

Chapter 16: Find Out if Your Hormones Are Imbalanced

A Quiz to Find Out if Your Hormones Are Imbalanced

Answer each question for each one of the sections below. Each section represents a different hormone imbalance that may affect your ability to lose weight. After each question, check the answer **always**, **sometimes** or **never** as it pertains to you. At the end of the quiz, I will show you how to score your answers and determine the best way to personalize your program. If you don't want to write in the book, go to my website, www.DrAliciaStanton.com and download a copy of the quiz you can write on.

Part A	Always	Sometimes	Never
I am often anxious and irritable	_____	_____	_____
I am often depressed	_____	_____	_____
I have a hard time falling asleep	_____	_____	_____
I have breast pain and/or fibrocystic breast disease	_____	_____	_____
I have a heavy menses	_____	_____	_____
My menses are irregular	_____	_____	_____
I have a history of low thyroid	_____	_____	_____
I have a lot of stress in my life	_____	_____	_____
I have cervical dysplasia/abnormal Pap smears	_____	_____	_____
I am depressed or anxious	_____	_____	_____
I have gained weight in my abdomen, hips and thighs	_____	_____	_____
I often retain water	_____	_____	_____
I have uterine fibroids	_____	_____	_____
I am often fatigued	_____	_____	_____
My diet is low in fiber	_____	_____	_____
I have heart palpitations	_____	_____	_____

Part B	Always	Sometimes	Never
My skin is thinner and has more wrinkles	_____	_____	_____
My breasts have gotten smaller	_____	_____	_____
I have urinary incontinence	_____	_____	_____
My sex drive is decreased	_____	_____	_____
My skin is oilier and/or I have acne	_____	_____	_____
I am gaining belly fat	_____	_____	_____
I have vaginal dryness	_____	_____	_____
My memory is decreasing	_____	_____	_____
It is harder for me to stay asleep	_____	_____	_____
I am getting more urinary tract infections	_____	_____	_____
My bone density is lower and/or eye of osteoporosis	_____	_____	_____
I am a smoker	_____	_____	_____

Part C

Always

Sometimes

Never

I am losing muscle mass even though I eat enough protein

I am gaining weight

I feel fatigue and low energy

My self-confidence isn't what it used to be

My sex drive is low

I feel depressed

I have muscle and joint pain

My skin is thin and dry

I feel anxious

My cholesterol is high

I have low bone mass and/or osteoporosis

Part D

Always

Sometimes

Never

It is easy for me to catch colds

I am often irritable

I feel tired but wired

I crave sugar and sweets

It is hard for me to wind down and fall asleep at night

It is difficult for me to concentrate

It is easy for me to binge eat

I have night sweats

I am adding belly fat

I often feel stressed

My blood pressure is high

I have high cholesterol

My blood sugar is high

I am gaining weight

My skin bruises more easily

Part E

Always

Sometimes

Never

I had exhausted no matter how much I sleep

It is very difficult for me to wake up in the morning

I'm a disaster without caffeine in the morning

I get very sleepy at 3 or 4 clock in the afternoon

I have digestive problems like diarrhea or constipation

I have low sexual interest

I get panic attacks or startle easily

I have slightly hands and feet when I'm nervous

I have mood swings

I am easily overwhelmed

I often feel weak or shaky	_____	_____	_____
Bright light seems to bother me	_____	_____	_____
I often wake up in the middle the night	_____	_____	_____
I get very cranky and shaky in between meals	_____	_____	_____
It is very difficult to focus or concentrate	_____	_____	_____
I don't have any motivation	_____	_____	_____

