Recommendations

Healthy Eating emphasizes healthy food choices, variety, and portion sizes consistent with Eating Well with Canada’s Food Guide. Healthy eating provides adequate nutrients, promotes optimal growth and health, and minimizes the risk of nutrient-related chronic diseases.

Healthy eating can be achieved by:

- Choosing a variety of foods from each of the four groups from Canada’s Food Guide (CFG) everyday, and by following the advice in the Guide.
- Choosing meals that include at least three of the four food groups.
- For adults: Eating three regular meals, plus snacks if needed, throughout the day.
- For children: Providing three regular meals and two to three snacks every day. Provide snacks that include foods from Canada’s Food Guide.
- Drinking adequate amounts of fluid for proper hydration.
  - For adults: Choosing water, lower fat milk and calorie-free beverages more often. Healthy adults need 9 to 12 cups (2.25 to 3L) of fluid each day.
  - For children: Choosing milk and water more often. Limit juice to 100% juice, maximum ½ cup (125 mL) a day. Fluid requirements for children vary with age.
- Choosing higher fibre foods such as vegetables and fruits, whole grains and legumes (beans, peas, lentils) more often.
- Choosing and preparing lower fat foods more often. Limiting saturated and trans fat.
- Limiting total daily intake of sodium.
- Choose food with little or no added sugar.
- For children, avoiding food and drinks with sugar substitute.
- Limiting alcohol and caffeine.

Health Benefits

Healthy eating:

- Promotes optimal growth and development in children and adolescents.¹
- Promotes and maintains a healthy weight when combined with active living.¹
- Minimizes the risk of nutrient-related chronic diseases such as cardiovascular disease (CVD), type 2 diabetes mellitus, osteoporosis, obesity and certain cancers.¹ Reduces the risk of health concerns such as anemia, viral infections,² dental decay³ and depression.⁴

Key Questions

What is Canada’s Food Guide?⁵

Eating Well with Canada’s Food Guide is a tool that defines and promotes healthy eating. It describes what amount of food individuals need and what type of food is part of a healthy eating pattern.
The eating pattern in Canada’s Food Guide includes foods from each of the four food groups.

- Vegetables and Fruit
- Grain Products
- Milk and Alternatives
- Meat and Alternatives

The Food Guide also includes a small amount of added oils and fats.

Canada’s Food Guide provides guidance on how much food individuals need to eat daily. The Guide recommends the number of Food Guide servings individuals should eat from each of the four food groups. Additionally, Canada’s Food Guide encourages people to choose foods lower in fat, sugar and salt.

**What are the four food groups of Canada’s Food Guide?**

Canada’s Food Guide encourages people to choose a variety of foods from each of the four food groups every day. Recommendations and servings sizes specific to each food group are summarized below.

**Vegetables and Fruit:**
Vegetables and fruit provide vitamins, minerals and antioxidants. Choosing dark green, orange and brightly coloured vegetables and fruits more often is recommended. Choose at least one dark green and one orange vegetable per day.

One serving of a Vegetables or Fruit is equal to:
- 1 medium fresh vegetable or fruit, or roughly the size of a tennis ball
- 1/2 cup (125 mL) of raw or cooked vegetables or fruits, or roughly the size of a hockey puck
- 1 cup (250 mL) of leafy vegetables, or roughly the size of a baseball
- 1/4 cup (60 mL) dried fruit, or roughly the size of two golf balls
- 1/2 cup (125 mL) of 100% fruit juice (limit to 1/2 cup (125 mL) a day)

*Refer to Guideline: Vegetables and Fruit Intake*

**Grain Products:**
Grain Products provide energy, fibre and essential vitamins and minerals. At least half of the total daily recommended servings of Grain Products should be whole grain.

One serving of Grain Products is equal to:
- 1 slice (35 g) of bread, 1/2 bun (35 g) or 1/2 bagel (45 g), roughly the size of a hockey puck
- 1/2 of a pita or tortilla (35 g)
- 3/4 cup (175 mL) hot cereal or 30 grams of cold cereal, or roughly the size of a tennis ball
- 1/2 cup (125 mL) of cooked rice or pasta, or roughly the size of a hockey puck

*Refer to Guideline: Fibre*
Milk and Alternatives:
Foods from the Milk and Alternatives group provide calcium, vitamin D and other essential nutrients. Choosing lower fat milk products more often is recommended such as skim, 1% and 2% milk as well as lower fat cheese and yogurt.

