

4 Wellness Goals for 2019

1. **Diet: Minimize simple sugars and some starches:** We all love simple sugars, technically mono- and disaccharides. These are glucose, fructose, sucrose, and several others, found in abundance in many foods under various pseudonyms. Fructose should not be singled out as any worse than other simple sugars. In soft drinks, simple sugars are usually added in excessive amounts and sugars in liquids are more rapidly absorbed than those in solid foods, both are negative players. Naturally occurring simple sugars such as those in fruits and pumpkin yield an overall slower absorption (lower glycemic index-GI) than “added, processed sugars”. This beneficial slower absorption is due to the presence of fiber, while at the same time, providing minerals and vitamins. An excess of simple sugars is no friend to losing weight because they are readily converted to body fat (adipose tissue). They are no friend for sugar management because they can rapidly elevate blood sugar, which is detrimental for diabetics, and in non-diabetics, results in feelings of low energy during blood sugar swings. In a serving, 2-3 grams of simple sugars added for taste reasons are acceptable for weight management, and 10 grams of simple sugars can be set as a maximal. It is better to consume sugar that is naturally present in foods. Added sugars that are less processed (like honey) are desirable over more processed sugars. But ultimately, if too much simple sugars are consumed relative to your energy expenditure, you will gain body fat.

The sugar-starch connection: It is impossible to discuss simple sugars properly without also discussing starches. Starches on the Ingredient list are **not** counted as sugars, but they are an unexpected culprit for raising blood sugar and contributing to fat gain (adiposity). Starches are naturally occurring (as in some breakfast cereals or as potato starch in potatoes), or can be added in natural or modified forms. Starches consist of molecules containing long linkages of glucose simple sugar.

Sugary foods to avoid and better alternatives: Foods or drinks containing more than 10 grams per serving of simple sugars can be avoided, even if the sugar has been added via a plethora of more natural sources, with positive messaging around each source. Foods containing large amounts of dates, honey, agave, maple syrup, and “raw” sugar should be minimized from a body weight perspective. These can be replaced by less sweet alternatives, and foods containing small amounts of natural high intensity sweeteners (like monk fruit and stevia). Due to improvements in processing and refining, there are a new generation of emerging foods with no added sugars that are very palatable, such as a chocolate bar with no added sugars. No need to muster the courage to consume pure baking chocolate anymore, for the hard cores amongst us.

Starchy foods to avoid and better alternatives: Avoid foods containing large amounts of high glycemic starches like rice flour or starch, corn starch, and potato starch. Minimize “gelatinized” starch which tends to have a higher GI. Avoid consuming foods with large amounts of low GI starches like white bread, white rice, wheat- and rice-derived pastas and other highly processed grains. More beneficial foods from a starch perspective, are those containing “retrograded” starches, modified starches with a low GI as detailed on the product description, and starches from tapioca and cassava (tapioca is derived from cassava). Foods containing alternative grains, grasses, and flours like amaranth, quinoa, wild rice; and nut butters will contain lower GI starches. In low-carb, and keto circles, oatmeal is often frowned upon, but contains complex, resistant starches, is lower glycemic, heart friendly, and has a high satiety value (less food

consumed at subsequent meals), and is thus beneficial for weight management. Choose a nice steel-cut or Irish oatmeal.

2. **Enjoy a Keto/Low Carb lifestyle, but without the stress and extreme regimentation of a traditional ketogenic diet:** The jury is out. Low Carb, Keto-friendly diets are healthy for us, and are a major trend in the USA and soon globally. This is not just a fad, but a new lifestyle dogma. Humans do not have an obligate requirement to consumer sugars, and evolutionarily, likely consumed high healthy fat rich, low carb diets. The modern food supply is laden with added sugars, and foods that never had sugar (like some meats) now have added sugars for improved browning. In modern society, it can be challenging to consume a traditional ketogenic diet (90% of calories as fat), or even a newer fanged ketogenic diet with 75% of energy from fat, 20% from protein, and 5% of carbs. I am still advocating consumption of low carb, lower glycemic index carbs, but it is very important for adherence/stickability to low carb regimens, to not limit carbs too severely. The consumed carbs can be part of alternating meals in the same day. Or, it is feasible to have days where carbs are consumed in more abundance, and the individual can return to a lower carb regimen the next day without need to start the metabolic adaption process all over.