Part F

Always Sometimes Never

I am depressed	_____	_____	_____
I had gained weight and it is difficult to lose it	_____	_____	_____
I am often constipated	_____	_____	_____
My skin is rough and dry	_____	_____	_____
Menses are irregular	_____	_____	_____
I am losing my hair	_____	_____	_____
The outer third of my eyebrow has thinned out	_____	_____	_____
I have muscle and joint pain/morning stiffness	_____	_____	_____
My memory is poor	_____	_____	_____
It is difficult to concentrate	_____	_____	_____
My face is puffy and eyelids are often swollen	_____	_____	_____
My hands and feet are often swollen	_____	_____	_____
My hands and feet are cold	_____	_____	_____
I am very tired	_____	_____	_____
I have a family history of thyroid problems	_____	_____	_____
My voice is hoarse	_____	_____	_____
I have carpal tunnel syndrome	_____	_____	_____
I have an autoimmune disease	_____	_____	_____
My body temperature is low	_____	_____	_____

Part G

Always Sometimes Never

I crave sugar and carbohydrates	_____	_____	_____
I skip breakfast	_____	_____	_____
I eat within 2 hours of going to bed	_____	_____	_____
I eat fewer than 3 times a day	_____	_____	_____
I eat high fructose corn syrup/process foods	_____	_____	_____
I get less than 8 hours of sleep at night	_____	_____	_____
I eat fewer than 5 servings of fruits and vegetables a day	_____	_____	_____
I eat less than 30 g of fiber a day	_____	_____	_____
I eat very little fat	_____	_____	_____

Part H

Always Sometimes Never

I have gained weight	_____	_____	_____
I have increased belly fat	_____	_____	_____
I crave sweets then "crash" about an hour after I eat them	_____	_____	_____
I get irritable and jittery between meals	_____	_____	_____
I eat very little fat	_____	_____	_____

Once I start eating sweets, bread or pasta, I can't stop	_____	_____	_____
I can't resist the bread basket	_____	_____	_____
It's difficult to concentrate	_____	_____	_____
I'm calmer after eat	_____	_____	_____
I get tired after eat	_____	_____	_____
I am often very tired	_____	_____	_____
I have a history of polycystic ovarian syndrome	_____	_____	_____
I have high blood pressure	_____	_____	_____
I have chronic yeast infections/jock itch	_____	_____	_____
I am often thirsty	_____	_____	_____
I have high cholesterol	_____	_____	_____
I have high blood sugar	_____	_____	_____

Part I

Always

Sometimes

Never

I have a history of chronic infections (canker sores, cold sores)	_____	_____	_____
I am exposed to pesticides and or toxic chemicals	_____	_____	_____
I am exposed to heavy metals (machinist, dental office)	_____	_____	_____
I get frequent colds and infections	_____	_____	_____
I have asthma or sinus problems	_____	_____	_____
I have environmental or seasonal allergies	_____	_____	_____
I have skin irritations like eczema or rashes	_____	_____	_____
I have arthritis	_____	_____	_____
I have an autoimmune disease	_____	_____	_____
I have irritable bowel syndrome	_____	_____	_____
I exercise less than 30 minutes 3 times a week	_____	_____	_____
I have food allergies	_____	_____	_____
I have a great deal of stress in my life	_____	_____	_____
I am overweight	_____	_____	_____
I am sensitive to perfumes and smoke	_____	_____	_____
I use tobacco products	_____	_____	_____
Someone in my home uses tobacco products	_____	_____	_____
I take prescription medications	_____	_____	_____
I eat less than 5 servings of fruits and vegetables a day	_____	_____	_____

Part J

Always

Sometimes

Never

I am constipated	_____	_____	_____
I have mercury amalgams in my mouth	_____	_____	_____
I eat swordfish, tuna or shark more than once a week	_____	_____	_____
I urinate small amounts of urine only a few times a day	_____	_____	_____
I have fibromyalgia	_____	_____	_____
I drink tap/well water	_____	_____	_____
My clothes are dry cleaned	_____	_____	_____
I live in an urban or industrial area	_____	_____	_____
I have had elevated liver enzymes	_____	_____	_____
I have had jaundice (turned yellow)	_____	_____	_____
I have a history of hepatitis	_____	_____	_____

