



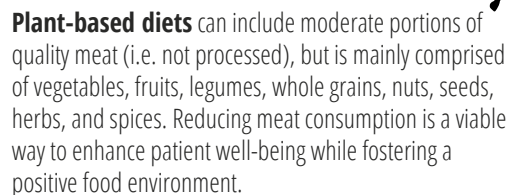
PLANT- BASED FOOD

GUIDELINES FOR HEALTHCARE

Introduction

A more sustainable future requires taking action to ensure healthier food practices in healthcare facilities. Food is a central component of our lives - not only does it provide essential nourishment, it plays a fundamental role in the economy and is embedded in cultural identities. The food we produce, consume, and waste, however, also has major impacts on human health and the environment.

There is a growing movement towards embedding climate-friendly practices in many sectors of society; the healthcare sector has a unique opportunity to protect environmental and public health, which can be achieved by implementing sustainable food practices in healthcare facilities. This factsheet provides guidelines for policymakers and healthcare professionals who are committed to building a healthier, low-carbon society through the promotion of plant-based diets in healthcare.



Plant-based diets can include moderate portions of quality meat (i.e. not processed), but is mainly comprised of vegetables, fruits, legumes, whole grains, nuts, seeds, herbs, and spices. Reducing meat consumption is a viable way to enhance patient well-being while fostering a positive food environment.

Exploring the environmental and health challenges

Modern Western diets heavily consist of dairy products, refined cereals, processed sugars, and fatty meats – this has a significant impact on human health and the environment through consumption patterns and production systems.

Whilst the extent of the **environmental impact** varies considerably between food groups, commercial meat and dairy production have the most negative ecological impacts by far and are the biggest drivers of climate change.^{1,2,3} Worldwide, livestock alone is responsible for approximately 14.5% of all anthropomorphic greenhouse gas (GHG) emissions and accounts for 70% of global agricultural land.⁴

Although the consumption of meat is a complex and often emotive issue, policy-makers and hospital managers should consider its environmental effects to effectively meet their emission reduction targets. For example, domestic ruminants (cattle, sheep, goats, and buffalo), are the leading contributor of methane - the second most abundant GHG after carbon dioxide.⁵

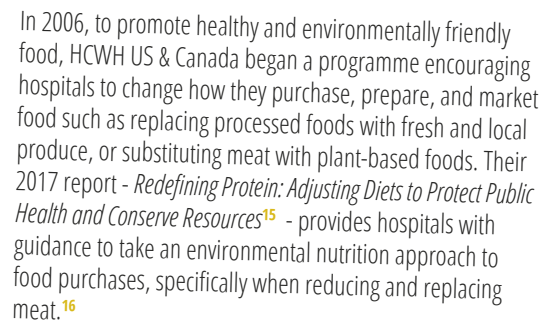
From a **health perspective**, meat consumption is often a contentious issue: there are many differing opinions within the medical field, but it is generally agreed that high-quality meat consumed in moderation can be a rich source of protein, vitamins, minerals, and micronutrients. *Over-consumption* of meat, however (especially when processed), can contribute to many chronic conditions such as cardiovascular disease, certain cancers, obesity, and type 2 diabetes.^{6,7}

There is strong evidence that avoiding processed meat and adopting a more plant-based diet reduces the risk of cancers.^{8,9} Plant-based diets are increasingly being promoted across the healthcare sector due, in part, to their positive impact on sustainable weight management and type-2 diabetes.^{10,11,12,13} The benefits of plant-based diets also extend beyond patients and impact providers and hospital staff, potentially leading to higher quality care.

What is needed in the healthcare sector?

Healthcare institutions are significant providers of food services, offering staff and patients at least three meals a day. Given their scale and impact on the local economy and community, they are in a unique position to provide food that not only nourishes patients, visitors, and staff, but also reduces carbon emissions through sustainable procurement and practices.

In 2017, the American Medical Association adopted a resolution calling on hospitals to provide more plant-based meals and remove processed meats to improve hospital food environments. Multiple hospitals across the US are creating new and exciting plant-based meals, developing farmers' markets or rooftop gardens at hospitals, and encouraging staff (including doctors, nurses) to learn about plant-based diets so they can inform patients.¹⁴



In 2006, to promote healthy and environmentally friendly food, HCWH US & Canada began a programme encouraging hospitals to change how they purchase, prepare, and market food such as replacing processed foods with fresh and local produce, or substituting meat with plant-based foods. Their 2017 report - *Redefining Protein: Adjusting Diets to Protect Public Health and Conserve Resources*¹⁵ - provides hospitals with guidance to take an environmental nutrition approach to food purchases, specifically when reducing and replacing meat.¹⁶

In Europe, healthcare institutions are also changing the way they think about food to increase the consumption of more plant-based produce. Not only does this reduce economic costs related to hospital admission and mortality, but also to improve the health of the community: increasing life expectancies and quality of life, thus enabling a continued active lifestyle.¹⁷

