Rethinking Hunger and Satiety

By David Greenwalt

Many people assume that being hungry is something that should never happen and is to be avoided. But human beings are born with the natural ability to regulate their dietary intake to meet their nutritional needs. Hunger is your body’s way of telling you that you need fuel. Many fear it and then eat in response to the fear. The reality is hunger is as natural as eating itself. We should expect it—not fear it.

Then again many overweight people aren’t really sure what hunger feels like or whether they actually ever feel it at all.

Like hunger, fullness (satiety) signals are also oftentimes broken. Many overweight people eat beyond full. Some know it. Others simply don’t feel it at all. Still others only feel it when they are completely bloated.

In the early days of Leanness Lifestyle I stressed how we should strive to eat according to hunger and fullness. I learned more later and began to really understand that …

*Eating according to “hunger” or fullness, especially in the beginning, may be unreliable.*

For these reasons and more it is very important that you create a food plan, log that plan, and eat according to your plan.

Before I get into how we can better manage hunger and fullness it’s important that I define these two variables strongly linked to our success or failure with permanent weight loss.

There are four types of hunger: physical, emotional, sensory and habitual.

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<thead>
<tr>
<th>Physical</th>
<th>Emotional</th>
<th>Sensory</th>
<th>Habitual</th>
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<tbody>
<tr>
<td>Builds gradually</td>
<td>Most common</td>
<td>Crave food at the sight, sound, smell, taste or touch of it.</td>
<td>Eating is driven by the clock, not hunger</td>
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<td>Strikes below the neck</td>
<td>Comes on suddenly</td>
<td>You may audibly moan when the senses kick in just at the thought of the food</td>
<td>It’s all about routine and schedule</td>
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<td>Occurs several hours after eating</td>
<td>Originates above the neck</td>
<td>Leads to feelings of guilt and shame</td>
<td>Patterns dictate eating</td>
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<td>Hunger pangs or gnawing feeling</td>
<td>Unrelated to time</td>
<td>Results from heightened emotional states</td>
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<td>Nausea</td>
<td>Persists despite fullness</td>
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<td>Irritability</td>
<td>Leads to feelings of guilt and shame</td>
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<td>Headache</td>
<td>Results from heightened emotional states</td>
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<td>Low energy/Fatigue</td>
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<td>Difficulty concentrating</td>
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Every single one of us eats for physical, emotional, sensory and habitual reasons. You may therefore ask “Why distinguish between the types of hunger?” Because the type of hunger you want to be engaging in the most is the physical type. Most healthy-weight people eat more often for physical reasons. Most overweight people eat too often for emotional, sensory and habitual reasons. Knowing the various hunger types can help increase consciousness about your patterns so you can begin the process of changing them for better results.
Physical hunger is a naturally-occurring state. Its purpose is to tell you it's time to eat according to your brain and signals it has received from your gut and other sources. Keep something in mind, hunger is increased as your fat cells shrink. Hmmm, why is that? It's because hormones created by your fat cells scream like a drill sergeant at your brain to GET HER BACK TO EATING WHAT WILL KEEP HER FROM LOSING WEIGHT!!!! RIGHT NOW!!!! Doesn't matter if you are 100 pounds overweight or 5 pounds underweight, weight loss or a hypocaloric state create strong hormonal signals with the purpose of getting you to STOP DOING THIS (losing weight)!

**HUNGER TIMING**

Ideally you'll be eating more often according to physical hunger. I'd like to see the rumblings of hunger begin about 30 to 60 minutes prior to when it's time for you to eat. I'd like you to "hang in there" with the hunger for 30-60 more minutes and then eat. Ideally you will adjust your meal portions and food types (explained in more detail in the satiety section) so you almost never feel completely famished or starving between feedings. IDEALLY YOU WILL KEEP YOURSELF BETWEEN HUNGRY AND SATISFIED. You will feel hungry when you begin eating. You will feel satisfied but not full when you are through. Allowing yourself to become overly hungry to the point of famished or ravenous is going to increase the likelihood that you will eat off plan and experience more pain than you need to even if you do hold strong and avoid a binge.

