing

Q: Yeah. 184

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A: So the changes will come it'll just take some time.

think the momentum that is created at this point is pretty great.

Q: Yeah, I also got that impression like the more I start looking at papers and everything the more I find that there's already, yeah, initiatives. Like yeah, sprouting everywhere. Yeah. Yeah.

A: which is great. Of course.

Q: Yeah. Yeah.

A: Just takes a long time to speed up the process. It will be good.

196 Q: Yeah. Yeah, of course. Well, that's why I'm here. Yeah.

198 A: Great.

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Q: Okay, um, yeah, I've asked you everything that I wanted to know, for now. Thank you for taking your time again. Do you have any remarks or questions for me?

A: I do have some questions, but it's mainly about what your work your exact goal is, and what you're doing with the information you gather?

Interview 2: Food services

Q: Could you tell me more about the food options at the hospital you're working at, the LUMC?

A: Yes, we have a menu where the patient make her choices daily for a chefs menu, the menu that we just give as menu so you can choose different components from that menu. If you choose to get the chef's menu, you get the chef's menu that we serve in without salt, less fat and vegetarian. If you don't like that, you have the choice for every a few components like meat, potatoes, sauce, the types of things that you can choose from five different choices. Except for the protein we have. We have meats, fish, and vegetarian. So you have nine options.

Q: okay.

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A: and the dessert, you can also choose the dessert of today. And you can choose all the other things like yoghurt, Vanilla Fla, chocolate vla. There are many choices. But since four years, I made the choices less. So we had made, we had less waste when I came here to work, we had so much more choices, and so much things to change with each other. And that made the waste a lot.

Q: Okay, that's good to hear. And how do you feel about the options that you currently have?

A: I think they're good. Not too much. Because you have different kinds of people like religion. That's



Diversity

reason why we three option of fish, chicken and vegetarian are three options. So for all the other people we have here in Leiden and around, there is enough choices.

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Q: Okay. Yeah. Okay. And are you familiar with the term planetary health diet?

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A: Not the planetary health diet, no.

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Q: Okay. It's basically where you focus on vegetables, whole grains and plant source proteins in your diet. You can eat animal products as well, but they're kind of reduced to a minimum, also sugar and all these additives to really lower the burden of your diet on the planet and also on human health.

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A: Yes, yes. When you do explain it, we have a vision. We call it pure LUMC and pure means no additives. Freshly cooked, and fresh from the grocery. So we don't use any premade components. And we have a policy to use not more than six grammes of salt a day like you know the Voedingscentrum.

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Q: Mhm.

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A: That is our guide. Okay. It's also from the government - Preventieakkord. And they say what we have to do they also go to the protein transition. So that's what we working on in in the hospital. Yeah, so we we in the chef menu we weekly give two options of vegetarian or plant based so not to say for now you don't get you don't can't eat meat, but we

Diversity

A: I thin...

Puur LUMC

3:44 Yes, yes. When y...

3:5 A: Yes, yes. When...

Preventieakkord

Vegetarianism

A: That is our guid...

would like to show that eating without meat is also a good meal and nice to eat. Okay, so we tried to seduce people to eat non no meat.

Vegetarianism

Influence patients choices

²⁵ Q: And how do you do that?

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A: Well we make Bami you know Bami, Nasi, that kind of dishes we do without meat. It's something else in it or just leave it and put more salad with more plant based components. It also use the, I don't know how to call it things that you can use instead of meat, vegetarian components you can buy with our groceries of our delivery. So we use that. But that is not also always healthy. Yeah, of course, there's also a lot of fats and sugar. So it's, it's hard for us to search the right component.

Vegetarianism

3:7 A: Well we make Bami you kno...

Q: Yeah, yeah, I can imagine. And if the LUMC would, for example, adopt a planetary health diet. Do you see any benefits or drawbacks in that?

A: Well, we are trying now. And we, we see that a lot of people are a little bit confused why you say that I can't eat meats. Patients are, are very kind to us. They like our food and they think everything is alright. But if you go to the restaurant, then the people are complaining and why can we eat? Fries? Why don't we have pizza? The kinds of things. It's hard.

Unclear communication

3:8 A: Well, we are trying n...

Q: Yeah, but that's more in the restaurant then where people can just when they are visiting or things like that.

36 A: The people who work at the LUMC.

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Q: okay, and which stakeholder group in your like perception is the most resistant toward it? Is it the employees or the visitors?

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A: Yes. Employees and the doctors.

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Q: Okay. Okay. And, yeah, you describe like the food options when people are staying at the hospital or being treated there. How are the food options if you're just visiting in the canteen, for example.

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A: So you can have a lot of options. For the for the dinners, you can choose the same what we give to the patients, but you also have a lot of sandwiches toasties you can make your own salad, you build your own salads, pokebowl just a normal sandwich and put some cheese or having more chicken etc.

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46 Q: Okay.

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48 A: And lots to choose.

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Q: Okay, that's great. And are there also based there where you try to nudge people towards a more healthy option? Maybe?

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A: Yes, that's just what we're trying to do now. At the moment, we're looking for something nudging things to to make people we're not a choice. What we think is the best choice choice. So that's, that's going on now.

12 Q:...

3:11 A: So you can...

Nudging efforts

Nudging efforts

Employees most resistant

Food choices

Doctors most resistant

9 Yes, that's.

Q: Okay, is there anything that you already tested and that you maybe know the impact of?

A: Well, I'm I'm since the first of April. I'm a team leader from the restaurant. So I know not know everything.

3:13 A:...

8 Q: Yeah

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A: but they changed that we will. You don't have any snacks, like fries. Five things only one item a day. Mostly the kroket. You know, that? That's the only thing we serve. And in the in start of it, there was a lot of rumour. Oh, why don't we can we get it? No, we are five months ahead and you don't hear anything. But we have other things that also are healthier than the snacks will say if you leave something else that puts something in return that's better. And that they are trying which they can do better.

Less deep fried options

Better food quality

Q: Okay. And what are some things where you say they could do better? For example.

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A: All the sandwiches they give are not homemade. By delivery, or bakery. But there are also a lot of additives. when you make it yourself, it's pure, like a sandwich with cheese or chicken, lettuce. Don't put anything else on it. So that that has I think it is a lot a great improvement when you make more yourself than that you buy that's one thing we have to change.

3:14 A: All the sandwiches...

Q: Yeah, of course, then you know what's in it better

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and spread this? Yeah. And do you have maybe things where you say, Oh, if we did this people would be better? Like informed like some of the you said you're working on some nudging things. Do you think there's something that could particularly help to convince people to eat healthier?

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A: Yes. Putting the the items in in the right way and healthiest in front, or make them cheaper, if that is possible. Enough to seduce them to buy the healthier things by good examples or or tastings. Taste is how good it is. Like that. We don't serve any candy anymore in restaurants with you nuts. Fresh fruit, cleaned fruit is just ready for for takeaway and eat. So

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 Q: okay, yeah, it sounds like you're doing a lot already. I think.

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A: Yeah. We're doing our best.

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Q: Yeah, of course. But it's always hard to change I can imagine. And how do you feel about your influence in, for example, driving change in the food policies at the LUMC?

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A: I have great influence. I'm, I'm somebody who likes to change. And I started with purely on che. But at first I was only head of the kitchen for the patients. So there we are much further in the in the Puur LUMC, say than in the restaurants. So I have I have a great influence. But I have I need to people around me. So I now have the chance to do that in restaurant.

:15 Q: Yeah, of co.

Positive result...udging efforts

3:51 Putting the the items...

Collaboration

High influence

Q: Okay, that's great. And could you describe some ways in which you try to influence the food policy since you started working? Um,

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A: well, I've changed the menus, I changed the chefs menu, only a few competence to choose a lot of signing, we have posters, did some trainings. What do we want with pure LUMC? Why do we want it? And we did some trainings for how do you do it? Do you tell the people but we have a menu with pictures. nice pictures from the foods, but also the nutrients are displayed like the protein galleries carbons carbon data, so people know what's in it. And if they have to make a choice, they have to make a choice. They can see okay, this is maybe better than that. We also try to make good choices from our view but there are always something that has more calories than you can chew. Sometimes you can choose for something. Something more calorie, and you liked it more and the other day, less calories.

Educate food assistants

Marketing

Marketing

Changed the menus, I changed the chef...

2 Q: Okay.

A: And it totally changed in the last three years for patients.

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Q: Okay. And what would you say is the biggest driver behind these changes?

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A: Quality, quality from the food, waste. And the process. When we first, when I first started here, we had so many things to cook. That took a lot of time. Sometimes we cook something and we only used

Quality improvement

Reducing waste

Process Efficiency

How the second of the second

one portion. And now we cook less, we cook fresh, we have the time to make a good quality. And I have so have less waste rate.

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Q: Okay. And you mentioned that there are some government initiatives as well. Would you say that those are mainly driving the change? Or is it really internally driven as well? Or maybe a mix of both? It's also possible of course,

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92 A: at first it was internally we do to make a better food, healthier food. And then came the Provincial Court. And now they say in 2030 you have to do a you have to change a few things. I don't know if you've know the Alliance. Gezonde Voeding. Yeah, in de Zorg, there are a few hospitals who says, They say okay, we are the first to do this. And if you want to join us, and we can teach each other, we can teach the hospitals or other I don't know how to say it. But they like to teach. So. And then we also started and then you, you meet so many people, and that sort of like the roller coaster. And more things are happening and changing. And that made us where we are now.

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Q: Okay. And has that happened that you taught other hospitals already? Were set still like in the start?

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A: No, no, no, we have monthly meetings. We started with 11 hospitals. And we are now with 55.

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Q: Oh, wow.

Quality improvement 3:5... Reducing waste 3:20 Q: Okay.... Collaboration

Process Efficiency

3:21 A: at first it was internally we do to make a b...

A: So everybody is joining. And, and you you learn from each other? And we have connection with each other for the how do you do this? And I think it's really worked well.

101

Q: Okay, that's really great to hear. Yeah, and you mentioned, for example, that the biggest drivers are kind of the quality, the waste and the process efficiency. So it's, it's mainly focused on that, and not really on the health of the patients or people.

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A: Also. So we had a few doctors here at the LUMC that are really convinced that good foods, healthy foods, can cure people or can help our with our medicines, less medicines. And since we heard from the Provincial Court, when they joined us, and we joined them to make a statement, at least, and also a Visie, LUMC is also developed with them. Also, the health from the patients, and our, our employees, and visitors.

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Q: Okay. Yeah. And how do you deal with, for example, resistance? You mentioned, for example, that doctors are not always happy with the food options at the restaurant in particular, how do you manage to deal with that?

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A: Well, that's hard, because I know what to say. Because I'm convinced of the good choice we made. But for our, our employees, it's sometimes, it's hard, and you not always can compete with a doctor. And he says, Well, I think it's ridiculous that you don't sell a pizza. And a doctor is always somebody, somebody who is higher in, in the range of the

Collaboration

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A:
So.:

3:24 Q: Okay, t...

Education and training
Unclear communication

3:27 A: Well, that's har...

hospital. So yeah, they're a little bit scared that they know what to say, don't want to be rude. And that's what why we try to learn them in some trainings from what can you say, if you can explain why we do this, then they'll they may understand it. If you can't explain, then you don't know what to say. And you say, Yeah, that is the boss... that is not the answer that you want to hear.

3:27 A: Well, that's hard, b...

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Q: Yeah, of course. And how often do you do these trainings?

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A: Well, we have done them now. And it was last year. It has three e-learnings. Two meetings, and now we are having a, like an app. And every week they have they get two apps of two messages with questions about pure LUMC, in their own environments. So we try to teach them every week a little bit. But it's hard to when they don't inspire them to look. They don't answer the questions.

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Q: Okay. Yeah. Have you noticed any changes since you introduced apps or?

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A: Well, they started in January. And I had just I had a conversation with the agency who quoted in our hospital and the response was very low. But as a team, Team Manager, you also have to get get contact with your employees created to forage. That's my job now.

117

Q: That's good. Then I would like to ask you that when I talk about the food transition in the LUMC, what do you think about?

Lack of interest in education

Education and training

Unclear communication

3:28 A: Well, we have don...

A: I'm, I am positive about the food transition. But I'm not somebody who says, no, no meat only plant based. Got plenty in our hospital. People need the good vote. When you, you have to eat a lot of plantbased foods to have enough protein. When you when you eat meat or fish or something else. So I don't think you can say no meat anymore. or so. They say 50:50, 80:20 I don't know anymore. But in the hospital and it's hard to realise, but for the people with no special diets or or heavy diagnosis like cancer. I think it's a good it's good also look for our planet, duurzamheid. Yeah, I think it's good. And, I

Importance of protein intake

Positive attitu...food transition

Positive about the food transitio...

121 122 **Q: Okay**.

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way to do it.

124 A: But we have to do more, yes.

Q: And what are some things that you would say are missing to maybe realise your ideal vision of how the food services should look like?

think we are in a good or we are already in a good

A: Well, I think with the patients, we are, we are doing good. It can be better but we're doing good. But for the employees, you can - we have to do a lot more. We noticed that, especially the young students are, are very firm. They know what they want to eat. There are already vegetarian or vegan. And that's the question is, do they come with us? So that is also a sign that we have to do more? I think we can do a lot to do that. But also have choices for people who don't want to do it.

Q: Okay. And what are some things where maybe what's one thing that you say, if I had this today that would bring me a step further, in realising that and?

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A: Well, I think you have, if you have good communication, good information, that helps. Sometimes they change something and they don't communicate, then people are surprised what's happening. If you tell them why things are happening, okay, let them see that it has happened. Or also by signing, you can do a lot to make people understand why things happen. The most important,

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134 **Q**:

okay, yeah, so tell them we're changing this because it's better quality, it's healthier, it's maybe less wasteful and things like that.

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A: Yeah.

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Q: Okay. And do you do that? You mentioned that you do it of course through the trainings for example, is there some other way that you do it?

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A: Now not enough, we also have TVs in restaurants, and we show them some movies about why we think healthy food is good. But now we have the film is more than a year, same film, so people don't see it anymore. So we have to change more and this is what we're doing now. And how can we motivate people to look to the movies what are we telling so make it more interesting for him for them to watch the things we show them and we like to do a

3:56 Well, I think you have...

Communication

3:33 A: Now not enough, we al...

Changes influ...ple's behaviour

Marketing

lot more with with designing in the restaurant or the routing into restaurants is not very logical to walk when you want you want to make your own sandwich on right there the sandwiches on the left there is the butter and cheese at the front, at the end is something else you need so, we have to find a different way and I think that helps.

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Q: Okay, yeah, yeah, that makes a lot of sense. Of course it should also be convenient. And then maybe you can work with nudging.

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A: The only have an hour, they want to walk quick. If you first walk through the stack is like ah, well essentially speakers also Good bye. Oh, they had a very nice salad. That's that's just a waste of the things.

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Q: Yeah? And how would you feel if a colleague came up to you and started talking about that they really want to work on the food transition?

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A: Oh, I will be happy. Because most of the people are a little bit scared of it. But why? Why? Why would I do that? Why should I say what people will eat? So if I have people who want it, I like to use them in my restaurant, okay, come and help me and tell people why we're doing it and why it's good for you and why it's good for the planets. I think we don't have have to say it's good for you to decide what's good for me, but also good for the planets. That's what now is a big item for everybody. Most people.

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Q: Okay, so that's like, one of the most convincing

Changes influ...ple's behaviour

Marketing

3:33 A: Now not enoug...

factors so she'll start talking about like, the environment.

152

A: Yeah, I think it's helping better than saying it's good for you.

154

Q: Okay. And are there any other factors should maybe help?

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A: Well, showing, tasting like, let people taste. Healthy food is nice to eat. Most of times 'ew, It's not nice to eat'. Of course, it's nice to eat. Oh, We only make nice food to eat, I always say, but they're convinced that it is not nice to eat. But maybe that was 20 years ago. But now it's good food. Yeah. Without meat, or it's vegan. It's really good food.

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Q: Yeah. And do you think I've heard like, a lot of times now that it's maybe a cultural thing for the hospital as well that people want to? Yeah, take care of the patients and like, kind of coddle them with nice food and comfort them?

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A: Yeah.

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Q: Does that also play a role? Yeah.

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A: Because we, we don't serve a lot of pastry anymore in restaurants. And people were angry. Well, if I have a bad not a very pleasant conversation with a doctor, I want a nice treat. If you have heard, you are diabetic. And you walk out of the doorway by the doctor or you walk into the pastry. That's not a good idea. Yeah. So what we tried to tell you... you

Environment...cing than health

Vegetarianism

Negetarianism

Negetarianism

Negetarianism

Tasting helps

Culture

): Yeah. A..

can eat pastry but not in our hospital, because we don't think that is the good way to. But we have other things. Also. less sweet, less, less fat.

166

Q: Yeah, yeah, I understand. I also when I'm at the hospital, and I live in Breda. And when I go there, then the first thing I see is like a big like Apple Flap or things like that. And I'm like, Yeah, I just went to the doctor, like, this is like supposed to be healthy. So yeah.

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A: That's it. A lot of people do understand why we do it. But why say if you you, you keep something out of your, your, you leave something out that you put something back as an alternative, you can get everything out. So there is no choice anymore.

170

171 Q: Yeah.

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A: There are a lot of choices who can be better than the face to remove we had before.