I am bothered by perfumes, strong odors, smoke, etc.	_____	_____	_____
I regularly take Tylenol	_____	_____	_____
I regularly take acid blocking drugs (Zantac, Pepcid, etc.)	_____	_____	_____
I regularly take birth control pills or hormones	_____	_____	_____
I regularly take ibuprofen or naproxen	_____	_____	_____
I regularly take medications for chronic headaches	_____	_____	_____
I regularly take medications for allergy symptoms	_____	_____	_____
I regularly take medications for diarrhea	_____	_____	_____
I have food sensitivities	_____	_____	_____
I am often tired	_____	_____	_____
I have chronic headaches	_____	_____	_____
I have muscle aches	_____	_____	_____

Scoring your quiz

For each question, score yourself **0 points** for each “never”, **2 points** for each “sometimes” and **4 points** for each “always”. At the total number of points for each part so you can determine the areas were you need to most work. I will give you suggestions and what your next step should be based on the number points you score in each part.

Part A - low progesterone/estrogen excess

Score: _____

0-20: You were doing well! Follow the 7 principles of the diet to maintain your balance

22-42: There are definitely some concerns. Consider hormone testing to determine which of your hormones are out of balance. Focus on Principle #3 in chapter 7.

44+: There is a hormone imbalance between estrogen and progesterone which is creating a number of symptoms and will make it difficult for you to lose weight. You would definitely benefit from working with physician who specializes in hormones and balance, considering hormone testing, closely adhering to the 7 principles and considering supplementation or hormone therapy, if indicated.

Part B – low estrogen

Score: _____

0-14: You were doing well! Follow the 7 principles of the diet to maintain your balance

16-30: There are definitely some concerns. Consider hormone testing to determine which of your hormones are out of balance. Focus on Principle #3 in chapter 7.

32+: There is a hormone imbalance due to low estrogen. One of estrogens functions is to help you metabolism, so low estrogen might make it difficult for you to lose weight.

You would definite benefit from working with a physician who specializes in hormone imbalance, considering hormone testing, closely adhering to the 7 principles and considering supplementation or hormone therapy, if indicated.

Part C - low testosterone

Score: _____

0-12: You were doing well! Follow the 7 principles of the diet to maintain your balance

14-26: There are definitely some concerns. Consider hormone testing to determine which of your hormones are out of balance. Focus on Principle #3 in chapter 7. Also, exercise and stress reduction are known to increase testosterone naturally.

28+: You're definitely showing signs of low testosterone which is creating a number of symptoms and will make it difficult for you to lose weight. I recommend that you find a physician who will work with you to evaluate your testosterone. You would benefit from hormone testing, closely adhering to the 7 principles and considering supplementation or hormone therapy, if indicated.

Part D - elevated cortisol

Score: _____

0-18: You currently don't show a lot of signs of high cortisol. This is either because your cortisol is balanced, or it may be too low. We can interpret this based on your symptoms and the results of Part E.

20-36: You're showing some signs elevated cortisol which will make it much more difficult for you to lose weight. Focus on principle 4 in chapter 8 and action plans in chapter 17.

38+: You're very stressed! If you don't feel that you are emotionally stressed, there may be a hidden cortisol demand such as a food allergy or chronic infection. It will be extremely difficult, if not impossible, for you to lose weight with an elevated cortisol level. I recommend that you work with a physician who specializes in hormone imbalances, consider a 4 point salivary cortisol test with DHEA level (see reference section for test) to see exactly what your adrenal function is. Focus on the stress reduction plans in chapter 17, make sure you've enough sleep and consider supplementation.

Part E - low cortisol**Score: _____**

0-20: You're not currently showing signs of low cortisol. This is either because your cortisol is balanced, or it may be too high. We can interpret this based in your symptoms and the results of Part D.

22-42: You showing some signs and symptoms of low cortisol, or adrenal fatigue. It will be more difficult to lose weight because your body has been stressed for such a long time that the metabolism is slower. Focus on the adrenal fatigue section in chapter 17.

