

## Eating Well With A Vegetarian Diet

Over the last several decades, the number of people eating vegetarian diets has dramatically increased. Many parents following vegetarian diets feed their children similarly. For centuries, many cultural and ethnic groups have followed traditional vegetarian diets and remained in good health.

Some aspects of vegetarian diets can be beneficial and in accordance with recent dietary guidelines such as increased dietary fiber and lower saturated fat intake.

However, when individuals take up eating patterns that are non-traditional for their culture, problems can arise. The dietary patterns of these vegetarians may not be healthy. For example, food intake may be haphazard, may lack variety, and particularly for children and teenagers, may be low in calories and certain necessary nutrients.

## What Is A Vegetarian Diet?

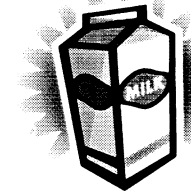
Vegetarian diets consist solely or mainly of plant foods: fruits, vegetables, legumes, grains, seeds, and nuts. Eggs and dairy products may both be included in some diets as well.

Generally, vegetarian diets can be classified as:

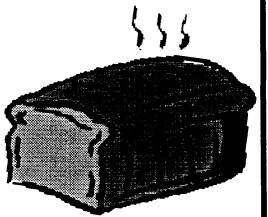
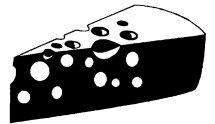
- ❖ **Strict vegetarian or vegan diet** which completely excludes meat, fish, poultry, eggs, and dairy products.
- ❖ **Lacto-vegetarian diet** which excludes meat, fish, poultry, and eggs, but includes dairy products.
- ❖ **Lacto-ovo-vegetarian diet** which excludes meat, fish, poultry, but includes eggs and dairy products.

## Who can follow the vegetarian diet?

Well planned vegan, lacto- or ovo-vegetarian diets can be healthful and appropriate. Children and teens have relatively high nutritional needs due to rapid growth. These needs can be met with a carefully planned vegetarian diet. Otherwise the diets might not be adequate in calories, calcium, protein, iron, vitamin B12, vitamin D or zinc (see chart below).



Necessary Nutrient Intakes	Nutrient Information	Food Sources
Calories	Vegetarian diets, especially the vegan diet tend to be "bulky" or "filling". Some high calorie foods and frequent snacks are necessary to help growing children meet their high energy needs.	See the servings needed from the Food Group Pyramid on the other side.
Protein	Vegetable sources contain necessary amino acids which are used to make protein however, no single vegetable contains them all.	Must use a combination of whole grains, legumes, vegetables, seeds, nuts, and soy protein to provide a complete protein. For lacto and lacto-ovo vegetarians milk and eggs are a good protein source.
Calcium	Dairy products generally supply the greatest amounts of calcium. It is difficult to achieve the high calcium needs of children and teenagers with a strict vegan diet.	For lacto/lacto-ovo vegetarians: milk, cheese, yogurt; For strict vegans; calcium fortified varieties of cereals, juices, and soy or rice milk; broccoli; beans, chick peas, almonds, dried figs, blackstrap molasses, calcium-processed tofu and dark leafy vegetables (collard, turnip and mustard greens, kale, bok choy and watercress)
Iron	The iron in meat is more readily absorbed than the iron from plants. You can help the body absorb more plant iron by eating foods with vitamin C such as citrus fruits or juices, broccoli, tomatoes, and green pepper.	Beans, chick peas, spinach, beet greens, dried fruits, prune juice, blackstrap molasses, pumpkin and sesame seeds, soy bean, iron-fortified cereals and breads, and some veggie burgers (check the label)
Vitamin B12	This vitamin is not made by plants. For diets that include dairy products or eggs, the intake of vitamin B12 is adequate.	Strict vegan diets must include vitamin B12 fortified breakfast cereals, soy beverages, TVP (Textured Vegetable Protein or Textured Soya Protein), or some brands of yeast extracts (check label). A vitamin B12 (cobalamin) supplement can be given and is a requirement for nursing mothers on a vegan diet. Milk and eggs are considered an excellent source for those lacto-ovo/lacto vegetarians.
Vitamin D	Foods naturally high in vitamin D are primarily animal foods. Milk in the United States is fortified with vitamin D. Our bodies can make vitamin D when exposed to the sun.	Those who do not consume milk or have limited sunlight exposure should take a vitamin D supplement of no more than 100% of Recommended Dietary Allowance (RDA) (read the label).
Zinc	Zinc is needed for growth and maturation, and tends to be low in vegetarian diets.	Good plant sources include wheat germ, nuts, seeds, beans and whole grains. Dairy products and eggs are also good sources.



## How can a vegetarian diet be planned?

The guidelines expressed in the Food Guide Pyramid for Vegetarians (on

back page) may assist you in planning a well balanced vegetarian diet. Over the course of a day, one should eat first from the Five Food Groups: (1) Bread, Cereal, Rice and Pasta Group; (2) Vegetable Group; (3) Fruit Group; (4) Dry Beans, Nuts, Seeds and Eggs (Meat Substitute) Group; (5) Milk, Yogurt and Cheese Group. Choose sparingly of fats, oils and sweets.

