

Workshop Report

Sustainable and Healthy Food in Healthcare



Radboudumc, Nijmegen, The Netherlands
Tuesday 9 October 2018





Organised by Health Care Without Harm (HCWH) Europe, the 2018 Sustainable and healthy food in healthcare workshop was co-hosted by Radboud university medical center (Radboudumc) as part of [CleanMed Europe 2018](#) - Europe's leading conference on sustainable healthcare.

OPENING WORDS

HCWH Europe's Food Project and Policy Officer, Paola Hernández Olivan, opened the workshop with an introduction to HCWH Europe's work on sustainable food, including the promotion of plant-based diets in the healthcare sector.

Wouter van Wijhe, Environmental Manager at Radboudumc, then presented the challenges that healthcare facilities face when trying to implement sustainable food policies.

Wouter showed how Radboudumc involves different stakeholders in generating motivation for promoting the health of patients, communities, and the planet through sustainable food.

Wouter closed his presentation with the example of Radboudumc's initiative to collect waste coffee grounds in order to grow mushrooms that are then used in the hospital kitchens.



Paola Hernández Olivan



Wouter van Wijhe

RADBOUDUMC'S INNOVATIVE MEAL SERVICE: FOODFORCARE

Manon van den Berg, Dietician and Researcher at Radboudumc then took to the stage to present the history of Radboudumc's novel meal service: [FoodforCare](#), which aims to improve patient recovery and reduce food waste.

In 2012, a group of young cancer patients (18-35 years old) shared their experiences with the hospital's food - they felt that the food was not stimulating, especially during chemotherapy. The oncology department used this feedback to develop and launch the innovative 'Food for Care' concept together with dietitians, the nutrition department, and food designer Maison van den Boer.



Manon van den Berg

Since developing the concept, patients from across Radboudumc's 26 departments are now offered a choice of fresh, tasty dishes in small portions, six or seven times a day, with high nutritional value. They also cater for allergies and individual needs (e.g. halal, vegetarian, vegan etc.) and provide nutritional advice to encourage patients to make healthy choices.

Malnutrition rates have been reduced thanks to this initiative, by increasing both energy and protein intake; food waste has reduced from 37% to 11% and patient satisfaction is over 85%.

Future developments include substituting animal protein with plant-based protein, and measuring the clinical outcomes with an ultimate aim to demonstrate that it is possible to reduce health risks and healthcare costs by investing in sustainable and healthy food.

[Click here](#) to view Manon van den Berg's presentation.

SESSION 1: THE IMPORTANCE OF SUSTAINABLE FOOD PROCUREMENT IN HEALTHCARE

Christina Schmidt, Director of Kitchen Management at Hospital Hietzing, Neurological Center Rosenhügel in Austria opened Session 1 with an overview of the Vienna Hospital Association. The association comprises 10 hospitals, 11 geriatric centres and residential nursing homes, and 10 educational facilities; these Viennese healthcare facilities are committed to providing healthy, local, seasonal, and sustainably produced food.

Part of this commitment is shown through their participation in diverse projects such as ‘Natürlich gut Teller’ (a “naturally good plate”) and UMBESA.

Both projects currently require separate criteria and actions, but Hietzing plans to combine these initiatives in the future to further promote a sustainable approach that looks beyond healthcare delivery, and integrates sociological aspects to make the healthy choice an easy choice.



Christina Schmidt

[Click here](#) to view Christina Schmidt's presentation.



Katarina Ask

Katarina Ask, Environmental Controller at Karolinska University Hospital in Sweden, presented the details of a new project for a hospital in Solna, Stockholm, that will specialise in intensive care and complex procedures.

The hospital will house 630 patient beds and will have an in-house kitchen to be run by an external contractor that will fulfil the obligations of Stockholm County Council's environmental program.

In the planning process they followed a four-step procedure:

- 1. Assessing needs (past and new):** Elevate the importance of high-quality hospital food whilst maintaining a “patient first” approach – providing the right food, in the right amount, and at the right time.
- 2. Selecting contractors:** This is a long but rewarding process, which will help you understand better the needs and wants of the market, as well as the position of the supplier, through the establishment of a “competitive characterised dialogue”.
- 3. Setting environmental demands:** For example, biodiversity, animal rights, etc. according to Stockholm County Council's new five year plan for environmental goals (2017-2021) which includes references to hospital food:
 - a. Making environmental demands in the public procurement of food

- b. 50% of the hospital food should be organic by 2021
- c. Reducing climate impact by 20% (compared to 2016)
- d. Reducing food waste from served portions (max 15%)
- e. Reducing overall food waste from hospital food by 40% (compared to 2017)
- f. 20% locally produced goods by 2021

4. Taking the entire process into account: Consider that tackling environmental issues should not happen in a vacuum.

Finally, Katarina outlined how staff training, close collaboration with contractors and health departments, and a consideration for all environmental and sustainable aspects early in the procedure have been integral to a successful project.

