



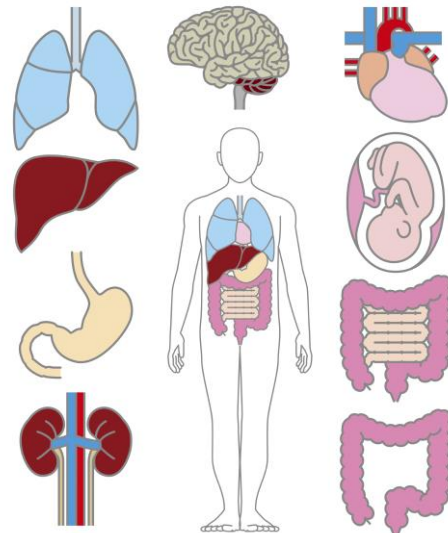
Enjoy this excerpt from chapter one of Dr. Karen's book **Is Your Life Style Killing You? The 8 Simple Steps for Lasting Weight Loss and Optimal Health**. You can get a copy of the book, [HERE](#).

Brain Chemistry and Cravings

There are many problems that may arise from chemical imbalances in the brain. One that is less often recognized and most often lived is the development of cravings. I'd like to spend some time discussing cravings in light of brain chemistry and chemical imbalance.

Many different lifestyle factors contribute to cravings. This is brain chemistry in action because a brain chemistry imbalance is often signaled by a craving. In other words, the body detects it is lacking something and sends a signal to alert the body to fill that need.

Ideally, the body should be able to detect the need, send the signal, fulfill the need (often in the form of food), and satisfy the craving. The simplest example might be water. Have you ever craved water? When we exercise or spend time in the sun, our bodies need more water to compensate for the loss of water through exertion or heat. Our bodies will cause us to crave water to ensure that the need is filled.



Unfortunately, when our bodies experience imbalances in the bio-chemistry of the brain, the system of craving can work against us rather than in our favor.

[\[Read Dr. Karen's Blog- Your Brain's Silent Killer – Sugar\]](#)

The Unsweetened Facts behind our Craving Nation

If we are out of balance, what we crave can keep us further out of balance. I experience this often in my own life. When I travel, am sleep-deprived, and working long hours, I notice my

cravings creeping back. (They certainly aren't cravings for broccoli and green beans). The stress of travel triggers my sugar cravings.

Eating my favorite sugar, black licorice, would not be the healthiest action for me to take to restore balance. Foods high in sugar do not restore balance, but create more imbalance by increasing blood sugar levels. The fact is, giving into my sugar cravings makes me feel worse. I suffer consequences of tiredness, lethargy, irritability, and lack of concentration. I've learned to use that craving signal as a message to me to slow down and practice good self-care. The chart below is an example of how our blood sugar affects so many aspects of our lives.

I use this chart all the time as a barometer of how balanced I am.

Balancing Blood Sugar	
Balanced Blood Sugar	Unbalanced Blood Sugar
Energetic	Tired all the time
Tired when appropriate	Tired for no reason
Focused and relaxed	Restless, can't keep still
Clear	Confused
Having a good memory	Having trouble remembering
Able to concentrate	Having trouble concentrating
Can solve problems effectively	Easily frustrated
Easygoing	More irritable than usual
Even-tempered	Getting angry unexpectedly

Addressing Brain Chemistry to Improve Health

[\[Watch Dr. Karen's Video- Your Gut has a Mind of Its Own\]](#)

When you recognize an imbalance, it is possible to use food and supplementation safely to support the increase of specific neurotransmitters and restore balance. Our brains use more than a dozen neurotransmitters, but we'll focus on one that I talk about all the time.

It has a powerful effect on our moods and behavior and can be manipulated by daily behavior. It is serotonin.

Serotonin: What It Does

Serotonin is one of the relaxing chemicals in the brain. People with sufficient serotonin levels experience happiness with themselves and their surroundings. They feel appreciation, confidence, and a general sense of well-being and contentment.



When serotonin levels are low, you may feel depressed, act impulsively, and have intense cravings for alcohol, sweets, or carbohydrates. You may feel unsatisfied if starch is not part of your meal and you may struggle more than others if you attempt a low carbohydrate diet. This may trigger a depression that can manifest may result in weight gain, insatiable cravings for carbs, and/or a general pessimistic attitude.

