

# Hidden Factors that Hinder Weight Loss

By Sara Bumgarner

4/5/04

According to NHANES (Nat'l Health and Nutrition Examination Survey) 64% of US adults are either overweight or obese. Over 300,000 US deaths a year are associated with obesity, making it now topple smoking as the #1 most preventable disease. There's hardly a day goes by that I don't have a customer tell me that they are REALLY dieting and exercising and REALLY working at trying to lose weight and it just isn't happening. Oh they may lose a few pounds, but their husbands or friends are doing the same thing and they're losing like crazy. What makes the difference?

In a word. Hormones. We know that our body's metabolism is primarily controlled by hormones. Hormones are chemical messengers produced by glands such as the thyroid that produces thyroid hormones, the adrenals that produce cortisol and adrenaline and others, the pituitary, the pancreas that secretes the hormone insulin, etc.<sup>1[1]</sup> Hormones help keep the body functioning properly, unless, of course, they are out of balance. Over the years we have found various imbalances in these glands that will hinder a person from losing weight. Things such as a sluggish thyroid, high cortisol levels, estrogen and progesterone imbalance, fatty liver, insulin resistance and so on. It seems whenever we correct these problems, then their efforts at losing weight work.

Not only that, but we feel better and become healthier as well. In addition, our body's ability to burn excess calories rather than store them plays a key role in weight loss. It's not simply a question of how much you eat or how little you exercise. It's a question of how effectively your body's systems use the calories that you ingest.<sup>2[2]</sup> Everytime I hear someone say weight loss is just a matter of taking in less calories than you burn, it frustrates me because I know there is so much more to it. Yes, for maybe 70% of people who are healthy and don't have endocrine problems, then I would say that's true. Most of those people aren't overweight anyway. Just think of the people you know who can eat as much as they want and not gain an ounce. More and more research is uncovering the reason why some people can't lose weight even though they are really trying.

These two books (Adrenal Fatigue and the Cortisol Connection) talk about how the adrenal glands producing high cortisol levels will not only hinder weight loss, but can actually put weight on even though you're not doing anything different.

These books, Before the Change, Creating and Maintaining Balance, and What Your Doctor/Premenopause, list the possible hormonal reasons for weight gain such as estrogen Dominance and/or Progesterone deficiency.

These books, Syndrome X and Combat Syndrome X, Y and Z talk about how insulin resistance, which is a precursor to Diabetes, can hinder weight loss.

---

<sup>1[1]</sup> Total Body Tune-up, Michael Murray, N.D.

<sup>2[2]</sup> Weight Loss, p 124

These three books, Cracking the Metabolic Code, Your Fat is Not Your Fault-Overcome Your Body's Resistance to Permanent Weight Loss, and ALT MED's Weight Loss list various combinations of these issues.

What I have done, is take the information from all of them plus information on body types, and the result is this questionnaire which should help us identify them all. By checking off the symptoms under the various categories, this questionnaire can help us determine if any of these issues are hindering your weight loss program. Then we can show you what supplements can help correct that and which diets work best for you. This is by far the most exciting new development in helping people lose weight that I've ever seen.

We also have Saliva Test Kits available that can determine your levels of these things too. So what I'm going to do today is briefly discuss as many as I can with the time I have available.

The first thing to keep in mind is that all of the body works together to create our current state of health. One faltering or overworked system impacts on another organ or system, which can then translate into a symptom or even a disease.

### **Adrenal Fatigue/High Cortisol**

One clear example of how this works is by looking at the first hormone I want to talk about and that is Cortisol, which is a result of stress. Chronic stress alters adrenal gland function. (The adrenal glands produce the stress hormones cortisol, adrenaline and noradrenaline.) Under stress, the adrenal glands produce more of these stress hormones which begins a disruptive chain reaction that impacts several organs and systems. Chronic stress depletes certain neurotransmitters in the brain, which can trigger **1)** carbohydrate cravings and eating binges. If this continues, it can lead to **2)** disturbed sleep patterns with an inability to "turn off" the day and fall asleep, which in turn can cause changes in the release of growth hormone.

Chronically elevated cortisol levels also **3)** decrease insulin sensitivity of receptor cells, reducing their ability to absorb glucose from the blood and thus **4)** increasing blood sugar. What happens to this extra sugar? **5)** It gets turned into fat and gets stored especially in the abdominal area. The extra sugar also **6)** raises cholesterol and triglycerides.

As cortisol continues to be elevated, it depletes DHEA which is responsible for production of our sex hormones and consequently our **7)** libido begins to decline. Not only that, but the adrenal glands use up progesterone to produce cortisol, thereby leading to a state of **8)** progesterone deficiency and/or estrogen dominance. Again, the result is weight gain. Low levels of DHEA also play a role in **9)** skin wrinkling, memory decline, and other aging processes, and **10)** depresses the immune system.

Finally with chronic cortisol elevation, **11)** changes in thyroid function begin to occur because the same protein, tyrosine, needed to make thyroid hormone is also needed to make cortisol therefore limiting the amount of thyroid hormone that can be produced.

This in turn lowers the body's metabolic rate and makes it even more difficult to lose weight.

This is how delicate and interdependent the balance of our body systems are and how any alteration in this balance can cause a chain of reactions that leads to a decline in health.<sup>3[3]</sup> You've probably all heard the commercials for CortiSlim, Relora or Relacore. These products are designed to help lower cortisol levels.

