

Vegetarianism

Facts and Tips

What is Vegetarianism?

The vegetarian diet mainly includes grains, legumes (dried beans and peas), fruits, vegetables, nuts and seeds.

According to the American Dietetic Association

“There is no single vegetarian eating pattern.” The types of diets are defined

depending on what is included or eliminated from the diet. As the diet becomes more limited, it becomes more difficult to get the nutrients

that you need.

Some of the most common types of vegetarians are:

- * Semi-vegetarians—eat milk, milk products, eggs, fish and poultry. They will not consume the flesh or organs of mammals. This is the most common vegetarian.
- * Pesco-vegetarians—eat dairy products, eggs and fish, but no other animal flesh.
- * Lacto-ovo vegetarians—diet includes milk and eggs, but they will not eat other animal products.
- * Lacto-vegetarians—include milk and milk products in their diet, but not other animal products.
- * Vegans—will not eat animal products of any kind. This is the strictest type of diet.



Why Do People Choose to Become Vegetarians?

People choose a vegetarian lifestyle for a variety of reasons. For some, the perceived health benefits of a diet based on plant foods attracts them, for others it may be due to religious beliefs, ethical reasons, environmental concerns, or economic reasons.

Is a Vegetarian Diet a Healthy Alternative?

Many people turn to vegetarianism for health reasons. The types of diets followed by vegetarians consist mostly of low fat, low cholesterol foods that are encouraged for all by the USDA's Dietary Guidelines for Americans, which state that “by following these Guidelines you can promote your health and reduce your risk for chronic disease...” Vegetarian diets can have positive effects on health and chronic disease prevention.



The 2000 Dietary Guidelines

The Dietary Guidelines for Americans recommend we choose a diet that is low in saturated fat and cholesterol and moderate in total fat. They also recommend we choose a variety of grains, fruits, and vegetables. Vegetarian

diets are based on plant foods, and thus provides a diet that is high in dietary fiber and generally lower in fat.

Chronic Disease Prevention

Studies indicate that vegetarians have a lower rate of coronary heart disease and certain types of cancer. The rate of high blood pressure is also generally lower among vegetarians. The risk for type II diabetes appears to be lower among vegetarians, perhaps because of the higher intake of complex carbohydrates and their lower body weight.

Nutritional Considerations

Protein

It is a common myth that it is difficult to obtain enough protein from a vegetarian diet. Most Americans consume more protein than their bodies need. Vegetarians can obtain sufficient protein if a variety of plant products and adequate calories are consumed. Animal products provide the highest quality of protein, but even vegans can meet their protein needs by combining a variety of legumes, grains, and vegetables, which also contain protein.

Vitamin B-12

Bacteria that live in animals produce vitamin B-12. Plant foods can contain B-12 on their surface from the soil, but they are considered an unreliable source of the vitamin. Labels on foods such as tempeh, miso, sea vegetables, and spirulina may indicate that they contain Vitamin B-12, however it is in an inactive form, and therefore cannot be used by the body. We need only a small amount of B-12 in our diet, but it is very important for good health. A deficiency of vitamin B-12 can cause irreversible nerve damage, therefore it is recommended that vegetarians who avoid or limit animal foods in their diets take a supplement or use fortified foods. Age limits the ability to absorb this vitamin, so supplements may be advisable for all older vegetarians.

Vitamin D

Unless foods fortified with vitamin D are eaten in the diet, the vegetarian may not obtain enough of this nutrient from dietary

2000 Dietary Guidelines for Americans

AIM FOR FITNESS

- ▲ Aim for a healthy weight.
- ▲ Be physically active each day.

BUILD A HEALTHY BASE

- Let the Pyramid guide your food choices.
- Choose a variety of grains daily, especially whole grains.
- Choose a variety of fruits and vegetables daily.
- Keep food safe to eat.

