How to green food services in European healthcare
INTRODUCTION

Our current food system is unsustainable and must be transformed if it is to support a low-carbon, sustainable future; that was the conclusion of several high-profile and data-driven reports released in 2019.\textsuperscript{1,2,3} Due to its potential to connect food production systems with consumption patterns and behaviours, the public procurement of food has been identified as a key driver in achieving this important transformation.\textsuperscript{4} Public procurement can also help move markets towards more sustainable options whilst simultaneously promoting healthy diets.

Hospitals and healthcare facilities in Europe face many challenges when procuring food products that are organic, environmentally responsible, or fair trade as part of a sustainable food strategy. However, many are ready to face these challenges and engage with new models of purchasing and consumption to contribute to a safer, just, sustainable, and prosperous future.

Following the publication of the European Commission’s \textit{Green Public Procurement (GPP) Criteria for food and catering services, and vending machines} in 2019\textsuperscript{5} hospitals and healthcare facilities in European are now empowered to begin greening their food services. Through a brief analysis of the main provisions within the European Commission’s GPP Criteria, this guide provides recommendations and case studies to support European healthcare providers that wish to implement sustainable food procurement strategies in their organisations. It identifies actions that can be taken at key stages in the procurement process and highlights the GPP criteria that are most relevant to European healthcare providers.

This document can be used by anyone interested in making changes within their operations to encourage more environmentally-friendly food options, without undermining patient and staff health or quality of care and accommodating cultural aspects of food sustainability. This includes sustainability managers, procurement teams, chefs, kitchen staff, health professionals, nutritionists, dieticians, as well as distributors and suppliers of food and food services.
INTRODUCING THE GPP CRITERIA INTO THE PROCUREMENT PROCESS

Pre-tender stage

Hospitals inevitably each have their own approaches to contracting and organising food supplies. To have a clear overview of the food purchased at the facility level, as well as opportunities for improvement, we recommend conducting an initial mapping exercise of food products and services to identify key sustainability aspects e.g. packaging, energy, or water use, alongside a survey of patients, staff, and visitors to gauge satisfaction levels with the current food offering (covering for example healthy food choices and preferences).

Before embarking on a new tender process, we also recommend establishing an internal working group to review the outputs of the mapping exercise and satisfaction surveys and establish clear goals for the tender. The working group should include representation from the procurement team (i.e. contract or category managers), sustainability staff, nutritionists, and staff and patient representatives. The working group’s role should be to:

- Set short-, medium-, and long-term targets, taking into consideration the GPP criteria (highlighted and discussed further below) and establish a baseline to monitor progress
- Plan measures to be implemented within the decision making and procurement process.

This initial research could be combined with awareness raising actions to help pave the way for adopting an organisational sustainable food strategy.
The revised EU GPP criteria for food procurement, catering services and vending machines are divided into:

- **Selection criteria** - refers to the tenderer/prospective contractor, not the product(s)
- **Technical specifications** - minimum compliance requirements for tenders
- **Award criteria** - evaluates the quality of the tenders and compare costs. Contracts are awarded to the most economically advantageous tender (MEAT), which includes a cost element as well as a wide range of factors influencing the value of a tender including environmental aspects
- **Contract performance clauses** - specify how a contract must be carried out

For each criterion, there is a choice between two levels of environmental ambition:

- **Core criteria** allow for easy application of the GPP criteria, focusing on key areas of environmental performance for products and aim to keep administrative costs to a minimum.
- **Comprehensive criteria** are more ambitious and consider more or higher levels of environmental performance, for use by organisations that want to go further in supporting environmental and innovation goals.
During the tender process:

Hospitals should define specific requirements in the product groups and services in order to support and facilitate implementation, ensure transparency and comparability of offers during the evaluation and award of contracts (from an economic and environmental point of view), as foreseen in the Directive 2014/24/EU on public procurement.6

Apart from the policy and the criteria to be applied, those directly involved in the procurement process are unlikely to be familiar with the GPP criteria. We therefore recommend providing training to procurement staff, particularly those that have little or no experience in the application of environmental criteria in public procurement.