If you are truly starving and about to have a pound of M&Ms CHOOSE A LEAN PROTEIN AND/OR VEGETABLES instead. Even if you went over on your calories on THAT one day by 200 or whatever the scale effect would be infamously small.

It is NOT common to eat and then be hungry 30 minutes later. You are likely undereating or eating the wrong foods even for weight loss if this is occurring.

_I never met anyone, ever, who was successful at weight loss who wasn’t extra hungry for a while. If you are never hungry you are usually not losing weight._

The strong hunger pains will lessen over time. It's like the receptors in the brain are willing to be beat on by hormones for a while and they SCREAM at you to eat eat eat but after some days have passed the receptors become less responsive to hormonal signals and they slow down the screaming at you to eat.

No one gets leaner without experiencing extra hunger for a while. According to published research, however, no one has ever died from hunger between meals. Hunger is not the same as starvation and malnutrition. Make sure you can separate them in your mind and pay close attention to the language you use to describe your hunger.

You aren't STARVING so don't say it. Instead bring it down a notch and say what it is -- you are REALLY hungry. Okay, we get it. STARVING says FIGHT OR FLIGHT and it sets up a panic inside. Watch your catastrophics and absolutes when describing your hunger. Watch your language. It matters a lot.

Based on my experience about 80 percent of those losing weight feel increased hunger compared to when they aren't losing weight. If you are losing weight as planned then you are probably feeling more hungry now than a few weeks ago--that is, if you are on a path toward weight-loss success. This is not always the case however. For some, because the foods are so water, volume and nutrient dense, it's all they can do meet their target calories for the day.

When you are hungry it's important to evaluate what type of hunger you're experiencing. Are you experiencing physical, emotional, sensory or habitual hunger? Start paying attention to what you are feeling.
The Protein-Vegetable Test

One trick to help you determine if you are physically hungry or if you are thinking about eating for reasons other than physical hunger is the protein-vegetable test.

The next time you are craving a sweet or salty snack, try this test to see if you are really physically hungry. Ask yourself if you would still want this snack if it were chicken breast (or some other lean protein) and carrots (or some other vegetable). If the answer is yes, why not go for the protein and vegetable to truly nourish that physical hunger? If the answer is no, then the hunger/craving you are experiencing is probably not a physical hunger in your stomach, but instead an emotional hunger.

Hunger as a Goal?

Hunger isn’t something you avoid. It’s something you seek. When you are experiencing hunger you have achieved your goal of shrinking your fat cells. Many like to describe their hunger pain as unwilling fat cells giving up their precious fat reserves. FAT CELLS HATE GIVING UP FAT! You are WINNING when you are hungry. You are NOT in danger of starving. It's just in-between-meals hunger. You can embrace your hunger—it means you are winning the war on fat loss.

If physical hunger is the pinnacle for determining when we should eat then what about fullness, also known as satiety?

Satiety – Eat More Food and Lose More Weight

Dr. Brian Wansink, author of “Mindless Eating: Why We Eat More Than We Think,” says our stomachs are bad at math but good at volume. What he’s saying is our stomachs don’t know if we’re eating 500 calories or 50 calories. But they do know if we’re eating a lot of volume. And if we’re eating a lot of volume (food and drink that takes up a lot of space) we’re likely to feel full sooner and before we’ve overeaten.

One of the reasons we want to consume most of our carbohydrates as fibrous vegetables is because they are bulky, have a high water concentration, they take up a lot of space and they are exceptionally low in calories. Okay, that was several reasons but we’re talking vegetables here—there’s always good things to say about them. When we eat fibrous vegetables we feel full before we overeat.
One of the reasons we want to consume some protein with each meal is because proteins have a tendency to increase satiety better than carbohydrates or fats.

One of the reasons we want to drink a water with each meal is because it increases the volume of the foods we've ingested giving a faster sense of satiety.

