

Nutrition: Part of the Action

Smoothies: Fuel for Active Living!

PRACTICAL AND NUTRITIOUS, A SMOOTHIE BLEND PERFECTLY INTO AN ACTIVE LIFESTYLE. IT'S THE IDEAL SNACK, BEFORE OR AFTER WORKING OUT.

Smoothies: Carbohydrates for training and recovery!
Before a workout, your muscles need energy to carbohydrate-rich smoothie is a smart choice. Guava to make and easy to digest, the ideal beverage is a great solution for busy people who work out early in the day and who aren't hungry enough to eat breakfast beforehand.

After an exercise to high-intensity workout, a good recovery drink needs to provide carbohydrates to replenish energy stores, and protein to repair muscle tissue damaged by the physical activity.
Having a smoothie after training provides both recovery and hydration. Milk is about 85% water and contains minerals that help rehydrate electrolytes lost in sweat.

Smoothies: Good for the whole family!
Looking for healthy snack ideas for your kids? Having a smoothie at snack time or with meals delivers the nutrients and energy your kids need to grow. Tasty smoothies add variety to your menu. They're also a great alternative for children and adults who are not the best of the best of white milk, including...

- 250 mL (1 cup) orange juice
- 250 mL (1 cup) milk
- 125 mL (½ cup) strawberries
- 125 mL (½ cup) orange juice
- Blend and enjoy!

Balance

Eat Well for a Great Workout

WHETHER YOU ARE WATCHING YOUR WEIGHT OR TRYING TO STAY HEALTHY, COMBINING GOOD EATING HABITS WITH REGULAR EXERCISE IS THE WAY TO GO!

Canada's Food Guide: All about balance
Whether you're an Olympic champion or a weekend athlete, diet and exercise are key factors in staying healthy. Following the recommendations in Canada's Food Guide is an excellent way to ensure you get all the nutrients you need for good health, while still enjoying your favourite foods.

Too much? Not enough?
According to the results of the Canadian Community Health Survey (2007), our energy needs are sometimes too generous. The data also shows that we eat too many nutrient-poor foods, such as chips, snack bags, muffins and pastries, soft drinks and other sugar beverages, and fast foods. On top of that, we don't get enough milk products or fruits and vegetables, even though many studies show that these foods can help us achieve and maintain a healthy weight.

Even physically active people can't resist the temptation of grocery store and vending machine snacks, which tend to have low nutrient density, as they often contain a lot of sugar and fat and very few vitamins and minerals. Moreover, they are also often sold in super sized! For example, over the last 20 years, the size of chocolate bars, bags of potato chips and many soft drinks has almost doubled! The alternative? Here are some nutritious snacks that are just as easy to eat when you're on the run and, what's more, they will help you boost your consumption of milk products, fruits and vegetables.

Healthy Weight

Maintaining a Healthy Weight: A Balancing Act

NO MATTER WHAT WE EAT, CONSUMING MORE CALORIES THAN WE BURN OFF DURING PHYSICAL ACTIVITY, ESPECIALLY BURNING MORE CALORIES THAN WE CONSUME LEADS TO WEIGHT LOSS.

What is energy balance?
To maintain a stable weight, all we have to do is balance the energy we consume and the energy we expend. When we eat, our bodies absorb calories from food and drink, creating energy. The energy is then used for our body's basic functions: breathing, digestion, sleeping... We use the same energy to do our daily chores and engage in physical activity.

Balance is the proven way to go!

Follow the 5 golden rules!

- 1 Listen to your appetite. Often, all we have to do is for smaller portions, eat more slowly, and eat a little while before eating to give us time to realize that we're no longer hungry.
- 2 Consume enough vegetables, fruits, and milk products. These food groups are often under-consumed even though they help us achieve and maintain a healthy weight.
- 3 Always include one source of protein (meat, poultry, fish, cheese, eggs, legumes, milk, yogurt, nuts) and one source of fibre (whole grain cereal products, legumes, fruits and vegetables, dried fruit, nuts or grains) in each meal. These foods are filling and provide energy for a longer period.
- 4 Limit sources of fat, sugar and unwanted calories: sweetened drinks, sugary cereals, doughnuts, commercial cakes and other sweet treats, chips, breaded and fried foods, alcoholic beverages, etc.
- 5 Keep moving! Continue to engage in physical activity regularly. You'll burn more calories and help your metabolism work more efficiently.

Healthy Trio

Calcium, Iron and Physical Activity: A Healthy Trio

ACTIVE PEOPLE NEED SPECIFIC NUTRIENTS. THEY HAVE TO ENSURE THAT THEIR DIET DELIVERS THE NUTRIENTS THAT MEET THEIR ENERGY REQUIREMENTS.