Post-tender/contract award

To ensure that measures requiring a change of procedure or activity are successful, regular awareness raising, communications, and active participation are needed to help avoid resistance and achieve good results. It is important to actively communicate and engage with all stakeholders (including staff and patients) in any policy being implemented. Such communications can be delivered via websites, emails, or even call centres and helpdesks which can provide information and support. It can also be helpful to organise workshops or seminars for both staff and patients, as well as for interested external stakeholders (which might include suppliers, policy-makers, non-governmental organisations, and members of wider community) to promote and gain acceptance of new policies and procedures. Such activities support effective implementation and can also help to stimulate long-term demand for sustainable food services.7,8

Finally, it is important to establish a monitoring system based on clear key performance indicators, to evaluate the progress and effectiveness of implemented measures. This process can help to identify challenges and further improve implementation based on the targets defined pre-tender. Public procurement departments, for example, may be required to report in a given time period about the tendering processes and acquisitions. Based on this reporting, if objectives are not met, a review should be made to improve implementation, adopt additional measures, or adapt approaches. This can also serve to estimate benefits achieved and report back to stakeholders.
In HCWH Europe’s 2016 report *Fresh, healthy, and sustainable food: Best practice in European healthcare* we identified that one of the main challenges in procuring fresh, seasonal, local, and organic products is that more time is required to identify suppliers that can reliably provide the adequate quantity and quality for hospital menus. Combined with the increasing demand from patients, staff, and visitors to introduce more sustainable options, there are a number of requirements that hospital catering and sustainability managers should consider to implement a healthy and sustainable food strategy.

**Organic food**

Transitioning to organic food procurement should be seen as part of a broader health-promoting sustainability initiative within healthcare. Eating more fresh, seasonal, and organic products has an important role in preserving our natural resources and reducing/preventing soil erosion, loss of biodiversity, and pollution to our water and air.

There are many ways to increase the provision of organic products without increasing costs. Hospitals that have been successful in doing this have, for example:

1. Introduced measurable targets e.g. 20% of food and drink products (by mass) to be organic by 2025
2. Gradually substituted pesticide-heavy products for organic initially, then scaled this up to other products.

It is also essential to monitor the progress of these initiatives and work closely with suppliers and local organic farmers to increase the provision of organic products within existing budgets.

In 2009, the **Municipality of Copenhagen** set a target to achieve 90% organic food in their public kitchens by 2015. The Municipality has developed a gradual process of understanding and stimulating the market for organic produce. It has established an open dialogue with market players, which has led to improved mutual understanding, trust and quality of outcomes. It has become an established practice to ask suppliers to provide samples of their produce to be tested for quality and taste as part of the evaluation criteria.

Apart from increased organic provision, the Municipality’s strategy also favours a diverse and seasonal supply of products. Dedicated procurement requirements were de-
signed to achieve a greater diversity of fruit and vegetables. A central requirement of the strategy is that an increase in organic products should not increase costs. This has been achieved by reducing expensive animal products, while increasing the proportion of fruit and vegetables. Though procurement contract costs have not increased, approximately €5.5 million has been invested in knowledge, education, and training to facilitate this change.

The **Bispebjerg and Frederiksberg Hospital** in the Capital Region of Denmark surveyed citizens on their experiences with hospital food. This provided valuable insight and motivated the hospital to create a food concept based on fresh seasonal ingredients cooked from scratch. The hospital now uses 90% organic and locally-sourced products and also has its own onsite bakery and butcher to prepare its own bread and meat, which is served to patients and employees.
**Fair trade products**

Procuring food that has been certified as fair and ethically traded helps raise public awareness of the wider social implications of food consumption patterns.

As part of the city’s project *Natürlich Gut Teller* (“a naturally good plate”), the Vienna Hospital Association, includes a minimum of one fair trade product in their procurement criteria. Initially they focused on coffee and bananas, but have since scaled up to other food products, such as cocoa. Some ingredients may be a challenge to procure, however, specifically products that are particularly rare, expensive, required in very small amounts, or require entirely new suppliers. By working directly with certification bodies that offer advice and resources, such as Fairtrade or Rainforest Alliance, the hospital can overcome many of these challenges with careful planning.