[Click here to view Katarina Ask's presentation](#)

The final presentation of Session 1 came from Adriano Leli, Procurement Director at SCR (Società Di Committenza Regione) Piemonte in Italy, who emphasised the importance of a “joint procurement” approach in reducing both administrative costs and the price of the supply/service (scale economy), as well as in overcoming potential constraints related to environmental impacts.

For example, an estimated annual purchase of 2,310 tons of organic food can save at least 84.1t CO₂ and nearly €5m per year compared to conventional food, with resulting positive social implications for the development of the organic products market.



Adriano Leli

At the regional level, Adriano spoke about the technical requirements and award criteria they use for their contractors, which puts more emphasis on nutrition and environmental impacts as opposed to price. Proposed menus are therefore evaluated based on environmental and social sustainability, favouring products with a short distribution chain and/or locally sourced within a radius of 100km from the place of administration. They also prioritise fresh, unpackaged products and consider how unused food is managed.

The discussion during this first session was focused on the price difference between the two main food preparation techniques - a refrigerated system (i.e. cook and chill) or a traditional fresh/warm system - as well as the need to start measuring CO₂ emissions from food-related products and services. Participants also discussed the connection between the food procurement procedures and clinical outcomes, particularly in relation to meat reduction and plant-based substitution.

[Click here to view Adriano Leli's presentation.](#)

SESSION 2: FOOD WASTE CHALLENGES AND OPPORTUNITIES



Yolanda Fernández Serrano and Laura Raya

The second session opened with a presentation from the Germans Trias i Pujol University Hospital, Spain. Catering Manager, Yolanda Fernández Serrano and Laura Raya (who is responsible for the Dietetics Service) presented the waste prevention and reduction project they have conducted for the past seven years, including a ‘3Rs Strategy’ to prevent waste:

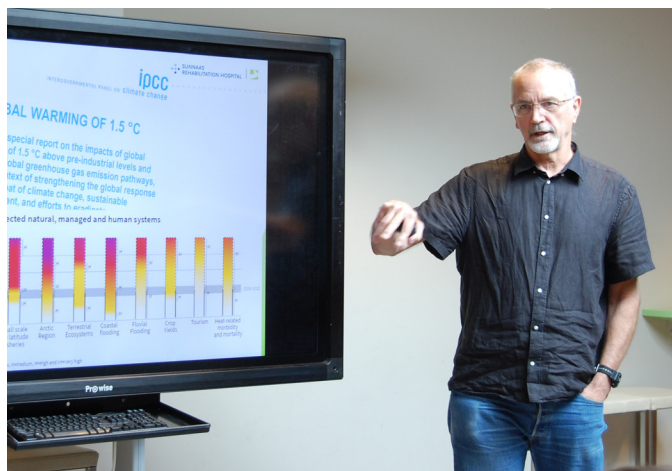
- 1. Reduce** - Approximately 10% of dishes were not consumed as a result of patients having been discharged, transferred, or having undergone a surgical operation between ordering and service. The hospital, therefore, adopted diverse corrective measures, such as:
 - a. Progressively increasing the choice of menus
 - b. Adapting menus to patients’ demands and needs
 - c. Training for nursing and kitchen staff to improve prescription, ordering, and data collection in the kitchen.
- 2. Reuse** - Once a week, approximately 45kg of surplus cooked food with a high nutritional value is now donated to social organisations in the city thanks to the cooperation of other entities that are collaborating in this project, such as Rezero, Andròmines, and Amics del Gorg Mar. Moreover, thanks to the collaboration of the Department of Health of the Generalitat de Catalunya and the Catalan Agency for Food Safety, they have been able to produce ‘Guidelines for the Donation of Food Surpluses’, guaranteeing food safety along the whole process.
- 3. Recycle** - Organic residues produced in the kitchen and in the cafeterias are now recycled (approximately 200 tonnes of food annually on average).

By investing in equipment and tools to optimise production at source, the hospital annually saves 7,200 meals and €52,000. Food waste at the Germans Trias i Pujol University Hospital is now 0.67%. They aim to continue reducing food waste by implementing additional awareness-raising measures and promoting local purchasing.

Reducing food waste minimises the healthcare sector’s environmental impact - it is an investment opportunity that can also improve patients’ meals, as well as reduce malnutrition and hospitalisation rates. Progress is being made incrementally, more and more case studies are being shared and promoted, but there is always room for improvement.

[Click here](#) to view Yolanda Fernández Serrano and Laura Raya’s presentation.