One serving of Milk and Alternatives is equal to:
- 1 cup (250 mL) of milk
- ¾ cup (175 g) of yogurt, or roughly the size of a tennis ball
- 3” x 1” x 1” (50 g) of cheese, or roughly the size of two white rectangular erasers
- 1 cup (250 mL) of fortified soy beverage

Some, but not all, rice, potato and almond beverages are fortified with calcium, vitamin D and other nutrients. Even when they are fortified, however, these types of beverages do not contain the level of protein found in milk or fortified soy beverage.5

Refer to Guideline: Calcium and Vitamin D

Meat and Alternatives:
Meat and Alternatives provide protein, iron, vitamin B12 and other essential nutrients. Choosing leaner meats, skinless poultry, as well as legumes (dried peas, beans and lentils) more often is recommended. Canada’s Food Guide recommends eating at least two servings of fish per week.

One serving of Meats and Alternatives equals:
- 2 ½ oz (75 g) of meat, fish and poultry
- 2 Tbsp (30 mL) of peanut or nut butters
- ¼ cup (60 mL) of shelled nuts or seeds
- ¾ cup (175 mL) of legumes (lentils, kidney beans, chickpeas etc.)
- ¾ cup (150 g) of tofu
- 2 ½ oz (75 g) of canned fish
- 2 eggs

For more information about advice for various populations and age groups, go to the Health Canada web page Mercury in Fish – Questions and Answers, available at the following link:
Individuals who follow a vegetarian or vegan diet need to choose a variety of meat alternatives, including:

- beans
- lentils
- tofu
- eggs
- soy-based meat alternatives
- seeds
- nuts
- nut butters

Individuals following a vegan diet should meet with a Registered Dietitian to ensure they are meeting nutrient requirements.

Refer to Guidelines: Iron; Vegetarian Eating; Pregnancy; Children and Adolescents

How many servings of each food group from Canada's Food Guide does an individual need per day?*

Canada’s Food Guide provides a recommended number of servings from each food group every day, based on age and gender. However, an individual's requirements also depend on his or her body size, activity level, and whether she is pregnant or breastfeeding.

Recommended number of Food Guide servings per day

<table>
<thead>
<tr>
<th>Age in Years Gender</th>
<th>Children</th>
<th>Teens</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-3 Girls and Boys</td>
<td>4-8</td>
<td>9-13</td>
</tr>
<tr>
<td>Vegetables and Fruit</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Grain Products</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Milk and Alternatives*</td>
<td>2</td>
<td>2</td>
<td>3-4</td>
</tr>
<tr>
<td>Meat and Alternatives</td>
<td>1</td>
<td>1</td>
<td>1-2</td>
</tr>
</tbody>
</table>

*Milk and Alternative servings are recommended based on calcium and vitamin D recommendations which vary depending on age.

For some groups, a range in recommended number of servings for a food group is given. In general, individuals at the lower end of the age range or less active can choose the lower number of servings in the range, while older or more active individuals can aim for the higher number of servings in the range.

Some groups of people require specific guidance on selecting foods in addition to the pattern recommended in Canada’s Food Guide.

- People who are at a healthy weight but need more food, such as those who are very active, should be encouraged to choose extra servings from the four food groups to follow a healthy eating pattern lower in fat, sugar and salt.
- Pregnant and breastfeeding women should eat two to three extra Food Guide Servings from the food groups of their choice to meet their need for extra calories.

Refer to Guidelines: Portion Size; Pregnancy
What is the difference between a serving and a portion?

A portion is the amount of food that you plan to eat at one time. A serving is a standardized amount set by Health Canada, such as serving sizes shown in Canada’s Food Guide. Therefore, a portion may be more or less than one Food Guide serving.