**Less and better quality meat**

Animal welfare standards are an important aspect in purchasing decisions and also cover many environmental aspects as well. We recommend that hospitals consider the production practices of animal protein suppliers and opt for those that have adopted ethical production methods, for example hormone-free, cage-free, free-range, or sustainably-sourced seafood. These practices can have an impact on consumer health and safety and are an important marker of social progress. For example, since 2015, the Soil Association in the UK only certifies free range eggs from chickens fed on a strictly organic diet in flocks of no more than 500-800 chickens. Ten years ago, The North Bristol NHS Trust (UK) received the prestigious Silver Food for Life Catering Mark accreditation from the Soil Association, which recognises environmentally sustainable and ethical catering services. To achieve this, the Trust’s catering team conducted an audit to identify locally available products and assess the financial implications of switching suppliers, for example, the Trust now sources beef from a local and organic provider. Although this has increased costs by an additional £1 (€1.2) per meal this investment forms part of their sustainable food strategy and underlines their commitment to promoting environmental quality and animal welfare, localised supply chains, and improving patient experience. The catering team at the Trust highlight staff training as key to their success: new staff receive a two-day general induction, with an additional full day training specifically to introduce the Soil Association’s Food for Life concept. Staff also receive two refresher training sessions per year devised by the dietician, covering diet, portion control, and meal presentation.
In line with the EU’s Procurement Directive, catering services procured by healthcare institutions must also demonstrate that they comply with specific social and environmental criteria relevant to hospital patients, staff, and visitors. This helps to ensure that menus contribute to reducing carbon emissions and pollution, and promote health and wellbeing.

**Plant-based menus**

Replacing animal products i.e. meat and dairy, with plant-based foods is becoming more and popular in can-
teens, and even the default option in some events or public settings. Plant-based products i.e. fruits, vegetables, pulses etc. have a reduced environmental impact compared to animal products and reduce the risk of many chronic diseases, such as cardiovascular disease, obesity, certain cancers, and type-2 diabetes.

Many hospitals are leading by example, increasing the availability of plant-based food whilst maintaining the recommended nutrition intake for their patients through actions such as:

The North Bristol NHS Trust obtained the prestigious Silver Food for Life Catering Mark accreditation
Offering a menu with 50% vegetarian or plant-based dishes
Offer a featured vegetarian or plant-based day weekly (e.g. “Meatless Mondays”)
Complementing reduced meat portions with pulses, grains, or vegetables

Due to the growing demand for plant-based products in Germany, Klüh Catering, a leading hospital caterer, launched “Plant Power” a nutritional concept for clinics and care facilities in September 2019, which places particular emphasis on plant-based dishes. You can learn more about European hospitals reducing and replacing animal products in our 2018 publication Plant-based food: Guidelines for healthcare.

Waste prevention, sorting, and disposal

Zero food waste strategies are based on prevention and reduction of waste generation, reuse and selective collection, and separation of organic waste. The GPP criteria recommend creating a plan for preventing and reducing the generation of waste, and sorting and disposing waste in accordance with the revised Waste Framework Directive adopted in 2018.

It is also recommended to integrate the following activities into these plans:

- Develop a waste inventory
- Reduce waste in the procurement of food and beverages including packaging as well as disposable and consumable products
- Identify reuse possibilities e.g. safe redistribution of surplus food amongst staff or local organisations.

It is important to highlight that successfully reducing food waste in hospitals is usually the result of a variety of measures in interdisciplinary cooperation.

HCWH Europe’s MECAHF project (Circular economy of food in healthcare) developed in collaboration with the Hospital Center of Niort (France) aims to prevent and reduce food waste as well as reinvest savings into the local economy through the purchase of more healthy and sustainable products. The project started with a presentation to employees of the central food production unit of the hospital to familiarise them with the projects actions and goals. This enabled everyone involved in the catering operation to understand the importance of measuring food waste, and look for effective ways to reduce it.

Through this project we are gathering evidence and experience of how European hospitals can prevent and reduce food waste in their institu-
tions to achieve a range of measurable environmental, health, and socio-economic co-benefits. Final results will be made available at the end of 2020.

**Provision of low impact drinking water**

Providing access to water fountains or tap water is becoming more common in European hospitals and healthcare settings as a way to comply with European and national legislation, reduce waste, and even make financial savings.