Serotonin Level Effects	
Optimal Level of Serotonin	Low Level of Serotonin
Hopeful, optimistic	Depressed
Reflective and thoughtful	Impulsive
Able to concentrate	Having short attention span
Creative, focused	Blocked, scattered
Able to think things through	Flying off the handle
Able to seek help	Suicidal
Responsive	Reactive
Looking forward to dessert without an emotional charge	Craving sweets
Hungry for a variety of different foods	Craving mostly carbohydrates like bread, pasta and cereal

How Food Affects Serotonin Levels

Serotonin is made from the amino acid tryptophan. Tryptophan comes from the protein you eat during the day. But having tryptophan available to make serotonin requires more than simply eating foods that contain it.



[\[Read Dr. Karen's Blog -Calories Are Not Equal\]](#)

Dr. Kathleen DesMaisons, Ph.D. is the one who first who alerted me to the powerful role serotonin plays in cravings. Her work has made a huge impact on my life personally and professionally. I highly recommend her book *Potatoes Not Prozac*. She is a colleague and a friend, and she is so masterful at explaining how eating the right food at the right time can balance your neurochemistry. With her permission, I have an excerpt from her book, *Potatoes Not Prozac*, to explain a very important way food affects serotonin levels.

After you eat protein, your body breaks it down into different amino acids. These amino acids travel to the brain in your bloodstream, but they cannot immediately enter your brain cells because there is a blood-brain barrier that controls what can enter your brain cells.

Tryptophan swims up to the blood-brain barrier with all the other amino acids. But there are far fewer tryptophan molecules than these other amino

acid molecules. In fact, tryptophan is outnumbered and loses out in the competition to cross the brain cell blood-brain barrier. Think of tryptophan as a runt that gets left behind in the shuffle. This means that eating protein with high levels of tryptophan alone won't work. The runt needs help!

Your body has a special way to help this runt get across the blood-brain barrier. When the body releases insulin, the insulin seeks out amino acids to use for building muscle. But insulin is not interested in our runt (tryptophan). It wants only the big guys. So, it carries off the other amino acids to other parts of the body where muscle can be found, leaving little tryptophan behind.

This is good, for now tryptophan can hop across the blood-brain barrier and be put to use making serotonin. And more serotonin makes you feel better (pages 144-145).

Naturally Increase Serotonin Levels

[\[Read Dr. Karen's Blog- Got Sugar Cravings?\]](#)

Modern living takes a costly toll on our health. Irregular sleep patterns, processed foods, a sedentary lifestyle, even the air we breathe are serious factors in the depletion of the body's serotonin system. Under stress, serotonin levels can plummet, so the body starts to crave simple carbohydrates to give us a boost of insulin.

Isn't it amazing that our daily activities create changes in our neurochemistry? Walking in the park or in nature, stretching exercises, gentle yoga poses, reading and meditation can promote the production of serotonin.

The feeling from these kinds of activities are peaceful, quieting, reflective, and meditative. At the same time, your inner emotional state is elevated by the increasing levels of serotonin being produced. Thus you have set up a positive cycle in which exercise or relaxation boosts serotonin, and this serotonin boosts mood.

Here are some of my favorite serotonin-boosting foods:

Dr. Karen's favorite serotonin-boosting foods

- | | |
|--------------------------|------------------|
| ✓ Nuts | ✓ Egg whites |
| ✓ Grilled chicken breast | ✓ Tuna |
| ✓ Peanut butter | ✓ Turkey |
| ✓ Greek yogurt | ✓ Cottage cheese |
| ✓ Quinoa | ✓ Salmon |



Resources from Dr. Karen

[*Is Your Lifestyle Killing you?*](#) by Dr. Karen Wolfe

[Karen's Kitchen videos](#)

[TOP 5 SUGAR BUSTER MUST HAVES](#) recommended by Dr. Karen Wolfe

Resources recommended by Dr. Karen

[*A Course In Weight Loss: 21 Spiritual Lessons for Surrendering Your Weight Forever*](#) by Marianne Williamson

[*The Craving Brain*](#) by Ronald Ruden M.D., Ph.D.

[*Low Glycemic Meals in Minutes Cookbook*](#) by Laura Kalina and Cheryl Christain

[*Natural Prozac: Learning to Release Your Body's Own Anti-Depressants*](#) by Joel Robertson

[*The New Glucose Revolution – The Authoritative Guide to The Glycemic Index*](#) by Dr Jennie Brand-Miller and Dr Thomas Wolever

[*Potatoes Not Prozac*](#) by Kathleen Desmaisons

[*Why Weight*](#) by Geneen Roth

[*Women, Food and God*](#) by Geneen Roth