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Q: And you mentioned a lot that it's better to communicate changes. Do you think it's also possible to just change something? Like replace it and not say anything? Or does that really not work?

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A: Oh, for some things, I think you don't have to communicate everything. Because if you do that, oh, there are always people who want to say something about it. The smaller things. I think you just have to change. But show them for oh, we have a new article today. You'd like to taste it. That's better than don't say anything at all. But if you can show them Oh,

Unclear communication

3:39
A: That's i...

have you taste this already? And free taste always works.

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Q: Yeah, yeah. It's like it's a pretty big cliche. Yeah. I can imagine in the Netherlands, it's like a big cliche thing that when it says like gratis that people are like: Oh, yes, I need that.

Culture

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181 A: It's a good thing. Okay.

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Q: Yeah. Yeah, of course. Um, okay. I think now I've asked you everything that I wanted to ask

Interview 3: Dietician

Q: Um, could you tell me more about the food options at the LUMC?

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A: For the professionals and the customers or for patients?

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Q: Um, both if you as far as you know.

A: Do you have you already spoken to some people?

Q: Yeah, so I do have like an overview of it.

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A: Yeah. You spoke to someone of the facility centre?

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Q: Yes.

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A: Okay, so you already know a little bit.

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Q: Yeah.

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A: I'm a head of the department of dietetics. So we are not responsible at the end for the foods in the hospital. Our duty is to advise patients in the hospital or at home in homecare advise them about their food and nutrition. And so I know of course we have we have the programme for the diet and food for patients. It's it's made in the LUMC mostly. And but they are responsible for financial also for the - what's your subject helped me a?

4:18 So we are...

Dieticians not...in food policies

21

Q: Sustainability.

A: Sustainability and all that part- I don't know exactly what you want to hear from me because we work with them. But that's not about sustainability. But that's for what what are we going to offer our patients and what what is what are we going to offer when they have a special diet? Gluten Free or something like that? That's what's our responsibility.

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Q: Okay, so you're looking at the different requirements someone Yeah.

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A: Exactly.

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Q: Okay. Do you have a large influence on that there?

A: When it's concerned so to offer our patients in related to their their diet and their nutritional needs. we have quite some influence Yes.

33

Q: Okay. And do you have any insight in opinions of others in the hospital like how do they find the food options especially the options for employees?

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A: For employees, a colleague and her team were trying to offer healthy foods and they changed... they made some changes in the offer and I know that some people are happy with the changes and others - the opinion of a lot of others - is I'm an adult and I can decide what I want to eat and whether I want to choose something which is healthy or a little bit less healthy so the opinions about the about the assortments in the in the employees restaurants is

4:19 W... Dieticians infl...patient choices

Food preferences A: For employees, a collea...

People feel lik...ken from them

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Q: Okay. Yeah. Okay, but it's the employees do they eat in the normal canteen like the visitors as well or is there a separate?

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A: Now, the employees eat, patients on the word, they eat at their own ward. And the patients on the polyclinic. What's the word for polyclinic?

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Q: I'm not actually sure but I know the polyclinic.

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A: They can get something here on the Leidseplein. The same assortment, the same offer as the employees okay. They can make the same choices.

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Q: Okay, that's very helpful to know. Would you say then that opinions are more negative from your point of view.

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A: Oh, no. Yeah. What I hear from customers. The employees.

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Q: Yeah. 50

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A: They uhm the Dutch word is "betuttlend". And I don't know if you know the the words. Why? Why do other people have to decide what I'm eating? I can do that I can decide myself. Yes. Or when I want a burger or kroket - a Dutch product. I don't know the word in English. I can decide. And I know it's not healthy to eat and 10 kroketten every day.

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Q: Yeah. Okay. Yeah, I understand.

Food preferences A: They uhm the D...

4:6 A: A...

58 Q: Okay.

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A: They make... we have contact about it. They we don't offer krokketten anymore. And now we have Croquw Miseur but they're not with with the good breads, and there's a lot of cheese or needs and which is more healthy or unhealthy. Yeah, you can discuss that. So,

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Q: okay. Um, are you do you know about the planetary health diet?

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64 A: Not very much. Yeah, I'm not working as a dietician.

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6 Q: Yeah. Yeah, of course. So it's basically a diet where-

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A: Yeah, yeah yeah of course I know.

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Q: Whole grains and try to limit animal products.

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2 A: I know.

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Q: Yeah. Would you see any benefits? Or maybe negative sides as well? If the LUMC were to adapt that in their services?

75

6 A: What was the question? Actually? Do they want to

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Q: No, no, I'm just researching the diet. So do you think it would be a good thing for the LUMC to adopt such a diet?

79

A: Oh difficult question for me. (pause) I think it's a good thing to adapt it when when we all have to adapt it. I don't know if that's that's an answer for you. But there is a lot of discussion about it. And there are people who are very enthusiastic about this idea, and are some others who don't think that's necessary. And when we let me say it this way, if we adapted tomorrow in this hospital, I don't think it's a good idea. It's, it's, it caused a lot of trouble, I think, with the patients and with the visitors and with the professionals. But in the future, there comes, there's maybe a time when it's necessary to also get that concept in this hospital.

81

Q: Okay. And you said earlier, if we all have to adopt, do you mean that whole LUMC or-

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A: No.

85

Q: -the Netherlands?

87

A: Yes.

89

Q: Okay. Yeah, yeah. Okay. So it's not the time yet

91

92 A: from I think at this moment is to early. Okay. Yeah. Okay. There was a week. In the Netherlands.

4:7 A: Oh difficult question for me. (pause) I t...

4:21 S

So it's...

Too early for change

94 Q: Yeah.

95

96 A: And the LUMC joins that week. That's the only week when we the only week that they don't offer animal food.

97

Q: Yeah, yeah, I understand. Yeah, animal products. Yeah. Yeah,

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A: For me personal. I can live with it.

101 102

Q: Yeah. Would that also, I'm thinking right now, would it maybe create even problems because there's patients that can eat a lot of things? And then if you take away more things, do you think that would create problems as well?

103

A: Well, maybe it's difficult for patients suffering from malnutrition, to get in to? To take enough protein if you are not allowed to eat any dietary or any animal foods, animal products, that could be a little bit difficult? Because it is you have to eat a little bit more and you have to know exactly what to eat, to eat enough and to eat to get enough protein also for healthy people.

105 106

Q: Yeah.

107
108 A: So that's a little bit difficult.

Q: Yeah, that makes sense. And how do you feel about your influence in driving changes to the Food Policy at the LUMC?

Yeah. W...

<u>ب</u>

Importance of protein intake

4:22 Well, maybe it's diffic...

A: Not very great. Not very big improvement. Small.

Small influence

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Q: Okay. Would you like to have more influence? Or 114 are you-

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A: It's fine for me. 116

117 118

Q: Okay.

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120

That's in other departments? Yeah. My, I want or my dieticians want to have influence on the products choices for the patients. And when that influence is enough to order what those patients need, then it's okay.

122

Q: Okay. So it's more the people working for you then-

124

A: Yeah. 125

126

Q: -that need that. Okay. What are some ways in which they try to-

128

A: Pardon? 129

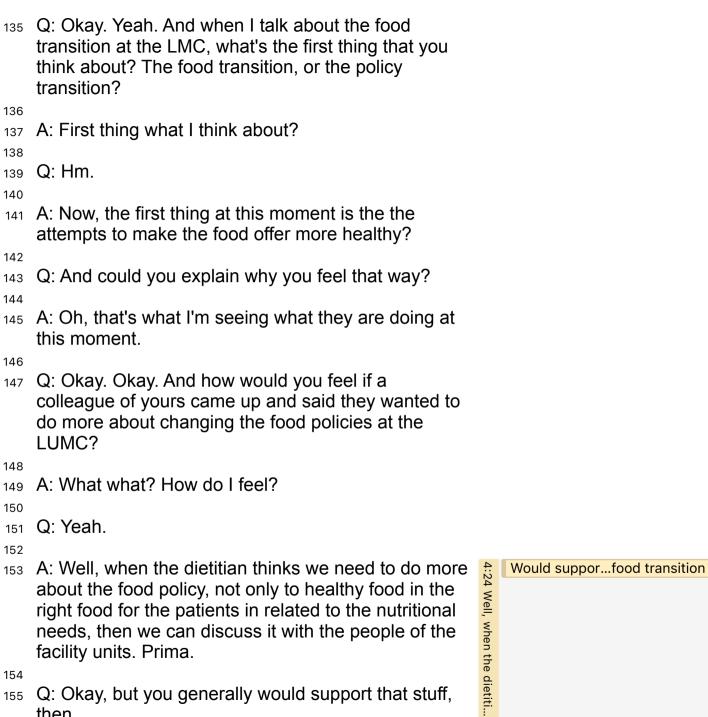
130

Q: How do they get influenced there? Do they have like, so how do they influence the food policies?

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A: They have meetings with the staff of the facilitator, facilty unit. That's, that's always what we offer our patients. They need a little bit more protein, calories, whatever. And how are we going to manage that?

Collaboration 4:10 That's in o... Satisfied with...nce (dieticians)



Q: Okay, but you generally would support that stuff, then.

157 158

156

Q: Yeah. Okay. And do you have? Yeah, and ideal way in which the food system here would work? How it would look like?

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A: Not particularly. No, I'm sorry.

161 162

Q: No, that's okay. No, that's no problem. Are there certain things that you would personally change? Or are you not involved in that?

164

A: Personally change in? And are we talking over the over the restaurant, I think. Well, I have my own food mostly just when you ask me this personal. No, I think it's, it's for for me, it's fine what they sell. Sometimes I buy salads in the restaurants. You can make them yourself at this moment. The sort poke bowl kinds of salads. Okay. Yeah. Perfect for me. And I'm not buying a lot of things in the restaurants. I think the the assortment means the offer is okay, at this moment for me.

166

Q: Okay. And have you noticed any changes in the recent years?

168

A: Yes yes. We already discussed that. Yes. They're trying to make the assortment more healthy and less products like fries and krokets and all that kind of things and more salads. More fresh fruit, more yoghurt, more vegetarian offers...

170

Q: So it's mostly been healthy changes then. Yeah.



172 A: Yeah, they try to make healthy changes. 173 174 Q: Okay. 175 176 A: Yeah, no plastic and these kind of things in the restaurant restaurants. 178 Q: Yeah. Yeah, and then if I maybe look back at the talk we had today. So far, um, Would you say that you're satisfied with the situation of how the food services are? Right now? 180 A: For me, yes. 181 182 Q: Okay. And then maybe in your professional opinion, like, like how the patients? Yeah. What? What kind of food the patients are getting? Are you satisfied with that? 184 A: Yeah, the dietitians are mostly satisfied with the Dietitians sati...th food choices products the patients can choose. 186 Q: Okay. 187 188 A: Well, there is some discussion about quality sometimes. But mostly they are satisfied. 190 Q: Okay. And quality in what way? 191 192 A: like, vegetables too long cooked or sometimes a Better food quality little bit cold, dry. It is this cooked in the morning and then regenerated in the evening. You know, what, what the process is the food for the patients? And

that means a little loss of quality.

194

195 Q: Okay. Yeah.

196

A: The way it does, there's a delay in the time patients eat it and the time it is prepared and that delay that's influenced the quality.

198

199 Q: Okay, so it's mostly, yeah, logistical reasons then.

200

201 A: Yeah. Absolutely.

202

Q: Okay. Yeah. But, yeah. And your department, did it work with both the restaurant and the patient service?

204

205 A: Only patient service.

206

207 Q: Okay.

208

A: The restaurant is just for us, like all of the employees in the LUMC, we buy something or not. And that's all.

210

211 Q: Okay.

212

A: No influence on what they are selling there. No.

214

Q: Okay. Do you know if any other dietitians are involved in that?

216

A: No, no dieticians is involved. Okay. They asked me a few years ago from what is healthy and what is unhealthy. I tried to explain them, because you can't

say from one product they want, they want a kind of list. So this is healthy. It is unhealthy. Yeah. And that's very difficult for us to say that about one product. You can't say a kroket example is unhealthy. It's impossible. It's it's what you eat in all day, week or year.

218

219 Q: Yeah.

220

A: So that's the only only time we discussed the products. Okay. And the employees restaurant.

222

Q: Yeah. Okay. I understand. So you're mostly more involved in this department and patients?

224

225 A: Yes.

226

Q: Yeah. Um, do you help with a menu there that they make?

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229 A: The dietitians, yes.

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231 Q: Okay.

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233 A: Yeah.

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35 Q: Okay. Yeah, I think, yeah, I've

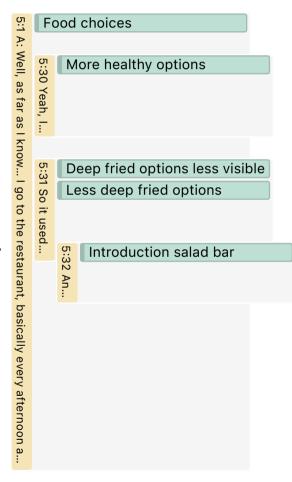
Interview 4: Doctor (Endocrinology)

Q: Can you maybe first tell me more about the food options at the hospital at the LUMC?

A: The food options?

6 Q: Yeah.

A: Well, as far as I know... I go to the restaurant. basically every afternoon and also quite a lot in the evenings. Because I work a bit late. Normally, Yeah, I think they have a very wide range of options. They sort of blocked the less healthy options a bit more since maybe one or two years. And now, the more well basically healthy options are much more central. In the in the restaurant. So it used to be a very big fried items corner, you know, and only so well basically, all these snacks and, and, and chips, but they... I think you'll even have to order them now. There are only a few kroketten in there. And basically yeah, they're the salad bar is most prominent now in the middle of the of the food restaurant and they also they have a lot of more much more healthy toasties like this fried sandwiches. Then they used to have a lot of salads anyway. Also, prepacked salads. And I think the choice is also better than what they had before. Yeah, and you can gather still dairy there's yeah, there's this year. I can mention all the items that we have. But but it's it's really Yeah. Right belts and much more healthy than it used to be.



Q: Okay, and you said that you go there a lot. How

happy are you with the options that are there?

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A: I'm quite happy.

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14 Q: Okay.

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A: It also changes the way I eat. I see. Well, I'm a professor in metabolic health, but I must admit I'm not really the the prime example of a person that eats best. I don't have breakfast. So for example, I have breakfast with a cookie in the morning. Which is ridiculous, possibly, but it's how we do it. But um, yeah, I normally I'll bend over to the to the kroketten corners, and I Yeah, and because I have to wait there I don't do it anymore. And I eat a lot more and more of these healthy salads nowadays. And these these fried sandwiches toasties and they're not just don't have just cheese on it, but they're also vegetables on those and and yeah, I mean they I think they are content wise they are much improved.

17

Q: Okay, so it really also influenced your behavior and a bit then as well.

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A: It does... No, no because I just noticed that yeah, I should eat more and better also because of health issues. So that's it not it was a combination of realizing that I should eat better and that the options were better.

21

22 Q: Okay.

23

A: And I tend to not to take anything from home. So I eat what's been offered here.

Happy with food options

Desire for healthier lifestyle

5:2 A: It also changes the way I eat. I see. Well, I'...

Changes influ...own behaviour

Q: Okay. And do you talk to colleagues about it? Do you know how they feel about the options? For example?

27

A: in general, people are quite positive. Yep, yep. I see that sometimes when visitors get in, because visitors can also of course eat in the restaurant that they always complain that they can't find the krokketten and fries basically. And certainly the older people I guess, that are quite used to when you go to a hospital or to some or you go out they have this unhealthy food as we also did in the past, I guess with my parents you're I mean when you go to a hospital, you are having fries because that compensates for, for going to the hospital. But no question that I think most majority of people I know are quite positive about the changes in the restaurant.

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Q: Okay, that's great to hear. Are you familiar with the term planetary health diet?

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2 A: No.

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Q: Okay, no problem. It's basically a diet that focuses on both the health of the planet and the health of the people. So they do that by for example, increasing the amount of whole grains you eat fruits and vegetables, and really limiting sugar and animal products to like a minimum to keep the consequences for both the planet and the health blow. Would you see any benefits or drawbacks for this diet if the LUMC were to adopt that?

Change acceptance
Complaints

Older people more resistant

5:36 And certainly the...

Most people s...ut the options

S Q: Okay, no problem. It's b...

36 A: Only benefits. I mean, I'm completely and we're doing research on the effects of fiber. Dietary fiber in preclinical research here. But um, yeah, I am always teaching students in the course and the lifestyle courses. That I mean, the dietary dietary intake is one of the best things you can do. And only mentioned in meta analysis. It's always the the total dietary fiber intake that is that comes out as protective against caused mortality, because diabetis, cardiovascular disease, and I haven't seen any, any single study showing that increase in dietary fiber intake is not good for you. And we mean in our most studies that we do here we see that's having dietary fiber as ferments into the short chain fatty acids so they have all kinds of fantastic benefits for the mass. I really think they are translational and in predicting what happens in humans. So yeah, I'm really a fan. If you keep your gut microbes healthy, my dietary fiber I'm quite sure that's a that's in place into the health of the person so...

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Q: Okay, so you would really see, yeah, benefits there in regards to the health of the patients and the employees and everyone that eats there then?