Dr. Barbara Rolls, author of “Volumetrics,” agrees. Her books in the “volumetrics” brand all have to do with filling up faster and staying full longer based on volume. Don't buy her books expecting a miracle though. I'll save you the trouble. Guess what foods she recommends the most? The ones we recommend at LL University—mostly vegetables for carbs, some protein and healthy fats at each meal with lots and lots of water. One of the selling points of Volumetrics or the LL University nutrition plan is this …

**You get to eat more (volume)—not less—than you do when you're fat, while still slimming down.**

Also, even though you may have just finished your last bite at a feeding it takes up to 20 minutes for the brain to receive the neurotransmitters and hormones telling it to let go of the hunger signal transmission it's been sending for the past hour or so. In other words there is a delay between when you finish eating and when your brain GETS IT.

So it makes a lot of sense to:

1. Eat slowly and mindfully. Sit at a real table made for eating. Turn off the outside distractions. Actually notice what the food tastes and feels like in your mouth. Be aware that you are actually eating. And stay in that moment. Chew your food slowly and more completely than you are used to.

2. Stop eating when you are satisfied but before you are “full” and give your brain 10-20 minutes to realize you are full.

**Your Mileage May Vary**

1. Feeling full quickly is no guarantee the fullness will last
2. Different combinations of foods and macronutrients affect people differently.

If per-meal satiation was the only thing to consider we could just eat massive salads for every meal and be just fine. We’d feel full quickly, the calories would be almost zilch and we’d lose weight as fast as is humanly possible. But we’ve all experienced eating a big-salad meal with only vegetables and sure, most of us will feel full quickly, but an hour later we’re ravenous again. Adding some protein and healthy fats like olive oil, avocado, fish oil, a few nuts or coconut oil can help ensure the fullness is sustained appropriately between meals.

Everyone responds differently to different combinations of macronutrients and food types. Even two people of equal size and gender will differ in what “fills them up” and for how long.

I’ll share a personal example to provide some clarity. A breakfast consisting of a generous portion of egg whites, one whole egg and two cups of vegetables not only doesn’t fill me up quickly but I’m usually very hungry an hour or two later. However, if I add even one-half cup of oatmeal (150 calories) on the side to this same breakfast I feel almost “stuffed” and do not feel the need to eat for four or more hours.
The same holds true with a dinner-time meal for me. I can easily eat 8-ounces of boneless, skinless chicken thighs and 1.5 cups of vegetables. I’ll be satisfied with the meal when I finish it, however I’ll feel hungry again within two hours even though the caloric value of the thighs alone tops 470 calories! But if I add either one-half cup of brown rice or one-half cup of potato to the same meal I not only feel much fuller right away I’m satisfied for hours longer even though, again, the additional calories are 150 or less.

I can take the same meal I just described and instead of just having chicken thighs and 1.5 cups of vegetables if I also add 2 cups of mixed greens (negligible calories) and two whole eggs (150 calories) making it into a chef salad I am quite satisfied when I finish it. I have no problem waiting four or more hours to eat again. Small but specific changes make a difference.

Volume matters a lot but so does the specific combination of carbohydrates, proteins and fats. Beyond macronutrients feeling satisfied at the end of a meal and feeling satisfied for hours after goes beyond simply measuring carbs, proteins and fats per meal – the individual foods themselves with their thousands of chemicals beyond carbs, proteins and fats also contribute greatly to whether we feel satisfied at the meal and whether we continue to feel satisfied for hours after.

To feel more satisfied at the meal and for hours after I recommend you do the following:

1. Choose big volume foods with few calories
2. Drink and add water for volume
3. Ensure most meals have some quality protein
4. Include some healthy fat either naturally occurring in the protein or added from sources mentioned
5. Track your satiety and play with specific food and macronutrient combinations to see what foods satisfy you the best at the meal and keep you satisfied for hours after.

I recommend you track satiety and see what food and macronutrient combinations seem to work the best FOR YOU. What works for you may not work for me or someone else but as a whole the principles of satiety discussed in this chapter can be adapted into your lifestyle for optimal satiation and weight-loss results.