CHOOSE SENSIBLY

- Choose a diet that is low in saturated fat, and cholesterol and moderate in total fat.
- Choose beverages and foods to moderate your intake of sugars.
- Choose and prepare foods with less salt.

sources. Vegans and other vegetarians who do not drink milk may be lacking vitamin D, as the most common dietary source of vitamin D is fortified cow's milk. Sunlight exposure is a major factor affecting vitamin D status, and in most cases exposure of five to fifteen minutes a day is believed to be adequate to supply the needed amount of this vitamin. It is recom-

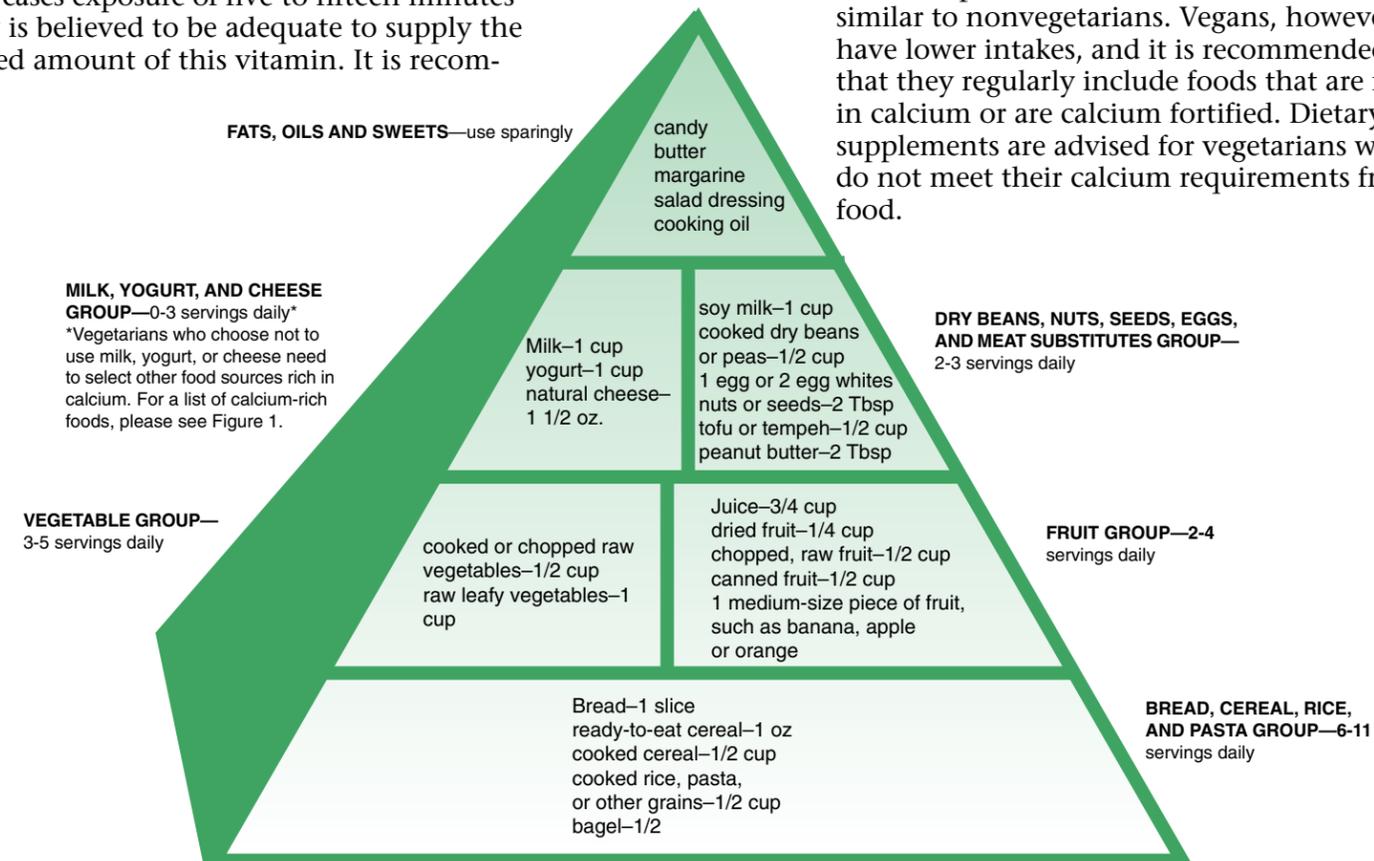


Figure 2.
Food Guide Pyramid for
Vegetarian Meal Planning

Source: National Center for Nutrition and Dietetics
The American Dietetic Association based on the USDA Food Guide Pyramid

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Figure 1. Food Sources of Nutrients

Protein—tofu and other soy-based products, legumes, grains, vegetables, nuts and seeds.