How to avoid “keto-stress”: keeping total simple sugar intake at 5-20 grams per day requires avoiding many, many foods that currently have too much added sugars. To avoid stress, incorporate higher sugar days, and allow yourself the occasional sugary desert—get that sugar urge out of your system. Never feel guilty about your eating choices, we are not robots. Do not carry around a urinary stick to measure your ketones, unless that is your shtick. Mammals including us humans, should never need to resort to such levels of quantification, unless you are a competitive athlete.

Practical low carb foods: Some foods everyone can incorporate into their low carb regimen: lots of high-quality fish, ancient grains, unsweetened almond milk, deserts prepared with almond flour, fruits, and pumpkins. Pumpkins and yams do not typically raise blood sugar appreciably. With a good foundational understanding of starches and sugars (Tip #1), a reasonable keto or low carb diet does not have to be super-limiting, and can be fun to follow. Food manufacturers, in response to consumer demand, are already beginning to cut back on added sugars in various foods, and there are many foods prepared with alternative grains (albeit expensive) and so “going keto” will be easier in the years to come.

Example of a Keto-friendly daily meal: AM (early, 6-7): eat to your heart’s content of unsweetened almond yogurt, topped with one tablespoon each C8 MCT oil and high-quality fish oil (providing 2 grams EPA+DHA). One cup of naturally-decaffeinated coffee (roasted within two weeks, and milled within minutes of consumption), dipped with unsweetened chocolate, for a small buzz and source of anti-oxidants. Lunch (11-12): one can sardines (with or without bones), in olive oil, served alone or on almond bread, cassava bread, or on chestnut flour crackers. If still hungry, add some peanut or almond butter; or have a bowl of bone broth. Drink lots of green tea or other unsweetened teas. Finish with a green apple (no need to separate eating fruit from other meal components). Dinner (early bird style, 3-5 PM): as much wild or sustainably-farmed antibiotic free salmon as you desire, broccoli, salads without caramelized nuts. Evening snack (8-9 PM): piece of fruit (or have an Avocado), or piece of vegan (soy or almond) cheese. There, just described a typical meal by the author.

3. **Exercise Smarter:** For competitive athletes, simple sugars are a great energy source, providing rapid energy for our exercised tissues. However, amongst us weekend warriors, too much simple sugars, can result in sluggish athletic performance, and even gaining weight. MCTs and exogenous ketone body salts, provide for more sustained energy than simple sugars and carbs and this is particularly important for endurance sports like cycling. Even in non-endurance sports like gymnasts and karate athletes, studies showed consumption of MCT oils did not diminish athletic performance, but allowed the athletes to decrease their fat mass. Due to digestive tolerance, some trainers will recommend MCT oils be consumed before and after sports to help with post-workout recovery. It is also recognized that loss of concentration and alertness is a major issue in athletes, particularly as they push their physical limits. In a recent study, MCT oils were shown to improve cognitive responses in exercised athletes.
4. **Sleep better:** The lack of sleep in the human population is becoming epidemic. Recent studies show that at least 50% of teenagers, partly due to social media habits, do not sleep nearly long enough. The elderly lose sleep due to loss of melatonin and medications are known to not sleep enough. University students as a result of ingesting sugary, caffeinated drinks and tablets.

If we do not get enough sleep, we cannot function optimally. We become irritable and cranky. We cannot concentrate optimally. We are tired, so we exercise less which contribute to being overweight and becoming diabetic. Our self-confidence wanes. We may lose our jobs and financial means if the problem is chronic. If chronically fatigued, we feel obligated to consume stimulants which leads to consuming even more stimulants and eventually a physiological addiction develops. When we do not sleep sufficiently, some evidence shows food and sugar cravings can increase (due to increases in the hormone ghrelin-which increases appetite- and decreases in leptin-which decreases appetite), contributing to being overweight. Chronic sleep deprivation may also impair sugar metabolism.

If we learn to sleep better (via meditation, techniques to shut off the “hard drive”-our brains, and many others), we will make better food choices, exercise more, be better partners to our loved ones and friends, and perform better on our jobs and at sports.