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A: Oh absolutely. No, no, absolutely. I mean, we should really should. I mean, refrain from really all these processed foods and get back to, to the non processed foods that is fiber rich, basically also.

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Q: Okay, um, and do you see any challenges there in implementing that as well?

Health benefits
Importance of dietary fiber

Only benefits. I mean, I'm completely and

Prioritise non-...ocessed foods

5:8 A: Oh a...

44 A: In the LUMC?

45

46 Q: Yeah.

47

A: I think I think the transition is already there, if I understand this correctly. I mean, I see the chickpeas everywhere now and the salads and chickpeas are the most fiber, the most fiber rich products in the world basically. That's also why I take them because I know that my intestinal health is improving and the thing is that many people don't like it's a tick. These are not the most tasteful things if you don't disguise it with the with the proper What is it now... herbs for example. And yeah, there are so many people who love their sauces and and their salt and everything to disguise the proper taste of how food should taste like. So. In the end. I mean if you offer it so if you're I mean you see I mean I don't think that that the restaurant no I have no idea but it's, they still sell well. Because now yeah, if you if you change what you serve to people, people will also change what they eat. Unless you're facing people like me, who don't take their food from home. But also all the people who are here as visitors, I mean, if there's only chickpeas, people will hate it's chickpeas.

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Q: Okay. Okay, so you wouldn't mind if they even took all the unhealthy Options from the menu.

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A: Personally, I would not mind personally but I mean, if that could be a reason why people will choose another academic hospital to to go to our because because of the food options. That could of



Transition already started

5:10 A: Per...

Food choices

course be not a good idea. I think yeah, it should be balanced. I mean, there are always people I see this with my with my parents, my parents like hamburgers and fries and if it's not on the menu they don't eat. For example... so I think there should always be for for some options also for people who Yeah, who otherwise would not eat sort of. Yeah, but I think hope Yeah, how it's done now in LUMC, for example had that it's basically I mean, it's not prominent anymore. I mean, you really have to look for them. So your attention is basically drawn to other options, which people may like as well.

Food choices

Convenience

5:10 A: Personally, I would not mind perso...

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Q: Yeah, yeah. Yeah, I can imagine I hear a lot of people talking about the salad bar all the time so-

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A: The salad bar... You come in it's you can, you know. You can make your own salads for example. And that is also I think, I'm the lazy guy. So on the left there was always the prepacked sites and not only lazy also I like to have things done quickly. So I can take this out, but you can also make your own salad with your favorite ingredients, and also the amount that you like. And I think that is a really, really good option.

5:11 A: The salad bar... You co.

5:12 A:

And I perso...

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Q: Yeah. Yeah, I agree.

59

A: And I personally I love the... Yeah, I mean, they had a better collection and now but they had a collection of sandwich off of these toasties, you know? Yeah. And they were they were layer two with vegetables in size. And now they sort of change it all the time, which I don't really like. I'm the guy who

Budgetary constraints

Resistance to change

had the same brand of car or for 60 years and I also like... I love a toastie. I like him to be on the menu every day, but a lot of chase a lot. But um, it was, it was very filled with avocado. Kind of other other vegetables and now they don't have that anymore. It's more like that the pulled chicken. And I think it's, it has to do with costs. Also first, no statistics that they know they're not so much so well. What is it? There's not so much on it. And they're still the same price. So yeah, that is that's of course the thing. Yeah, they need to make money.

Q: Of course. Yeah. And how important would you say is the food policy at the LUMC to you?

A: How important with respect to what?

Q: Yeah, personally professionally.

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A: So it's good that you show to the world, those are the visitors, that you're into into a into a healthy foot basically. Yeah, firstly, yeah. I see that my personal personally, I've benefited benefits from it. Yeah, my intestinal health isn't always that good. But I see that if I if I have a more healthy lifestyle also with eating, and after year, five, five or six days a week and then basically half the foods here, five to six days a week, that does improve my intestinal health. So personally, I'm completely favoring the transition that I already see. I think also it's really good to show that the LUMC is a healthy University Medical Center in that sense. And people also realize by going to the restaurant Oh, well, this is purportedly what I should eat. So the tip of the day also message back home,

Budgetary constraints

Resistance to change

5:12 A: And I personally Hove the... Y...

Health benefits

5:13 A: So it's good that you show to the world, thos...

for example. What was the exact question again? Health benefits Q: What how important the food policies are to you? A: Yeah. So yeah, firstly, it's very important. Yeah. Food policies important 5:40 So... And I think societal. I think it's also due to at least maturity, importance, but it's good that you do it. Q: Yeah, yeah, I understand. And how do you feel about your influence in driving change to the food policy? 76 A: I don't think I ever had influence here. Well. Gives feedback about food Small influence maybe this way. Where they put me forward because if I see something, if I don't like the food, I'll tell them. If I like the food, I'll tell. I tell them to because sometimes I once I had a soup that was so mega salty. That I sort of said - What is probably something went wrong there. Oh, it's got who's got the message back? No, no, it's not wrong. It's exactly how we meant it to be. And then a central I can bring it to you influence here. Well, maybe now and you can taste it now. And that there must be a part of salts sort of being unleashed in this in this batch of super. But no, I always also tell them if I read it like something I'm gonna check this gonna make a change because because I complain sometimes I always, or else also like to get positive feedback if I really like something. Does that change Unsure about...ence of efforts policy? I don't know. I don't think. Q: Okay, so you having changes based on that? And A: I don't think so. No, I mean, they're a colleague of Small influence Other people...more influence

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mine. Who you'll have approached I guess, also...

mean, I think he's actively, actively working together with restaurants as our professor on lifestyle in implementing changes here. I mean, he's also the television screen and the restaurants. Yeah, people hyper him today's law. I think he is influential and maybe as one of the few people here but uh, no. I don't see any influence on me.

Other people...more influence 5:15 A: I don't think so.... Small influence 5:43 I don't think so. z

Q: Okay, and why have you not tried to do more?

84 A: Yeah, basically, I see the changes that are there. And that works for me personally. Yeah, I tried to be influential in many other aspects of life in research in getting the group together and getting my pharmaceutical Caltex. And eating for me is something that you do in five minutes. And behind my screen, and yup. Now I'm the professor of lifestyle. I will certainly do it also here. I tried to educate also children. I have no yeah, we made movies for you know corpus museum here. Purpose is the is the is seen as the museum with a very big person on the outside, too, can travel through the whole body. And I'm working on brown adipose tissue brown fat, and that isn't a tissue that you should stimulate by, by cold exposure. And it's also stimulated by my fiber intake. So it makes it made a small feast to educate children for example, it's good to eat your fibers who's good to eat your banana or Apple also to stimulate your brain activity. I got a great response on that. But that's basically science wise, food wise. No, I think on Hanno Pijl is already doing a good job and-

Different priorities 5:16 A: Yeah, basically, I see the changes that are there. And that works for me...

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Q: yeah, for me, yes. Okay. So your influences more

in other areas than

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A: if it would have been the panel. I would certainly be happy to step in. I've never been approached for that. No.

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Q: Okay. Yeah. So it's also a matter of opportunity.

91

92 A: Yeah

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Q: And when I talk about the food transition at the LUMC, what do you think about?

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6 A: what do I think about what?

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Q: when you when I talk about the food transition? What's kind of the first thing that comes to your mind?

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A: Oh, first thing for me, it will be getting the, cutting the processed carbs out and getting the unprocessed food in. That's how I see it. I see the chickpeas I see the avocados coming in. I see a lot more vegetables. I see the salad bar with unprocessed items. And I see a lot less rice. I see a lot less krokketten.

101

Q: so it's something that's already happening as well.

103

A: Oh, yeah, absolutely. No, absolutely. I think this has been changed during COVID somewhere. But um, yeah, but one or maybe a year ago. I guess. The things have been starting to change already. Yeah.

5:44 if i...

Would suppor...food transition

- Q: Okay. And how would you feel if a colleague came up to you and asked for Yeah, they wanted to really start the food transition and they want your, your help or your input? What would you how would you feel about that? 107 A: Oh, good. I can at least think based on my scientific knowledge, what is good for people? 109 Q: Okay, so you would feel positive about that as well.
- 111
- 112 A: Yeah.

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- Q: Okay. That's great. Oh, you 114
- A: have the feeling that they made their way already. Because I have the feeling that you are still talking about something that is that is going to happen?
- Q: Yeah. 118
- A: And I see so many things already. So I don't think that there will be a major additional change there. I guess. But um, but yeah. I'll be happy to to be in a panel or to be thinking with you. Yeah.
- Q: Okay, perfect. That's good to hear. And could you maybe describe, how would your ideal food policy look like? At the Luc
- A: My ideal food policy? I never really thought about this. Because I said a few times already. I think they're the changes are already. Yeah. Well, people

Would suppor...food transition 5:21 A: And...

5:22 Different priorities know. I know. Already that I changed my food intake. And for me, that works perfectly. And yeah. I told you already that I'm not I mean, so far, I haven't really be thinking about this whole food policy because it works for me. And I put my emphasis and other things.

Oh, the ideal food policy. Yeah. Yeah. As I said, Well, you could look here we I guess, is that I think the changes are already perfect. Very good. I'm, I've never really thought about about foods other than things have improved and I'm eating better. So I really should think about ideal food policy. I would think things can be cheaper because prices go steeply up in the air. But also with the transition that I see already. These have been enormously increase especially a few years ago and that was really not happy with that. We had a bigger sandwiches and then they cut to the sandwich length by half. Not putting much more on top of it, and the price stayed exactly the same. And I thought it was ridiculous. And they sort of at a time I thought well. I should get in my own food because it is ridiculous. The prices go up that much. Well, I mean, on the other hand, people really easily adjusted that's also me. So now I'm paying a lot more than I used to do for my food, but I see that yeah, that for me it is works so so in the end, I'm not too unhappy anymore. Ideal... Yeah. It depends on definition of ideal. Ideal to improve the health of every single person. Yeah, just got to get rid of all the fries. Get rid of all the kroketten... and uhm yeah, that ideal will really get away of all the unhealthy foods, but there's just so many your main goal is health, global health, if the goal is also Yeah, I mean, being a bit supportive to people who don't

Different priorities 5:22 A: My ideal fo... 5:23 Oh, the ideal food policy. Yeah. Yeah. As I said, Well, you could look here Higher prices I guess, is that I th Focus on patient health change. Yeah. Keep the pricing. Not sure. Yeah. I think depends completely on definition of ideal. Or, or best. Yeah, what you should advise.

126 127

Q: Yeah. Okay. And if I kind of look back at what we talked about today, I feel like you're really positive about the changes that are happening and adjusting. Would you say that other people are doing the same or from your experience, at least?

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A: Yeah, that's what I tried to say in the beginning. That's for my colleagues. I also Yeah, I see that many, many, many after their dinner or their lunch, at least in the restaurants. So many do. And that Yeah, and I don't hear complaints, which is always a good thing. And asserts I do hear sometimes complaints of visitors. That they can't find the unhealthy bar. Yeah, yeah. That's yeah. As a child, I was always promised fries if we go to some something that was not nice. Like, like, go to the hospital. So yeah. Yeah. But yeah, what are these just I mean, like Peter is also not black anymore and I mean children don't I mean, that are that are now being raised have no idea who Black Peter was. So that there's no problem either.

130 131

Q: Yeah.

132

A: And also for dinner. I have to say that the dinners are also much better than it used to be. Yeah, that I mean, for example, what I in the past the vegetables were really cooked way too far. And now I see that I'm not sure if that is on purpose, but at least nowadays, the vegetables are much less overcooked, which I think that's a good idea to get

Better food portion size

Better food quality

Better food quality

And also for di...

the vitamins in and not our. I see that Yeah. Also the portions they they are they are instructed better. And it past whatever you want it they put on their plates, and now people get instructions. And I see in general, there's a lot more vegetables on the plates than used to be. Yeah, I think it's also really improved in the taste. Is really improved versus versus the past. I also must say that to call it I mean, it does serve the same dish every single time. I see differences in the dish all the time. Not sure why, but in the past it was much more consistent.

134

Q: Okay. Great. Um, yeah. Then I asked you everything I wanted to ask you for today. Thank you for taking your time again. Do you have any questions for me? At this point?

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A: I would love to reach your thesis when it is ready. So maybe you can share what you have written.

Better food portion size

Better food quality

5:27 A: And also for dinner. I have to s

Interview 5: Nurse

2 Q: Okay, then. Can you tell me more about the food options at the LUMC?

A: What do you want to know, because I am a nurse. I am not working in the kitchen.

Q: Yeah. Just how you experienced the food options maybe for the patients.

8 A: So to see so that they can choose what they want to eat. Is that what you mean?

9

Q: Yeah.

11

12 A: I have your phone number. I can make a photograph of our list. My patients can choose so that's a patient get choose what they want to eat. And in the evening, or now we have a list too I think. And I think it's, I think it's very good. Okay, I think they have a lot to choose. Yep.

Food choices

Happy with food options

Q: Okay. 14

A: And is that enough or do you want to hear more?

Q: Yeah. 18

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16 17

> A: In the morning, lunch, of course and dinner, around five o'clock in between there are very healthy snacks. I don't like them because there's no sugar. no sugar, no salt in it, but they are very healthy and with extra protein in it. I think that's it.

Introduction healthy snacks A: In the m...

22 Q: Okay.

23

A: And then in the afternoon, the kitchen people, they they walk by the patients for another round of coffee or tea or some sodas, and then in the evening around eight o'clock they walk by again. Patients can choose again. But then they don't have snacks. They only have snacks with the with the route now with round in the morning. They have snacks to at around now. Yep. Okay, so we have a different view. In the morning. It's like sweet, so like, like cheesecake or brownie and in the afternoon we have like a salad or something or healthy bread so what. We had nuts, I thought we have slices of cheese. Yeah, cheese bars. Yeah.

25

e Q: Okay.

27

A: And when the patients arrived in the morning, and went to the operation room, and is not back in time to order his dinner, then the people from the kitchen will order for them and else they can choose from how many meals, two kind of meals they can choose. But it's when they like none of them, they can choose vegetables with mashed potatoes or just cooked potatoes they can choose anything, anything they want. But there are in the evening you can choose. There's a week menu.

3 A: And when the patients arriv...

Patients can ch...their own diet

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Q: Okay, okay. Yeah.

31

A: And that's variates every season.

33

Positive evaluation

Positive opinio...s in restaurant

35

66 A: Yeah. Spring, summer, autumn, winter and so on.

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Q: Okay, and how do the patients feel about these options?

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A: They feel sometimes like it's luxury. Again, it's hospital food. So it's not like home. But I really think quality is better than I experienced in other hospitals or elderly homes or something.

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Q: Okay, and how is it in terms of health? Do you take that into account as well?

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A: I'm sorry, can you repeat the question?

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46 Q: How healthy is the foods that you serve?

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A: how healthy? They try to use less salt, less fat. Yes, less sugar and so on. So and especially the last I don't know when they they start with the with the small things in between. The last two months they are very strict with healthy things in the food. We used to have Snickers and Mars with peanuts and cake but they took it out so the nurses are going to be very thin at the moment because we cannot eat any cake anymore.

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Q: Okay, and who makes these changes?

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A: I think is from the hospital from the management above. I have no links with them. So I don't know.

6:5 A: how healthy? They try t...

A: They...

Changes influ...own behaviour
Changes influ...ple's behaviour
Food policies...getting stricter

6..

Changes com...p management

54 Q: Okay.

56 **/**

Like it's not our ward who thinks oh, let's do let's do it this way. So it's hospital.

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⁵⁹ Q: Okay, yeah, I understand. Yeah.

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A: We have a restaurant for the employees. Well, they took out the the fish and chips so that's not possible to collect anymore. Do you understand?

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Q: Okay, yeah. And do you feel like you have any influence in changing this? Yeah, the policies regarding food?

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65 A: No, no.

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Q: Okay, would you like to have more influence?

69 A: No, no.

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Q: Okay, so you're Yeah, you're not really. It's not really important for you?

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A: I'm a nurse, but I do administration. I do IT, I do everything... reanimation just a few minutes ago, so we don't want to mess up with the food. People who can also eat because there they have a very small appetite. Then we want to make the food thing. Yeah, that's processes we want to have influence and we have with what they are offering the patients, I don't care.

No influence

Different priorities

A: I'm a nurse, but I do...

- Q: Okay. Yeah, yeah, I understand. It's not, yeah, it doesn't have to be a priority. Yeah.
- A: If we have patients who are all feeling sick after operations and they have only meals very, very heavy. Then I will take actions because I want my patients to eat something and not to vomit or how do you call it?
- Q: Yeah, yeah, of course. Yeah. So you also take into account the situation then as well. Of the patient? Yeah.
- A: We only we only look what our patients need. What food is going on? But not if they want it. It is possible to get spaghetti or we want only vegetables for our patients, no.
- All wards are different in this. We have. We have a lot of people with cancer but we do not treat them with chemo therapy. But as we are more possibilities to offer patients things they can eat because they normally don't want to eat anything. Yeah. But our ward we have a lot of cancer, cancer, but well, they are not allowed to feel sick.
- Q: Yeah, yeah, I understand. And how would you feel if a colleague came up to you and said they wanted to start maybe initiative to really get food to be more healthy?
- A: Well, they already have done that. So I think it's okay. Okay, you think it's okay, did you talk to a dietest from the hospital or not?

