



Nutrition School

by Alexis Williams, RD

A is for apple. Did you ever wonder why the first reference in the alphabet is to food? If you haven't, maybe it's time for a refresher on nutrition. The best place to start is Canada's Food Guide. And while you may think the food guide can't teach you anything new, it offers a quick and easy refresher on balance, portion control and your basic nutrients.

Most of us are familiar with carbohydrates, protein, fat, vitamins and minerals. Add in water and you have the six essential nutrient categories required for life. We're also familiar with the four primary food groups: vegetables and fruits, grain products, milk and milk alternatives, and meat and meat alternatives. The confusion often lies in which food groups provide which nutrients. Let's take a closer look.

Carbohydrates

Most athletes understand the importance of carbohydrates for fuelling their athletic pursuits. Carbs are essential nutrients required for the brain and for muscle function in prolonged activities like running. Carbohydrates are found in grain products, vegetables (mainly sweet and starchy types like potatoes, corn, peas, etc.), fruits, milk, yogurt, beans and legumes. The best choices among these groups include whole-grain bread products, cereals and pastas, as well as grains like brown rice, amaranth and kasha. Quinoa, although technically not a grain, is also a good source of carbohydrates. In the vegetable group, a variety of dark green and brightly coloured vegetables are your best options. Antioxidant-rich fruits, such as berries, apples and citrus, are also great choices. Dairy products and milk alternatives, such as milk, soy beverage and yogurt, are best if prepared with little or no added sugar, unless you are using them as a recovery snack (e.g., chocolate milk). Milk and milk alternatives, as well as many meat alternatives like beans, offer the added bonus of providing both carbohydrates and protein, so they can create a balanced meal or snack.

Protein

Intake of protein is most commonly associated with muscle development—an important aspect of our overall health. As we age, we lose muscle if we don't make an effort to preserve it. We can preserve muscle by including resistance training and by consuming adequate protein. In preventing muscle loss, we also can prevent weight gain—when we lose muscle, it slows down the metabolism. Protein is found mainly in meats, poultry, fish and meat alternatives, such as tofu, beans, legumes, eggs, nuts and seeds. It's also found in milk and milk alternatives and in small quantities in some grain products. The best choices in the meat group include lean proteins like fish, poultry (without skin) and lean cuts of red meat and pork. As far as meat alternatives go, most are excellent options, but consumption of higher-fat nuts and seeds should be limited to a small handful (¼ cup) at a time. Unless you need to get extra salt for long distance training (e.g., marathons), look for proteins with little or no added sodium, which is commonly used as a preservative and for flavour. There is naturally occurring sodium in dairy products, so don't panic but make sure you consider these otherwise nutrient-rich foods as part of your daily sodium intake. Recommended sodium intake should be less than 2300 mg per day, unless you have received a specific recommendation from your doctor or dietitian.

Fats

Although demonized in the 1990s as being the culprits of weight gain, fats are essential for your overall health. Canada's Food Guide recommends consuming 30–45 ml (2–3 tbsp.) of unsaturated fats per day. Unsaturated fats can be found in plant-based oils used in cooking as well as salad dressings and spreads. If you regularly eat higher fat choices within the food groups, you may wish to have a lesser amount of added fat. For example, if you eat avocados, olives, nuts, seeds (heart-healthy fats) and cheeses as your food group choices, your fat intake will naturally be higher.

Many people focus on only one type of good fat for their health, but variety is important because each type of oil contains different balances of unsaturated fats that have differing health benefits. Despite the benefits of unsaturated fats, we still need to practise moderation—fat is twice as calorie dense as protein or carbohydrates.

Vitamins and Minerals

If you eat a healthy, balanced diet it's possible to get most of the vitamins and minerals you need. I say most because in the case of a few select nutrients, it's very difficult to reach the required levels. One of those nutrients is Vitamin D. In 2010, the Institute of Medicine guidelines for Vitamin D intake were increased to 600 IU per day for children and adults aged 9 to 70. To get this from your diet, you would have to drink about 6 cups of fortified milk or eat a substantial amount of oily fish every day. We also get Vitamin D from sunshine, but during winter months (November to April) the sun isn't strong enough in Canada.



