

PLANT-BASED FOODS AND PLANT-BASED DIETS

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PLANT-BASED FOODS are those derived from plant sources, including fruits, vegetables, seeds, whole grains, nuts, and legumes.

PLANT-BASED DIETS are not vegan or vegetarian diets,^{1,2} but rather diets primarily composed of a variety of whole plant-based foods that are minimally processed along with lower proportions of meat and dairy.¹

KEY POINTS

- I. **PLANT-BASED FOODS AND PLANT-BASED DIETS PROVIDE** fiber, micro- and macronutrients, and phytochemicals which promote health and contribute to disease prevention^{3,4} which may indirectly lower healthcare costs.⁴
- II. **PLANT-BASED DIETS SUPPORT SUSTAINABILITY** through reductions in land and resource use, biodiversity conservation, and providing ecosystem services.^{1,2,5,6}
- III. **PLANT-BASED FOODS** such as grains and legumes are generally lower in cost than other whole foods.⁷

WHY ARE PLANT-BASED FOODS IMPORTANT FOR SUSTAINABLE DIETS?

Plant-based foods provide health, ecological, and socio-economic benefits. Whole plant-based foods are the building blocks of a nutritionally balanced diet, providing fiber, micronutrients, and macronutrients such as protein.^{1,2} Many fruits, vegetables, and other plant-based foods have naturally occurring phytochemicals (phytonutrients) that have been shown to support disease prevention including type 2 diabetes, certain types of cancers, and heart disease. They may also lower blood pressure.³ Thus, the national dietary guidelines of many countries recommend eating diets high in plant-based foods.²

Unlike animal-sourced foods such as milk, eggs, and meat, many plant-based foods do not have complete proteins with all the necessary essential amino acids (the building blocks that form protein). To ensure intake of all essential amino acids and complete proteins, it is important to

pair various plant-based foods with one another such as legumes with cereals grains.⁸ Including low to moderate consumption of animal-sourced food will also help ensure consumption of complete proteins and other key nutrients for health, including bioavailable iron and zinc, calcium, and vitamin B-12 in a plant-based diet.⁹

Ecologically, plant-based foods and plant-based diets are often associated with reduced land, water, and resource use as well as lower greenhouse gas emissions and a reduced carbon footprint in contrast to diets with higher consumption of animal-sourced food.^{1,2,5}

In contrast to vegan diets with no animal-sourced food, balanced plant-based diets have similarly been found to require less land and water. They are associated with lower greenhouse gas emissions.⁵ Reductions in land, water, and resource use are associated

with biodiversity conservation and the provision of ecosystem services.¹



Plant-based foods such as fresh fruits and vegetables are often higher in price compared to other food groups. However, seasonal offerings are frequently more affordable.² Further, canned, frozen, or dried fruits and vegetables are often lower in cost and include many of the same benefits as their fresh counterparts.¹⁰ In addition, plant-based proteins such as legumes and whole grains are often substantially less expensive than many animal-sourced foods.⁷ Further, grains and pulse crops (legumes that include dried peas, beans, lentils, and chickpeas) have a long shelf life, making them convenient and cost-effective choices for purchasing in bulk. Plant-based diets, given their health benefits, are associated with notable healthcare cost-savings nationally and globally.^{2,4}



CONSUMER PRACTICES TO INCREASE CONSUMPTION OF PLANT-BASED FOODS

- 1. EAT A DIVERSITY** of fresh fruits and vegetables, seeds, whole grains, nuts, and legumes.
- 2. WITH OVER 30,000 EDIBLE PLANT SPECIES CONTAINING 4,000 PHYTOCHEMICALS,** explore new recipes with different plant-based foods to try new flavors and meet taste preferences.³
- 3. EAT ANIMAL-SOURCE FOODS IN MODERATION.**
- 4. SUBSTITUTE OR COMPLIMENT MEAT-BASED ENTREES** with a variety of plant-based proteins, including beans, lentils, chickpeas, buckwheat, amaranth, and quinoa. Enhance recipes with a sprinkle of plant-based proteins such as chia seeds, hemp seeds, and nutritional yeast.
- 5. BAKE YOUR OWN BREAD** using flours made from whole, ancient, and sprouted grains, as well as alternative flours made from pulses or nuts.



INSTITUTIONAL PRACTICES TO PROMOTE PLANT-BASED FOODS

- 1. FOCUS YOUR MENU OFFERINGS** to support diverse plant-based diets that provide exciting flavor journeys.
- 2. SOURCE SEASONAL, FRESH, LOCAL, AND MINIMALLY PROCESSED** plant-based foods.
- 3. FEATURE ENTREES MADE OF PLANT-BASED PROTEINS** or a mix of plant-based proteins with meat, such as hearty options like lentil and beef burgers.
- 4. USE SIGNAGE TO CELEBRATE THE SUSTAINABILITY ATTRIBUTES** and other interesting information regarding plant-based foods featured on your menu.

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