



Ready for the 2019 wildfire season?

The countdown has begun ... what will the 2019 wildfire season bring? According to recent media clippings, responses to protect citizens from carcinogenic wildfire particulate matter requires rethinking homebuilding and applications of filters and screens to protect residents: <https://www.cbc.ca/news/canada/british-columbia/sarah-coefield-air-filters-wildfires-1.5008640>. Quesnel, Prince George and Williams Lake made the top 13 on Greenpeace's list of the worst air quality in the world for 2018: <https://globalnews.ca/news/5027881/prince-george-air-quality-wildfire/>. Wildfire smoke inhalation may be the equivalent of smoking a few packs a day: <https://bc.ctvnews.ca/inhaling-wildfire-smoke-potentially-equal-to-smoking-a-few-packs-of-cigarettes-a-day-researcher-1.4285032>; Every year in BC will be awful. See: <https://www.cbc.ca/news/canada/british-columbia/expect-every-year-to-be-awful-experts-weigh-how-to-protect-b-c-public-from-wildfire-smoke-1.5008914>. For wildfire resiliency and management, the BC government has set aside the following in the current budget (announced February 19, 2019): \$60 million for the Community Resiliency Investment Program to reduce wildfire risk for 2018/19; and \$111 million over three years to increase wildfire response and control capacity: <https://globalnews.ca/news/4981568/bc-budget-wildfire-costs/> 🍏

Deadly mushroom incidents are on the increase in BC

Local doctors are being warned about the spread of the world's most poisonous mushroom right here in BC. Incidents of dogs dying, and kids and adults being severely poisoned, is on the increase. Even trained foragers make mistakes, so please be sure before you pick or eat any mushrooms: <https://vancouver.sun.com/news/local-news/death-cap-mushrooms-proliferating-in-b-c-experts-warn> 🍏

Sleep deprivation accelerates Alzheimer's brain damage

Good sleep habits, like 8 hours of sleep a night, can help protect the brain

The University of Washington School of Medicine in St. Louis <https://medicine.wustl.edu/> has published research (January 24, 2019) in the journal Science that explains the links between lack of sleep and Alzheimer's disease. Read the press release here: <https://medicine.wustl.edu/news/sleep-deprivation-accelerates-alzheimers-brain-damage/> Read some media reports here:

USNews.com: <https://www.usnews.com/news/national-news/articles/2019-01-24/study-sleep-deprivation-speeds-up-alzheimers-disease>; Science News: <https://www.sciencenews.org/article/lack-sleep-tied-increases-two-alzheimers-proteins-brain>

And in another article, in the National Post, researchers warn that lack of sleep is a public health crisis: <https://nationalpost.com/news/world/brain-researchers-warn-that-lack-of-sleep-is-a-public-health-crisis>

Turning to the positive, what does good sleep do for you beyond keeping you safe? See this summary list of 10 things: <https://www.healthline.com/nutrition/10-reasons-why-good-sleep-is-important#section7>

So what do you do, especially when you have little control over your work schedule and the distances you have to travel? Like any kind of sustainable long-term success, start with small changes and build on them. Consider these tips – and try at least a couple that you have not tried before. The list below is a summary of tips consistently provided by sleep researchers, experts, and other credible sources:

1. Keep your sleep area as dark as possible
2. Keep your sleep areas as quiet as possible
 - a. No pets in the bedroom
 - b. Have the difficult conversation with the snorer/tosser; everyone needs the best sleep every night – your health and safety depends on it
3. Plan consistent transition habits that help you get to sleep and keep you asleep:
 - a. No screen time for an hour before sleep time
 - b. Set all screens to sleep mode and mute
 - c. Remove clocks and other devices with blue lights or other pilot lights
 - d. Fully switch off TVs and accompanying smart boxes that generate blue light(s)
 - e. Do mindless stuff – flipping through a magazine etc. before sleep so that you are relaxed and not stressed
 - f. No caffeine in the hours before sleep (everyone has a cut off time)
 - g. Spicy foods or large meals at night time can be challenging; always eat several hours before trying to sleep
4. If you are not asleep 30 minutes after getting into bed, get up. Do something else. Then try again when you feel tired.
5. Temperature – too hot or too cold will postpone good quality sleep or wake you during sleep and prevent you getting back to sleep. Cool is way better than hot.
6. If you are already a light sleeper, consider ear plugs and a mask. If you have young children or care for an elderly parent this may not be an option, but try and share the duties with another responsible person in the household so that everyone gets “quality sleep nights”.
7. Seven good nights of quality sleep each week is best, but three good nights of sleep a week is way better than none!
8. Poor sleep can be caused by one of several medical conditions so don't hesitate to get a qualified doctor's opinion. When the underlying medical condition is fixed, much better sleep will follow.
- h. Exercise is important each day, but not in the last few hours before you plan to go to sleep

For resources on sleep matters, see: Six things that matter most: <https://www.hopkinsmedicine.org/health/healthy-sleep/sleep-better/preparing-your-bedroom-for-a-great-nights-sleep>; 17 things to consider: <https://www.healthline.com/nutrition/17-tips-to-sleep-better> and other possible choices: <https://bettersleep.org/better-sleep/the-ideal-bedroom/> 🍏



Non-stop smoothies!