The serving sizes in Canada’s Food Guide are examples of healthy portions. Becoming familiar with Canada’s Food Guide and the serving sizes for various foods will allow individuals to better manage the portions they consume.

Refer to Guideline: Portion Sizes

What does a healthy meal look like?

A healthy meal will include one food from at least three of the four food groups from Canada’s Food Guide.

To build a healthy meal:

- fill ½ of the plate with Vegetables
- fill ¼ of the plate with Meat and Alternatives
- fill ¼ of the plate with Grain Products
- have 1 serving of Milk and Alternatives
- have fruit on the side

A healthy meal will help with portion control and meeting recommended servings from the four food groups.

How can individuals meet their recommended number of servings listed in Canada’s Food Guide?

Adults can meet their recommended number of servings by eating three regular meals, plus snacks if needed, throughout the day.

For children, caregivers should provide three regular meals and two to three snacks every day.

Meals should include one food from at least three of the four food groups. Snacks should contain healthy foods from Canada’s Food Guide.

Refer to Guideline: Planning Healthy Meals and Snacks
What foods are not included in the four food groups of Canada’s Food Guide?

High fat, high sugar and high salt foods and beverages are not included in the four food groups of Canada’s Food Guide because these foods often contain few vitamins and minerals.

Examples include:

- Foods: jam, honey, syrup, candies, potato chips, pretzels, chocolate, baked goods (pies, cakes, doughnuts, cookies, pastries)
- Beverages: pop and fruit-flavoured drinks
- Condiments: pickles, mustard, ketchup

Foods and beverages high in sugar, salt or fat should be limited so they do not replace nutritious foods in the diet. Limit these foods to one to two per week.8

Herbs and spices are not included in the four foods groups as they do not contribute significantly to calories or vitamin and mineral intake. However, herbs and spices can be useful for flavoring foods without the use of salt.

Beverages such as tea, coffee and alcohol are also not included in the four food groups. Individuals should follow the recommendations for caffeine and alcohol discussed in this practice guideline.

Refer to Guideline: Food and Drinks High in Calories, Fat, Sugar or Salt

How much fluid does an individual need for proper hydration?

Fluid requirements will vary depending on an individual's size and weight, outside temperature and participation in physical activity. Satiating thirst and consuming beverages at meals generally provides adequate fluids for individuals to maintain hydration.9

All types of fluid contribute to an individual's total intake, as well as the water content of food. In general the required daily fluid intake for different age groups is as follows:9
### Required Daily Fluid Intake for Different Age Groups

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age (years)</th>
<th>Daily Recommendations (mL)*</th>
<th>Daily Recommendations (cups)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>2-3</td>
<td>1000</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4-8</td>
<td>1400</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>9-13</td>
<td>1700</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>14-18</td>
<td>1800</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Over 19</td>
<td>2200</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Pregnancy - all ages</td>
<td>2400</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Lactation – all ages</td>
<td>3000</td>
<td>12</td>
</tr>
<tr>
<td>Male</td>
<td>2-3</td>
<td>1000</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4-8</td>
<td>1400</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>9-13</td>
<td>1900</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>14-18</td>
<td>2600</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Over 19</td>
<td>3000</td>
<td>12</td>
</tr>
</tbody>
</table>

*Amounts listed are the adequate intakes for fluid, less the water content in food eaten. Water content of food accounts for about 20% of total water intake.

Additional recommendations about healthy fluids include:
- Limit 100% juice to ½ cup (125 mL) per day for children and adults.8,10
- For adults, choose water and lower fat milk and calorie-free beverages more often.8
  - don’t exceed the caffeine or alcohol recommendations discussed later in this guideline.
- For children and youth, choose milk and water more often:
  - Children 2 to 8 years – provide 2 cups (500 mL) milk per day.5
  - Youth 9 to 18 years – milk intake should be at least 2 cups (500 mL) per day.5
- Limit beverages that are high in calories and low in nutrients such as fruit flavoured drinks, soft drinks, sports and energy drinks and sweetened hot or cold beverages.1

### What are some tips for increasing dietary fibre?

A high-fibre diet can help prevent constipation, and may help control blood sugar and blood cholesterol.11
A high-fibre diet can also help reduce risk of obesity as high fibre foods promote satiety and are generally low in energy density.12
Below are some tips for increasing the dietary fibre in an individual’s diet:

- Eat more foods that contain at least 2 grams of fibre per serving on the Nutrition Facts table.
- Choose whole grains, like whole grain breads, crackers, cereals and pasta.
- Choose vegetables and fruits more often.
- Choose legumes (dried beans, peas and lentils) more often.

