

While it is generally postulated that calories in minus calories burned should determine weight, this overly simple equation leaves many factors out. Not all calories are created equal. On face, that may seem puzzling, but different foods have the ability to trigger the release of certain hormones, as well as to trigger different immune reactions, and the consequences of these biological mediators released secondary to foods eaten all play a role in weight gain. The fact that different foods, based on our body's reactions to them, will release different mediators, means not all calories are created equal. This is the rational beyond diets that are low in carbohydrates. Even if you portioned food so that the calories from a portion of cake was equal to the calories from broccoli, there would still be higher carbohydrates in the cake, as well as less fiber. This means the cake will trigger a release of insulin, where as the broccoli does not. Insulin tells the body to store fat. This means even though the calories are the same the end result is not. This is one of many reasons that calories are not the only cause of weight gain. Food sensitivities, like carbohydrates, will be another reason for weight gain. It is not just calories.

If one is eating foods, they are sensitive to, even if they are healthy, they will create

inflammation. This inflammation then results in insulin receptors not working as well, and dysregulation of insulin, which will also cause weight gain. Eating foods we are sensitive can have adverse reactions and contribute to weight gain for a number of reasons. Insulin dysregulation is one.

Another reason that food allergies can cause weight gain is because if you are eating foods you are sensitive to, you crave them more. The reason for this is when you are sensitive to a food you make an antibody to it. An antibody is designed to attack an invader. If the invader is not around, in this case the food you are sensitive to, the antibody will attack your own tissue instead. We begin to crave this food because eating it again will distract the antibody from attacking our own body, and it will begin to attack the food again. However, the more of the food you eat, the more of the antibody you make, and the problem escalates. Also, this antibody made to attack food also creates cytokines as a by-product. These cytokines begin to destroy neurotransmitters which make us feel good, such as serotonin. We now crave foods high in carbohydrates because they easily cross the blood brain barrier and make serotonin. However, these foods are the same ones that make insulin, and tell the body to store fat.

Food Sensitivity and Weight Gain (Continued)

Foods that we eat that create inflammation, also trigger the release of the hormone cortisol.
Cortisol is an anti-inflammatory hormone that the body makes to oppose inflammatory food sensitivity reactions. However, over production of cortisol causes weight gain around the middle and can therefore be another way food sensitivities contribute to increases in weight. Overproduction of cortisol can also make one feel anxious or contribute to insomnia, so food sensitivities can be responsible for these symptoms as well.

Food sensitivities create inflammation in the gut. This inflammation will cause a decreased absorption of nutrients. When the body receives nutrient dense food, it releases a hormone called GLP-1. This tells the brain we are no longer hungry. This is why one can eat a lot of calories, such as a bag of potato chips, and still not feel full. Even though the calories were high, the nutrients are low, which means GLP-1 is not released. Similarly, if you are eating healthy foods, but ones that cause inflammation in your body, this local inflammation will cause you to not absorb the nutrients there and will result in the same issue.

Food sensitivities not only create inflammation in the gut, but systemically as well. These food sensitivities will cause inflammation that triggers the release of leptin. Leptin is the hormone that works with insulin to tell us to store more fat. Leptin will oppose other hormones called adipokines, that tell us to burn more fat. Inflammation in the body, as well as gut will contribute to weight gain.

It is not a scenario that is merely defined by calories. It is the types of food you eat, and a matter of if they create inflammation in the body. Even the healthiest foods can create inflammation in the body by provoking an IgE reaction, IgG reaction or complement reaction. By measuring multiple ways your body can react to foods you can truly define what foods are healthy for you and are part of your fastest path to normalizing your weight.