More importa...n what they eat

A:

If
we hav...

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Q: I'm talking to next week to them. Yeah.

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A: Okay. Okay. You know, from the ENT Ward, it's a really special category patients. They used to drink and smoke a lot they drink alcohol in this way of sentence but they are living an unhealthy life already. So if and when they are here for the surgery, they can eat for two weeks or something and afterwards they won't never ask for brown breads, you know, with lots of fibre and that kind of stuff. They will ask for a white, white bread, you know, and I don't feel responsible to change the lifestyle they used to live for so long. Yeah. It's, it's really hard to change the lifestyle so I'm already happy if they decide to stop smoking or stop drinking after the surgery to prevent that the cancer comes back.

Resistance to change

Time in hospit...le in long-term

Okay. Okay. You know, from the ENT Ward...

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Q: Yeah.

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A: For the gynocology or the eye or the jaw surgeries, it's different, I think. But the ENT patients it's really a very special group of patients from the gynocology. I see. We have young patients from gynocology and elderly patients and there is really a difference in what they choose for foods you know that from gynocology you see. They want to eat a lot of pie, or yogurt with cereal, you know, muesli or healthier cereals. I don't know. But eat fruit with fibres and so you see really difference between patients and the specialties.

95

Q: Okay, and is there a certain group of patients that likes more healthy food then?

Different appr...patient groups

A: For the gynocology or the eye...

A: There are always patients who are not satisfied and they are content with what we have. There are always patients who think it's not nice, but there are also patients who think it's very, very good what we have here so you will always find one who want more healthy food because I think if you are Muslim or Hindu or whatever diabetic you we can adapt the menu to your lifestyle you know, or if you are kosher or whatever, gluten free the kitchen, they order the things that the patient needs for their diet.

100 Q: Okay, yeah. So you take that into account. Okay.

A: Yeah, we do that when they come here for the surgery. We call it opname. You have a big list with what kind of diet do you have? It's really a long list. It's I've never I never know there are so many options for diets.

104 Q: Yeah. Yes, it's a lot. I can imagine.

- A: Okay, we can, we can adjust it with for every patient.
- Q: Okay, so it's really Yeah. Tailored as well. If it's needed. Okay. Um, and yeah, when the hospital makes changes to make, maybe the food policy more healthy. Do you do you mind that or do you just accept that then? Yeah.

A: Yeah, we accept it. Because it is not Yeah, we cannot change it. So it's a pity sometimes. Yeah. But okay.

6:14 A: There are always patients...

Different appr...patient groups

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112 Q: Okay, and in what way? Is it a pity?

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A: No, I like a slice of cake or chocolate or something. And it's gone.

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116 Q: Yeah.

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A: Sometimes. Sometimes I like chips. Well, it possible. So that..

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Q: Yeah, yeah, I understand. So it's also personally affecting you?

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122 A: Yep.

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Q: Okay. Okay. I asked you everything that I wanted to ask you for today. Do you have any questions for me today?

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A: No, I'll send you a photo from our food car for the breakfast. And lunch if you like. Yeah, I sent you photograph of the I have to think the menu. I don't know how many menus I have, but I'll do my best and I'll send them to you.

6:21.

Unhappy with changes

Interview 6: Doctor (Endocrinology)

Q: Can you tell me more about the food options at the LUMC?

3 A: About the food options? Well, I must say we have a cafeteria where a lot of options are offered. I mean, you can choose for for hot meals and for cold meals, including bread with a pretty wide variety of off of how do you sell stuff on it on the bread and there's all kinds of salads usually fresh salads. It has been has changed in the last I would say two years guite substantially. So there are now many fresh salads offered and less fast food offered but there is still a fast food corner. So you can you can get you often can get i as far as I know because I never go there. But you can get chips and and kroketten and all kinds of bad stuff as well. But it's less I think I think there's less in that category as a couple of years ago. So and fruit is always available. So it's it's guite I think it's a good cafeteria actually and it although it has improved in the last couple of years.

Q: Okay, so how would you say you feel about these options that they offer?

A: I think I think generally I can find I, I must say I rarely go there because I bring my own food for for lunch. But in bed when I go there I can almost always find something that I like. I mean, I usually choose fresh foods. So fresh salads. I never take the warm meals and I sometimes the and that's primarily because I do not really trust what they put in there.

Food choices

7:1 A: About the food options? Well, I must say we have a ca...

7:34 But yo...

7:2 A: I think I think ge...

To be honest. And what they do with with the wild wild eating and what what kind of stuffed day they add to those hot meals but but to sell its are really fine and I sometimes take bread with cheese or bread with tuna salad and and I, The tuna salad is okay. So in general, I must say I'm quite satisfied with what they offer.

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Q: Okay, understand and do you have any insights in how other people feel about these options like colleagues or patients for example?

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12 A: Well, I know that guite a few colleagues of mine. Actually, we're disappointed that for example, the pancakes with sugar, were not not no longer available. And also the I think the Kroketten are less available nowadays and some people are really disappointed. But then after a while I don't have it and I I was they they told me that they were disappointed because they thought I was responsible for the removal of those food items. As I I have I have you know I talked with the in particular couple of years ago I talked with the kitchen staff on a regular basis to help them make the the offerings more healthy. So and many of my colleagues told me that they were disappointed but now I don't hear any anybody anymore. And I think as far as I know, most people are guite happy with what our cafeteria offers. And then the patients you asked about patients, the patients is a totally different thing. I mean, the the patients get very different stuff. They do not get stuff. They do not get food from the cafeteria they have so we have an hour as you probably know, the LUMC has its own kitchen. That that makes every day the

Happy with food options

2. I think I think ge...

People feel lik...ken from them 7:3 A: Well, I know that quite a few colleagues of mine. Actually, we're disappoi... Less influence than previously So...

Blameshifting

food of patients fresh and but there and my feeling is I'm not I'm not that often. with patients in hospital patients. I usually do outpatient clinics but but my feeling is that there there can be things improved in the hospital. I must say. And there's there's one story of a friend of mine who was in the hospital for COVID. And he developed diabetes in the course of his, unfortunately, in the course of his disease process. And then he was offered all kinds of sweet desserts. And he said well, it's amazing that they offer this to me as a diabetic patient. So So I think that things must improve there.

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Q: Yeah, yeah, I agree. I can imagine. Are you familiar with the term planetary health diet?

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A: Yes, I am. I know. You know, I've read the Eat Lancet report. So yes, the answer is yes.

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Q: Okay. What do you see any benefits are also drawbacks if the LUMC would adopt that in their policies?

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A: Oh, I would see, I would say I would see only benefits I think it would benefit the patients it would benefit the staff, it would benefit students it would benefit everyone and it would also benefit the planet. So if that could be established I would be very, very happy. Okay, so So let's meet more vegetables, fresh vegetables, all this you know, ultra processed food out. It's simply unhealthy. So I would be very happy.

Q: Okay, so, overall, would you say that the food

A: Well, I know that... Focus on patient health 7:38 And there's there's o...

A: Oh, I would see, I would...

Food policies important

Focus on patient health

Focus on planetary health

A: Yes, it is.

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26 Q: Okay.

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A: It definitely is. Yes. Yes.

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Q: And how do you feel about your influence in regard to driving changes to it?

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32 A: Well, I again I had I had many talks Well, that's a couple of years ago, but that since then a lot has changed. And I do think and also for example, I there's a video a short video they they recorded me 15 minute video that is on my shoulder on a regular basis on screens in the cafeteria, where I explain to lay people what healthy food is. And you know, they they actually show that video over and over again, to our to our personnel. And I do feel that I have had guite some influence on what happened in our kitchen. People were very interested and then my day listen to my explanations why ultra processed food is bad for us and and why we should eat primarily should eat vegetables and fruit and nuts and olive oil etc. So I do feel that I had influence on what they serve nowadays. Definitely.

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Q: Okay. And you mentioned that it was already a few years ago. Have you done anything? Or Has anything happened since then? For you?

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A: Oh yes, yes. I mean, it has changed and, and I'm certainly not the only certainly not the only driver of

7:39 Q:...

Food policies important

High influence

Less influence than previously

A: Well, I again I had I had many talks Well, that's a c...

7:7..

A lot has chan...in recent years

7:7 A: Oh y...

A lot has chan...in recent years

Food options more healthy

Less deep fried options

Food preferences

Q: Okay, could you give me some examples of like things that changed?

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A: For example, the salads, so the salads there there are way more fresh salads now, and there's less. There's less fast food. So and the bread what you put on the bread I'm not sure what the term is in English but the stuff that is on the bread is generally more there's more vegetables there's more you know for example, tomatoes and salads etc on the bread when because you can buy either those those small What do you call them? Buns or something or the small breads that that you can you put things on yourself? And there's also there's also bread that is prepared by the kitchen. And in the letter case. There's far more vegetables on them then than it used to be. So yeah, I think a lot of things has changed have changed.

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Q: Okay. Yeah, that's great. And may I ask why you talk to the kitchen staff. I mean, there must have been a reason why they approached you or you approached them.

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A: Yeah. Well, they approached me actually. Because then they heard about my efforts to get my patients eating more healthy. I gave quite a lot of data I was on television and I had all kinds of trouble public exposures. And and a day saw that actually,

7:8 A: For example, the salads, so the salads there t...

Actively supp...healthy options

0 A: Yeah. W...

this is as far as I remember, this one of those public presentations was the reason why they called me and they said well, we want to talk to you because because we think that our that our menu should become healthier. And and I was very glad of course that they called.

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Q: Yeah. Okay. And then you really felt like, yeah, the questions or the talk with them really had an impact as well.

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8 A: Yes, yes, definitely. Yeah.

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Q: That's good to hear. And when I talk about the food transition at the LUMC, what do you think about?

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52 A: Well, you know, that there is a transition. Currently, although the last, let's say a year or so I don't notice very much change anymore. unfortunately, because some things can be improved, I guess. But it's always you know, there's always tension because because the there are commercial interests don't know dark. I'm not sure how that works in our hospital. I must say I don't know where the money goes. That is that is made by the cafeteria. I think it's it's the hospital actually they gets the money. Because it is I think the cafeteria in lamc is from the is from the hospital. It's not a a separate company. That is that is actually exploiting the exploiting the cafeteria. So, you know, there's always a balance there is there is always there has to be a balance between what people buy or want to buy and and health because

7:12 A: Well, you know, that there is a transition. Currently, a...

Actively supp...healthy options

7:10

A: Yeah. Well,...

Budgetary constraints

Less changes...recent months

unfortunately, so many people want to buy the the fast food so I know that they're there that it has been difficult to to diminish. The fast food section. Now what are they saving think now we're talking about this there is a cafeteria there's a coffee shop. On this next to the cafeteria there's there's a coffee shop where patients there's that's a place where patients often go outpatient clinic patient and and they also the the offerings of the of the coffee shop are have improved guite a bit. So there's much less bad stuff there. And I'm also happy about that.

7:12 A: Well, you know, that there is a

Budgetary constraints Less changes...recent months

Q: Okay. Yeah. And how would you feel if a colleague came up to you tomorrow and said they wanted to really drive the food transition further at the LMC

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A: I would be extremely happy.

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Q: Okay, and, why would you feel that way?

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A: Because I think that that we need to optimize our food market not only by the way in the LUMC but everywhere. I mean, the food market needs to change to tackle this huge pandemic. of chronic disease that we're facing. You know, it has such it has a lot to do with the food we eat. So I really think that too. We have to change our food market. To help us keep help keep being healthy and and also to help sick patients to get better, because their food is also very important.

7:14 A: Because I think that that w...

Would be ope...ers on change Would suppor...food transition

Big changes are needed

Focus on patient health

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Q: Yeah, yeah. Definitely. And how would kind of the ideal food system at LUMC look like in your opinion? 65

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A: Well, as base, I would say, as everywhere I think, the ideal food system would offer only fresh food. And I to be honest, less Bread. Bread is I mean bread is not is not particularly unhealthy, but in the in the amount of bread we eat, they become then it becomes unhealthy indeed. So and then you know bread should be all bread should be whole grain, and which is not the case at this time. So so fresh, unprocessed food as the only offerings for eating. That is my basically my my ideal. And, and you know, no soft drinks no fruit juices, just coffee, tea and water. And then vegetables, primarily vegetables and fruit, and less fish and and meat in particular. That would be my ideal.

More healthy options

Vegetarianism

Vegetarianism

well, as base, I would say, as everywhere...

 Q: Yeah, yeah. That sounds very much like a planetary health diet as well. Yeah.

A: Yeah. I truly believe that. You know, I think you know, the Eat Lancet report, right?

Q: Hm.

A: Yeah. So, so I think it's a fantastic piece of work. And it's really remarkable what they, what they calculated there and, and I think that to save the planet and to save our own health, we really need to make that transition.

Q: Yeah. And would you see any challenges in implementing that as well?

A: Definitely. Yes, unfortunately. I mean, there's such

Focus on patient health
Focus on planetary health
Yeah. S...

Resistance to change

a huge you know, counter activity. From the food industry and also from people because people, you know, the food industry knows exactly what it does. In terms of producing stuff that people like, there's a whole science behind that. And, and people like sweet people like fat, and it has, this has deep evolutionary roots. We particularly like the sweet stuff and and the energy effects stuff. So and that's exactly what the how the food industry they know that and they design their products to make us crave them. And it's so it's not only the so it's the food industry, but it's also people who actually buy all that stuff and want that stuff. It's a very, very complex process that we have to go through, I'm afraid.

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Q: Yeah. Do you think then that yeah, the reactions or the actions of people are also the reason why maybe the food services at the LUMC are not as healthy as they could be it?

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A: I think I can certainly indirectly so because it as I said before, it has to do with the selling of stuff and if if you know if the cafeteria doesn't sell their products, then of course, it's doomed to be you know, to to get bankrupt by and, and that's you know, that that's very difficult for them. So, and as always, there's also those colleagues that I told you about, who say who are you know, expressing themselves as against removing all these nice, unhealthy food items. But, you know, the real driver in the end is money. So, you know, that's a very, very strong counter active thing, I guess.

Resistance to change

People crave unhealthy foods

7:41 De...

7:42 In terms of producing stuff that...

Resistance to change

Budgetary constraints

7:44 th...

7:18 A: I think I can certainly indirectly so...

mentioned earlier that you try to influence your patients as well to eat more healthy what are some of the options you usually get there?

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A: Oh, that differs enormously. Some patients are very and some patients even asked for my dietary choice. So they want to change and they are aware of the fact that that their food is one of the main reasons why they get sick. But there's others and it's very interesting I, I never quite understand how that works in their heads, but there are doctors even who basically know what's going on with their food and they know that they eat unhealthy and yet, and yet, they they simply and then sometimes they, you know, they they do fine and they, they and then even they lose a lot of weight, eating healthy and they feel much better. And then in the end, they still fall back to what they used to do before. It's it's for some people and I must unfortunately say I'm, I'm afraid the majority of the people is it it's very difficult to sustain a healthy dietary advice.

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Q: Yeah, and what are some things that you noticed that maybe work better or worse than others?

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A: Well, you know, I think one of the things that is important in the in the clinical office is to be you know, to create simple rules so make your your dietary advice should be as simple as possible, and that makes it easier for people. And then what people like is obviously very personal. So within that, that simple rules. People have to make their own choice of what they do and what they don't want to eat. But and that's, that's another important thing. So

Correlation be...iet and health
Patients don't...diet and health

7:20 A: Oh, that differs enormously. Some patients are very...

7:45 Pe.

People need options

never advice, the same food items to all of your patients because then it's doomed to fail. Try to personalize as much as you can. That's one of the other rules. But then then again, you know, a rule like what my main rule that I try to convey to my my my patients is stay away from from ultra processed food and try to minimize processed food and eat as much unprocessed food as you can. And, and that's a quite quite an easy rule, but it's not so easy in in practice, because many people in the Netherlands and I think it's it's even worse in the United States, more than 50% of calories that we eat on a daily basis are from ultra processed food. It's terrible.

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Q: Yeah. Yeah. I can also imagine that if you well they come from your office and you told them to not a ultra processed foods and then they maybe pass a cafeteria, that all UMC and they see all of those foods. That's also what's counterproductive, then. Yeah.

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A: Absolutely. Absolutely.

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Q: Hm.

A: Absolutely. And the painful thing is that we are next to the train station here at LUMC. So many patients come by train to our outpatient clinic, and then they leave the hospital. And then there's this this station, this train station where there's processed food everywhere, all day long. And, and then, you know, you have to be strong to not take that. Yeah, you have to be very strong.

Places next to...ealthy options

7:22 A: Absolutely. And th...

Q: Yeah, it's very difficult. I also I travel a lot by train and then sometimes I want to I'm really hungry and I want to get something but there's only like all the time or like burgers and fries. Nothing really. That's gonna keep you yeah for long and

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A: yeah. And then you do really have to, you know, withhold yourself to to buy something. And I know for myself I know, for myself as well. I mean, I think I know how difficult it is. But yeah.

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Q: Yeah. Okay. And then maybe yeah, circling back to the food services a little bit. Who would you say has kind of the most influence on what is offered there?