44+: You're showing signs of low cortisol or adrenal fatigue. I bet that you're really exhausted and having difficulty losing weight. I recommend he do a 4 point cortisol test and DHEA level to see how your adrenal function is (see reference section for testing recommendations). If you also show signs of low thyroid, make sure your adrenal glands are stable before you start any thyroid replacement. When you have low cortisol, you may not tolerate thyroid replacement well until your adrenal function has improved. Focus on adrenal fatigue section in chapter 17 and find a physician who can help you with supplementation of possible hormone therapy.

Part F - low thyroid**Score: _____**

0-22: You currently don't have signs of low thyroid function. Follow the 7 principles to help you maintain optimal thyroid function.

24-48: You're showing some signs of low thyroid function. Because your thyroid is a closely tied your metabolism, it may be more difficult to lose weight. Thyroid is also closely tied to your cortisol levels, be sure to focus on stress reduction and information in chapters 8 and 17. You may want to consider asking her physician to order thyroid function testing and thyroid antibody testing (see the information at the end of the chapter)

50+: You may have a significant thyroid issue which will lower your metabolism and make it very difficult to lose weight. I recommend consulting a physician to have your thyroid function tests and thyroid antibody test done. You may also need to consider supplementation and thyroid therapy, if indicated. It's very important to remember that if you also have signs of low cortisol, you need to make sure that your cortisol levels and adrenal glands are stable prior to initiating any thyroid hormone therapy. If your cortisol levels are too low, you may not be able to tolerate thyroid therapy very well.

Part G - appetite regulation**Score: _____**

0-10: You're doing well! Continue to follow 7 principles to keep your appetite balanced.

12-22: If it is difficult to control your appetite, weight loss is more difficult. Focus on the information for Principle 6 (Evaluate How You Eat) in chapter 10 and the action plans in chapter 19.

24+: Appetite control may seriously hinder your ability to lose weight. Focus on chapter 10 and chapter 19. Also, I recommend you consult a physician and do some testing to determine if a hormone imbalance is causing your increased appetite. Consider a two-hour blood sugar and insulin test to see if you or metabolic syndrome.

Part H - high insulin**Score: _____**

0-20: Your insulin level appears to be stable. Continue to follow 7 principles to maintain a healthy insulin level and metabolism.

22-42: You're showing signs of high insulin and may already be insulin resistant. Pay close attention to the information on insulin resistance in chapter 1 and follow Principle 2 (Eat Right) in chapter 6 and the action plan in chapter 14. Because it's easier to take care of this if it's caught early, I recommend consulting a physician and checking a lipid profile, fasting blood sugar and fasting insulin test to check for insulin resistance.

44+: You're at high risk of being insulin resistant and may be prediabetic or diabetic at this point. In addition to following chapter 6 in chapter 14 closely, remember that stress and cortisol levels are also closely tied to insulin resistance. Also, inadequate sleep can contribute to insulin resistance. Focus on the information in chapter 17 to help with sleep and stress reduction. Consult with your physician and consider a lipid profile, fasting blood sugar, fasting insulin and a two-hour blood sugar and insulin test. You may also want to consider supplementation to enhance your insulin sensitivity as well.

Part I – Inflammation**Score: _____**

0-22: You're currently not showing significant signs of inflammation. Congratulations! Continue following the 7 principles to keep your body in balance and reduce risk of inflammation.

24-48: You're showing signs in general inflammation and may be at risk for more chronic diseases if the inflammation continues. This also makes it more difficult to lose weight. Insulin resistance, adrenal fatigue, food intolerances and chronic infections can all contribute to inflammation. You may want to consult a physician to help you address some of these potential causes of inflammation. You may also want to consider testing with highly sensitive C-reactive protein, homocysteine, complete blood count and vitamin D level to see what your level of inflammation is.

50+: You have signs of significant inflammation and, in addition to having difficulty losing weight, are at risk for a number of chronic diseases. Consult a physician to help you test for and address potential insulin resistance, adrenal fatigue, gluten and food intolerances, infection and toxin exposure. I recommend testing highly sensitive C-reactive protein, homocysteine, complete blood count, and vitamin D in addition to testing for insulin resistance. You should also consider supplementation with antioxidants and fish oils.

