“I feel tired.”
“I can’t get the energy to get out of bed.”
“I can feel myself dipping low throughout the day.”

One of the most complaints I hear from people is that they are low in energy. They are dragging from the moment they wake up until the moment they go to bed. No amount of sleep helps the situation. Of course, there can be several reasons why we may sit within what feels like an eternal dream world without feeling the spark of life force igniting within to give us that pleasing “fire in the belly” sensation.

Since I like to look at the “root” of why we have certain health issues rather than just skimming the surface, I have explored what creates energy in our body deep within our cells. If you’ve ever taken a biology class, you would have learned that we have “energy-manufacturing powerhouses” within our cells called mitochondria. About 10% of our body weight comes from our mitochondria, and that all mitochondrial DNA come from our mother. Most chronic diseases beyond fatigue are associated with mitochondrial dysfunction such as cancer, muscle weakness, and neurological issues.

At a very basic physical level, these powerhouse structures act as “mini factories” of energy production. When we speak more symbolically about mitochondria, they might be referred to as what assists us in harnessing chi (or prana). In chakra terminology, they would connect to the solar plexus chakra, which is associated with how we digest and transform energy. Therefore, our ability to transform is within every cell with these little “chi” producers and regulators.

It’s probably no surprise that many people lack so much energy. We are putting out so much and not feeling nourished, so the equation of in versus out is not in balance. What may help with creating a balanced energy equation is to focus on some strategies to help replenish our mitochondria.

Here are some to consider:

1. **B vitamins**: The mitochondria is the hub of burning our food into fuel. To do this well, we need to make sure we are taking in water-soluble B vitamins like thiamin (vitamin B1), riboflavin (vitamin B2), niacin (vitamin B3), and pyridoxine (vitamin B6). Fortunately, these vitamins are widespread in foods like whole grains, legumes, meats, fish, egg yolks, vegetables, and fruit. However, since B vitamins (together with vitamin C) are used to make stress hormones, we may need to get more from foods or even a supplement if we are under stress.

2. **Don’t overeat**: Mitochondria become overwhelmed when we eat too much food. The over-
nutrition means that the mitochondria have to work harder, and to keep up the pace, they may be putting out an excess of free radicals from all the food they are burning. Free radicals are reactive, aging compounds. Therefore, overeating is overaging. In fact, some groups are actively forming communities about reducing their calories by 10-15% so they don’t age so poorly and aren’t susceptible to chronic disease. All those free radicals can also damage the mitochondria. For myself, I like a 12-hour overnight fast where I stop eating at 7 PM and don’t start again until eating breakfast the next morning at 7-8 AM.

3. **Spices & herbs**: Fats are burned for energy in the mitochondria, but it’s not as simple as it sounds. The process that your body goes through to burn fats is rather complex and goes in stages within the cell. There are some plant foods that help to jumpstart the process of fat burning including the spices caraway, chili pepper, nutmeg, licorice, black and white pepper, paprika, coriander, saffron. Your spice rack in your kitchen is truly filled with energy-enhancing actives!

4. **Low toxin load**: Toxins such as heavy metals, persistent organic pollutants (e.g., bisphenol A), and other endocrine disruptors that we find in food essentially “poison” the mitochondria. Therefore, one of the best ways to begin with your mitochondria is to reduce your intake of toxins by buying organically-grown produce and wash your produce well before eating.

5. **Foods low in glycemic index**: The way that we handle sugar says something about the health of our mitochondria. Insulin, which is released after a sugar load, can lead to changes in how we burn fat and can determine whether our body becomes more inflamed. Eating foods that do not spike our blood sugar and insulin are preferred for this purpose. Also, some initial research suggests that artificial sweeteners may interfere with our metabolism in unique ways. My personal preference is always to stay closer to natural sweeteners like apple and pear juice concentrates in baking, or even applesauce and/or a ripe banana!

6. **Colorful plant foods**: The mitochondria is all about color, and has the “cytochrome enzymes” (“cytochrome” is literally translated into “cellular pigments”) in its inner membrane to prove it! The job of these enzymes are to extract energy from fuel. Plant foods which are colorful and rich in phytonutrients serve the mitochondria because they contain protective compounds that help to blunt the stress from metabolism. The foods highest in phytonutrients are collard greens, ground cocoa powder, beet greens, broccoli, and Brussels sprouts.

7. **Flexible fats**: The mitochondria has a sophisticated structure. Even though they look like tiny kidney beans within the cell, inside they have lots of curvy walls (called cristae) that are active in metabolism. The ability for the mitochondria to function well and transport fuel will be determined by how “fluid” the wall is that is transporting fats to be burned for energy. Most people do not eat enough of the fluid, anti-inflammatory omega-3 fats, which are squiggly, wiggly, and find their way into the mitochondrial membrane. Getting more of these fats by eating more oily fish (salmon, mackerel, tuna), leafy greens, nuts, and seed meal (particularly flaxseed meal), can be beneficial for enhancing “metabolic flexibility” within the inner walls of the mighty mitochondria.

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