# **Healthy Vegetarian Eating**

A vegetarian diet can be part of a healthy, active lifestyle. A well-planned vegetarian diet can lower your risk of heart disease, high blood pressure, type 2 diabetes, and prostate and colon cancer. It can also help control your weight.

Healthy vegetarian eating is suitable for people in any stage of life: infants, children, adolescents, adults, and pregnant and breastfeeding mothers.

A healthy vegetarian diet provides enough key nutrients such as protein, iron, zinc, calcium, vitamin D, vitamin B<sub>12</sub>, and omega-3 fats.

This handout is a guide for people 2 years and older. Use this handout to make sure your vegan or vegetarian diet has all the nutrients you need to be healthy.

# Types of vegetarian eating

Usually a person who follows a vegetarian diet does not eat meat, poultry, or fish. However, there are many different kinds of eating plans that could be called vegetarian. Common vegetarian diets are:

Semi- vegetarian	may include some fish, and maybe even small amounts of meat or poultry
Lacto-ovo	<ul> <li>includes eggs, milk, and milk products</li> <li>excludes red meats, poultry, and fish</li> </ul>
Lacto	<ul> <li>includes milk and milk products</li> <li>excludes red meats, poultry, fish, and eggs</li> </ul>
Vegan	excludes all foods of animal origin, including red meats, poultry, fish, eggs, honey, milk and milk products

# Eating well on a vegetarian diet

The guide below and on the next page can get you started on a healthy vegetarian eating plan.

#### Vegetarian basics

- Use Canada's Food Guide to make vegetarian choices.
- Choose a variety of foods from the 4 food groups of Canada's Food Guide. Include vegetables, fruits, whole grains, milk alternates, legumes, nuts, seeds. You can also include eggs, and milk and dairy products, and fish.
- Choose whole, unrefined foods often.
- If you eat milk products, choose ones that are lower in fat more often.
- Choose foods that are sources of protein, vitamin B<sub>12</sub>, vitamin D, calcium, iron, zinc, and omega-3 fats every day. See pages 3 and 4.
- Limit foods high in fat, sugar, and salt.
- If you aren't able to eat many different kinds of vegetarian foods from Canada's Food Guide, you might need a vitamin and mineral supplement. Before starting a supplement, talk to your healthcare provider.

### **Food Guide tips**

- The next page lists vegetarian foods in all four food groups, as well as the number of servings recommended in Canada's Food Guide.
- Higher calcium foods are listed in each food group on the next page. Choose foods from the high-calcium lists every day for strong bones and good health. If you follow a vegan eating plan it's especially important to eat higher calcium foods every day.



# Choose a variety of foods from each food group every day.

## Vegetables and Fruit

### Recommended number of servings per day:

Adults, 19 years and older: 7 to 10 Teens, 14 to 18 years: 7 to 8 Children, 4 to 13 years: 5 to 6 Toddlers, 2 to 3 years: 4

- Vegetables, fresh, frozen or canned, ½ cup (125 mL)
- Vegetables, leafy, cooked, ½ cup (125 mL)
- Vegetables, leafy, raw, 1 cup (250 mL)
- Vegetable or fruit juice, ½ cup (125 mL)
- Fruit, fresh, frozen, or canned, ½ cup (125 mL) or 1 medium fruit
- Raisins, dried fruit, ½ cup (60 mL)

#### **Higher calcium foods:**

- Bok choy, broccoli, collards, Chinese cabbage, kale, mustard greens, okra, 1 cup (250 mL) cooked or 2 cups (500 mL) raw
- Calcium-fortified tomato juice, ½ cup (125 mL)
- Calcium-fortified fruit juice, ½ cup (125 mL)
- Figs, 5 medium

#### **Grain Products**

#### Recommended number of servings per day:

Adults, 19 years and older: 6 to 8 Teens, 14 to 18 years: 6 to 7 Children, 4 to 13 years: 4 to 6 Toddlers, 2 to 3 years: 3

- Bread, 1 slice (35 g)
- Bagel,  $\frac{1}{2}$  (45 g)
- Flat breads (pita or tortilla), ½ (35 g)
- Rice, bulgur or quinoa, cooked, ½ cup (125 mL)
- Pasta or couscous, cooked, ½ cup (125 mL)
- Cereal, hot, <sup>3</sup>/<sub>4</sub> cup (175 mL)
- Cereal, cold, 1 oz (30 g)