Refer to Guidelines: Vegetable and Fruit Intake; Fibre; Constipation

**What is Canada’s Food Guide’s recommendation for oils and fats?**

Oils and fats supply calories and essential fats, and help the body absorb fat-soluble vitamins. The type of fat consumed is as important for health as the total amount consumed.

A variety of foods contribute to the total amount of fat in a person’s diet: meat, fish, nuts, cheese, dairy products and avocados. A significant amount of fat comes from oils and fats that are added to foods either during cooking or at the table.

Canada’s Food Guide recommends including a small amount - 30 to 45 mL (2 to 3 tablespoons) - of unsaturated fat each day. This includes vegetable oils used for cooking such as canola, soybean and olive oil, salad dressings, non-hydrogenated margarines and mayonnaise.

Individuals should limit their intake of saturated fats, and limit or avoid intake of trans fat by:

- Limiting butter, hard margarine, lard and shortening.
- Having meat alternatives such as beans, lentils and tofu often
- Choosing lean meats prepared with little or no fat
- Trimming the visible fat from meats; remove the skin from poultry
- Choosing lower fat milk alternatives

To limit total fat intake, individuals can:

- Read the Nutrition Facts label on food packages, and use this information to guide choices towards foods low in total fat, saturated and trans fat.
- Use cooking methods such as roasting, baking, or poaching that require little or no added fat.
- Order lower fat foods when eating out.
- Limit fried foods and high-fat bakery items.

Refer to Guidelines: Heart Healthy; Eating Out; Label Reading
What is a healthy amount of salt in an individual's diet?

Limiting sodium (salt) intake is recommended for all individuals for prevention of hypertension, cardiovascular disease, stroke and kidney disease. Evidence also exists that a diet high in sodium is a risk factor for osteoporosis, stomach cancer and asthma.\textsuperscript{13}

The Dietary Reference Intakes for sodium include an Adequate Intake (AI) and Tolerable Upper Intake Level (UL). The AI is a recommended intake level, thought to meet or exceed the requirements of all individuals in an age group. The UL is defined as the highest average daily level of intake likely to pose no risk of adverse health effects, and reflects an intake level that should not be exceeded.\textsuperscript{9}

### Dietary Reference Intakes for sodium\textsuperscript{9}

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Adequate Intake (mg per day)</th>
<th>Tolerable Upper Intake Level (mg per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3</td>
<td>1000</td>
<td>1500</td>
</tr>
<tr>
<td>4-8</td>
<td>1200</td>
<td>1900</td>
</tr>
<tr>
<td>9-13</td>
<td>1500</td>
<td>2200</td>
</tr>
<tr>
<td>14-18</td>
<td>1500</td>
<td>2300</td>
</tr>
<tr>
<td>Adults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-50</td>
<td>1500</td>
<td>2300</td>
</tr>
<tr>
<td>51-70</td>
<td>1300</td>
<td>2300</td>
</tr>
<tr>
<td>70 and over</td>
<td>1200</td>
<td>2300</td>
</tr>
</tbody>
</table>

Note: 2300 mg sodium is the equivalent of 1 teaspoon of salt.

The recommended upper limit for sodium intake is 2300 mg a day for adults and adolescents.\textsuperscript{9,13} Due to the high-sodium food supply and the current high levels of sodium intake, a reduction in sodium intake to 1500 mg per day may be difficult to achieve at present. In the interim, a daily intake of less than 2300 mg sodium is recommended for most adults.\textsuperscript{9,13} The closer an individual can get to a daily intake of 1500 mg the better.\textsuperscript{9} Lower intakes are recommended for adolescents and children as shown in the table above.\textsuperscript{9}

Most Canadians' intake of sodium greatly exceeds the recommended upper limit.\textsuperscript{13} The current mean intake of sodium by Canadians is about 3,400 mg per day.\textsuperscript{13} Most of the sodium (about 77\%) we eat comes from processed/packaged foods or restaurant foods. Other sources include adding salt during cooking and at the table as well as salt occurring naturally in foods.\textsuperscript{13}

Refer to Guideline: Sodium
What is the difference between natural and added sugar?

