EATING for ENERGY

Do you hit a wall of fatigue mid-afternoon or have trouble staying awake during your night shift? While there is no substitute for a good night's rest, eating the right food can help to increase your energy levels and will also likely improve your mood.

Part I: Breaking up with Sugar

What Goes Up, Must Come Down

When our energy levels dip, we often turn to chocolate or any other sugary food within armsreach for a quick fix, but this is the worst thing you can do for your energy levels. Here's why: food that contains carbohydrates is broken down by the body into glucose (sugar) — the body's main source of fuel and the brain's sole source of energy. Carbohydrates can be categorized as either simple or complex. Simple carbohydrates (also called simple sugars) include the **naturally** occurring sugar found in fruit and milk, and refined (added) sugar, such as the table sugar you put in you morning coffee or the sugar that is added to soft drinks and baked goods. Do to their simple chemical structure, simple sugars are

rapidly digested and cause blood sugars to rise fast and high. This provides a quick burst of energy, but the feeling is short-lived and typically followed by a crash. When the pancreas senses a sharp rise in blood glucose levels, it responds by flooding the bloodstream with insulin, a hormone that clears sugar from the blood. This results in a 'what goes up, must come down effect' as blood sugar and energy levels plummet – and the higher the high, the lower the low.

Is the Sugar in Fruit Bad for You?

The naturally occurring sugar in fruit (fructose) is different from refined sugar. Unlike highly processed foods containing refined or added sugar, whole fruit contains vitamins and minerals which have added health benefits. Whole fruit also contains fibre which helps to slow digestion and allows the naturally occurring sugars to be absorbed gradually into the bloodstream. Fibre is also the reason why whole fruit, such as an orange, is better for you than a glass of orange juice. Without the fibre, the natural sugar in juice can raise your blood sugar as quickly as the sugar in pop.

How Much Sugar is Too Much?

Added sugar adds extra calories to you diet and provides no nutritional value. The less you eat, the better. The World Health Organization (WHO) recommends adults limit their intake of added sugar to less than 10 percent of daily calories, and less than 5 percent of total energy intake for additional health benefits¹. For the average adult, 5 percent would amount to 25 grams of sugar per day, which is equivalent to 6 teaspoons. The estimated added sugar intake among Canadians is 14 teaspoons per day².



World Health Organization (WHO)

Sugar is "Hidden" in Many Foods

Sugar is easy to identify in foods such as cookies and cake, but some sources of added sugar are not as easy to spot. Sugar is "hidden" in many of the foods we eat such as breakfast cereals, bread, condiments such as BBQ sauce and ketchup, granola bars and pasta sauce. Many of us consume too much sugar without even knowing it.

Food	Portion	Sugar	Sı	ugar (tsp)*
Iced tea	500 mL	43 g	11	O CO
Can of pop	355 mL	39 g	10	O a
Vitamin water	590 mL	32 g	8	O a
Snickers bar	1 bar	29 g	8	
Orange juice	1 cup	23 g	6	O a
Iced coffee	16 oz	20 g	4	Ó.
Pasta sauce	1/2 cup	8 g	2	O S

* 4 grams of sugar is equal to 1 teaspoon (tsp)

Sugar may also be hidden in otherwise healthy foods. Oatmeal, for example, has long been renowned as a great way to start the day, but flavoured instant oatmeal is often loaded with added sugar. A healthy alternative is to make oatmeal from scratch using steel-cut or oldfashioned rolled oats and add cinnamon, vanilla, and fresh or dried fruit for added flavour. The benefit to your health will be well worth the extra time and effort. Flavoured yogurt is another surprising source of added sugar in the diet, and ironically, the low-fat varieties are especially the ones to watch out for. A small container of low-fat vanilla flavoured yogurt can contain up to 3 teaspoons of added sugar. To get the calcium, protein and healthy bacteria that yogurt has to offer, without all the unwanted sugar, buy plain and unsweetened yogurt and flavour it yourself with naturally sweet fresh or frozen berries.

How to Spot Added Sugar

One quick way to know whether a product contains a lot of added sugar is to look at the ingredient list. Ingredients are listed in descending order by weight, so the ingredients that are up high on the list make up the largest proportion of the food.

As a general rule, skip products that list "sugar" as one of it's top THREE ingredients

INGREDIENTS: whole grain rolled oats, sugar, sea salt, calcium carbonate, oat flour

When reading ingredient lists, watch out for the many different names for sugar such as evaporated cane juice, agave nectar and corn syrup. All sugar is metabolized by the body in the same way — doesn't matter if it's "brown" sugar or "organic" cane sugar.