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A: Or I guess I guess the staff of the kitchen. And, and, ultimately. I think the staff of the kitchen is by far the most influential group of of people. And then, in the end, there's also when it goes when it is about money. There's also the Board of Directors of the hospital that can listen. And I know that I'm not sure about I guess, in the last couple of years, our board allowed the kitchen to to diminish the the fast food section to to to make it smaller. But I know that many years ago, there was also they tried to do that and then the board of directors said no, we can't be can't afford that because we need to we need the money that is generated by that fast food section in our in our cafeteria. And so this has changed also the - Our board is is convinced that we need to eat more healthy, so that's important as well.

Kitchen staff has influence

power

7:46 Or...

7:48 There's also the Board of Directors...

7:24 A: Or I guess the staff of the kitchen. And, a...

7:47

An...

Budgetary constraints

Q: Yeah. Yeah, I hear a lot of parties I'd like want to

drive the change as well. I'm just wondering why you think hasn't happened yet?

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A: Yeah. It's a good question. It's a very good question. Why does this go so slowly? I think, I think money is one thing but it's not the only thing certainly not the only thing. It's also perhaps any change takes time. And it takes effort, and it needs attention. And we are so busy. You know changing is something that you you have to make time for. And, and that's something that also that's also in the way, I guess it's you know, not not particularly regarding food transition, but But for example, our outpatient clinic goes as long as we could do to make it more efficient, and we slowly but surely do that. But it's a slow process because we there's so much time involved there and we don't have time to you know, to improve and to. So I think time is an issue as well.

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Q: Yeah, yeah, I can imagine. Yeah, of course in the hospital. Everyone is always really busy as well. So yeah.

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A: And that goes for everyone. For the doctors or the nurses but also for the people and in the kitchen.

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Q: Yeah. And where do you think most changes are originating from? Is it more like that? Yeah. One of your colleagues says, oh, we need to change something or is it also No, I'll send it

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A: No, no, no, not it's, it's by far the most the most important source of change is the kitchen staff. They are you know, they're so they are convinced

Slow progress
Time constraint

Time constraint

Time constraint

Time constraint

Time constraint

7:26 Q: Yeah, yeah,...

Kitchen has d...making power
Kitchen staff has influence
Slow change

that they need to offer more healthy food. And, and that's the reason why it changes slowly but surely. But it's not. It's not colleagues or people saying, well, hey, listen, you need to change that. I guess there are people who do or will do say that, that they think it's ridiculous, and I know, I know about patients who told the nurses in the hospital so not outpatients patient but in hospital patients that tell the nurses that they think it's ridiculous what they get what they get for food. But I'm not sure I don't think that that trickles through to the kitchen, those messages. So I think it really is the kitchen staff that does the job.

Kitchen has d...making power

Kitchen staff has influence

Slow change

Slow progress

Slow progress

Q: Yeah. Okay. So yeah, it's really them initiating as well. I mean, they contacted you, for instance, as well, to help them, okay.

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A: Yeah, yeah. Yeah. And the kitchen stuff of course, is is influenced by this general I would say, societal wave of interest for health. In general. I mean, this is I'm not sure how that works, but it's not only in the Netherlands, but I think everywhere, that there is a kind of of how you say that. Health- looking for the word- people are aware, are suddenly - the last five years I would say in the Netherlands - became much more health conscious. That's what I was looking for. So it's really interesting why such a health conscious - why that suddenly pops up. Because, you know, we knew 20, 25 years ago already that the food we eat is very bad for us. But now suddenly there's a kind of wave through our society that we need to get get healthier, at least that is, it's not unfortunately, society but it's a small, relatively small group of people. And and I think the kitchen staff is influenced

Influence of society

7:30 A: Yeah, yeah. Yeah. And

the kitchen stuff of course, is...

by that by that societal feeling. Influence of society 121 Q: Yeah, there's also a few like initiatives like the 7:31... Green Deal 122 Green Deal and all of these kinds of things. Yeah. 123 A: Exactly. Yeah. 124 125 Q: Do you think it would help if those like more 126 outsides influences were more strict in that? 127 A: I think so. Yes, definitely. Definitely. 128 129 Q: Okay. 130 131 A: I think in the end, I strongly believe that we need 7:32 A: I think in th... Green Deal rules. That we need rules that the Green Deal should be, you know, there should be laws telling us you should do that. Because if you don't make rules people will stay very reluctant to take unpopular decisions. And sure. 133 Q: Of course, it's always hard. 134 135 A: Yeah. 136 137 Q: Okay, um, I've asked you everything that I wanted to ask you for today. Thank you very much for taking the time out of your day.

Interview 7: Dietician

2 Q: Could you tell me more about the food options at the LUMC?

4 A: Yeah, do you mean the breakfast, the lunch, the warm meals?

Q: All of it basically.

A: Okay. Yeah, well, in the morning the patients that are on the clinical departments can can choose breads. Besides crackers. We have cornflakes. Well. that kind of products and of course we have cheese and ham. Chocolatepasta, peanut butter and for the drink. We have milk, karnemelk, chocolate milk, juices. And we have medical drinks. So that's called Drinkvoeding. Okay. Oral nutritional support. That's is for the people that have problems with the eating. For example, when they have less appetite, they can get that kind of drinks during the meals. And for lunch, we have the same products as at the learned of at breakfast. And in the evening, we have well I can send it to you. We have the menu of the chef each day. And so that's every day another meal. And the patients also can choose some components. So they can choose fish, chicken or vegetarian foods and vegetables, potatoes, rice, and pasta and some toppings.

Q: Okay, so it's very customizable as well.

11

A: Yeah, they can choose in the evening. So they have a lot of choices.

Food choices A: Okay. Yeah, well, in the morning the patients that are Patients can ch...their own diet Q: Okay.

A: In the evening. 16

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Q: And how are the services received? Like, do people like it or?

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A: Yeah, well, it depends on who you're asking. I think. So that's a variable, I think. When patients have problems with eating because they are nauseous or they have less appetite or they do have problems problems with swallowing. Yeah, then it's difficult for some patients.

21

Q: Yeah, I understand.

23

A: So I think well 25 to 40% of the patients in the hospital. They have, well, some problems with eating because they have less appetite or they're nauseous or something like that. And there is some risk of malnutrition for those patients. But if you asked me about the quality of the food I don't know what they think about that. I didn't research for that. And maybe you can ask that to Elly Baak.

25

Q: Yeah. I've spoken to her as well. Yeah. Yeah.

27

A: I think she knows what the complaints are of the quality of the food.

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Q: Okay. 30

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A: So I don't know that.

Most people s...ut the options 8:2 A: Yeah, well, it...

A: So I think well 25

Different appr...patient groups More importa...n what they eat Q: Yes, no problem. And is there are you aware of any changes happening in the to the food menu right now? Or in the past?

35

A: Yeah, they started with Puur LUMC. So and I was with some meetings at the beginning for Puur LUMC. So I know the changes and I know, I know what the goal is, for those changes and I also work at the cardiology department, and together with Daan. We started also a project for more healthier food. For the patients on the cardiology departments.

:5 A: Yeah, they star

Puur LUMC

Nudging efforts

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Q: Okay, and in what way did you do that? In what way did you make changes there?

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A: Yeah. Well, it's a while ago that we started it we had the healthy sandwich of the week. So that was for example with tuna or mozzarella so they can can choose the healthy sandwich. On the menu we posted some stickers so patients can choose the healthier version of the products. And we also did this with a dessert. So with some stickers on the on the menu, they can choose to healthier desserts like yoghurt with fruit.

8:6 A: Yeah. Well, it's a while...

41

Q: Okay.

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A: Because we have also some well desserts in the menu that are not so healthy. But those products are meant for those people. I just mentioned, the people with some problems with appetite or they're nauseous or something and we also have a menu for the breakfast and lunch and we had made some

:7 A: Because

Traffic light co...ess indication

Actively supp...healthy options

8:7 A: Because we hav...

8:10 A: Well, I went...

Traffic light co...ess indication

46 Q: Okay.

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48 A: So we made it for the breakfast and for the lunch.

Q: Yeah. Okay, so it's kind of like a, like a Nutri score that they have in a supermarket sometimes as well.

A: Yeah, something like that. But then we have three options.

Q: Yeah. Okay, that's very interesting. Um, and are you familiar with the concept of the planetary health diet?

A: Well, I went to a Congress, the National Voedings Congress in March. And there was a speaker from Wageningen. And he had a presentation about well, less proteins from meat and well, how you can make a transit to more protein, more protein from beans or rice or that kind of products.

Q: Okay. Um, yeah, the planetary health diet is also, yeah, closely related to that, I would say it's really about integrating whole grains to the diet, limiting the amount of animal proteins it's not vegan diet per se. So you can still eat like dairy or some animal

Importance of protein intake

products like meat, but it's really reduced and also reduce just like sugar and other additives. Just so yeah, we're on the same page on that. What I mean. Do you see any benefits perhaps for the LUMC to adopt those policies? For such a diet?

59

A: Benefits from that. Yeah, well, if the patients will get more fibre, I think that is for most of the patients a benefit. But products that contain a lot of fibres, sometimes is not so easy to ingest and so you need to have a balance between that I think.

8:12 A: Benefit...

61 62 **Q**: **Yeah**.

63

A: So the thing is, I think, to make food that is delicious, and still, yeah, is healthy, but it's also well, not so difficult to swallow or to eat.

65 66

Q: Yeah.

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A: I think most of the hospitals will have two kinds of patients. You have patients that can eat anything because they're not too sick to eat. And you have patients that are have a lot of problems with eating in general. So for those patients, it's hard to eat very healthy and to eat enough. So you have I think, two groups and in the ideal world, it's better that you make two kinds of menus.

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Q: Are you currently taking a different approach for those kinds of patients right now?

71

A: No, yeah, we tried in the study with Daan with cardiology department and we have some adjusted

Different appr...patient groups

Importance of dietary fiber

8:15...

8:14 A: I think most of the...

Adjusted men...r special cases

menus for some patients. So for example, patients who had upper GI surgery, we have a special diet. Well, it's it's a diet that is easily digestable. So we have some adjusted menus. For some of the patients but not two diet for the whole hospital.

Adjusted men...r special cases

Different appr...patient groups

Q: Yeah, of course. Yeah.

7

73

A: But I think it would be better if we will do that. So a group that has a lot of problems with eating and a group that has no problems with eating or to get enough nutrition.

8:16 A: But...

Q: Okay, do you think that would be like possible logistically and all of that?

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A: It should be possible, but there is there are some problems with the logistic. So for example, one group will receive the normal rice and the other group we will receive the other rice. And so you need two products of a lot of products. So that's for the inkoop. It's sometimes a problem.

8:17 A: It should b...

2 Q: Yeah.

83

81

A: So that's the challenge, I think.

85

Q: Yeah, you would need to of course, buy like two versions of products I can imagine.

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A: Yes, you need two versions. And I know most of the Inkoop departments of the hospitals don't want a lot of versions from a lot of products. I will think it will be better that we will do that. And this is the same for

:18 A:

Product management

Logistical challenges

Product management

8:18... pasta. So you need a normal pasta and you need Product management pasta with more fibres. So the whole grain pasta. Q: Yeah, but that's currently not done? 92 A: No, they choose between products, most of the time they will choose. Q: Okay, and who makes these decisions? Are they involved in making the food policies or 96 A: In most of the hospitals, it will be the head of the Kitchen has d...making power 8:19 A: In most... department nutrition from the kitchen. Okay. So I Kitchen staff has influence think in our hospital, it will be Ellie Baak who decided that and we can give an advise on that. We're not the person who will decide it essentially. Q: Yeah, I understand. And would you say that food policies at the LUMC are important to you? A: For me? Q: Yeah. A: Yeah, I find it important. Yes. Food policies important Q: Okay. Could you describe why that is? A: Yeah, because it's my core business. So I want -People need options 8:20 A: Yeah, b... for me, it's important that people can choose, while

they are in the hospital. So more choice is better I think. And maybe in the future, we will, can tend it

more on characteristics of the patients.

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Q: Okay. And do you feel...

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112 A: And eventually I will hope that if there is more choice, they will they will eat more during the day and they eat more of the things that are healthy for them or are the best to get in?

113 114

Q: Yeah. Okay.

115

A: But I think the future is a challenge of the quality 116 of the protein for most of the patients. So I think that's a challenge for all the hospitals.

117

Q: In what way? 118

119

A: So when we will go to less meat in the diet, we have to make sure that the protein quality is not less for patients. So we need to look for combinations for in the evening meal. So if you can make a combination of rice and beans, that is a good combination for the protein quality. So it has the quality like for example, some red meat.

121

Q: Okay. 122

123

A: So I think that's, that's that's the future for for the nutrition in the hospital. But it's, it's a difficult one to. to make for all the products so maybe artificial intelligence will help us in that process.

125

Q: That's a very interesting thought. Yeah. And how do you feel about your influence in maybe making changes or influencing the food policy?

Importance of protein intake 8:23 A: So when we wi...

Artificial Intelligence

8:24 A: So I...

A: How do you mean?

129

Q: Do you feel like you have enough influence or the 130 influence that you want?

131

A: Oh, okay. No. 132

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Q: Okay. 134

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A: No, no, but it's also because the time. We are responsible for the patients, for my direct patients, I will get an order for patient A and I need to treat patient A so... like this, if we go into products with artificial intelligence for the protein quality, we need time for that.

137

Q: Okay. Yeah, and you don't have enough time to kind of make the changes.

139

A: No, no. 140

141

Q: Okay. Um, have you can you describe some ways in which you tried influencing the policies still? You mentioned that you were for example, joining some meetings on Puur LUMC and things like that?

143

A: Yeah, so we educate ourselves. So we know well, what the goal is, I think, but, but we don't have enough time to lead the project.

145

Q: Okay. 146

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A: Does that answer your question, or or not.

Artificial Intelligence 8:25 A: No, no, but... Time constraint

8:37 A:...

Education

Q: No, I understand. Are there any barriers that you faced in trying to maybe, yeah, you said that you don't have enough time, for example, are there any other things that prevented you from making changes?

151

A: Yeah, what I just mentioned, we're we don't have the decision. So we only give advice because we don't have to follow the lead in it. That's also a barrier I think.

153

Q: Yeah. Okay. Yeah, so you need like more, yeah, decision making power in that way.

155

156 A: Yeah. Yeah. Yeah.

157

158 Q: Okay. Uhm.

159

A: I know from other hospitals, the dieticians are or the Department of dietitians. They also do not have that in the in the hospital.

161 162

Q: Okay, so it's a, it's a problem.

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A: It's not Yeah, it's, it's a problem not only in, in our hospital.

165

Q: Okay, I understand. So it's generally okay. Um, and when I talk about the food transition in the LUMC What do you think about, the first thing?

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A: Yeah, well, they tried now to have more vegetarian products. They started with that. So I think that's, that's good. Patients have more choice

Advice not always followed

8:27 A: Yea...

Dieticians not...in food policies

8:29 A:...

Importance of protein intake

Importance of protein intake

Q: Such as?

171 172 A: sorry?

Q: Like, which steps?

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A: Yeah, the step that that we make the protein puzzle with products that are not meat or fish.

176

Q: Okay. 177

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A: So combinations in the meal that give a higher protein quality of the meal.

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Q: Okay. And do you know how when you say for example, you increase the vegetarian options. Do you know how these are received?

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A: The patient? How they received the vegetarian? No. I don't know.

184

Q: Okay, no problem. 185

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A: We don't examine that. 187

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Q: Yeah, of course. Yeah. Yeah. And how would you...

190 191	A: All my patients have they or have a surgery or they have less appetite. Or they're nauseous. So you don't know where the problem exactly is? Is it the progress, is the food or is it the problem with eating?
192 193 194	Q: Okay. Yeah.
195	A: So most of the time, I don't make a conclusion about the quality of the food in general.
196 197	Q: How would you feel if one of your colleagues came up to you and they said they really want to work on the food transition?
198 199	A: Yes, I think that's a good idea.
200201202	Q: Okay, so you would support that that as well?
203	A: Yes. But not I think it's good to also give the patients some choice to eat meat. So not no meat at all.
204 205	Q: Yeah.
206207208	A: I think that's too extreme.
209	Q: Yeah. So giving them a choice as well.
211 212	A: Yeah. Give the people a choice.
213	Q: Okay. That's interesting. And then, lastly, could you maybe describe your kind of ideal vision of the food landscape and the LUMC how would that look

8:32 A:... People need options

014	like?
214 215 216	A: You mean, at the meal at evening for dinner?
217 218	Q: Yeah, for example.
219	A: I think I mentioned it already, but we have two types of patients and within those two types of patients, that we can give them enough choices. And also the choices are vegetarian foods with the protein puzzle within the vegetarian option.
220 221 222	Q: Okay.
223 224	A: So we need artificial intelligence for that.
225 226	Q: Okay.
227	A: And the protein muscle, I think it's also important with, for example, the lunch.
229 230	Q: And how do you think AI could help there?
231	A: Well, we need a lot of combinations of products. So, for example, the beans with the rice is a combination, but also bread with hummus is a combination, so you have a lot of combinations and a high quality of proteins in the meal.
232 233 234	Q: Okay

Different appr...patient groups

8:33 A: I think I...

Q: Okay
 A: And I think you need artificial intelligence for that.
 We can start with giving some examples. But it's a lot of work to give all the examples.

- Q: Okay.

 A: And I know, University of Wageningen, they'll make something like that.

 Q: Okay. That is very interesting. I wasn't aware of that.