Sugar intake includes sugar that occurs naturally in food (naturally occurring sugar) and sugar that is added during food processing (added sugar). Naturally occurring sugars are in some food and beverages found on Canada’s Food Guide. For example, lactose is a natural sugar in milk, while fructose is a natural sugar in fruit. Added sugars are defined as all sugars and syrups that are added to foods during processing and preparation.

Refer to Guideline: Food and Drinks High in Calories, Fat, Sugar, or Salt

What is the recommended maximum amount of added sugar in an individual’s diet?

The World Health Organization advises that added sugar should make up no more than 10% of an individual’s caloric intake to reduce the risk of chronic disease such as cardiovascular disease, obesity and diabetes. According to the Dietary Reference Intakes (DRI), individuals who consume high amounts of sugar are more likely to have decreased intake of vitamins and minerals.

Approximate Recommended Maximum Intake of Added Sugar

<table>
<thead>
<tr>
<th>Age</th>
<th>Approximate daily amount in teaspoons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children (4 - 8 years)</td>
<td>8</td>
</tr>
<tr>
<td>Youth (9 – 13 years)</td>
<td>10.5</td>
</tr>
<tr>
<td>Teenagers (14 – 18 years)</td>
<td>13</td>
</tr>
<tr>
<td>Female adults (19 – 50 years)</td>
<td>11.5</td>
</tr>
<tr>
<td>Male adults (19 – 50 years)</td>
<td>15</td>
</tr>
</tbody>
</table>

Calculations based on energy intakes from Eating Well with Canada’s Food Guide, with the maximum added sugar being 10% of total calories.

Tips for using added sugar in moderation include:

- Limit added sugar in coffee and tea.
- Limit sugar sweetened beverages.
- Limit high sugar desserts, candy, jam, cereals and honey.
- Choose foods with no added sugar where possible.

Refer to Guideline: Food and Drinks High in Calories, Fat, Sugar or Salt
Are sugar substitutes safe to include in an individual's diet?

The sweeteners in the table below are approved by Health Canada as safe if they are taken in amounts up to the Acceptable Daily Intake (ADI).¹⁹

<table>
<thead>
<tr>
<th>Sweetener</th>
<th>Common/Brand Name</th>
<th>Other information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acesulfame Potassium (Ace-K)</td>
<td>• Not available for purchase as a single ingredient</td>
<td>• ADI = 15 mg/kg body weight/day</td>
</tr>
<tr>
<td></td>
<td>• Equal®</td>
<td>• One can of diet pop has about 42 mg of Ace-K</td>
</tr>
<tr>
<td></td>
<td>• NutraSweet®</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sugar Twin®</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sweet’N Low®</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Private label brand</td>
<td></td>
</tr>
<tr>
<td>Aspartame</td>
<td>• Sucaryl®</td>
<td>• ADI = 40 mg/kg body weight/day</td>
</tr>
<tr>
<td></td>
<td>• Sugar Twin®</td>
<td>• One can of diet pop contains about 200 mg of aspartame</td>
</tr>
<tr>
<td></td>
<td>• Sweet’N Low®</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Private label brand</td>
<td></td>
</tr>
<tr>
<td>Cyclamate</td>
<td>• Saccharin</td>
<td>• ADI = 11 mg/kg body weight/day</td>
</tr>
<tr>
<td></td>
<td>• Hermesetas®</td>
<td>• One packet of Sugar Twin® contains 264 mg of cyclamate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Avoid in pregnancy</td>
</tr>
<tr>
<td>Saccharin</td>
<td>• Splenda®</td>
<td>• ADI = 5 mg/kg body weight/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One tablet of Hermesetas® contains 12 mg of saccharin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Avoid in pregnancy</td>
</tr>
<tr>
<td>Sucralose</td>
<td></td>
<td>• ADI = 9 mg/kg body weight/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One packet of Splenda® contains 12 mg of sucralose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One cup of Splenda® contains about 250 mg of sucralose</td>
</tr>
</tbody>
</table>

Are sugar substitutes all right for children to have?