Sugar's MANY NAMES

Ingredients ending in "- ose"	Glucose, fructose, sucrose, dextrose, maltose
Syrups and nectars	Agave nectar, high fructose corn syrup, maple syrup
Anything cane-derived	Cane crystals, cane sugar, evaporated cane juice
Malts	Barley malt, rice malt, malt

Part II: Foods that Fight Fatigue

Focus on Complex Carbohydrates

The key to sustained energy is maintaining steady blood sugars. When your blood sugars are controlled, there are no highs and lows in your energy levels. Keeping your blood sugar in check, means paying attention to the types of carbohydrates you choose. The ones to avoid are refined carbohydrates (such as sugar), which are metabolized quickly by the body and can wreck havoc with your blood sugar. Instead, focus on complex carbohydrates high in fibre which provide energy, without causing a crash and burn effect (as sugary foods do). Minimally processed whole grains and foods made from them (such as whole wheat pasta, oatmeal and whole grain bread), legumes (such as beans. peas and lentils), whole fresh fruit and vegetables (pears, berries, avocado, sweet potatoes and Brussels sprouts) are all good sources of complex carbohydrates. The fibre in these foods slows the rate at which sugar enters the bloodstream and causes a more gradual and lower rise in blood sugar. Unlike simple sugars, which provide a temporary and short burst of energy, complex carbohydrates supply a slow and steady source of energy.

Don't forget to stay well hydrated. Dehydration is a common cause of fatigue. You'd be surprised at how much better you can feel just by drinking more water.

High Fibre Foods					
Food	Portion	Fibre (g)			
Whole grain bread	1 slice	4			
Rolled oats, dry	1/2 cup	5			
Quinoa, cooked	1/2 cup	3			
Flaxseed	2 tbsp	4			
Avocado	1/2 fruit	7			
Raspberries	1/2 cup	4			
Broccoli, cooked	1 cup	5			
Sweet potato	1 medium	4			
Pear	1 medium	6			
Black beans, cooked	1/2 cup	6			
Hummus	1/2 cup	5			
Adzuki beans, cooked	1/2 cup	9			

Avoid Highly Processed Grains

the bran, endosperm and germ. In addition to being high in fibre, whole grains are an excellent source of Bvitamins, iron and magnesium - all of which are important for energy production. Whole grain bread, wholewheat pasta, brown rice, oats, quinoa, barely and millet are all considered whole grains. The grains to avoid are highly processed refined grains. Refined grains are stripped of the bran and germ layer of the seed, which grains act like sugar in the body causing blood sugars to skyrocket. White bread, white rice, white flour and energy levels up, replace refined grains in your diet (such as white bread and white rice) with whole grain

Easy Snack Ideas for Long Lasting Energy

- · Smashed chickpea and avocado sandwich on whole grain bread
- · Greek yogurt with frozen berries, walnuts and ground flaxseed
- Hard boiled egg with whole grain toast and a piece of fresh fruit
- Rolled oats with low-fat milk, hemp seeds, walnuts and raisins
- Whole grain bread with almond butter and sliced banana



Eat Protein at Every Meal

For sustained energy, combine slow releasing complex carbohydrates with a source of protein (or healthy fat), which further slows digestion. For example, adding hemp seeds and walnuts to your to your oatmeal, which boosts up the protein content of the meal, will help you feel more energized than a bowl of oatmeal on its own. Choose lean sources of protein as foods high in fat (say a cheeseburger), are not only bad for your health, but can make you feel lethargic and cause daytime sleepiness. Excellent sources of lean protein include: grilled chicken, legumes such as beans, peas and lentils (e.g. hummus, falafels, split pea soup, black bean veggie burger), nuts and seeds (such as almonds, walnuts, pistachios, pumpkin seeds and hemp seeds), eggs and lowfat Greek yogurt, flaxseed and chia seeds, and soy

products such as tofu and tempeh. In addition to being high in protein, fatty fish (such as salmon, tuna and Arctic char), walnuts and flaxseeds are also an excellent source of omega-3 fat, which is important for brain function and can help you feel more mentally alert.

TAKE-HOME MESSAGE

A diet that emphasizes unprocessed whole grains (whole grain bread, quinoa, brown rice), lean protein such as legumes, nuts and seeds, fresh whole fruit and vegetables and healthy omega-3 fats will not only increase your energy levels, but will lead to an overall healthier diet.

Recipe: Energy Balls

- 1. *Make the date paste*: cover the dates with water and let soak for at least 30 min. Drain the dates and reserve the soaking liquid. Place dates in a food processor and process (adding the soaking liquid <u>as needed</u> one tablespoon at a time) until the mixture is relatively smooth. Transfer to a large bowl.
- 2. Add the nuts and pistachios, oats and dried cranberries to the food processor and pulse until the nuts are coarsely chopped (you may need to do this in two batches depending on the size of your food processor). Transfer to the bowl with the dates and add the hemp, sesame seeds, salt and lemon zest. Mix well and form into 1" balls and roll them in the coconut. Store in an airtight container in the fridge. (Makes ~18 balls)

INGREDIENTS

3/4 cup pitted Medjool dates 3/4 cup unsalted nuts (such as walnuts and cashews)

1/4 cup unsalted unshelled pistachios 1/2 cup old-fashioned rolled oats

1/4 cup dried cranberries

2 tbsp hemp seeds

2 tbsp sesame seeds

1/2 teaspoon salt

1 teaspoon of lemon zest

walnuts are an excellent source of omega-3 fats which fuel your brain