 A: I can email you the project that they will do.
- Q: Yeah, that will be great. Yeah, thank you. I've asked you all the questions that I wanted to ask you for today.

Interview 8: Doctor, Gynocology

Q: Could you tell me more about the food options at the LUMC?

A: You mean in the restaurant? Or for the patients?

6 Q: Both.

11

A: Both the food options? I do not know in detail actually, for the patients. What I see is but I'm not sure do they get - they have menu, something like that and the order for that?

Q: Yeah, there is like a choice menu.

A: I think it's too much. I'm not sure about that. I think in my opinion, it wouldn't be nice to have a room where they can take their own food, for example, because it's like ourselves, I mean, sometimes you want to have, you're hungry and you're eating three slices of bread. And the other time you only need one. Yeah, so I think there's a spillage actually and I don't know what to get order but I think it's changed because before they get the food we gave them and now they can order from like a menu. And then the restaurant I found that it's all changed into healthy and again, you have a good example I love to eat the Italian cheese, small one, on my bread, but all of a sudden it has gone. So first ask where is the the carbello cheese? Well, I think it's out of stock, but it never came back and then I found it's not healthy. So they decided for me what's actually healthy and I'm still missing it but I think it's a good opportunity. I

Preference for...tarian options
Unhappy with food options
Unhappy with food options

Think it's too much. I'm not sure about that. I think in my...

Too many options

think... it's good that it's a healthy bar and they've got good food etc. And the only thing is with meat and I don't I think it's better to have a vegetarian restaurants because then the supply is broader. I've always found for vegetarian food that there is much more choice to eat. Now they have meat and they have a choice of non meat. But if there is no meat, they make a broader like... Okay, make it more you say more choosable

Food preferences
Preference for...tarian options
Unhappy with food options
Unhappy with food options

14 Q: Yeah.

15

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A: But I found that they - the assortment, they made it smaller and other things and that's in the in the daily groceries as well. The sizes of the breads are bigger. I don't know why. But anyway, it was like this announced like that, okay, I don't know nothing about the price but but yeah. That's if you ordered a sandwich, a healthy sandwich you get that sandwich a yeah, you cannot eat it.

Unhappy with changes

Preference for...tarian options

Q: Yeah, I've heard that. Yeah. Yeah, maybe they got some feedback. That's-

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A: yeah, make it smaller and more... I found that in the week without meat. There's a bigger choice than we have now with 9:36 l f...

9:35 But I found that they...

ight

Q: Okay, and that's just one week of the year right during the vegetarian week?

23

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A: Yeah, they have a broad assortment actually compared to they have now because now with this, in the vegetarian part is like this. It's the meat part is

still there. To make it just a regular way.

25

Q: Okay. And do you have any insights about how other people are feeling about the options for example at the restaurant?

27

A: Actually, I didn't hear any complaints. No, I didn't hear complaints like oh, there's not... No, no complaints from my colleagues. They are never complaining.

29

Q: Okay, did you hear any positive things? Or?

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32 A: Neither.

33

4 Q: Okay.

35

A: More like, oh, it's out of stock or the kinds of things but that's it, no complaints, actually, on both sides.

37

38 Q: That's good.

39

40 **A**

41 Not really, no.

4

Q: Okay. Are you familiar with the term planetary health diet?

4

5 A: You have to explain a bit more?

46

Q: Yeah. So it's basically it's not like a plant based or vegan diet is a diet where you focus on like, whole grains and fruits and vegetables. There are still some

Most people s...ut the options

Actu....

animal products like milk or meat but very reduced to a minimum as well, like also, additives and sugar is also very reduced. Would you see any benefits or drawbacks as well? If the LUMC were to adopt that in their food policy?

48

A: Sounds good.

50

Q: Yeah. Can you explain why?

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A: Is it also like strawberries you have in the summer and salads in the summer and in the winter, you eat kale?

54 55

Q: No, that's not part of it.

56

A: Because usually now you can buy everything. I mean, if you want to eat strawberries with strawberries, they come from Kenya. Yeah, it's always weird. That's nothing to do with planetary health like.

58

Q: I mean, also a bit. Yeah, to really lower the impact on the planet. I guess. Yeah, it is supposed to lowered impact on the planet. The health of people.

60

A: I think that similar because now the sort of the strawberries in Kenya for our winter food during Christmas. I think I think that's a good option. We have to go a little bit back to more where we come from. So planetary means from if the earth guesses that we have to eat that. Yeah, you can make assumptions, of course for special events, but basically, it would be nice option.

Supports ado...tary health diet

Seasonal menu

:7 A: I..

Focus on patient health

Focus on planetary health

Focus on plantbased

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62
   Q: Yeah. Okay, so you see mostly positive sites
   there. Yeah. Okay. It's also
64
   A: It is also against the bio industry. Is it?
66
   Q: Not necessarily no.
68
   A: the planetary. Yeah, the bio industry, you know?
   Q: organic?
72
73 A: not organic. I mean, all the eggs we are
   producing, the animals are...
74
   Q: Oh, yeah. Yeah.
76
   A: Is that planetary or not?
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   Q: Not in the amount that we're eating eggs right
                                                            9:38 Q: Not...
   now. So it's really reduced as well.
80
   A: Okay. Sounds good. Yeah.
81
82
   Q: Yeah, so generally you would feel positive of the
   LUMC would-
84
   A: No negative feelings.
86
   Q: Okay. That's great. And how do you feel about or
   how important are the food policies at the LUMC for
   you?
88
   A: By means? I'm a doctor?
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Preference for...tarian options

90 Q: Yeah. How important would you say they are for you?

A: For the patients is very important. Because I think the patient is, when you're sick. You're, maybe you don't like to eat food. But on the other hand, it gives satisfaction maybe that there's something to eat, to drink and me as a doctor as an, as an employee. It's important that we have food of course and I think as well that we need a good restaurant. Yeah. Yeah, I think it's important to have it

9:9 A: For the patients is v... More importa...n what they eat

Q: Yeah. 95

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A: Especially when you're on call. It's nice that you know, there's a way out if your call by eating something or eating something which is nice.

Q: Yeah. I understand, and how do you feel about your influence in driving changes? To the policies?

A: It looks like zero? Well. I'm in a little bit of a position but for example, I wrote to the, the Board of Directors, I said, Why don't you make a vegetarian restaurant here as first academic hospital and they said, No, we're not gonna do that. So I don't have any influence, but they listen to me but they say no, I measured I told you, I measured how many cows we're eating here, etc. So I said it's also not only are you say it's, you get money back. I was saving. Instead of saying we use cost saving, it's more like reviewing bees. We are sustainable. And it's even cost saving. If you make here a vegetarian

9:12 A: It looks like zero? Well, I'm in a litt...

Actively supp...healthy options :

Small influence

restaurant, yeah, but they weren't coming. No, no, because we're not convinced but they were afraid that all the arguments from the people will say, Oh, I decide that I don't eat meat. I decided myself. Okay. Yeah, they were hesitating and afraid of the comments. But I don't have any influence on the zero, okay, because if I say make this came very close to say, Oh, that's interesting thing we would we don't

Actively supp...healthy options

Changes com...p management

Organizational culture

102 103

Q: Yeah, yeah. So yeah.

104

A: I was a little bit shocked like last time when the head of the department she was on the meeting. And she said, because it's at who is the head who can decide to make it vegetarian so that I can do that. But the you were there. But she said, yeah, in the board of directors, somebody still wants to eat his cat. And they also want to have for the students the marks and the candies, etc. Yeah. So it's not influential. At least it looks like yeah, if you're the top you can decide whatever you want to talk about it. Yeah. To make a measurement and say, Okay, we decided to do that. Unfortunately, I like to eat my kroket. So, okay, I have to address this little democratic, but that might be an interesting thing. Yeah, you make a report that brings me to the... How can we work on the content of having the food here?

9:13 A: I was a little bit shocked like last time when the

9:12 A: It looks like zero? Well,...

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Q: Yeah, yeah. At the end, we're gonna write a letter to the Board of Directors.

108 109

A: Yeah, I know.

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Q: Of course. Then we're gonna see if they're gonna Yeah.

112 113

A: If they are influenceable.

114 115

Q: Yeah, yeah, but I imagine if they're already not listening to doctors, this might be a bit difficult.

116

A: They won't listen to doctors. They listen actually to noboy.

118

119 Q: Yeah.

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A: They listen to words. I think if you say we make more healthy, that's a good option. But if you say okay, we decided to make that vegetarian, it is a no. Only plant based broader scope like healthy and unhealthy means, you know this or not that. And then they say, Well, no meat, why not? You know this. This is a concept. Then I think they have to decide but they, they're clever. They know that if the concept is there, you can still say it's vegetarian.

122

Q: So they might be more convinced by the healthy argument.

124

A: Well, the interesting thing is when I told them about to make the hospital restaurant vegetarian, they talked to Dr. Pijl. You're having an appointment with him as well?

126

127 Q: I spoke to him this week.

128

9 A: Oh, what did he say about the meat?

Change is difficult
Small influence

Healthy has b...rian in hospital

Property A: They listen

ō

131 Q: Yeah, he doesn't really mind honestly.

A: Because they say to me, that he says you need to eat proteins for the patients. So I said, Okay, that makes sense. But later I thought the patient is here only maybe for a week. I cannot imagine that then you'll get loss of proteins. If you are a week here without eating meat, for example. That doesn't mean your alleles to proteins. Yeah. At least in my option. They hide themselves at the back of him because

Q: Okay. Yeah. Yeah, I had the feeling and during interview that he didn't have that much influence either.

137 A: Oh, that's interesting.

he's the expert in food.

Q: So yeah, not sure maybe that's kind of like blame shifting but I don't know.

A: That is because at the top they are always blame shifting.,

143 Q: yeah. Yeah.

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A: It's a very good idea. But you know, the professor here says it's better not. Yes. The professor did say that.

Q: Yeah, it's very interesting. Yeah. Okay. But have you tried any other ways of influencing the food policies or just?

9:41 A: Because they say to m...

148

A: No, no, no, no, no, no, really. Not really. Vegetarian was an option as a blurb. Furthermore, no, it's what you get. It's a company.

150

151 Q: Okay.

A: I'm not so interested in it either.

154

152

155 Q: Yeah.

156

A: They give you things but now it's interesting because I work for quite a long time already. And first, the restaurants you can get everything or maybe even more, and I was sometimes wondering why we do that. But now they make it healthy. I'm more aware about what there is. Those new do not skip things. But they also introduced kind of nuts for example, they were not there before, and I don't see the sneakers and the marks anymore. Yeah. So I found that that is changing. fluid.

158

159 Q: Yeah. Okay.

160

A: I sometimes say well, why do it this or that? But it's still there.

162

Q: Yeah, yeah, I feel change is just really slow as well.

164

A: Yes and I'm not in the pillar of influencing food. I'm interested in the field of surgery.

166

167 Q: Yeah.

Drastic chang...itor restaurant

9:18 A: They give you things but n...

186

187 **Q: okay**

188

A: though, they have bread, the healthy bread it okay. I believe more in more, well designed food.

That's not a thing, designed better.

190

Q: Yeah. Okay. And what are your main reasons to push further vegetarian diet at the hospital then?

192

193 A: Why?

195 **Q: Yeah**.

196 197

194

A: Because I'm a vegetarian. Okay. And I think when I counted all these meat things, I thought, why don't you make all the hospitals vegetarian? Because it's not necessary to eat meat. I'm not how do you say I'm not a fundamentalist, but because I don't. I don't like it. When I was small I didn't like it either.

9:20 A: Because I'...

Preference for...tarian options

Food waste reduction

199 Q: Yeah.

200

198

A: But I think that can work on sustainability. So why not? Not necessary to eat meat. So make the vegetarian that's one thing make the food amount, I need the option smaller and designed to be a little bit better. It's a small piece of bread.

:21 A: But I thi.

203 Q: Yeah.

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202

A: Taking the bread like anything we're going to put on that.

206

207 Q: Yeah. Okay.

208

A: We've got the toasties here as well. I just ate a Toasty but it's like, Okay. It looks vegan and I think like okay. It's not. Yeah, I don't know what.

210 Q: Yeah, I understand. 212 A: They have to put more awareness. I think. more awareness more. To make it look better. 214 Q: Yeah, more appealing? 216 217 A: Yeah, more appealing. Yeah, this would work. Also for the patients. Yeah. It's not like a first class hotel, but it's more like, oh, well, instead of looking at it looks like now like, okay, 218 Q: Okay. Yeah. And Not very appetising. Yeah, okay. And how would you feel if one of your colleagues came up to you and said they really wanted to work on pushing healthy foods or sustainable foods and they're asking for your help. 220 A: I would help, yeah. 222

Options need to be attractive Q: Okay. Y...

Q: Okay, and why do you feel that way?

A: To work with them?

Q: Yeah. 227

A: Because I think it's important part of the hospital.

Q: okay 231

> A: for the patient, but also for me as an employee as well. Like, okay, let's have lunch.

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235 Q: Okay.

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A: The restaurant is actually fully booked all the time. So that means that a lot of people want to eat there. And the other thing is, is very important thing. It's networking. Eating together means networking. That's pretty excessive. Yes. Just a caress. That's an important one for half an hour. Just to have lunch. Okay. And that's the network. You talk with your colleagues. Let's have lunch at 1230, something like that.

9:23 A: The restaurant is act

Food services...fy social needs

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Q: Yeah. So there's social part as well.

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A: Absolutely. Absolutely. Yeah.

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Q: Yeah. Yeah, I understand. And then when I look at our conversation so far, it seems like it's, it is kind of important to you how what the food policies here are, but you did say that you kind of stopped influencing them or trying is that because of the reaction you received that there is nothing they didn't really do anything about what you said. For example?

244

A: Well I think they changed already. So there must be some influence not from me, but there is awareness about the fruit. That's one thing and that's that I'm glad to that, that I find that it's a part of it because long time it stood still. You know, once in the past, I think in Germany it still is you have a special restaurants for doctors, specialists and for the other employees in Germany still there.

246

Q: I'm not sure.

A: Because it wasn't in the past when I was younger was a special restaurant. Then they decided to have it for everybody and then multiple Okay, yeah. And now it's also betterthe doctor sitting together and the nurses. But your question is more like, I cannot influence it all comes from above. And I think from there, they also say you have to change it, make it healthy.

250251 Q: Okay.

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A: But I think it might be important that they have an inquiry, something like that in the hospital. What do you want or? And I think the design is also important. Yeah, I call it the design, but

255 Q: yeah

257 A: presented.

Q: okay. Yeah. And what do you do you feel like there are, you're talking about the board of directors as one of the barriers do feel like that's the main barrier, in your opinion.

A: I found that they are a barrier because the head of the department says no, they don't want to have this or they don't want to have that. So that's not the barrier, but it's more like why? Because they are asked to make the influence and make it make, for example, sustainable or whatever. And they didn't come through it all. Yeah, that's weird.

Board of directors has power

Q: Okay. Yeah, yeah, definitely. Yeah.

264

A: But our headaches if they say okay, this cheese Italian cheese is not healthy, they can take it out. But as they say, for bigger or broader things, and it costs money this

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Q: Do you feel like there are any other barriers that you can identify?

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A: Well, there are barriers. Both the content of the food or the logistics, both and the logistics are found that it is sometimes difficult because I've heard from patients or hear treated for example, for oncology or radiotherapy, that afterwards they eat something.

270

271 Q: Yeah.

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A: Like okay, we have already gotten there, but it's also like drinking coffee and then they want to eat something which is not healthy. The question is, is that for hospital, how do you frame that? And that's a difficult one. Yeah. If you like to eat the Mars, for example, after every therapy, and it's not there, that's demanding or difficult.

274275

Q: Yeah, yeah.

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A: But I still think that has to do with design. It's what I gave an example. Basic food. If you eat it, you it's like okay, but if you make it very attractive and appetite, and pizza was lovely. Cauliflower. You give and you say things to make us more better.

Focus on outs...age of hospital
Hospital shoul...ealthy lifestyle

Ke okay,

We

9:27 A: Well, th...

Logistical challenges

Options need to be attractive

9:45 A: Bu

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A: But my influence is slow, low and slow.

281 282 283

Q: Yeah. And you said earlier that you did research or you mentioned it a few times, about how many cows are consumed. Is that was that out of your own interest or did someone ask you to do that? So you're just your...

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A: I thought about a vegan and vegetarian restaurant here. And because of the problem let's make it vegetarian and but let's make a calculation. To measure is to know. So I made a measurement.

There was a brainwave, but it didn't work out.

Because I was visiting sustainability and you can always say okay, this co2 footprint doesn't doesn't see anything interesting. This is a card right from there. And people say Oh, that's much. I thought that by this consumption. One cow Well, I measured the chicken is less. A cow has a footprint of this. Nobody says how much stuff so a cow this to wait even calculated money. Something. For example, the co2 footprint print is like 428 cars parked there. Yeah, 20,000 kilometres a year. For the cow it's 65 103 cars we eat three cars. Is a number of pork less. And the chicken is like we have 16 cars. If you have to meet your chicken, chicken, beef.

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Q: Yeah, beef consumes a lot of resources. Yeah. So yeah, it's mainly your own initiative and when you do something...

289

290 A: Yeah.

9:30 There was a brainwave, but it didn't work o...

291

292 Q: and how would you? What would for you the ideal food policy look like the LUMC? You mentioned vegetarian, anything else?

