

The Importance of Food Quality in Promoting Healthy and Sustainable Diets

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DESCRIPTION

Food quality is a central concept in nutrition and food sciences, playing a vital role in shaping dietary patterns, health outcomes and the sustainability of food systems. As global food environments undergo rapid transformation due to urbanization, industrialization and changing consumer preferences, ensuring high food quality has become increasingly important. Food quality extends beyond mere availability and quantity it encompasses nutritional value, safety, sensory attributes and the methods by which food is produced, processed and distributed. High quality food is essential for promoting healthy diets while also supporting environmental sustainability and long-term food security.

From a nutritional perspective, food quality is closely linked to the composition and bioavailability of nutrients. Diets rich in high quality foods such as whole grains, fruits, vegetables, legumes, nuts and minimally processed animal-source foods provide essential macronutrients and micronutrients necessary for growth, development and overall health. In contrast, diets dominated by low quality, ultra-processed foods are often high in energy, added sugars, unhealthy fats and sodium, while being low in dietary fiber, vitamins and minerals. Poor food quality contributes significantly to the global burden of malnutrition, including micronutrient deficiencies, overweight, obesity and diet-related non-communicable diseases.

Food quality also plays a vital role in food safety, which is a fundamental requirement for healthy diets. Contamination by pathogens, chemical residues, or environmental pollutants can compromise food quality and pose serious health risks. Unsafe food can lead to foodborne illnesses, reduce nutrient absorption and undermine consumer confidence in food systems. Maintaining high standards of hygiene, proper storage, effective processing and rigorous quality control measures throughout the food supply chain is essential to protect public health and ensure that food contributes positively to nutritional well-being.

Sensory characteristics such as taste, texture, aroma and appearance are additional dimensions of food quality that influence dietary choices and eating behaviors. Foods that are

appealing and culturally acceptable are more likely to be consumed regularly, supporting dietary adequacy and diversity. High quality foods that meet sensory expectations can encourage the consumption of nutritious options, particularly among children and adolescents. Conversely, poor sensory quality may discourage the intake of healthy foods, even when they are nutritionally adequate, highlighting the importance of aligning nutritional value with consumer acceptability.

Beyond health, food quality is increasingly recognized as a key factor in promoting sustainable diets. Sustainable diets are those that support health while minimizing environmental impact and preserving resources for future generations. The quality of food is closely linked to agricultural practices, processing methods and supply chain efficiency. Foods produced using sustainable farming practices often retain higher nutritional value, reduce reliance on harmful chemicals and support biodiversity. Improving food quality at the production level can therefore contribute to environmental sustainability while enhancing the nutritional profile of diets.

Food processing has a significant influence on food quality and sustainability. While appropriate processing can improve food safety, extend shelf life and reduce food waste, excessive processing may reduce nutritional quality and increase environmental costs. The growing consumption of highly processed foods has raised concerns about both health and sustainability due to their resource-intensive production and packaging. Emphasizing minimally processed foods and adopting innovative, sustainable processing technologies can help balance convenience with nutritional and environmental considerations.

Food quality is also closely connected to food equity and access. High-quality, nutritious foods are often less accessible or affordable for disadvantaged populations, leading to dietary inequalities and health disparities. Promoting food quality within food systems requires policies and interventions that ensure equitable access to nutritious foods for all population groups. This includes supporting local food production, improving food distribution networks and implementing policies that encourage the availability and affordability of healthy food options.

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Consumer awareness and education are essential components in improving food quality and promoting healthy and sustainable diets. When consumers understand how food quality affects health and the environment, they are more likely to make informed dietary choices. Clear food labeling, nutrition education programs and public health campaigns can empower individuals to select foods that are both nutritious and sustainably produced. At the same time, collaboration among governments, the food industry, researchers and communities is necessary to establish and maintain food quality standards that align with health and sustainability goals.

In conclusion, food quality is a cornerstone of healthy and sustainable diets and a critical focus within nutrition and food sciences. It influences nutritional adequacy, food safety, consumer behavior, environmental sustainability and social equity. Improving food quality requires a holistic approach that addresses the entire food system, from production to consumption. By prioritizing food quality, societies can move toward dietary patterns that support human health while safeguarding the planet, ensuring a healthier and more sustainable future for generations to come.