By Dr. Delia Roberts



Pressed for time but looking for a healthy nutritious snack that's quick to make, endless in its options and easy to eat? If you have access to a blender, smoothies are a great strategy for low cost, easy access nutrition as part of a balanced diet.

Some of these items are packed full of antioxidants and other compounds that help to reduce inflammation. As such they will speed up recovery and help to protect you against disease. But beware of marketing hype! Not all the advertised miracle foods and spices are worth spending your money on. It's also easy to consume a lot of calories quickly when you drink a smoothie, so choose your ingredients wisely. Just because the drink is green, doesn't mean that it's going to be a healthful choice.

Smoothies built for health don't need to taste bad

Leaving some chunks of fruit or adding fibre rich ingredients and some healthy fats are another way to make your smoothie healthier. Doing so will slow down digestion a little, making the meal last longer, and lowering the effect of the drink on insulin and blood glucose. Keep in mind that liquids are absorbed much faster than whole foods, and no one food can provide you with all the nutrients that you need.

Veggies for nutraceuticals

- Green veggies are a great source of minerals, vitamins and fibre. Spinach packs the most nutrients, followed by

kale and broccoli. If you steam your veggies to soften, save the water to thin your smoothie or use for soups and stews to capture all the water-soluble nutrients.

- Orange veggies also provide Beta-carotene, another great antioxidant. Carrots are the least expensive, but if you buy squash or sweet potatoes in the late fall the cost is much lower and they store well. Cut them in chunks, toss with a bit of olive oil and roast them for a delicious addition to your smoothie.
- Red beets are rich in vitamins and minerals, fibre, antioxidants and the precursor to NO, a substance that the body uses to dilate blood vessels and lower blood pressure. They store well too so can be purchased in the fall and roasted or boiled as needed for your smoothie.

Fruit for flavour

- Berries are packed with antioxidants and fibre, but are expensive unless you buy in season and freeze.
- Citrus fruits like oranges are less expensive and guess what – they also win over berries nutritionally on every mineral and vitamin except E and K. Navel oranges are also lower in free sugar.
- Bananas are inexpensive and higher in carbs and minerals but lower in vitamins than oranges. Over-ripe clearance bananas are economical and great for your post-work smoothie when the sugars are needed for recovery.
- Acai and Goji berries are rich in vitamins, antioxidants and fibre but they are very expensive and there are lots of other fruits and vegetables that can provide these nutrients more economically. Goji berries may also interfere with medications used to treat diabetes and high blood pressure.

Fats for energy and to slow digestion

- Avocados are portrayed as being super healthy, but once again it's a bit of a myth. Spinach matched by weight of serving obliterates avocado on every front except for monosaturated fats (heart healthy) and creamy texture.
- Coconut oil is a good source of MCTs (medium chain triglycerides), a type of fat that's absorbed faster than others. None of the other health claims about this product have been proven.
- Olive oil is a great source of heart healthy fats so if you are looking for healthy calories, this is a good oil to choose.
- Fish oils are very high in powerful anti-inflammatories and are a fantastic addition to your diet, but their strong flavour might prevent their use in your smoothie.
- Nuts and seeds are great sources of healthy fats but are gritty unless they are ground very fine. Walnuts, freshly ground flax seed, hemp hearts and chia seeds provide powerful anti-inflammatory omega-3's but they are very expensive. Store them in the fridge and add just a tablespoon or two to get the benefit of these important nutrients.

Protein for power

- Protein powder is the upmarket source of protein for your smoothie, but there are other much more economical ways to add protein to your meal.
- Legumes like red lentils are very inexpensive, they cook to mush and absorb the flavour of whatever you mix in. Extremely high in vegan protein and fibre they can't be beat.
- Ground nuts, nut butters, chia seeds and hemp hearts are super sources of protein as well as other healthful minerals and compounds, but cost and texture might prevent their use in your smoothie. They also are about 50% fat.
- Dry milk powder is a very inexpensive way to top up your protein needs. Rich in calcium and Vitamin D, it dissolves and the flavour can be covered by fruit and other additives. It's also portable and stable at higher temperatures so if you are hiking through the block, load up your shaker cup in the morning, and just add water when you need an energy boost.

Fluids for function

- Coconut water is rich in potassium but it also contains about the same amount of sugar as in a sport drink. It's a good addition for your post exercise carb restoring smoothie. Oranges and bananas are also great sources of



When you google "green smoothies" there are literally hundreds of photos and recipes. Few, however, explain why they are good, how they fit into a safe, balanced diet, or how many calories they contain. Be sure to make informed choices that best meet your dietary needs, likes and activity levels.

potassium, as well as Vitamin C and fibre and are less expensive.