Alberta Health Services is mandated to follow Alberta Health and Wellness’ Alberta Nutrition guidelines for Children and Youth (preschool to high school), which recommend that children and youth avoid sugar substitutes).¹⁰ In therapeutic counseling healthcare providers should individualize their messages about the use of sweeteners for each client according to their assessment and care plan.

What is the recommended limit for alcohol for adults?

Women: Limit consumption to 1 drink per day, and no more than 9 drinks per week.²⁰,²¹
Men: Limit consumption to 2 drinks per day, and no more than 14 drinks per week.²⁰,²¹

One drink is defined as 12 ounces (355 mL) of beer, 5 ounces (150 mL) of wine, or 1 ½ ounces (45 mL) distilled spirits.²⁰,²¹
Moderate alcohol intake has been associated with lower incidence of cardiovascular events in some populations studied. However, a higher intake of alcohol than the recommended amount may result in an increased risk of hypertension, cardiac dysfunction, hepatic dysfunction, and certain cancers, along with other conditions.

Alcohol is also high in calories, and using mixes such as juice or regular pop adds sugar and more calories. If individuals choose to drink, sip slowly to make drinks last longer. Use water, club soda or diet pop as a mix to make drinks lower in calories.

**What is recommended limit for caffeine for adults?**

Caffeine exerts stimulant effects and may cause insomnia, headaches and irritability. Adults are recommended to limit their caffeine intake.

<table>
<thead>
<tr>
<th>Population</th>
<th>Age</th>
<th>Maximum Caffeine Intake</th>
<th>Amount of Coffee (8 oz cups) per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>4-6 years</td>
<td>45 mg/day</td>
<td>coffee not recommended</td>
</tr>
<tr>
<td></td>
<td>7-9 years</td>
<td>62.5 mg/day</td>
<td>coffee not recommended</td>
</tr>
<tr>
<td>Youth</td>
<td>10-12 years</td>
<td>85 mg/day</td>
<td>coffee not recommended</td>
</tr>
<tr>
<td></td>
<td>13-18 years</td>
<td>2.5 mg/kg body weight/day</td>
<td>coffee not recommended</td>
</tr>
<tr>
<td>Adults</td>
<td>&gt;18 years</td>
<td>400 mg/day</td>
<td>about 3</td>
</tr>
<tr>
<td>Women planning to become</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pregnant, pregnant women,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>breastfeeding mothers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above provides a recommended amount of coffee per day as Canadian adults get approximately 60% of their caffeine intake from coffee. Individuals should be also aware of additional sources of caffeine, including tea, energy drinks, cola beverages, chocolate and chocolate products and medication containing caffeine.

The use of caffeinated beverages by children and adolescents should be avoided.

*Refer to Guideline: Children and Adolescents*
When should an individual take a vitamin and mineral supplement?

Vitamin and mineral requirements for an individual depend on many factors, including the individual’s medical status, age, gender, body size and activity level. Most individuals can meet their vitamin and mineral needs by following healthy eating guidelines. Some individuals might need a vitamin and mineral supplement if they are not able to get all the nutrition they need from food.