Part J – Detoxification

Score: _____

0-28: Your detoxification pathways appear to be functioning well. And, you're limiting your exposure to toxins. Keep up the good work!

30-58: You may have some symptoms of poor detoxification and a possible increase in exposure to toxins. Remember, toxins are stored in your fat so if you are not detoxifying well, it will be more difficult for you to lose fat. Focus on principle 1 (Eliminate Toxins) in chapter 5 and the action plan in chapter 13.

60+: You definitely have an increased exposure to toxins and a poor detoxification system. This will make it very difficult to lose weight. Also, since toxins are stored in fat, if you do lose fat, you will release the toxins and may not feel well. It is important to not only optimize your liver's ability to remove toxins but to reduce your exposure to toxins as well. Focus on elimination of toxins and the supplementation to enhance the function of your liver. Also, closely monitor your medications with your physician to make sure you're not adding undue stress to your liver.

Hormone Testing

We discussed the various types of hormone tests, including blood, urine, and saliva, in chapter 7. Because many of these symptoms may be due to imbalances in a number of different

hormones, it may be worthwhile to have your hormone levels checked to see exactly which ones are too high or too low. In the reference section, there are a few of the highest quality laboratories for hormone testing listed. I would encourage you to speak your physician regarding the evaluation of your hormone levels. If your physician is unable to help you with these types of tests, contact one of the laboratories in the reference section and they will be able to help you.

Other Tests That Could Save Your Life

I believe it is very important to know what your hormone levels are so you can determine if they are in appropriate balance or not. However, there are number of other tests that can help you determine if your health and metabolism are optimal. As you focus on the principles in this diet, you'll be able to watch the levels of your abnormal tests improve. These tests will help you know the function of your thyroid, liver and detoxification system, insulin and blood sugar control system, energy production and metabolism and to level of inflammation. You may download a copy of this list from my website, DrAliciaStanton.com, to take to your physician so the test can be ordered at your next physical exam.

Complete blood count

A complete blood count is one indicator of your general health. Your hemoglobin and hematocrit are measures related to your red blood cells and will tell your physician if you're anemic or not. The red blood cells carry oxygen and, if they are low, you may be fatigued. This test also looks at your white blood cell count. Your white blood cells are important to help you fight infection and can be elevated (or very low) during an infection. Your platelet level, another part of this test, is one way to measure how well your blood will clot. Elevated platelets can also be a sign of inflammation.

Lipid profile

Your lipid profile is another name for a cholesterol panel. We have become incredibly concerned as the country about our levels of cholesterol. We'll want to know what our cholesterol "number" is. We are taught by television commercials and the majority of the medical community that the higher your cholesterol, the more likely you are to have a heart attack or stroke. However, the reality is that 50% of heart attacks occur in people with cholesterol levels less than 200, which is considered normal. Many cholesterol abnormalities are caused by improper diet (refined carbohydrates, high fructose corn syrup, trans-fats) and hormone imbalance (low thyroid, low testosterone, high insulin).

Different functions of cholesterol include: Formation of hormones such as estrogen, progesterone, testosterone, DHEA and cortisol; production of bile salts to aid in food digestion; conversion to vitamin D and production of the membranes around all of our cells. Cholesterol must get transported throughout our body in the bloodstream by being bound to protein because it is not soluble in our blood. The danger to our arteries is not necessarily cholesterol, but oxidized cholesterol. Remember, oxidation is caused by free radicals and it is the same process as rust on metal. The real goal is for us to reduce the chance that we'll oxidize the cholesterol by limiting our exposure to free radicals and inflammation.

The protein that carries cholesterol to the cells and tissues is called low density lipoprotein or LDL. We also call this the "bad" cholesterol. The protein that carries the cholesterol back to the liver is called high density lipoprotein or HDL. This is known as the "good" cholesterol. The ratio of bad cholesterol to good cholesterol is a better indicator of your risk for heart disease than the level of total cholesterol. Many physicians focus on the ratio now more than the level of total cholesterol. You can improve your ratio by eliminating refined carbohydrates, high fructose corn syrup and trans-fats.