In 2010, to reduce its environmental impact, the University Hospital of León (Spain) decided to remove bottled water by installing water dispensers. This has reduced PVC waste by 1,000kg/year (177,090 bottles), and achieved cost savings of €97,545 in a two-year period (2009-2011).

**Staff training**

Clearly mapping career pathways as well as offering continuing professional development and training for staff at all levels is an opportunity to improve both care delivery and the patient experience. The GPP criteria recommend that staff contracted for more than one year receive 16 hours of on-site procurement training annually with other temporary or short term staff receiving training proportional to the duration of their contract.

Training must be adjusted to the needs and conditions of each hospital, as highlighted by the North Bristol NHS Trust (page 8). Hospitals should dedicate financial resources to the professional development of food service workers and raising public awareness of the benefits of healthy and sustainable food.

Size matters! An initiative to reduce food waste at the Hospital Center of Niort
VENDING MACHINES

It is important to assess whether vending machines are the most appropriate means of providing food and drinks within a healthcare facility, and determine attitudes towards them amongst users. This was one of the key recommendations from our 2019 publication *Guidelines to procure vending machines in healthcare.*

In scenarios where vending machines are suitable, consider installing the minimum number of vending machines possible to cover the estimated demand in each location. It is also important keep track of consumption so that you can adjust to the demand more precisely.

Regarding products made available through vending services, the GPP criteria for vending machines focus on:

- Organic products in accordance with Regulation (EC) No 2018/848
- Certified fair and ethically traded products
- Vegetable fats produced from certified crops complying with environmental criteria

The GPP criteria also establish requirements for the installation of smart controls and other systems to monitor energy consumption and reduce CO₂ emissions.

Creating a sustainable food strategy starts with a good understanding of the nutrition and hydration needs of employees, patients, and visitors, and this should include vending machines.

The Hospital de Cruces was one of the first hospitals in Spain to adopt a policy where 50% of food and drink on offer in vending machines are healthy products (e.g. fruits and vegetables, nuts, salads,) in line with the Spanish nutritional recommendations to limit the consumption of (saturated) fats, sugars, and salt.

A simple system of highlighting healthy products with a green sticker has proven to be an effective nudge towards increased consumption of healthy products within the hospital’s vending machines. Having established a greater proportion of healthy products, the hospitals staff have now turned their attention towards incorporating more organic and fair trade certified products – coffee beans across the hospital’s hot beverage machines, for example, are now exclusively fair trade.

Concerning more direct environmental impacts, the vending machines have been adapted to an LED lighting system, reducing energy consumption by almost 80% (613.2kWh/year down to 131.4kWh/year). Hot beverage machines dispense only cardboard cups made with renewable, recyclable, and biodegradable raw materials to also reduce plastic waste.
RECOMMENDATIONS

The GPP criteria provide an opportunity for the healthcare sector to recognise and enhance the positive role that public food procurement can play in supporting a sustainable food system transition in Europe. Hospital procurers must ensure effective, ambitious, and focused implementation based on the recommendations and best practice we have shared in this guide:

1. Develop an overarching sustainable food strategy based on **full implementation and enforcement of the GPP criteria** for food procurement, catering services, and vending machines.

2. Set **quantitative targets** for organic and fair trade purchasing, focusing initially on a small number of priority products. Establish a timeframe for expansion and create a business case to support it supported by staff, patient and visitor feedback.

3. Ensure that **products with high animal welfare standards**, including free range and organic, are awarded additional points in tendering processes.

4. Specify minimum percentages and/or award points for **seasonal products that support the local economy**.

5. Promote **plant-based diets among patients and employees** by adding new ingredients incrementally, and raising awareness about how plant-based dishes can be prepared at home.

6. Introduce contract clauses on **minimising food and packaging waste**, ensuring that single-use materials are replaced with reusable alternatives by 2021 according to the Single-Use Plastics Directive.

7. Promote the availability and accessibility of **drinking water** to patients, staff, and visitors.

8. Apply selection criteria for caterers based on applying appropriate environmental management measures, such as **staff training**.

9. Provide **healthier options in vending machines** and consider introducing environmental criteria to reduce energy consumption and waste generation.

10. Conduct thorough **data collection and monitor progress** of measures implemented to improve effectiveness of your overall sustainable food strategy.
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