



Vegetarian diets



Why do people become vegetarians?

- For many people, vegetarianism may be more of a necessity than a choice
- Reasons for vegetarianism:
 - Lack of availability of animal products
 - Do no "harm" to animals because of religious or philosophical beliefs
 - To eat low on the food chain to preserve the environment
 - To preserve the world's food supply
 - Better health : keeps weight low and thus the risks of certain diseases



Types of vegetarian diets

- There is no one vegetarian diet:
 - Ranges from people who eat all foods except red meat (mainly beef) to those who exclude all foods from animal sources, including honey
- According to the American Vegetarian Society and the International Vegetarian Union, **vegetarianism** “is defined as the practice of not eating meat, poultry or fish or their by-products, with or without the use of dairy products or eggs.”



Types of vegetarian diets

	Plant food	Milk	Eggs	Fish	Poultry
Vegan	X				
Lactovegetarian	X	X			
Lacto-ovovegetarian	X	X	X		
Pollovegetarian	X				X
Pescovegetarian	X			X	
Macrobiotic	X				



Vegetarian diets and health

- According to the American Dietetic Association (ADA) :
 - “Appropriately planned vegetarian diets are healthful, are nutritionally adequate, and provide health benefits in the prevention and treatment of certain diseases”
- If implemented properly, all the vegetarian diets are health promoting



Vegetarian diets and health

- However, highly restrictive vegetable diets can be harmful to health:
 - especially to pregnant women, growing children and ill ones who need extra nutrients
- The special concerns are that these diets may be deficient in:
 - Quality protein, Vitamin B₁₂, Vitamin D, Zinc, Calcium and Iron



Dietary recommendations for vegetarians

- Choose a variety of foods:
 - whole grains, vegetables and fruits, legumes, nuts, seeds and if desired dairy products and eggs
- Choose whole, unrefined foods:
 - Minimize highly sweetened, fatty and highly refined foods

See Brown, Table 16.3



Dietary recommendations for vegetarians

- Eat a variety of fruits and vegetables
- Eat lower fat animal products, if used
 - i.e. Low fat cheese and milk, etc.
- Vegans should include a source of B₁₂
- Do not restrict fat in younger children
 - Calories from fat are needed to help meet their nutrient and energy needs



Special considerations

- Getting enough vitamin B₁₂
- Vitamin D intake in vegetarian diets
- Calcium intake in vegetarian diets
- Zinc intake
- Complete protein intake
- Iron intake



Special considerations

- Vitamin B₁₂
 - Is only present in animal products
 - It is advised to obtain Vitamin B₁₂ from fortified products such as soy milk, breakfast cereals and Vitamin B₁₂ supplements



Special considerations

- Vitamin D
 - There are two main sources of vitamin D: Sunlight and vitamin D-fortified milk and a few other fortified foods
 - If milk is not part of the vegan's diet and sun exposure is limited, vitamin D-deficiency can occur
- Vitamin D fortified soy milk and/or breakfast cereals or a vitamin D supplement may be taken



Special considerations

- Calcium intake
 - Although plants contribute significantly to calcium it is difficult to obtain 1000mg calcium from plants alone
 - Include kale, broccoli, dried beans in the diet, also
 - Calcium fortified soy milk and orange juice



Special considerations

- Zinc intake
 - Many plants are good sources of zinc but zinc is poorly absorbed from plant sources
 - Include whole grains, dried beans, nuts and zinc-fortified breakfast cereals



Special considerations

- Complementing plant protein sources
 - Vegans can meet their need for complete protein by combining plant foods which together will provide all the essential amino acids
 - The goal is to complement plant sources of essential amino acids to obtain complete protein

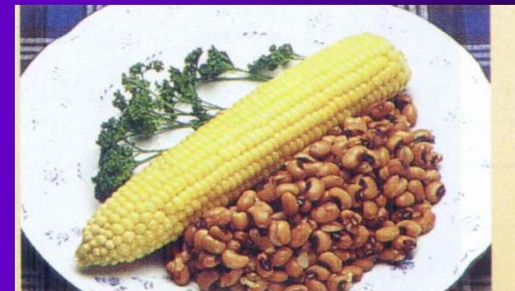
Complementing plant protein sources



Rice and dried beans



Corn and dried beans



Bread and peas



Lentils and wheat





Complementing plant protein sources

Bread and humus
(garbanzo beans)



Tortilla with
refried beans



Corn and green
lima beans



Rice, vegetables
and tofu





Complementing plant protein sources

- Peanuts, rice and dried beans
- Seeds and green peas
- Soybeans and seeds
- Barley and dried beans



Special considerations

Iron intake

In developed countries, iron from plant sources with an ample supply of vitamin C help meet the iron requirement, while in developing countries, too few iron-rich plants make iron deficiency common.



More information?

- World wide web resources
- Several cook books
- Attention:
 - Some of the information on vegetarian diets is wrong/misconstrued as some organizations are committed to selling particular beliefs, memberships or books rather than promoting healthy vegetarian diets.

[Lightning Quiz](#)