Another substance measured in the lipid panel is triglycerides. Triglycerides are composed of free fatty acids and a glycerol molecule and they are an excellent indirect measurement of insulin resistance. They are the chemical form in which most fat exists in the body. They're also a major component of very low density lipoprotein or VLDL and play an important role in metabolism as energy sources and transporters of dietary fat. Elevated triglycerides are associated with a high intake of refined carbohydrates and high fructose corn syrup. Remember, in chapter 1, we learned that excess sugar is converted into fat. In order to lower your triglyceride levels, eliminate refined carbohydrates, limit alcohol, increase your exercise and make sure you're getting enough omega-3 fatty acids from foods or supplementation.

Thyroid function tests

Thyroid function tests allow you to see how well your thyroid is working and, subsequently, how good your metabolism is. Many physicians look at only one measure of thyroid function, thyroid stimulating hormone or TSH. Thyroid-stimulating hormone (TSH) actually comes from the pituitary gland and your brain to stimulate your thyroid gland work. I often tell my patients that it is a measure of how hard your brain is yelling at your thyroid to work. So it is an indirect measure of how much thyroid hormone you actually have in your body. The higher the number is, the "louder" your brain is "yelling" at your thyroid to make thyroid hormone. Over the years, the upper limit of "normal" TSH is coming down. Doctors used to think that your thyroid was "borderline low" if the TSH was between 5.0 and 10.0. In 2001, the American College of Endocrinologists suggested that the upper level of normal TSH should be 3.0. However, most laboratories and many doctors still look at the upper level of normal as being 5.0. This means that many of us probably do not have optimal levels of thyroid hormone, you may even have symptoms of low thyroid, but because doctors are looking at the wrong reference ranges, you

were told that your testing is “normal” and a thyroid is “fine”. I like to see your TSH level between 1.0 and 2.0.

It is also very important for your physician to look at your free T3 and free T4 rather than total T3 or total T4. The total hormone levels represent the amount of hormone in that your blood whether it is bound to a protein (not active) or not bound to a protein (active). Free hormone levels are the best measure of active thyroid hormone in your blood. Your thyroid secretes mostly T4, which has some activity. However, your body converts much of the T4 to another hormone, T3, which has 5 times more activity. That means, the more T3 your body is able to make, the higher your metabolism and the easier it is to lose weight. Remember, stress, which causes high cortisol levels, significantly reduces your body's ability to convert T4 to T3. This is one of the reasons that it is hard to lose weight when you're stressed.

Thyroid antibody tests

Thyroid antibody tests look for antibodies against the thyroid created by your body in an autoimmune reaction. The antibodies can damage her thyroid and makes it harder for to work appropriately. I checked for thyroid antibodies in my patients at least once a year to make sure that they are not damaging their thyroid. If any my patients have antibodies against their thyroid, I suggest a gluten-free diet, fish oils and antioxidants to reduce inflammation in the body. Very often, these suggestions work, the thyroid antibodies are reduced, the thyroid works much better and their metabolism is increased.

Fasting blood sugar

Your fasting blood sugar is the measurement of your blood sugar first thing in the morning before you had anything to eat or drink. This is a good measure for your risk of diabetes. Please note that if you're insulin resistant, your fasting blood sugar may not yet be abnormal. But, you on a path towards diabetes and blood sugar elevation. You want your fasting blood sugar levels be less than 90 mg/dL.

Fasting insulin

Fasting insulin is the measurement of your insulin first thing in the morning before you had anything to eat or drink. It is a wonderful indicator for your risk of insulin resistance because it is going to be elevated long before your blood sugar rises as a result of diabetes. Elevated fasting insulin tells you that your body is not listening well enough to a normal level of insulin, that's becoming insulin resistant, so your body has to produce more of it. You can reduce your insulin level by limiting refined carbohydrates, high fructose corn syrup and sugars. You want

your fasting insulin level to be less than 8 mIU/ml.

