



Ten Ways I Cancer-Proof My Life Everyday

1. I cook almost every meal that I eat

Want to know the best way to make sure only quality ingredients are used to make your food and it is prepared in non-damaging ways? Make it yourself and benefit from the meditative-like time spent cooking, while getting closer to the food that fuels your body and helps it to fight cancer. Processed food and prepackaged foods are not food.

2. I eat nutrient-dense foods that are low in sugar and simple carbohydrates and keep my pantry nearly empty

Animal products (meat, cheese, and sometimes kefir), vegetables, sweet potatoes, kimchi, berries and some fruit is usually all you will find in my refrigerator. Dark chocolate (85% or higher) is a treat at times. Coffee supplies, olive oil, ghee, nuts, spices, a little white rice (for after workouts), and sometimes macadamia nut oil and avocado oil is usually all you will find in my pantry. This forces me to eat real foods that I must spend time preparing and cooking – all are quality ingredients that leave my body easily able to manage my metabolic state without potentially inflammatory and cancer-stimulating blood sugar or insulin rushes.

3. I maximize my sleep, sleep hygiene, and circadian rhythms

For millions of years humans and our predecessors awoke to start the day accompanied by the sun's bright and warming rays. These "blue" rays also activated a part of our brain which would signal to the rest of our body that sleep time was over. The opposite occurred at night – when the sun set, the lack of the sun's rays and blue light would allow the pituitary gland to provide the body with melatonin. Melatonin signals to the body that it is sleep time, fights inflammation, and helps our cells repair the day's damage and fight cancer. An adequate amount of sleep continues this repair process. In this regard, I literally aim to sleep away cancer.

Television, computer screens, alarm clocks, and other blue lights at night tell the brain it is still daytime and to hold off on producing cancer-fighting and sleep-inducing melatonin. I limit all of these devices at night and use f.lux on my computer and Twilight on my phone to block blue light at night. I also sleep for at least eight hours a night to allow my body to fix all the damage, inflammation, and free radicals it encountered during the day. Rarely do I get less than eight hours. When I awake, I try to expose myself to blue light and engage in some activities to keep my circadian rhythms on beat.



4. I limit exposure to chemicals that may cause cancer

This is a difficult task nowadays as everything seems to cause cancer, but I avoid the easy targets. I avoid nearly all plastics and plasticizers as they have chemicals that leach into our food. Even the coatings on receipts often contain BPA, a chemical that resembles estrogen and may stimulate breast cancer. Instead, I use non-plastic containers, like Klean Kanteen for my water and I avoid plastic bottles, where the water within them often sits at high temperatures allowing the plastic to leach chemicals into the water. I transport my food with stainless steel air-tight containers. I use no plastic bags, plastic plates or utensils, or Styrofoam. I also generally tick everyone off around me as many people rely on the environmentally unsound convenience of plastic. I get that I am a little crazy at times with plastic, but my comfort level is to avoid plastic as much as possible.

5. I feed my bowel bacteria

The billions (check this) of resident critters that are squatting in our bowels serve many healthy purposes. Some of these happen to be fighting inflammation, diffusing potential carcinogens, and reducing our risk of cancer. I eat lots of bacteria-ridden and cultured foods like unpasteurized cheese from grass-fed cows and fermented foods like kefir and kimchi that both feed my bowel bacteria and provide me with a healthy dose of new bacteria. Other foods that feed my bowel critters are fibrous vegetables and some starches like sweet potatoes. I also have a little ball of bacteria (my dog) that I play with several times a day, exposing me to more bacterial species.

6. I engage in lots of low-level activity throughout the day

Our body is meant to encounter a significant amount of activity throughout the day. Sitting in an office for eight hours is unnatural for our body and mind (and soul). I park in the furthest parking spot in the back corner to get some steps before work. I try to walk my dog in the morning. I go for a walk every day at lunch (regardless of how busy I am), I never take the elevator, and usually go for a walk/hike in the evening after work. It is not difficult to get in three or more miles a day, and a couple small changes can get you to five or more.