The nutrient needs of active people aren't substantially greater than those of sedentary people. However, eating out foods or food groups means it's harder to get enough of the nutrients required. An inadequate diet can lead to deficiencies, especially in calcium, iron and vitamin D.

Calcium and physical activity
In addition to helping build and maintain bone mass, calcium plays a role in muscle contraction and relaxation. Adequate calcium intake is therefore essential for ensuring that muscles work properly and for minimizing the risk of muscle cramps.

What happens when calcium intake is inadequate? In both men and women, the body responds to a calcium shortage by drawing from its reserves—the bones—to meet its needs. Little by little, bones become more fragile and brittle, increasing the risk of fractures. If you want to stay active for a long time—the advice applies to men too—nourish your bones!

Even though Statistics Canada's 2006 Canadian Community Health Survey confirms that milk products are our main source of calcium, the survey also showed that most people don't consume enough of them.

Bone Health

Bone Health: Good Teammates

IT TAKES MORE THAN CALCIUM TO BUILD SOLID BONES. THERE ARE OTHER PLAYERS ON THE FIELD ON OFFENSE: KEY NUTRIENTS!

First, calcium, the champion of a strong skeletal structure
A calcium-rich diet is especially important for children and teenagers. Optimal bone mass normally peaks at around age 30, after which bone loss slowly outpaces bone building. This doesn't mean that the intake of dietary calcium loses importance. On the contrary! For adults, adequate calcium intake helps maintain reserves built up over their lifetime, slows age-related bone loss and minimizes the risk of fractures. Contrary to what many men believe, osteoporosis doesn't just affect post-menopausal women. Just remember that it's never too late to work on having healthy bones.

Information Did you know?
In Canada, among people aged 50 and older, one out of four women and one out of eight men have osteoporosis.
For any physically active young women, and those who aren't, an early, temporary interruption of menstruation increases the risk of osteoporosis.

WHAT FOODS PROVIDE CALCIUM? Most people know that **dairy products are our most reliable source of calcium.** There is calcium in other foods as well: canned sardines and canned salmon (with bones), almonds, sesame seeds, some legumes, some green vegetables and some calcium-enriched juices and plant-based beverages. These foods can contribute to your calcium intake. However, they do not replace milk products because they often contain less calcium or their calcium is more difficult for the body to absorb.

Before Working Out

Pre-workout Nutrition

NUTRITION AND DIGESTION GO HAND IN HAND. TIPS FOR CHOOSING THE BEST FOOD AND DRINK TO HAVE BEFORE WORKING OUT.

Why eat or drink before working out?

- To keep your muscles well-watered and carbohydrate stores
- To have the energy you need to get through your workout
- To feel good
- To recover more quickly after your workout

Less than 2 hours before physical activity, watch out for:

- Fatty foods, as they take longer to digest (e.g., chips, store-bought muffins, and pastries, fried foods, etc.)
- High-protein foods, as they take time to digest (e.g., meat, poultry, fat, etc.)

Less than 1 hour before physical activity, go easy on:

- Foods that can cause digestive discomfort or acid reflux if they are consumed just prior to working out (e.g., cucumbers, onions, shallots, garlic, tomatoes, broccoli, cauliflower, peas, etc.)

tips Recommended diet

Time before activity	What to eat/drink
3 hours	Normal meal that provides carbohydrates and a moderate amount of protein and fat from nutritious foods.
2 hours	Meal providing mostly carbohydrates, with a little protein and very little fat and fibre.
1 hour	Light meal providing mainly carbohydrates, a little protein, and very little fat and fibre.
Less than 1 hour	Light carbohydrate snack and a small amount of protein, as needed.

After Working Out

Post-workout Nutrition

WANT TO RECOVER QUICKLY AFTER A WORKOUT? HERE ARE SOME EFFECTIVE NUTRITION TIPS TO GET YOU UP AND GOING.

Drink!
After a workout, you need to drink liquids to replace part of the lost body fluids and promote recovery. All liquids count: water, milk, juice or diluted juice, chocolate yogurt, sports drinks, etc. Choose the one you like best. What about having a nice glass of chocolate milk?
Chocolate milk is an excellent recovery drink following a sustained moderate to high-intensity physical activity lasting 60 minutes or more. It contains enough water (about 80%) to hydrate your body thoroughly. It also has the ideal amounts of protein, carbohydrates and nutrients to replace the minerals lost in sweat, replenish your energy reserves and repair the muscles used during your activity.