- Women who are pregnant, breastfeeding, or who could become pregnant should take a daily multivitamin supplement containing 400 mcg (0.4 mg) of folic acid, and also contains vitamin B₁₂²³
- Pregnant women should also ensure their daily multivitamin supplement contains 16 to 20 mg of iron²⁴
- The individuals listed below should talk to a physician or Registered Dietitian about whether or not they should take a vitamin and mineral supplement:
  - Adults over the age of 50 years – should take 400 IU of vitamin D daily;¹ however, additional vitamin D or vitamin B₁₂²⁵,²⁶ may also be needed.
  - Individuals who avoid whole food groups of Canada’s Food Guide.²⁵,²⁶
  - Vegetarians who do not eat any animal foods. Refer to Guideline: Vegetarian.²⁷,²⁸
  - Smokers²⁵,²⁶
  - Individuals who drink alcohol in high amounts.
  - Individuals with a medical concern that increases their nutrient needs or decreases their nutrient intake.²⁵,²⁶

Refer to Guideline: Vitamins and Minerals

Vitamin D

There is recent evidence that vitamin D deficiency exists in some Canadians, partly because of low levels of sun exposure.¹⁻²⁹ As well, it is widely agreed that consuming adequate amounts of vitamin D from dietary sources is difficult.²⁹,³⁰

In view of low levels of vitamin D intake from food and probable low levels from sun exposure, Nutrition Services, Alberta Health Services recommends that healthy individuals include food sources of vitamin D in their diet, and supplement their intake as follows:

- 1-70 years, including pregnant and breastfeeding women: take 400 IU vitamin D per day as a supplement
- Over the age of 70: take 800-1000 IU vitamin D per day as a supplement

For adults at risk of fragility fractures or osteoporosis, the 2010 Osteoporosis Society of Canada recommendations are:³¹

- adults 19 to 50 years at low risk of vitamin D deficiency should take 400 to 1000 IU vitamin D per day as a supplement
- adults 51 years and older at risk of vitamin D deficiency: 800 to 1000 IU vitamin D per day as a supplement. To achieve optimal vitamin D status many individuals may require up to 2000 IU per day.
Examples of foods that contain vitamin D are:
- Fatty fish, such as salmon, halibut, and herring
- Milk and fortified soy, rice, or almond beverages
- Eggs
- Margarine
- Fortified cereals
- Fortified yogurt or kefir (fermented milk)

Refer to Guideline: Calcium and Vitamin D

Folate

Folate has been shown to reduce the risk of neural tube defects (NTD). In addition to a folate-rich diet, all women who could become pregnant require:
- daily supplementation with a multivitamin containing folic acid (0.4 mg or 400 mcg) for at least three months before conception and throughout pregnancy and lactation, and
- a multivitamin supplement that also contains vitamin B$_{12}$.

Women with health risks, such as diabetes, epilepsy, obesity, family history of NTDs or previous pregnancy with NTD may require more than 0.4 mg folic acid per day at least 3 months prior to conception and for the first 10 to 12 weeks of pregnancy, and should discuss recommendations with their doctor. Women should not take more than 1 mg (1000 mcg) without first talking to a doctor.

For other specific dietary supplement advice for individuals, consult a Registered Dietitian.

Refer to Guidelines: Calcium and Vitamin D; Iron; Vegetarian Eating; Pregnancy

How can the risk of food borne illness be minimized?

Food safety is important when handling all food, especially food that is prepared for young children, seniors and pregnant women. Food borne illnesses can be prevented with proper food handling procedures.

Refer to Guideline: Safe Food Handling

What role does physical activity play in a healthy lifestyle?

Being active every day is an important step to better health and can help to manage weight. Individuals of all ages should plan for physical activity in their daily lives. For example, walking wherever possible (get off the bus early, use the stairs) and spend less time being inactive (watching TV or using a computer).

The Public Health Agency of Canada (PHAC) has detailed information and recommendations about physical activity for all ages. The Agency's resources and handouts are available from: http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/04paap-eng.php
The Canadian Society for Exercise Physiology (CSEP) has the same activity recommendations, and also recommendations for sedentary time for children and youth, available from:
http://www.csep.ca/english/view.asp?x=804

The recommendations for adults aged 18-64 years from PHAC and CSEP applies to individuals who do not have a suspected or diagnosed medical condition. The guidelines may be appropriate for pregnancy. Individuals should consult a health professional if they are unsure about the types and amounts of physical activity appropriate for them.33

**Are there any handouts on general healthy eating for children and adults I can use with my clients?**

Refer to approved provincial Alberta Health Services nutrition handouts to support patient education. For more information, contact Nutrition.Resources@albertahealthservices.ca
References