SESSION 3: STEPPING OUT OF THE COMFORT ZONE: NEXT STEPS FOR ADVANCING A SUSTAINABLE FOOD POLICY IN THE EUROPEAN HEALTHCARE SECTOR



David Brasfield

David Brasfield, Environmental Manager at Sunnaas Rehabilitation Hospital in Norway, is leading the Nordic movement to understand environmental footprints throughout the life-cycle of products and services used in healthcare facilities.

In collaboration with other hospitals in the South-Eastern Norway Regional Health Authority, Sunnaas has developed a climate footprint analysis that combines life-cycle analyses of physical data and environmentally extended input/output analyses (EIOA) of economic data to construct a complete consumption-based “climate inventory”.

Food-related emissions do not seem relevant at a regional level. They are, however, significant at Sunnaas Rehabilitation Hospital, representing 23% of the hospital’s total GHG emissions. Following this assessment, the Sunnaas hospital, in cooperation with its catering services provider, committed to reducing food-related emissions with targets including: Reducing food waste by 50% by 2030; increasing the recyclability of packaging; extending the plant-based menus to two days per week; and improving communication between the kitchen and wards.

During his presentation, David outlined how food should be viewed within the greater context of well-being and integrated with other climate and environmental initiatives and measures. He is currently developing a more holistic approach to the hospital menu that combines a sustainable, health-promoting lifestyle, with other elements such as temperature, noise, and lighting design that can affect our immediate eating experience.

[Click here](#) to view David Brasfield’s presentation.

Finally, Ruth López de Dicastillo, Bromatologist at San Pedro Hospital in Spain gave her presentation with a focus on food safety, and more particularly on the systematic monitoring of indicators, their analysis, and subsequent comparison with benchmarking techniques - fundamental tools for any food service. Particular attention is paid to:

- Control and continuous improvement of products, services, and processes
- Quality assurance (planned and systematic activities are applied in a quality management system)
- Compliance with current legislation
- Preventive and corrective actions
- Applying appropriate resources

Their hospital catering service focuses on three areas:

- Microbiological control of processed food
- Control of allergens in processed food



Ruth López de Dicastillo

- The correspondence between the request and the menu that is served to patients

The next step is to compare and carry out benchmarking with other organisations in the hospital social catering sector. A national platform is being developed in Spain - called 'Hospifood' - and is based on the European Foundation for Quality Management (EFQM) excellence model, where indicators are grouped according to the sub-criteria results of the model.

This platform allows hospitals to compare information with other similar facilities and consequently get information that adds value. The platform creates a database with all participating organisations and allows users to filter through the data as well as get in touch to share experiences, learn, and help other organisations.

[Click here](#) to view López de Dicastillo's presentation.

CONCLUDING REMARKS

Food should nourish people and support both healthy lifestyles and a healthy planet, yet in many ways our current food system is unsustainable. Diet choices directly influence personal health and wellbeing and food production and consumption processes have a significant environmental cost. The healthcare sector is uniquely positioned to start the conversation about how these issues can be addressed. By implementing healthy, sustainable food strategies healthcare providers can improve public and environmental health and also begin to address socio-economic disparities that exist within our communities.

As we have learnt in this workshop, hospitals and other healthcare facilities across Europe are already changing the way that patients and employees eat and think about food. From the production of the ingredients, to processing at the factory through to the transportation necessary to bring food to patients' plates and the need to deal with wasted food, the creation of a hospital meal results in social, economic, and environmental effects that extend well beyond the consumer. When we amplify this by the thousands of meals prepared, served, and consumed daily in healthcare institutions across Europe, the environmental and social influences at the global level are truly significant. However, practices across the sector vary considerably and not all hospital food service managers are equipped with the knowledge and tools to implement food strategies that promote health and environmental sustainability.

HCWH Europe will continue to highlight the challenges, opportunities, and best practice from European healthcare institutions in developing sustainable and healthy food strategies. This is important in raising awareness and mobilising and inspiring others to begin on their path towards sustainable and healthy food. Looking ahead, it is vital that we see healthy food as synonymous with sustainable food, not only for the wellbeing of patients, but also for the wider community and the planet.

HCWH is always looking to collaborate and learn - please visit our website, www.noharm-europe.org, to sign up for our newsletters and find out more about how you can get involved in the movement towards healthy and sustainable food in healthcare.

Paola Hernández Olivan, HCWH Europe Food Project and Policy Officer - paola.hernandezolivan@hcwh.org

HCWH Europe wishes to thank all participants for their contributions and sharing best practices in sustainable and healthy food in healthcare.



HCWH Europe gratefully acknowledges the financial support of the European Commission's EU Life+ programme. HCWH Europe is solely responsible for the content of this publication and related materials. The views expressed do not reflect the official views of the European Commission.