About Alexis

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The following table summarizes a few other nutrients Canadians often lack:

Nutrient	Recommended Dietary Allowances (RDA) or Adequate Intake (AI)	Food Sources
Iron (do not take supplements unless you have had a blood test)	Males 19–50: 8 mg Females 19–50: 18 mg	Red meats, pumpkin seeds, fortified cereals, beans, legumes, tofu
Calcium	Adults 19–50: 1000 mg	Milk or milk alternatives, canned salmon, dark leafy greens, almonds, tofu
Magnesium	Males 19–30: 400 mg 31–70+: 420 mg Females 19–30: 310 mg 31–70+: 320 mg	Green leafy vegetables, grains, nuts, seeds, milk
Omega 3 fatty acids	Males 14–70+: 1.6 grams Females 14–70+: 1.1 grams	Oily fish (e.g., salmon, trout, mackerel, herring, sardines, anchovy), ground flax, chia seeds, walnuts and other nuts, fortified foods
Folic Acid	Adults 19–70+: 400 µg Females (pre-pregnancy and pregnancy): 600 µg	Dark leafy greens, fortified grain products

Source: Dietary Reference Intakes (DRI); see Health Canada's site at www.hc-sc.gc.ca for more information.

Sizes and Number of Servings

Getting the right balance of food groups can require a little planning, but it can easily fit into any lifestyle. Not every single day, nor every meal, will align perfectly with the recommended food group servings, but planning your intake with this information in mind is a great guide.

One of the most common concerns I hear about Canada's Food Guide is that many people are shocked at the number of recommended servings of grains. Although six to seven for women and seven to eight for men sounds very high, keep in mind that one serving is quite small: typically only ½ cup of cooked grains or one slice of bread. (Some breads are more like 1½ servings per slice, and most bagels are three to four servings.)

If you find that your diet is high in foods from the meat and meat alternatives food group, take a look at the sources in your diet. If you consume a lot of beans and nuts, these foods also contain carbohydrates and are high in fibre, so you can balance with fewer grain servings. Extra dairy servings that are high in protein (e.g., Greek yogurt or cottage cheese) can replace servings of meat and alternatives, especially in vegetarians.

Dietitians of Canada offers an interactive

tool to help you assess your diet. Visit www.eatracker.ca for more information and to set up your profile. It has recently been revised to include an integrated recipe analyzer to help you incorporate your favourite meals.

Using the Food Guide for Weight Loss

Some critics of the food guide suggest that you can't lose weight following the food guide. That's simply not true. If you use the portion suggestions as a guideline and stay within the recommended servings, you're likely to reduce your calorie intake, which will lead to weight loss.

Within each food group there are higher and lower calorie choices. For example, if you choose more vegetables than fruit, you will consume fewer calories. Within the milk and milk alternatives group, if you go for lower-fat proteins like cottage cheese and yogurt, you'll get fewer calories than from higher-fat cheeses. Similarly, within the meat and meat alternatives category, a 75-gram serving of skinless chicken will be about half the calories of 2 tbsp. of peanut butter.

Some people may find it helpful to reduce the recommended grain servings by one to two and increase the protein servings by

one to two. (Preferably plant-based protein that also gives you added fibre.) Since protein and fibre are more satiating, this subtle shift can help reduce feelings of hunger while still reducing calories and promoting the preservation of lean muscle mass.

The Food Guide for Athletes

If you expend a lot of energy through running or other activities, the food guide servings may not be sufficient. This would apply to those who exercise at moderate to high intensity for at least one hour or more a day, six days a week, and are not trying to lose weight. For highly active individuals, you may want to add one to two extra servings from each of the food groups to support your extra energy needs but still keep a good balance. As always, if you need more specific counselling, contact a registered dietitian (www.dietitians.ca).

With so many helpful tools at your fingertips, it's easy to make a healthy choice that fits your lifestyle and supports your goals and overall health.

To download a copy of Canada's Food Guide or to learn more about the nutrition resources available through Health Canada, go to www.canadasfoodguide.org.