293 294

A: Diversity in the vegetarian kitchen.

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Q: How do you see that being implemented? Just 296 one day?

297

298 A: Well, the thing is, I heard in the conversation last week as well that it has is also a matter of money. And that's an issue of course. They did they have their own restaurant or did it was it

299 300

Q: It was outsourced.

301

302 A: That's what it was looking for. Yeah. And it's here in our we changed quite a lot. I remember when when you get a drink that the foods snacks were different from now. Great. They get graded very high. But there are several things which are very weird. For example, if you order for drinks or food for more than 30 persons there is also somebody who brings it there to pay for it. It's very expensive. Yeah. So for example, this portal here is because it gives an online class on art and medicine. And if order for drinks I have to pay quite a lot of money. So I buy it myself now. Yeah. Because then they say okay, 30 persons, they look as five bottles, but they're only doing two but they have to pay five. Okay, it's over. How do you say over and over? Over supply? Yeah, it's all supplied. supply everything a little bit too much.

Preference for...tarian options

9:47 A: Wel... **Budgetary constraints** Q: Okay, that would also lead to a lot of waste.

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A: Yeah, there was a session when I gave the other session and there was for 30 persons were cheese that there were sandwiches soup. And as I came in this central how many prisons? She said we ordered for? I think 60 But nobody. Well, there was a left over Yes, yes. So I said whether you're going to do with left Oh, she said we throw it away. So I said give it to me because they give it to the students onboard bubble and I gave them the other things but it's it's all a little bit too much. Yeah, yeah. And the rest like that and sustainable. I don't eat cheese. It's all ideas. Yeah. stuff. So make a half of it. Well, a lot of things have changed.

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Q: Yeah, yeah. logistics are certainly Yeah. Yeah. Do you see any other challenges there? Or?

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A: Less is better. Okay, I think you better eat something and say, Oh, I like one more and it's there's no more instead of saying I eat too eager, I eat enough. That's always an issue.

311 312

Q: Yeah, definitely. Yeah.

313

A: Especially with food which you cannot preserve. Always see that there's too much. When I organise meetings, it's always too much.

315

Q: No, okay, so maybe the training should be to make it vegetarian and then also less, less supply

Oversupply of food

9:48 A: Yeah, there was a session when I gav...

318 A: Less is more or less is better?

319

Q: Of course. Okay. Yeah, I mean, that would be a good food system, I think.

Interview 9: Doctor, Cardiology

Q: Could you tell me more about the food options at the LUMC from your perspective?

A: For whom? Food options for whom?

 Q: Whatever you know, if you know more about the restaurant, that's fine. Or about the patient services.

8 A: Yeah, yeah. So, yeah, these are two different things, of course. The food choices for patients and those for the personnel and for the visitors. And so there are sort of three streams in that regard. Well, starting off with the... You talked to A: already, or not?

10 Q: Yeah.

A: Well, he knows even more. But so starting with patients, of course, they can fill out their choices for their food choices. And they pick from a menu that is being made. And maybe A: told you that we are trying to improve the choices and to let people make more healthy choices. So that's there. Maybe we'll talk in more depth later on. On that side, then you have the restaurants on our second floor in the hospital where patients go to to get their food. And that's part for the personnel of the hospital itself. And whereas the visitors, they are strictly not allowed in that part. But they do anyway. So they don't get tossed out. But they have their own part that's adjacent to the restaurant for the personnel. And that serves more of... Nah, it's more coffee and sweets,

A lot has chan...in recent years
Food options more healthy
Positive opinio...s in restaurant

Hell, he knows even more. But so starting wit...

but also some more healthier choices as well. So the restaurant for personnel is rather large and used to be...

- Yeah, characterizes a lot of unhealthy food, I must say. So a lot of fried food and pre-prepared things. etc. And it's roughly, I would say, yeah, maybe a year or four, five perhaps.
- 14 There has been a shift towards more healthy choices. And those include, amongst others, fresh sandwiches of various sorts.
- 15 But also the salad bar, which has... You can make your own poke bowl with ingredients. And yeah, more options for vegetarians as well. So all in all, and the idea is also that it is still there.
- 16 You can buy fries. Well, fries, yeah, I think so. I never really look at it. But and the other fried options like a croquette or something. I think these are almost mostly gone. But you can get it if you ask for it. So it's not in this place. So that's there. And for patients, for visitors, then, yeah, there has also been done more to provide healthy choices.
- But also the presentation of the food is in a way that it looks more healthy. The whole setup of that particular area is also more in a green atmosphere.
- Green being the more natural atmosphere that they have brought there. And also presentation with lots of fruits and then have the healthy choices displayed there where you can actually pay for it.
- 19 And it's so, yeah, that really is nice. Then another thing is we have a healthy wall, so to speak. There is this I think it's a brand name and it's not that particular brand, but it's a machine where you can take out healthy choices outside of office hours.
 - So that is one thing. And the last thing that I

A lot has chan...in recent years Food options more healthy Positive opinio...s in restaurant

Deep fried options less visible Less deep fried options

More healthy options

10:3 Th...

Introduction salad bar

10:4 But als... Vegetarian options

10:56 Gree... More healthy options

Less deep fried options

remember, you can each department can order food. If they have a lunch or they have a meeting or if they have visitors and also their choices have become more vegan, vegetarian and less the traditional bitterballen and the other more unhealthy stuff. But it is it is still there.

10:9 So that is...

More healthy options

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Q: Mm hmm. OK. And do you have any insights on how maybe your colleagues feel about the food options or patients?

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A: Yeah. Well, as always, there are people who are against these healthy choices. And I look. I'm not sure if you know that Medisch Contact. It is a magazine.

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Q: OK. I've never heard of it.

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- A: It is a widely read magazine for doctors Medisch Contact. So in the issue of April 20th of this year, there is a sort of. Yeah, it's not a column.
- 30 It's something I'm not sure if you can can screen grab it or so, but it is called the Praktijkperikool. It means something goes wrong in practice and typically it's about.
- Well, the last time we had it. So it's a national thing and it's not only LUMC. And we had a contribution where someone who was had a pacemaker and had a machine on their next to their bed that is able to transmit data from the pacemaker to us.
- So we know how he is doing. But this person has not enough money. He switched off all the electricity at night. So we didn't get the data. Things went wrong and he ended up in hospital. Well, there you

Resistance to change

Less deep fried options

- think, OK, I understand.
- This is a typically clinical medical thing. This person who I actually know is a PhD student is moaning about the end of the hospital fries, you know, fried potato.
- And then it's dramatic. And he says, yeah, but listen, it's not called comfort food for nothing. And so we should not take that away from hardworking coworkers and with lots of adverbs and adjectives.
- And well, and then he ends with I plead for a compromise. Let's all once a week be open to a portion of fries. And there you go. Without salt, non-processed potatoes, air fried.
- Well, all of these things are not at the moment. But there you go. Someone had trouble going to a national. And what amazes me even more is that they published it. I mean, this is not a real practical, something that impeded and impeded beats the normal medical way.
- So I intend to confront him whenever I see you. The first time and next time I see him. Listen, you're making a fool out of yourself. But so there you go. That's these emotions can be rather big.
- The other hand, there are lots of people who really applaud to it. And you hear them actually saying while looking at the salad bars. And there are really some nice. It's just a salad bar with just the lettuce, etc. But also some really interesting with avocado and pearl gerst.
- I'm not sure what English word for all of this, but really good choices. And tofu varieties of falafel, etc. And people actually commented how well it is, how good it is.



41 Q: Mhm.

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A: I, my observation is mostly positive, but some extremely negative and more in the sense of who are they to decide what I eat? And it's my own choice in a way it is. But it is also the choice of the hospital to provide a safe working environment.

And that includes safe food. So it's my take on it.

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Q: Yeah, OK. Yeah, I understand. And you said earlier that you try to influence people to take more healthy choices, especially the patients. What are some ways in which you do that?

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A: Yeah. So down the funnel, he had a really nice project. He's a PhD student of mine. You know, do it's good pressure with me. And what he did together did was first we had a questionnaire. Just just asking of people if they knew what healthy food was.

And what's price roughly 80 percent? Yeah, I know what healthy food is. And those are patients admitted to our wards. So you could think, then why are you here? And it's because if you know, in in cardiology, 80 percent, eight zero percent of patients have their disease because of a bad lifestyle.

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Q: Mm hmm.

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з A: It's ginormous.

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Q: Yeah.

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A: So but still 80 percent. Yeah, yeah, I know that. So then we have made the menu in a different way

People feel lik...ken from them

Mismatch bet...mong patients

10:61 A: Yeah. So down the funnel, h...

Nudging efforts
Positive result...udging efforts

and we have categorized healthy choices and not so healthy choices and also used colors there. ⁵⁸ I'm not sure if Dan sent you a example of this. So this is already nudging in a way by colors, by clustering them one and to actually identify what it was. Then we had the food assistance who went with this cart over the department, going from bed to bed, so

to speak, to ask them, what do you want to eat? And this is typical for the bread.

And there we had a healthy sandwich and it could be freshly made. It was a bit more expensive. But it was a healthy one. And the food assistants were. yeah, where we're asked, instructed to give some background and to provide input to a patient on healthy food.

So the other thing is the carts themselves. They were clad with a poster that looked more fresh and showed demonstrated more healthy food. So there were apples on it, vegetables, etc. Rather than a brown cart that goes around.

62 So they pushed this cart from bed to bed or from ward to ward. So that looked like that.

Q: Mhm.

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A: Then when people were discharged, they got two recipes and a packet of herbs without salt.

Q: Mhm.

A: So healthy herbs and recipes. They each got that as well as a measuring cup for rice and pasta. And we enthused them to cook themselves more.

Nudging efforts Positive result...udging efforts

10:23 I'm

Traffic light co...ess indication

Food assistant...ient's choices

10:62 Then we had the food assist...

10:63 So the other thin...

Nudging efforts

Changes influ...ple's behaviour Influence at home

And saying, so no processed food, as less processed food as possible, more fresh and cooked for yourself. So that's what we did there. I'm not sure if I'm forgetting something. Next to the hospital, and that's a bit of a coincidence, there is a rather large garden.

And this garden is meant for people, what we called with a distance to the working space. So we had issues making it for them difficult to work in a regular job. So it's a sort of a social care type of things.

⁷³ It's a rather large garden and it's just next door from the hospital. And next to that one is our rehabilitation center.

75 Q: Mhm.

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76 77

A: It's called Basalt. It's one of the Basalt buildings. Basalt is a big organization in the Netherlands, all on rehabilitation.

And there's also one here. People with cardiac disease are often referred to Basalt for their rehabilitation. After they had their operation or they had their myocardial infarction. And what we're now doing in pilot. Because during this rehabilitation phase, they get several types of, yeah, and you call it education.

So it's physical, it's emotional. It has to do with addictions like smoking, for instance, and of course also eating. And there's a dietician involved. If people are interested, they can then go to this garden next to and learn how to cook.

81 It's a professional kitchen with all the professional gear. Where people from our hospital teach four

Holistic persp...Ith is important

10:65 And saying, so no processed food, as I...

Education

10:31 And there's

Education

pairs at a time. So eight people at a time in four instances how to cook.

And of course, people don't know how to cook anymore. Because they just order it and it comes to them with lots of salt, etc. Fat, sugar, you name it. So that's another thing that we do from the clinic.

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Q: Okay, that's great to hear. And are you familiar with the term planetary health diet?

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A: I think I do, but you explain what you mean by it.

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Q: So it's basically a diet where you really focus on implementing whole grains in your diet. And fruits and vegetables to really focus on that. It's not a vegan diet, so it's still allowed to eat meat or dairy and things like that.

89 But r

But really to limit additives and sugar. How would you feel if the LUMC would adopt that in their policies?

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1 A: Totally for it. Totally for it.

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93 Q: Okay.

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5 A: Yeah.

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Q: Yeah. Okay. Do you see any... What are the main benefits you see there?

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A: The main... I think for patients it's more healthy. Less salt intake, less sugar, less saturated fats, less trans fats, etc. For the hospital, yeah. I mean... I mean, I think it could be a bit more expensive, so not

Agrees with in...ary health diet
Supports ado...tary health diet

10:36 A: Th...

Budgetary constraints

Focus on patient health

a benefit. **Budgetary constraints** Yeah. the volume is not high at the moment, so that Focus on patient health needs to be developed. That supply chain for the planet, obviously it's better. All sorts of things. You can also derive food more locally. I think that is extremely important. Yeah, the less 10:38 I think th... Preference for...tarian options meat, the better. I mean, that is a common thing. Everybody knows that. The footprint of meat production is enormous as compared to plant-based foods. 102 Q: Okay. And how do you feel about your, maybe. personal influence in regard to maybe changing the food policy or driving changes there? 104 A: I think I have a rather big say in it. High influence 105 106 Q: Okay. And have you tried influencing the food Actively supp...healthy options 10:69 Q: Ok... policy? 108 A: Yes. 109 110 Q: In what way? Is it the way that you described previously? 112 A: Yeah, so I put down on this project, on this healthy food, on the department. First cardiology, I'm a cardiologist, so... But now it also goes to other departments as well. 114 It's on 10 at the moment with the food cards. So. 10:41 It's on 10... Gets asked for...food services and the restaurant also, they want my input. I have a little bit less time at the moment, so I'm not trying to

interest someone else from the department to get

involved there. The garden project that I just

10:67 Yeah,...

Local supply

Logistical challenges

mentioned, I'm also one of the initiators of that one. I mean, well, that's another thing, but smoking cessation is also something that I'm really involved in. But these things can go hand in hand. So, we have this project, Duurzaam en Gezond LUMC, so Sustainable and Healthy LUMC, and it comprises several elements, of course.

You see, I'm also a board member of Vereniging Arts & Leefstijl. Vereniging Arts & Leefstijl, you can look it up. It's a, well, Vereniging, so we have members, roughly 2,000, of healthcare professionals who feel lifestyle is important. So, artsandleefstijl.nl, that is our website. And we have the lifestyle rudder.

We have all sorts of materials that we, this is, koolhydrat, how do you say it? What's the word in English?

Q: Carbs?

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A: Yeah, carbs, thank you. Carbs, limited eating for diabetes too, overweight, metabolic syndrome. We have the same thing for, to treat hypertension, with food, et cetera.

We have these papers. This is called the lifestyle rudder. You can find it on our website. What it indicates are six behavioral elements that you can actually influence.

Oh, I put it upside down, let's see now. But so, it's, and this is on the desk on each outpatient clinic.

Q: Okay.

A: So, I give it to the patient and I say, listen, see if there's anything on it that you feel is rebellious. Of

Gets asked for...food services

10:41 It's on 10 at the...

Correlation be...iet and health

Correlation be...iet and health

Changes influ...ple's behaviour

Changes influ...ple's behaviour

course, it explains why I feel it's important in English. Food is one of them.

And just last week I talked to the Voeding Centrum in the Netherlands. And we will combine together to work together towards the goal. Of course, they want to have more healthy food.

So, that is a positive. And another thing I may add is that we now have an initiative in the Netherlands, which is called Coalition Lifestyle in Care. Coalition Lifestyle in Care. It is from the VVS, our ministry sponsored it.

128 It derives from IZA, Integraal Zorgakkoord, Integral Care Agreement. If you mention it, people say, oh yeah. What this coalition does, it has four parties that, so there's the NFU, which is the organization of all the academic hospitals, National Patient Federation, NPF, TNPOW, which is a research institute in the Netherlands, and Vereniging Arts en Leefstijl. And in seven teams, our goal is in three years, implement lifestyle in care.

And I'm chairing the team that will do implementation in practice and quality. The nicest of the seven, I think. And so, that immediately alludes to what we are talking here.

So, that means how can we let all healthcare providers, professionals, make lifestyle medicine an integral part of their daily work. And that includes letting people eat healthy.

And for that, we have made this very small, it's called a lifestyle check. If you send me your, I can send you some of this. These are 12 extremely short questions that patients in the waiting room can fill in, in two minutes. And so, it starts with, can we talk about lifestyle? Yes. Okay. Come on. No? Then you

Voeding Centrum NL

Noeding Centrum NL

Noeding Centrum NL

Hospital shoul...ealthy lifestyle

also have a conversation afterwards, I think. Then 10 questions about lifestyle. Can you eat healthy? Do you move? Et cetera.

And then lastly, are there any impeding elements like no money, no home, et cetera. And with that, there's also one. No alcohol. Do you feel surrounded by people around you?

Second question. Do you succeed in eating healthy? Open, fresh, and close. And behind there's a checkbox, and that's, I want to work on this subject. So, if they come into your outpatient clinic room, treatment room, and I immediately see that we ask our colleagues to take 60 seconds of the consult time, that could be 10 minutes or 50 minutes, talk about including food. So, that is what we now intend to do.

And there's actually quite a bit of money that we can spend on this, so I'm optimistic we can do at least some things. So, their health, food, and also the other elements, will be a much more integral part of what we talk with the patients during our consultations.

Q: Okay. And could you maybe, for me, describe how, for you, the ideal food landscape would look like at the LUMC?

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A: Yeah, it would be plant-based. Plant-based diet, healthy, regional, and also surrounded with education towards the consumers.