#### **Higher calcium food:**

• Calcium-fortified breakfast cereal, 1 oz (30 g)

## Milk and Alternatives

#### Recommended number of servings per day:

Adults, 19 years and older: 2 to 3 Teens, 14 to 18 years: 3 to 4 Children, 4 to 13 years: 2 to 4 Toddlers, 2 to 3 years: 2

#### All Milk and Alternatives are high in calcium:

- Milk, 1 cup (250 mL)
- Milk, canned (evaporated), ½ cup (125 mL)
- Yogurt, <sup>3</sup>/<sub>4</sub> cup (175 g)
- Kefir, <sup>3</sup>/<sub>4</sub> cup (175 g)
- Cheese,  $1\frac{1}{2}$  oz (50 g)
- Fortified soy beverage, 1 cup (250 mL)
- Fortified rice or almond beverage, 1 cup (250 mL) (These are low in protein. Along with these, be sure you eat other higher protein foods from the Milk and Alternatives and Meat and Alternatives groups.)

#### **Meat and Alternatives**

#### Recommended number of servings per day:

Adults, 19 years and older: 2 to 3 Teens, 14 to 18 years: 2 to 3 Children, 4 to 13 years: 1 to 2 Toddlers, 2 to 3 years: 1

- Legumes (dried, cooked beans, peas, and lentils), <sup>3</sup>/<sub>4</sub> cup (175 g)
- Tofu, 150 g or <sup>3</sup>/<sub>4</sub> cup or 175 mL
- Peanut or nut butters, 2 Tbsp (30 mL)
- Shelled nuts and seeds, ½ cup (60 mL)
- Fish, shellfish,  $2\frac{1}{2}$  oz (75 g)
- Eggs, 2

#### **Higher calcium foods:**

- Tofu, calcium-set, 150 g or <sup>3</sup>/<sub>4</sub> cup or 175 mL
- Soybeans, cooked, <sup>3</sup>/<sub>4</sub> cup (175 g)
- Salmon with bones, ½ cup (125 mL)
- Almonds or soy nuts, ½ cup (60 mL)
- Almond butter or sesame tahini, 2 Tbsp (30 mL)
- Chia seeds, 1 Tbsp (15 mL)

# Nutrients of concern for vegetarians

#### **Protein**

Protein foods are needed for the growth and repair of your body tissues and to help your body fight infections. A variety of plant foods eaten over the day gives you enough protein to meet your needs. Good sources of plant protein are found in the Meat and Alternatives group.

If you are a vegetarian athlete you will need to eat a wide variety of protein-rich foods such as:

- soy products
- nuts
- legumes
- seeds
- grains

Most athletes don't need a protein supplement to get enough protein.

#### Calcium and vitamin D

Calcium and vitamin D help keep your bones and teeth healthy. Vegans may have trouble eating enough calcium and vitamin D to meet their needs.

Look at the lists of higher calcium foods on page 2. Eat a variety of higher calcium foods from all 4 food groups to meet your needs.

Each day you will also need to eat foods high in vitamin D such as:

• eggs

- fortified cereals
- fortified cow's milk
- fortified yogurts
- fortified soy or rice drinks (check the label)
- margarine

Include at least two of these sources of vitamin D every day.

All healthy people (age 1 to 70) should take a daily vitamin D supplement of 400 IU.

Adults over age 70 should take a daily vitamin D supplement of 800 to 1000 IU.

Ask your healthcare provider for more information.

#### Iron

Iron is needed to make red blood cells, which carry oxygen in your body. Vegetarians need about twice as much iron as non-vegetarians because the iron from plant foods is not absorbed as well as the iron from animal foods.