- Soy or nut milks are all good sources of calcium, but only soy milk will provide you with much protein, and none of these drinks contain the important Vitamin D found in cow's milk. If you choose a vegetarian milk for your smoothie consider taking a Vitamin D supplement (or get some sun exposure in the summer).
- Yogurt contains great probiotics and Greek yogurt is also high in protein. Beware of the high sugar in most flavoured varieties, but using yogurt can really richen up your smoothie.
- Fruit juices are high in sugar (even unsweetened) but if you don't have access to a blender and are using a shaker cup, they can provide the flavour and depending on which one you buy, Vitamin C and possibly other nutrients. Pomegranate and cranberry juices are good choices, rich in antioxidants and other nutrients but check the labels carefully. Often these drinks contain less than 30% of the actual fruit juice.
- Green tea is another option for your morning smoothie. Matcha in particular is very high in catechins, a powerful antioxidant and anti mutagen. It also contains caffeine though, so keep in mind that a late afternoon dose may interfere with your nightly sleep.

Herbs, spices and flavouring

- Turmeric is a spice related to ginger that has been shown to have antioxidant properties. The active ingredient curcumin is not very bioactive, but if you consume it together with pepper, you can increase the ability of your body to use it. Try a smoothie made with roasted squash, turmeric, pepper, ginger, cinnamon and nutmeg for a delicious savory flavour.
- Spirulina is an algae packed full of protein and anti-inflammatory antioxidants. Add a teaspoon to your smoothie if you like!
- Vanilla is not nutritionally valuable but it does add flavour and sweetness without sugars.
- Cinnamon contains antioxidants and enhances the flavour of some fruits, so it makes a great addition to your smoothie.
- Raw cocoa powder can give your smoothie a rich chocolatey flavour and provide anti-inflammatory polyphenols.
- Molasses is rich in iron. If you like its strong flavour you can use it to sweeten your smoothie a little. Pair with cinnamon, ginger and nutmeg to soften the flavour.
- A little honey or maple syrup can sweeten your smoothie but go easy as they both act like free sugar in your body.

Recipes

The Fit to Plant Basic Energy Booster

- ¾ cup dry milk powder
- 2 Tbspn chocolate drink mix or orange tang or 1 tsp instant coffee + 1 tsp vanilla + 2 Tbspn sugar
- 1.5 cups water
- Put all ingredients except for water in your shaker cup until needed. Just add water and shake. Note: You can increase the nutrient density of this smoothie by adding the ingredients of your choice from the list above.

Basic Green Smoothie

- 1 cup chopped kale or spinach
- 1 orange (peeled)
- 1 cup other fruit (pineapple, a banana, berries)
- 2 tbsp chia, hemp or ground flax seeds
- 1/2 cup coconut water, unflavoured yogurt, milk, fruit juice or water
- Pulse greens with a bit of your liquid until smooth. Add the fruit and a bit more liquid and pulse again until smooth. Blend in ground seeds and remainder of liquid until you reach the desired consistency.

Health in a Cup

- 2 carrots or 1 cup winter squash, roasted or steamed
- 1 navel orange peeled
- 1 ripe banana or ½ cup thawed frozen berries
- ¾ cup dry milk powder
- ¼ cup cooked red lentils
- 1 tsp each turmeric, cinnamon and ginger
- ¼ tsp pepper
- 1 Tbspn chia, hemp or ground flax seed
- ½-1 cup of liquid (either unsweetened fruit juice, coconut water, plain yogurt, milk or water)
- Chop carrots or squash into small pieces and steam in ½ cup of water until very soft – or toss in olive oil and roast about an hour in a 350 degree oven. Blend with a bit of liquid and the fruit until very smooth. Then add cooked lentils and pulse. Add milk powder, spices, seeds and liquid and shake the blend one last time until desired consistency is reached. 🍷

Canada's new food guide:

Eat more plants, drink more water

After more than 12 years since the last update, the Federal Government has released a revised Food Guide – advice for Canadians on what to eat, including the new endorsement of plant-based diets.

The guide has more dietary influence than perhaps any other document in the country and impacts what institutions' kitchens like school cafeterias and hospitals as well as home kitchens prepare across the country. For more than 40 years, the guide has told Canadians to eat specific size servings from four food groups. The latest version changes all of that.

Learn more here in this Globe and Mail article: <https://www.theglobeandmail.com/canada/article-new-food-guide-shifts-toward-plant-based-foods/>.

View the guide in full here: <https://food-guide.canada.ca/en/>

And for suggestions on how to incorporate the new food guide into your cooking: <https://www.theglobeandmail.com/life/food-and-wine/recipes/article-how-to-incorporate-the-new-food-guide-into-your-cooking-repertoire/> 🍷