Policy context

Sustainable and healthy food can be linked the **Sustainable Development Goals (SDGs)**, and can also help reach the goals of the **Paris Agreement** - limiting global temperature increase to well below 2°C.^{18,19,20} Projections show that global dietary guidelines with minimum amounts of fruits and vegetables, and limiting consumption of red meat, sugar, and total calories could reduce food-related emissions by 29%.³ The European Union's Seventh Environment Action Programme highlights that to deliver environmental and health co-benefits, demand for animal-based food products (particularly meat and dairy products) must be reduced in parallel with a shift towards plant-based sources of protein.²¹

Public procurement is an important tool for promoting plant-based diets in healthcare. The most recent technical report on the **Green Public Procurement (GPP) of food and catering services** establishes a technical specification and award criteria for promoting vegetables, fruits, and pulses such as vegetarian days, increasing plant-based proteins, a weekly limit of (red) meat, or bulking up of meat dishes with beans, grains, or vegetables.²²

Plant-based foods have to be clearly specified in procurement procedures and menu planning to monitor and implement the continuous promotion of vegetables, fruits, and pulses and/or the reduction of animal-products as part of environmental management measures and practices.

These few policy examples do not address the full range of regulations at the international, European, and national levels – other policies and regulations which address food safety, land use, water use, fertilizer use, animal welfare, and labelling are also relevant to promoting plant-based diets in healthcare.

Case studies

Royal Blackburn Teaching Hospital, United Kingdom

Operated by the East Lancashire Hospitals NHS Trust, the Royal Blackburn Teaching Hospital annually provides a full range of hospital services to over 700,000 adults and children. The hospital serves approximately 1,200 patient meals daily, including breakfast, lunch, snacks, and dinner.

Prompted by the NHS Trust's *Food and Nutrient Standards*²³ and evidence linking reduced meat consumption to improved human health, and environmental sustainability - the hospital has increased its vegetarian and vegan options with a daily selection of seasonal vegetables and meat substitutes. Favourites amongst the vibrant vegan options include: stir-fry vegetables, spinach and falafel burgers, and stuffed peppers.

The hospital has also established a successful *Meat-free Monday* initiative, satisfying the Soil Association's *Food for Life Silver Award criteria*, as well as other initiatives encouraging visitors, patients, and staff to see, taste, and learn more about healthy and sustainable food.²⁴ One consequence of this awareness-raising approach is increased demand for the pre-packaged vegan salads available for purchase.

To effectively implement menu changes and introduce a plant-based diet in healthcare, the Trust found it useful to gather input and feedback to assess feasibility based on users' preferences. The East Lancashire Hospitals NHS Trust has not yet developed a fully vegan menu, but is slowly increasing the number of vegan and vegetarian options.



Hietzing Hospital & Neurological Center, Rosenhügel, Austria

One of the largest hospitals in Vienna, they serve 1,200 meals for in-patients, and 500 for staff at the canteen daily. As a signatory city of the *Milan Urban Food Policy Pact*, Vienna is committed to developing a sustainable municipal nutrition system that reorients institutional food services (including health facilities) towards providing healthy, local, seasonal, and sustainably produced food.²⁵

Hietzing Hospital proudly participates in the following projects:

- **Natürlich gut Teller (A “naturally good plate”):** Dishes must meet criteria such as organic and seasonal fruits and vegetables and minimal portions of meat (with high animal welfare standards and fish from sustainable sources).
- **UMBESA:** A menu optimisation project promoting freshly cooked meals, limited meat consumption, and meat substitution. Employees positively influence patients’ dietary preferences who now voluntarily choose vegetarian food.

Both of these projects currently require separate criteria and actions, but Hietzing plans to combine these initiatives in the future to further promote plant-based foods.

Since 2010, the hospital has reduced meat consumption by half, reducing costs by 16% and increasing patient and staff satisfaction by 34%. Director of Kitchen Management, Christina Schmidt sees scope to scale-up these initiatives: *“measures and strategies to promote plant-based diets are endless.”* Acknowledging the long-term positive impact of the hospital’s food policies on the local community and economy, Ms. Schmidt also believes nutrition should be an important part of therapy.

Radboud university medical center, The Netherlands

A leading academic centre for patient care, education, and research, whose mission is ‘to have a significant impact on healthcare’, Radboudumc offers hot lunches and dinners to staff, patients, students, and visitors - approximately 500 meals per working day.

In 2015, Dutch dietary guidelines recommended reducing weekly meat consumption to less than 500 grams (and limiting red meat to 300 grams); by implementing *Meatless Monday* in 2014, Radboudumc was ahead of the trend. Their restaurant, however, still offers a choice of sandwiches and savoury snacks with meat (products) to cater to individual wishes.

In 2012, the innovative concept *Food for Care* was developed between young cancer patients, oncology specialists, dieticians, and the hospital’s food nutrition department, and its food partner.²⁶

Through *Food for Care*, Radboudumc has implemented a concept that improved nutritional intake whilst helping patient recovery by offering small, tasty, and tempting dishes six or seven times per day, according to patient needs and wishes, e.g. halal, vegetarian, vegan, allergies etc.

“With our Food for Care concept we can ensure that patients get the nutrition they require, whilst also reducing food waste. In the dishes of our meal service the amount of protein is increased to support quicker recovery and shorter hospital stays”

Manon van den Berg, Team Leader Nutrition Radboudumc, Researcher and Clinical Dietician.