### Choose iron-rich foods every day

Foods high in iron include:

- dark green leafy vegetables
- dried fruit (such as raisins, dates, and apricots)
- eggs
- grain products made with iron-enriched flour
- legumes (beans and lentils)
- molasses, blackstrap
- nuts and seeds
- tofu
- whole grains

# Certain foods can increase or decrease the amount of iron you absorb from food.

Vegetables and fruits high in vitamin C can increase the amount of iron you absorb from food. Foods high in vitamin C include:

- broccoli
- oranges
- cantaloupe
- peppers
- grapefruit
- strawberriestomatoes

• kale •

Coffee, tea, and milk products can decrease the amount of iron you absorb from food.

#### **Tips**

- Eat vegetables and fruits at each meal for the vitamin C.
- Don't drink tea and coffee close to meal times.
- Don't take an iron supplement or multi-vitamin and mineral supplement with milk products.
- Cook in cast iron cookware to increase the amount of iron in foods.

### Vitamin B<sub>12</sub>

Vitamin  $B_{12}$  is needed for healthy nerves and red blood cells. It is found naturally only in animal products: meat, milk products, and eggs. Plant foods don't have enough vitamin  $B_{12}$  to meet most people's needs, unless the foods are fortified. Even plant foods with natural vitamin  $B_{12}$  (such as spirulina or fermented soy products) are not a high source of vitamin  $B_{12}$ . Adults need  $2.4\mu g$  (mcg) vitamin  $B_{12}$  a day.

**All vegetarians** should eat 2-3 servings of vitamin  $B_{12}$ -rich foods every day. Some vitamin  $B_{12}$ -rich foods are:

- Red Star® Nutritional Yeast (Vegetarian support formula), 1 Tbsp (15 mL)
- Fortified soy beverage, 1 cup (250 mL)
- Cow's milk, 1 cup (250 mL)
- Yogurt, <sup>3</sup>/<sub>4</sub> cup (175 mL)
- Eggs, large, 2
- Fortified meat substitute (such as vegetarian ground round or patties), 1 serving (see package)

Read food labels. If vitamin  $B_{12}$  has been added, it will be listed on the Nutrition Facts table.

If you don't eat the foods above regularly, talk to your doctor about testing your blood levels of vitamin  $B_{12}$ , and ask if you need a supplement.

Adults 50 and over: Older adults absorb less vitamin  $B_{12}$  from animal foods. Eat foods fortified with vitamin  $B_{12}$  regularly, or take a supplement.

#### **Zinc**

Zinc helps your body heal and fight off infections. Vegetarian diets are usually high in phytate and fibre, which can reduce the absorption of zinc. It's important to make foods high in zinc a part of your everyday diet.

Foods high in zinc include: hard cheeses, eggs, yogurt, mushrooms, green peas, fortified cereals, wheat germ, sunflower seeds, cashews, pumpkin seeds, sesame tahini, almonds, peanuts, navy beans, canned vegetarian baked beans, chick peas, lentils, fortified meat substitute, soybeans, and tofu.

# What about a daily multivitamin and mineral supplement?

You may need a multivitamin and mineral supplement every day to help meet your nutrient needs. Talk to your healthcare provider for more information.

### **Omega-3 fats**

It is important to eat foods with omega-3 fats every day. Omega-3 fats can help to prevent heart disease and stroke, and are important for eye, nerve, and brain development.

Fish is high in omega-3 fats. If you don't eat fish, include at least 2 sources of omega-3 fats every day. The foods below are higher in omega-3 fats:

- sea vegetables such as arame, dulse, nori, kelp, kombu, or wakame
- omega-3 enriched eggs

If you don't usually eat the foods above, you may not be eating enough omega-3 fats, especially if you are pregnant or breastfeeding. You may benefit from an omega-3 supplement. Ask your healthcare provider before taking an omega-3 supplement.

If you follow a vegan eating plan, you can buy omega-3 supplements made from microalgae. In stores, these may be called an omega-3 fatty acid or DHA (docosahexaenoic acid) supplement.

Other things to think about when trying to get enough omega-3 fats in your diet:

- limit trans and saturated fats
- use canola or olive oil in cooking
- include other foods that have omega-3 fats, like flaxseeds, flaxseed oil, walnuts, and foods with omega-3 fats added (like yogurt)

## To find out more

Visit websites like:

- www.dietitians.ca (click on the Your Health tab)
- Canada's Food Guide (www.hc-sc.gc.ca; search for Canada's Food Guide)
- www.eatrightontario.ca