Vitamin B-12—vegetarian burger patties, fortified soy beverages, nutritional yeast and fortified cereals.

Vitamin D—sunshine and fortified cereals and soy beverages

Calcium—tofu processed with calcium, fortified soy beverages, broccoli, seeds, nuts, some greens (kale, mustard greens and collards), bok choy, and fortified orange juice and breakfast cereals.

Iron—tofu, green leafy vegetables, dried fruit, legumes, whole grains, fortified cereals and breads.

Zinc—whole-wheat bread, whole grains, legumes, tofu and nuts.

mended that vegans take supplements if sun exposure is limited. Older vegans are especially at risk for vitamin D deficiency because of their reduced ability to synthesize it and should consider supplementation.

Calcium

Lacto-ovo vegetarians who consume milk and milk products have calcium intakes similar to nonvegetarians. Vegans, however, have lower intakes, and it is recommended that they regularly include foods that are rich in calcium or are calcium fortified. Dietary supplements are advised for vegetarians who do not meet their calcium requirements from food.

Iron

The vegetarian diet is higher in iron content than nonvegetarian diets, however, body iron stores in vegetarians are lower due to the poor absorption of the non-heme iron found in plant foods. To increase the iron absorbed at a meal, a source of vitamin C, such as citrus fruit, green or red peppers, tomatoes or broccoli, should be included. The use of iron cookware can also increase iron intake.

Zinc

Vegetarian diets tend to be lower in zinc than nonvegetarian diets, and the zinc that is available from plant foods is not absorbed as well. Vegetarians should strive to meet or exceed the recommended allowances for this nutrient by consuming a variety of foods containing zinc. See Figure 1 for a list of zinc-rich foods.

Vegetarianism and the Life Cycle

The position paper of the American Dietetic Association states that “well-planned vegan and lacto-ovo vegetarian diets are appropriate for all stages of the life cycle, including during pregnancy and lactation. Appropriately planned vegan and lacto-ovo vegetarian diets satisfy nutrient needs of infants, children, and adolescents and promote normal growth.” The more restrictive the diet, however, the more likely dietary deficiencies can occur. It is important that all vegan children have sufficient calories, a reliable source of vitamin B-12, vitamin D, calcium, iron, and zinc. To

ensure an adequate diet is provided to infants and growing children, it is recommended that parents consult with a dietitian.

Vegetarian diets can be healthful and appropriate choices for adolescents, however, vegetarian diets are more common among adolescents with eating disorders, and parents and professionals need to be aware of individuals who severely restrict their food choices and exhibit symptoms of eating disorders.

The nutrient and energy needs of pregnant and lactating women can be met with a vegetarian diet. Their diets should be supplemented with B-12, and if sunlight is limited with vitamin D. Supplements of folate are recommended for all pregnant women, however, vegetarian women generally have higher intakes of folate than nonvegetarians.

Tips for Vegetarians

Vegetarians should choose a diet that is moderate in fat, saturated fat, cholesterol, sugar, and sodium to meet the Dietary Guidelines for Americans.

The healthful vegetarian diet should include a variety of foods such as whole grains, vegetables, fruits, legumes and, perhaps dairy products and eggs.

Vegans should supplement their diets with a regular source of B-12, and if sun exposure is limited a source of vitamin D.

One meal planning approach is to follow the Vegetarian Food Guide Pyramid (see Figure 2) developed by the American Dietetic Association and to make informed choices from among the five food groups.

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