Sporty delight

One serving:
 • 1 banana
 • 250 mL (1 cup) white or chocolate milk
 • 15 mL (1 tbsp) honey, if you use white milk
 • 4-6 raw dates

Place all ingredients in the blender, mix and enjoy your well-earned treat!

tips
Replenish water, electrolytes (sodium, potassium) and fuel your body for recovery from tomorrow's activity. You also great post-workout protein from your sports bag. This is also an easy way to cut hunger and help you move on to the next day.

Fats

Fats: An Inside Look

ACTIVE PEOPLE WHO CARE ABOUT THEIR HEALTH OFTEN WORRY ABOUT FAT.

The good side of fat
This, too, has its share of controversy. But they are still essential for the body to work properly, so we don't need to eliminate them from our diet. It's all about balance. Contrary to popular belief, consuming as little fat as possible is not better for your body. Why? Because fats are the carriers of several essential vitamins, as well as being a source of energy for cells and meat. Fats also provide the essential fatty acids that our bodies can't make on their own. That means we have to get them from what we eat. Canada's Food Guide recommends including a small amount (10 to 40 mL) of unsaturated fat in our diet each day. The reduction of fat in cooking and oil of salad dressings.

According to dietary recommendations, we should get between one quarter and one third of our daily calories from fats. An excessive intake affects an active person's physical and mental performance. A shortage of fat can also increase the risk of vitamin deficiencies and the likelihood of developing a variety of health problems. Physically active people should not eliminate fats in favour of carbohydrates or proteins. You need all three, every day.

Hidden fats
Many foods contain **fat** naturally: meat, fish, cheese, nuts, milk products, avocado and olive. On the other hand, many processed foods contain hidden fats: doughnuts, pastries, commercial muffins and cakes, prepared foods, fried foods, chicken, chips, cookies, macs, etc. The latter foods are responsible for adding a lot of calories to our diet without providing much in the way of essential nutrients. Some believe that only products are responsible for adding a great deal of fat to our diet. Not true. On average, milk products only account for 18% of the total fat in Canadian diets.

Hydration

Hydration Made Easy

IF YOU ENGAGE IN REGULAR PHYSICAL ACTIVITY, APPROPRIATE HYDRATION IS EVEN MORE IMPORTANT.

Proper hydration before, during and after exercise:

- Replaces some of the fluids lost in sweat and prevents dehydration
- Facilitates blood circulation and the transport of oxygen and energy to the muscles
- Helps dissipate heat generated to maintain body temperature, avoiding overheating
- Provides carbohydrates to muscles during effort before the drink contains carbohydrates

Did you know that dehydration can have a big impact on performance?
It is important to take in enough liquid every day. There are two ways to tell you if you are getting enough to drink:
 • Your weight loss after the workout should be no more than 2% of your body weight.
 • Your urine is abundant and pale yellow.

Information What to drink?

Temperature outside	Duration of the activity	Drink of choice to consider
Cool or cold	< 1 hour	Water
Hot or humid	> 1 hour	Water
Hot or humid	> 1 hour	Carbohydrates (sport or oral)

*Always bring more than 1 litre, in which case, water + carbohydrates is a great mix.
The source of carbohydrates in the drink includes the natural sugar in fruit and 100% pure fruit juice, as well as in the sugar added to sports drinks and sweetened fruit drinks.

Supplements

Spotlight on Supplements

MANY HEALTHY PEOPLE—ATHLETES AND NON-ATHLETES ALIKE—USE DIETARY SUPPLEMENTS, OFTEN WITHOUT GOOD REASON.

Vitamin and mineral supplements
Believe it or not, there are people thinking that they're more energy, stamina for frequently undiagnosed deficiencies and prevent a variety of diseases. Vitamins and minerals from these sources of the body's chemical reactions possible, but they do not provide energy.
Most active people do not need supplements if they have a varied, balanced diet. Moreover, the risks associated with taking supplements are too often overlooked. Megadoses can harm your health. While some vitamins are eliminated in your urine, others are stored in your fat stores and in your liver.

Protein supplements
Taking supplements to build muscle mass or lose weight is a widespread phenomenon in sports. Hearing the fat is protein powder. Yet active people's protein needs are not much higher (1.2 to 1.7 g per kg per day, depending on the sport) than the general population's (minimum of 0.75 per kg). A balanced diet meets these needs easily.
Not convinced? Let's look at an average 80 kg (176 lb) man who does one hour of a range of physical activities (biking, running, swimming) three to four times a week. His daily needs would be around 1.2 g to 1.4 g per kg of body weight, so 96 to 112 g of protein a day.
The following table demonstrates how a normal diet is more than enough to meet even an active person's needs.

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