Low levels of activity lead to anti-cancer metabolic alterations like improving insulin sensitivity (i.e. less insulin needed after a meal to lower blood sugar) and increased breakdown of fatty acids. These benefits even continue for the follow day.²

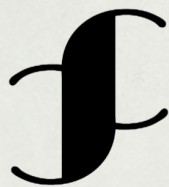
7. I engage in intense, muscle- and mitochondria-stimulating activities and I lift heavy things

While less intense “background” activity has many anti-cancer benefits as discussed above, periodic intense exercise, like sprinting and lifting heavy things has anti-cancer benefits as well. Even a single bout of high-intensity activity or exercise causes significant breakdown of sugar and muscle glycogen, lowering blood glucose levels afterwards and improving insulin sensitivity (we do not want too much insulin as it can stimulate cancer cells).³

1. Guarner F, Malagelada J-R. Gut flora in health and disease. Lancet. 2003

2. Newsom SA, Everett AC, Hinko A, Horowitz JF. A single session of low-intensity exercise is sufficient to enhance insulin sensitivity into the next day in obese adults. Diabetes Care. 2013

3. Devlin JT, Horton ES. Effects of Prior High-Intensity Exercise on Glucose Metabolism in Normal and Insulin-resistant Men. Diabetes. 1985



8. I fast

On most weekends, I eat an early dinner and do not eat again until the following lunch, creating an 18+ hour fast. I will drink coffee with heavy cream at times during the morning. This fast tells my cells it is famine time, causing them to break down their reservoirs, upregulate anticancer AMPK, and begin to recycle their spare and faulty parts through autophagy.⁴ Cancer is a process of excessive growth, while fasting-induced autophagy is the exact opposite as our cells are breaking things down and halting excess growth.⁵ The added bonuses are lower blood glucose, improved insulin sensitivity, and less fat tissue from the weight loss. The feeling of accomplishment is quite nice too.

When I don't fast, I still only eat 2-3 meals per day with no snacking between. This allows my blood sugar and insulin to drop and my cells to avoid being "over nourished," stimulating unwanted cellular growth.

9. I stress appropriately

Besides my road rage-filled drive to work, I aim to constantly limit my chronic stress. Counter to this, I aim to acutely stress myself with intense exercise, giving talks and Grand Rounds (always stressful), and eating green and cruciferous vegetables. All of these (yes, even the vegetables), stress my cells and acts much like a training session for them so that when they are exposed to pathogens and cancer, they can fight them appropriately. Unbeknownst to many, the sulfur in broccoli and sprouts is sensed by our cells as a toxin, and pathways like NRF-1 are activated, stimulating our immune system.^{6,7}

10. I eat healthy, cancer-fighting fats

Beef, organ meats, eggs, butter, cheese, and soup bones (for bone marrow) from grass-fed cows has higher amounts of inflammation and cancer-fighting omega-3 fatty acids, conjugated linoleic acid, and lower amounts of inflammatory omega-6 fatty acids. Grass-fed butter also has more cancer-fighting butyric acid, the same fat that our bowel bacteria produce after digesting vegetables.⁸ These fats provide the building blocks for my cells' protective layers, support adequate hormone function, and fuel our cells and immune system to fight cancer, with little effect on my blood sugar and insulin (keeping my insulin sensitivity high). They also keep my appetite in check and provide a significant number of vitamins and nutrients to ensure that my cells function optimally in the daily battle against cancer.

This is what I do

I know this may seem overwhelming, but that's not my intention. Small changes can go a long way. Nobody can guarantee a cancer-free life. However, my life revolves around cancer, and this is what I do based on the available literature. This is not medical advice, but rather how I cancer-proof my day.

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5. Singletary K, Milner J. Diet, Autophagy, and Cancer: A Review. *Cancer Epidemiol Biomarkers Prev*. 2008

6. Johnson IT. Glucosinolates: bioavailability and importance to health. *Int J Vitam Nutr Res*. 2002

7. Houghton CA, Fassett RG, Coombes JS. Sulforaphane: translational research from laboratory bench to clinic. *Nutr Rev*. 2013

8. Wong JMW, de Souza R, Kendall CWC, Emam A, Jenkins DJA. Colonic health: fermentation and short chain fatty acids. *J Clin Gastroenterol*. 2006