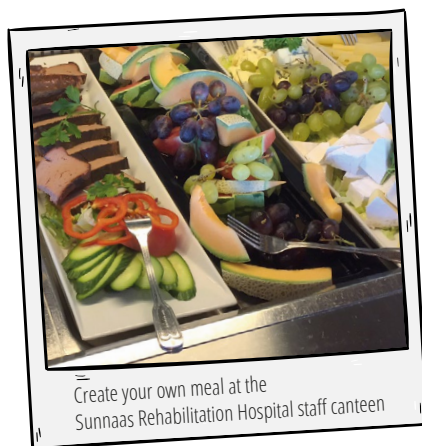
Radboudumc has adopted a circular-economy approach to its food production, and reduced food waste from 40% to 11%, allowing the hospital to invest in higher quality ingredients and foster a sustainable food environment.

Sunnaas Rehabilitation Hospital, Norway

The hospital’s environmental policy prioritises addressing the global climate challenge. A “climate inventory” which encompasses the whole lifecycle of food shows that 23% of the hospital’s climate footprint can be attributed to food services.

Sunnaas hospital leadership, in cooperation with its catering services provider, has committed to reducing food related emissions including a target to reduce food waste by 50% by 2030. Plate sizes have been reduced, information about environmentally friendly food practices is readily available to patients and employees, and patient and staff satisfaction is monitored with a “smiley face” feedback system.

Launched in 2016, their initial *Meat free Monday* campaign received some negative feedback concerning removed menu items; the campaign was re-launched with an emphasis on high quality greens, fish, and poultry. The shift in focus yielded more positive feedback, with the Monday menu now seen as the highlight of the week - expanding to two days per week is now being considered.



Proposed recommendations for promoting plant-based diets in healthcare

1. Focus on procurement

- a. **Leverage your institution's purchasing power** to increase access to healthier and more sustainable food from local/regional sources and environmentally-conscious distributors.
- b. **Consider adopting the 'less meat, better meat' approach**, which includes dairy products.²⁷ Ensure that your animal products (e.g. meat, eggs, seafood, dairy) meet high animal welfare standards, and include criteria such as non-therapeutic antibiotics, and low-stress/minimal transportation.

2. Design an appealing plant-based menu

- a. **Enhance patient-centred care:** work directly with dietitians to identify plant-based foods such as colourful fruits, leafy vegetables, whole grains, legumes, and nuts that can **improve patient well-being**.
- b. **Design a menu that is less reliant on meat:** meat/vegetable blends or meat/legume combinations are ways of reducing but not completely eliminating meat from the menu. Serve smaller portions of meat balanced with larger servings of vegetables and legumes.
- c. **Offer pulses and seeds** (lentils, chickpeas, sunflower, pumpkin etc.) in meals and snacks due to their nutritional, social, and sustainability advantages.⁷
- d. **Provide a vegetarian/vegan menu:** include regular plant-based options on a daily basis - consider providing at least one meat-free meal per week.
- e. **Be creative and descriptive:** encourage people to choose plant-based options with attractively named dishes e.g. *"Creamy Cauliflower with Toasted Walnuts"* or *"Crunchy Carrot Bites."*

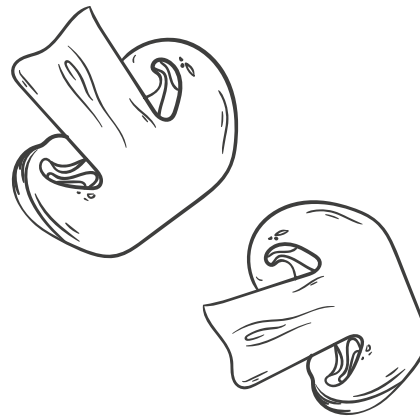
3. Raise awareness

- a. **Offer tasting sessions**, cookery demonstrations, and support groups for patients, hospital staff, and visitors to highlight the benefits of plant-based diets.
- b. **Communicate the rationale for menu changes** through posters and other communication channels.
- c. **Introduce organic and plant-based options** in commercial outlets and vending machines.
- d. **Share your recipes and your message** - hospital food can be delicious, healthy, affordable, and produced with care for the environment and the people who produce it.
- e. **Collaborate with policy-makers and experts** at all levels to promote more sustainable policies and practices that make healthy, plant-based foods more available and affordable.



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Photos: Royal Blackburn Teaching Hospital, United Kingdom (P.5), Sunnaas Rehabilitation Hospital, Norway (P.7), Radboud university medical center, The Netherlands (P.9 top), and Hietzing Hospital & Neurological Center, Rosenhügel, Austria (P.9 bottom).

Health Care Without Harm (HCWH) Europe is the European arm of a global not for profit NGO whose mission is to transform healthcare worldwide so that it reduces its environmental footprint, becomes a community anchor for sustainability and a leader in the global movement for environmental health and justice. HCWH's vision is that healthcare mobilises its ethical, economical, and political influence to create an ecologically sustainable, equitable, and healthy world.

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