So, just providing the stuff, but also talking to them about them. So, letting them know what is good and why are these things. I think that's on the plate. So, they can take this knowledge home and do it

Encourages h...ealthy lifestyle

10:71 And behind there's a...

10:52 And there's...

Focus on patient health
Focus on planetary health
Focus on plantbased

Education

10:73

also surroun...

themselves. Education 10:73 also surrounded with ed... That's what I want to do. 141 Q: Okay, so really also education. 142 143 A: Enormously important. Often overlooked element. 144 145 Q: Yeah, maybe that would also help with the negative reactions a bit. 147 A: Sure. 148 149 Q: I could imagine, yeah. 150 151 A: Sure, sure. 152 153 Q: Okay. And how would you feel if one of your Would be ope...ers on change 10:72 Q: Okay.... colleagues came up to you and they wanted to work Would suppor...food transition on this together? 155 A: Good. 156 157 Q: Does that happen or is it more driven by you? 158 159 160

A: Well, there are more people that are worried and

Q: Okay, that is perfect. Then I have asked you everything that I wanted to ask you for today.

involved. So personally, I am not alone.

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Interview 10: Hospital Board

Q: Could you tell me more about the food options at the LUMC from your perspective?

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- 4 A: Right, there are three different strata for food here in the house. Number one is patients. Number two is those working here. And number three is the students.
- The students are managed by the students themselves. And the other two are of course managed by the hospital. And the students themselves, I'm in the process to engage them in more healthier food, more diverse food recognizing that a toasty ham, is not very good for Muslims. Because that's meat coming from a pig. So that you have to give alternatives.
- That bitterballen you probably know, these brown things. That you can also have vegetarian ones. So I'm busy with them in the discussion. And of course, depending on the sweet spots you have with students, they are changing.
- So when you have a group which think they are important and it's easy to change, when people think, okay, with Coca-Cola we earn 50 cents and with Coca-Cola Light we earn 25 cents a day. So I have discussions with them.
- 8 And in the restaurant for personnel, there are big shifts have been made to healthier food. Also to vegetarian food.
- Which is not always that positively perceived by people. Because they just want to eat their normal croquette and normal nasi instead of the oldfashioned one.

Three target g...food services

Three target g...food services

Actively supp...healthy options

Actively supp...healthy options

Budgetary constraints

So when y...

People feel lik...ken from them

11:4

Which...

- So that's a difficulty. But when you go inside the cafeteria, you can see all the advertisements about healthy food. So we try to do our best. But I know that there is quite some criticism on that throughout the hospital.
- And with patient food, I'm not that perfectly informed. But I know that they are doing their best. But of course, they have all the regulations about how food needs to be prepared before going into the hospital.
- So that's an issue. But these are the three strata.
- Q: And when you say that the food is not always received very well in the hospital, is that people in the hospital or visitors, patients?
- A: Well, you know, so very popular used to be the spaghetti bolognese. And I said that this is with a lot of meat and things like that. That's now out of the menu. And it used to be very popular. Bami, nasi goreng, the Indonesian style food used to be very popular.
- But it was meat-based. Now it's much more, I think, healthier. But the taste was more... People liked the old product a lot. So they are complaining that it's not anymore the way it used to be.
- 19 **Q**: Okay.

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- A: That's the honest truth. And having said that, myself always eating spaghetti bolognese once every two weeks, I'm missing that as well.
- Q: Yeah, I can imagine. It's always difficult when

Unhappy with changes
Unhappy with food options

People feel lik...ken from them

People feel lik...ken from them

11:6 A: Well, you know, so very po...

things get removed. Yeah, I understand. And are you familiar with the concept of the planetary health diet?

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25 A: Yeah.

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Q: Okay. Would you see benefits for that if the IOMC would adopt that in their policies?

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- A: Well, you know, it's one of the things... I take it from a little bit different angle. So when you come here into the hospital, the first thing you see is these automatic machines where you can buy drinks.
- You see Coca-Cola. You would ask me to get completely rid of Coca-Cola first and just give healthier drinks. Number two is... This hospital is the best hospital, I think, in the world to be reached by public transport.
- But we also have one of the largest facilities for parking your car here. So here this stupid thing, this grey thing over here, that people can leave the garage and are not in the rain when they enter the hospital.
- I would always love to have it made towards the central station because then you're serving the ones coming by public transport and not the ones coming by car. So when you think about health and about the impact on planets and about public transport and everything,
- I think you should not focus only on food but also on movement and things like that.

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Q: Yeah. So...

Soft drink ma...s are annoying

11:7 So when you

- A: And also... And that I think is nicely done so you can walk around. Now it's starting to flower again. We try to make places outside where people can walk, both patients as well as the ones who are in between, in lunch hours.
- They can move. We have quite an active stimulus for people on bikes, but I would love to see also some constraints for those coming by car.

40 Q: Yeah.

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42 A: That's not about food, it's about health.

Q: Yeah, I understand. So really a holistic perspective as well for all areas.

46 A: Yeah yeah.

Q: Okay. And if we're looking at food again, how important are the food policies at the LUMC to you?

A: Well, you know, this is an organization which is concerned on health. Yes, so I think the advertisement should be towards health, so healthy living, you should buy food, come by public transport, eat the correct things.

Don't smoke. You've seen when you come here, we were the first... I think we were the first, because I brought it from Edinburgh, the first non-smoking policy around. You've seen probably the stairs that we advise people to take the stairs instead of the elevators.

I think the whole attitude towards health needs to begin when you see the hospital. I think it's

Holistic persp...Ith is important

Holistic persp...Ith is important

Focus on outs...age of hospital
Hospital shoul...ealthy lifestyle

important. And not only food, I think again the holistic approach.

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Q: Yeah, I understand. It's very noticeable when you come from the public transport, there's the blue line.

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A: Yeah, so here it starts. Healthy living starts here.

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Q: Yeah, I understand. And then you come in and there's the snack machine immediately. Yeah, it's a bit contradictory. I guess as well.

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A: So that has to do with, you know, there are people who are thinking that you have an educational role, which I'm certainly one of them. And there are people who say, okay, you should not be too much imposing things on the public.

And I think, well, this is an organisation intended to be there for health, so you can be clear on that.

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Q: Yeah, definitely. It should be the image maybe as well of the hospital. And how much influence do you have on policies like that, or changes to be made?

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A: Well, formally the answer is yes. You have to take a pace which is in conjunction to what people want. For instance, also for the flying policy, at the university everything less than 800 kilometres we go by train.

Unless, you know, you have to go back and forth on one day, which sometimes happens. So we can say, okay, we have a programme for free bicycles here.

67 We have a programme for free electric bikes for those who travel larger distances. We have an

11:10 A: So that has to... Change cannot be too bold Change is difficult

Organizational culture

High influence

active policy of being able to buy a bike, tax deductible here. So these kind of initiatives we can take from the board's perspective and stimulate what's coming up.

You always have to be careful because when you're changing things, as you rightly said, so when people are eating spaghetti Bolognese for their own life on Friday and you take it out of the menu, then you receive a lot of complaints. So it's about changing an attitude and it takes time.

So I know, for instance, when I was... there is an initiative called Healthy University, I don't know whether you know that, when you type it in, I noticed when I was in Edinburgh four years ago, there was this Health University concept launched.

I was very enthusiastic about it. We started here and that was the blue line. First on the front part of the hospital, but I said, listen, all the students are now smoking in the back.

So that's not correct. So we need to also for all the generations, it needs to be done. So you have to take steps, but there's a Health University initiative with also possibilities to exercise.

I like that initiative a lot and that's one of the things. Well, I learned about it when I was in Edinburgh and I just brought it here. So yes, you have influence, but you have to be careful that your pace is the same as the company with 9000 employees.

But when you're consistent, you can make steps.

74 But so I'm...

There's this... Drink machines, whenever I come in, it's irritating me. The fact that outside the blue line people are smoking. So when you walk there, you see the stand of the bus stop.

Attitude of pe...to be changed

Change is difficult
Organizational culture

- It's full of cigarette things. It's outside our territory. So for me, it would be good to have on this side of the blue line when you walk to a station, this healthy living, don't stop here kind of sign.
- And the smoking thing, I... So when I was in Tanzania about five years ago, there was a big, big advertisement in the hospital. You're entering a non-smoking zone. So I've stolen that from Tanzania.
- It's cleever. Because I like that you're entering a non-smoking zone. It's a little bit more aggressive. It's properly advertised.
- Q: I think it's becoming pretty common in universities as well.
- A: Well, now it's in a couple of years. So we started quite early with it. Now it's everywhere. We all know that the two biggest problems for universities are students with alcohol and students with drugs.
- So we're not there yet. And that's a little bit... It lowered the tension, especially students with drugs is a big problem. And throughout the Netherlands. That's something people don't talk easy about.
- 1t's a big problem.

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- Q: Yeah, I can imagine. I imagine that you're in aposition to make these changes. Or drive these changes, at least. Is there any common barriers that you find?
- A: Like I said, you can just go as fast as your surroundings. And the larger the organization, the more opinions you have. And the slower it goes. You have to go steady towards the direction to reach your

Large organis...anges difficult

goals.

- To never try to be fast. Because that will always backfire on you. And at a certain moment people are like, okay. So now, I'm making small steps. But all the steps are going in the right direction.
- I think that's the most important thing. When you think about environmental issues, we're very active here in the hospital for that. With a little longer payback time, that's also all about health.
- 91 It's not directly influencing health. For instance, the energy projects here. What has energy to do with health? Well, just go one week living next to an energy plant and you know.
- 92 It's all small steps towards the same direction. But trying to have a holistic approach is important.
 - Q: It's also about changing the culture of the people in the hospital. Are you satisfied with the influence that you have on these changes?
- 96 A: So you can't organize as a dictator. You have to organize things. Stimulate and show and discuss with students. Let's put it another way. I'm not hampered by the organization.
 - I can't go faster than the pace of the organization.
- 9 Q: Of course.

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- A: So satisfied with this life. I'm a bike driver. I think it's very important that we have all the facilities for those coming by bike in order.
- I never go by car so I won't notice. I'm a member of this family with my own prerequisites and preferred ideas.

High influence

A: So you...

103	But there is no resistance that I'm aware of.	Unaware of rece to changes
104 105	Q: When I talk about the food transition at the LUMC, what's the first thing that you think about?	
106 107	A: It's XX on the screen. It's about explaining what is healthy food. He makes quite some advertisements. Both in the house as well as in the newspapers and everywhere.	
	I think he managed to get quite a number of things. He's running. He's visible.	
109 110	Q: How would you feel if someone came up to you and said they wanted to do more about bringing health in the hospital?	
111		
112	A: I would very much stimulate that. So when it's feasible. There are sometimes conflicting interests. You have to figure out whether it's feasible but you can't be against healthy things.	Would be opeers on change Would supporfood transition
114 115	Q: Does that happen a lot?	
	A: With the students they have quite a number of ideas. They are now turning their kitchen into a more modern style diet. There are quite active groups against smoking here in the house.	
117	There is a healthy exercise club. I think the best way to organise it is bottom up.	
118		
119	Q: What's the process of introducing a policy like that?	
120		
121	A: People have an idea. They can discuss. There is	Initiatives canut new policies

If they all agree.

123 124

Q: How long does it take on average?

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A: Depending on the size of the project. But this live healthy, take the stairs, they just designed things for all the elevator and footsteps. When the design was done, the elevators were put in one weekend and all the steps were done.

27 That needed a little bit of preparation but then it was done after a couple of hours. Initiatives for making better access for bicycles took longer.

That needs more infrastructure. Changing the food chain, that's of course also not easy but that was quite fast implemented. The stupid Coca-Cola in the machines which is annoying for me.

I've been complaining about that for a long time. For instance, when you order something to drink for the end of the day, you always have orange juice, water and Coca-Cola. When I want to order, I don't want to have Coca-Cola.

That's impossible. I tried it so many times and then when you think you are influential here in the board, the answer is no. Because this is a standard package. You don't want to change. Sometimes very stupid things take ages.

A lot of things are very easy to organize.

132 133

Q: And who do you complain to? The catering?

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A: The catering, yes. They say now you are

Initiatives can...ut new policies

Pe

Influence limited in some ways

Slow change

Slow progress

: Complaints

complaining but when we take that out, much more people are complaining. These are the kind of discussions. Then again, we have to satisfy a lot of people.

11:22 A:...

Complaints

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Q: Would you say there is maybe one group of people that is resisting more towards these changes than others?

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A: Well, first you have to educate your population to see that this is important. And that you are not there to try to make their life less easy or less pleasant.

140 First you have to educate and then you can implement. You can't implement when you are happy. No starting point of understanding. So I think that's important.

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Q: But there is not really one group of people, like colleagues here or visitors, that is more negative than others?

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A: Not that I am aware of.

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Q: Yes, that's fair. And could you describe maybe the ideal way in which the food or health policies at the LUMC would look like?

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A: So when something is nice, something new is nice, then people start exploring. For instance, here there is a cafeteria just at the opposite side of the LUMC, which is vegetarian.

149 They have all kinds of wonderful snacks, which are vegan and whatever. You have never been eating there, you could say, oh, what's this? But it's very

Importance of education

11:23 A: Well, first you

nice. It's very popular. So it was introduced as a vegan style cafeteria and done in a very clever way.

It's not advertised, but when you are there, then you notice. And they are very good things. So nobody is complaining, because you are not missing things, you are exploring new things, instead of that you are missing the old things. That's the way I think it's the most clever way.

So when we come back to the example, so don't just take out the Coca-Cola from the machines, but put something else in there, which is good, which is tasteful. And I don't have to tell you, you can have very tasteful, healthy food.

Q: So always replace it with something. Attractive. So people don't feel like they are missing out.

155 **A**

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30 years ago, when you were eating vegetarian, things were disgusting. But nowadays, very good cookbooks and things like that for vegetarian food. You are not missing something when you are eating vegetarian.

So now I think the whole idea about healthy food has changed so much towards a more healthy attitude with replacement with healthy things, which are tasteful. And I think that's the best way.

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Q: Okay. And how would you think if the LUMC would transition to maybe a vegetarian hospital or a certain day of the week is completely vegetarian, how do you think that would be received?

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A: Well, I think a certain day in a week would be fine.

Replace optio...on't miss them

11:24 It's not advertised, but when yo...

People need options

But it's the best to keep both possibilities there and just augment your vegetarian, your healthy food.

Make it cheaper and make it better with more emphasis. Because then it will sell itself. Because when you change yourself into a vegetarian hospital, everybody will complain.

So when it's nicer, for instance, you have these beautiful snacks nowadays which are vegetarian. So nobody is complaining when you have these vegetarian snacks because it's very tasteful, very good.

You are not missing something. When it's not good or when it's expensive, people want their traditional thing back.

Q: Yeah, I can imagine. And do you have something in mind where you maybe did that, that you took something away but you put something else back so it wasn't received badly?

A: Well, I know from a number of them, but for instance, the salad bar is horrible here. That's an example that I never take salad here.

Q: And why is that?

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A: Because it's not nice. It's not tasteful. I'm not happy with it. I always take something else. But if it would have been nicer, of course, I would be more than willing to do so.

Q: And what would be your advice for someone that wants to drive more sustainable or healthy policies in the hospital? What should they do?

People need options

Would be ope...vegetarian day

Introduction salad bar

A: Be...

- A: So for instance, there was a nice project. I can't remember which railroad station. But when you walk the stairs and make music, and everybody wants to see you make music.
- And there are all kinds of people moving up and down and making tunes. It was fun. Instead of getting rid of your rolling escalator.
- So it's fun. And for instance, we have a nice package here. When you want to become a fit, then you have to download an app.
- You can download an app. Every morning they advise you for exercises.
- And it pops up every morning. So it was given by the hospital. It pops up every morning with me at 7 o'clock and then I have to do some exercises.
- When I'm not doing it, it says, hey, you have not been working. So these kind of things you can easily do.

Q: So really nudge people and make it attractive. And that app is made by the hospital?

185 A: We have a shared insurance company.

Q: That also reminds you every day. I understand. So really nudging people and making it attractive. I think I've asked you all my questions for today.

Thank you very much that you took the time. It's really helpful for me. Do you have any questions for me?

A: So what will be the end project of your interviews?

Nudging efforts

Positive result...udging efforts

There was a nice project. I can't remem.

Options need to be attractive

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- Q: I'm part of a thesis lab on the topic of sustainable hospitals. Together with Leiden, Delft and Rasmus University. We're basically going to write. We're going to put all our findings together and write an advice for the hospitals.
- And my part in this is that I look at the sustainable food transition and the healthy food transition. To see how can we drive more changes in that part. I think the LUMC is already doing really well. Other academic hospitals are not doing that well yet.
- Or having more problems. So how can that be applied and that's basically what I'm looking at then as well.

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- A: My wife is working in the Erasmus hospital. She's driving every day with an electronic bike. What we did here is that we have special places where you can upload your e-bike.
- In Rotterdam that's not the case. She has to take out the ACU, make it 12 floors and then put it in the thing over there. The fact that we have installed I think 60 or 70 of these.
- You stimulate the use of these kinds of things. So she's complaining to her hospital that this is invalid. So you should stimulate. And have a holistic approach.
- Because vegetarians don't smoke. When you're not smoking you're not necessarily a vegetarian. But it's a way of living so I very much like the holistic approach.
- 201 Q: I think that's really good. Alright. Yes.
- A: So send me when you have your project done.