

New Start, New You!

Every January, many of us are inspired by the prospect of a healthier self to begin important lifestyle and behavior changes. Losing weight is among the most common of New Year's resolutions.

Here, we outline some tips for achieving and maintaining a healthy BMI (body mass index).

Eliminating/Reducing Inflammation

Most people associate inflammation with redness and pain after an injury or illness. This is how acute inflammation manifests itself, and it is easy to see and feel. But subacute, or "chronic" inflammation is the type of inflammation that manifests as heart disease, cancer, fatigue, and – you guessed it – extra pounds. Chronic inflammation is not something we directly feel, hence the phrase, "silent killer."

It is true that eating fresh fruits and vegetables in copious amounts can help quell inflammation, but the key is to prevent it from occurring in the first place. One strategy is to eliminate sugar, as it is extremely inflammatory: eating sugar increases inflammation. This is a simple enough concept, but did you know that fat cells, too, are inflammatory? Contrary to popular belief, adipose tissue (AKA "fat") is not an inert substance in the body: it is, in fact, a living organ that secretes inflammatory hormones. This in turn exacerbates metabolic dysfunction. Therefore, weight loss generally helps reduce inflammation. And when you reduce inflammation, it helps you lose weight.

Maintaining Stable Blood Sugar

Many people believe that hunger is mostly caused by an empty stomach when the reality is that hunger is a response to blood glucose levels. This is why it is possible to eat hundreds, even thousands of calories (such as candy bars and other sweets), then feel hungry relatively soon after. This is also the reason why it is possible to go long periods

of time without eating (despite an empty stomach, there is a lack of hunger). The bottom line? It's all about blood sugar control.

When starting a new weight loss program, one of the many obstacles that eventually trips people up is wild blood sugar fluctuations, which leads to unrelenting cravings and mood swings. The goal, then, is to optimize blood sugar stability/prevent insulin resistance. Doing so helps drive a metabolic shift that facilitates weight loss and weight management. Blood sugar control can be easily assessed via pre-diabetes biomarkers including fasting glucose, HbA1C, and insulin.

Optimizing Gut Health

This means establishing and colonizing the gastrointestinal tract with diverse beneficial bacteria (AKA a healthy microbiome). Healthy gut flora not only help protect against pathogens, they also help synthesize vitamins and impact neurotransmitter levels, ultimately affecting not only one's immune system function, but how one looks and feels.

A healthy gut ecology is supported through the consumption of prebiotic and probiotic foods. Fermented foods, such as vegetables and dairy, are such examples. On the other hand, sugar and refined carbohydrates promote the growth of pathogenic ("bad") bacteria, which often cause weight gain.

The good news is that these three pillars of health work synergistically: reducing inflammation helps promote healthy gut bacteria; optimizing blood sugar results in a smaller inflammatory burden; and a healthy gut helps drive blood sugar stabilization with greater efficiency. All work together; fortunately, you can quantify more than just what you see on the scale.

Micronutrients: The Key to Effective Weight Loss

For those who really want to delve further into the science behind an enviable metabolism, we offer a list of vitamins with an explanation of their role in the body's ability to burn fat and build muscle.

VITAMIN A:

This vitamin is particularly good at regulating how genes are expressed. Although genes do determine to an extent how the body stores or burns fat, our genes are, simply stated, not our destiny. Two persons with the same gene may express it very differently, depending on their individual cellular environment. This is where vitamin A enters the picture. It can actually enhance the expression of certain genes that lower a person's tendency to store food as fat. If one is vitamin A deficient, s/he may be pre-disposed to storing fat tissue. On the other hand, correcting a vitamin A deficiency may have a different, more positive effect, as studies have indicated that vitamin A may reduce the size of fat cells.

VITAMIN D:

Similar to vitamin A, vitamin D (commonly referred to as the "sunshine vitamin") affects genetic expression, including the way that fat cells develop. A vitamin D deficiency is strongly linked to poor carbohydrate metabolism: instead of efficiently burning carbohydrate for fuel (which consequently helps impart energy and mental focus), the body instead stores carbohydrate as fat. Correcting a vitamin D deficiency can boost metabolism by reversing this deleterious effect.

VITAMIN E:

This micronutrient affects metabolism by inhibiting immature fat cells from developing into mature fat cells, which are more "stubborn," metabolically speaking. The cumulative effect of this is a reduction in fat storage.

VITAMIN B3:

Also called niacin, vitamin B3 can increase the hormone adiponectin, which is secreted by fat cells. Adiponectin's main function is to signal cells to burn fuel. It also has a role in helping muscles use glucose for energy rather than storing it as fat.

VITAMIN B5:

Some evidence suggests that vitamin B5 (AKA pantothenate or pantothenic acid) might be helpful for weight loss because it has been associated with less hunger when dieting. At the cellular level, vitamin B5 activates the enzyme lipoprotein lipase, which breaks down fat cells.

This list is by no means exhaustive: in fact, there are multiple micronutrient influences on weight loss. These micronutrients work both individually and synergistically, and repletion often promotes clinical benefits throughout the body. It should come as no surprise that micronutrient adequacy also supports heart health and energy levels. Therefore, discovering (then correcting) micronutrient deficiencies becomes a critical first step in improving overall health.

Discover your weight loss potential today with Micronutrient Testing!