Two-hour blood sugar and insulin test

A two-hour insulin and blood sugar test is an excellent way to measure for insulin resistance and metabolic syndrome. This test is done by measuring a response to a 75 gram load of sugar. Usually, in order to make the test consistent, there is a sugar drink you drink containing the 75 grams (which is actually about what you find in 2 cans of soda). If your insulin response is elevated after 2 hours, it means that your body is not listening as well to insulin and you need to produce a lot more than usual to keep your blood sugar stable. If your blood sugar response is elevated after 2 hours, it means that even with a higher level of insulin, you still can keep your blood sugar under control and you're at very high risk for diabetes. Your two-hour insulin level should be less than 30 mIU/ml and your two-hour blood sugar level should be less than 120 mg/dl.

Highly Sensitive C-reactive protein (hs-CRP)

Inflammation is felt to be a major contributor to many other diseases that we face now such as heart disease, diabetes, Alzheimer's and cancer. It is necessary an important part of your body's response to injury or infection. However, if left unchecked, chronic inflammation can create major problems for us. The highly sensitive C-reactive protein is one of the best markers we have to measure inflammation throughout our body. C-reactive protein is a protein produced by our liver in response inflammation. The normal level for highly sensitive C-reactive protein is less than 3.0. The optimal level is less than 1.0. It is important to know how much inflammation you have in your body. As you follow the principles of this diet, you will reduce your level of inflammation and should see this number come down. If your number is greater than 1.0, follow the principles of this diet and add 3000 mg of fish oils (EPA/DHA).

Homocysteine

Homocysteine is an amino acid found in the body and is involved in the production of the amino acid cysteine. However, this reaction depends heavily on some of the B vitamins (folic acid or B9, B6 and B12), and if there are deficiencies in these vitamins, homocysteine levels can be elevated. High homocysteine levels have been associated with an increased risk of cardiovascular disease and fractures in elderly. Since B vitamins are also incredibly important for optimal metabolism, monitoring your homocysteine level is a good way to make sure your B vitamin levels are adequate and your risk for heart disease and fractures is low. I like to see the homocysteine level less than 7.0.

Vitamin D

Vitamin D is a fat-soluble vitamin that has been found to have many functions including increased absorption of calcium and phosphorus to help with bone mineralization. Vitamin D deficiency is also been implicated in early 16 varieties of cancer in many diseases such as heart disease, diabetes, depression and osteoporosis. Since vitamin D also helps the pancreas release insulin, adequate vitamin D levels are helpful weight loss. I measure my patients vitamin D levels at least once a year and supplement with 2000-5000 IU per day depending on their levels. My goal is to have my patients reach a level of 25-hydroxyvitamin D between 50 and 80 ng/ml.

Table - Dr. Stanton's Recommended Optimal Laboratory Values

Thyroid stimulating hormone (TSH)	between 1.0 and 2.0
Free T3 and free T4	mid-range for the lab
Thyroid antibodies	negative
Fasting blood sugar	less than 90 mg/dl
Fasting insulin	less than 8 mIU/ml
Two-hour blood sugar test	less than 120 mg/dl
Two-hour insulin test	less than 30 mIU/ml
Highly sensitive C-reactive protein	less than 1.0
Homocysteine	less than 7.0
Vitamin D (25-hydroxy vitamin D)	50-80 ng/ml

The least you need to know:

Many symptoms of hormone imbalance overlap so it is often important to look at all the hormones to determine which ones are actually not balanced.

If you have high levels of inflammation, it is difficult to lose weight and you are at risk for chronic disease.

Detoxification is very important for weight loss and overall health. It is just as important to limit your exposure to toxins as it is to support your liver so it functions well.

There are many tests available to help determine if your metabolism is running well. Just because the test is in the "normal range", it doesn't mean it is in the optimal range.