What is cortisol? Cortisol is a steroid hormone produced in the adrenal glands in response to stress. Stress can come from illness, injuries, trauma, accidents, surgeries, death of a loved one, moving, work related issues, money problems, divorce, marital conflict, trouble with children, chronic pain and on and on it goes. If you're a type A personality, if you experience road rage, if you are impatient, demanding, or if you worry a lot, then you probably have cortisol levels off the charts.

Cortisol levels can also be elevated by estrogen hormone therapy, exercise, pregnancy, depression, anxiety and by the intake of mild stimulants such as ephedra or caffeine (as little as two or three cups of coffee will elevate cortisol levels).<sup>4[4]</sup>

One of cortisol's many functions is that it stimulates the release of glucose, fats and amino acids for energy production in response to stress.

You've all heard of the "fight or flight" response to stress. If you were being attacked by a bear, you would want the fight or flight stress hormones to rush energy to the muscles to run or fight, and to the brain to be alert. You would want your pupils to dilate to let more light in so you can see better, and your heart to race and your airway passage to open up to help you respond to the danger. This is fine, in an emergency situation, but then when the danger is over, cortisol should go back to normal levels. However, a byproduct of modern living is constant and chronic stress which causes constant cortisol secretion, which causes weight gain. The reason weight gain happens is that cortisol causes the body to turn protein into glucose that the body can use for energy. This causes an increase in blood sugar levels. If the glucose is not needed for some action such as running, (ie if the boss jumps down your throat or you're stuck in traffic and late for a meeting, then you can't expend that extra energy) then the excess glucose causes insulin to be secreted which then stores all that glucose as fat-especially in the abdominal area. In the meantime, the protein came from the breakdown of muscle tissue which is more metabolically active than fat meaning it burns more calories. But now, we have more fat and less muscle, thanks to cortisol.<sup>5[5]</sup> All without eating a bite of food.

Another thing cortisol does is cause food cravings because you used up all your stored energy and now your body wants to get more in reserves. So you crave high-fat, high-sugar foods which act as a temporary mood 'boost' by stimulating the release of insulin. If you remember nothing else, remember this, that insulin is a fat storing hormone par

---

<sup>3[3]</sup> Cracking the Metabolic Code, James B. LaValle

<sup>4[4]</sup> The Cortisol Connection, Shawn Talbott, PhD

<sup>5[5]</sup> Cracking the Metabolic Code p 80

excellence. When it is released, it rushes all the fat and sugar calories into fat storage. Eventually, by over stimulating insulin release, the body becomes insulin resistant, and with more insulin resistance, more fat is stored than the body needs. This insulin resistance is commonly called Syndrome X or more recently is being called Metabolic Syndrome. We'll discuss it in more detail later. It is one of the Hidden Weight Gain Factors listed on the questionnaire.

So you can see that it is vitally important to support the adrenal glands, to do what you can to eliminate and reduce stress, and to keep cortisol levels to a minimum. How do we do that? OVERHEAD SENSEThe way to reduce cortisol supplement wise is with products like Relora, Relacore or CortiSlim, but that's not the whole picture. Stress depletes a number of nutrients so a high-quality multivitamin is crucial in the program. There are also a number of wonderful supplements that not only reduce cortisol but also nourish and support the adrenal glands that become exhausted from the stress. Theanine, Ginseng, Rhodiola, and Raw Adrenal are all valuable in reducing cortisol and its damaging effects.

## **Estrogen Dominance**

The next imbalance I want to address is what is termed "Estrogen Dominance". Anytime there is too much estrogen and not enough progesterone to counteract its effect, you have estrogen dominance. You men might think that you don't have to pay attention to this one but that is not true. This one is, however, a major player in the women, not only because it causes weight gain, especially in the hips and thighs, but it has been linked to a wide range of conditions, including PMS, uterine fibroids, endometriosis, fibrocystic breasts, headaches, infertility, and low libido, as well as breast, ovarian, and uterine cancer, and cervical dysplasia or Class III or abnormal pap smears.

In men, it causes low sperm count and infertility, enlarged prostate, but the latest research is now linking excessive estrogens in men to prostate cancer and testicular cancer.<sup>6[6]</sup> It also slows down the production of testosterone with resulting loss of muscle strength, stamina, sex drive<sup>7[7]</sup> excess body fat and depression.<sup>8[8]</sup>

## **Xenoestrogens**

You might ask, How does a man get excessive estrogen? For the most part, the same way women do. Through what is called xenoestrogens or xenohormones or environmental estrogens. We also call them hormone mimickers. Xenoestrogens are foreign substances with estrogenlike effects in the body. Xenoestrogens can mimic natural estrogen or block it at estrogen receptor sites on cells throughout the body.

---

<sup>6[6]</sup> Creating and Maintaining Balance, Holly Lucille, ND, Rn

<sup>7[7]</sup> Weight Loss, Burton Goldberg p231

<sup>8[8]</sup> All about DIM p 23

Hormones are like keys and receptor sites are like locks. We used to think that only one key worked for each lock, but now we know many keys can fit into the same lock.<sup>9[9]</sup>  
This can be good and it can be bad.

These artificial estrogens activate receptors to stimulate a hormonal effect AND/OR they can occupy the receptor and block natural hormones from doing their job, either way disrupting normal hormone function. Receptor sites on cells can be likened to parking spaces. If xenohormones get in that parking space, then they disrupt hormonal activity because they are much more potent than our own hormones, AND they keep our own hormones from getting in there and doing their job. They also may interfere with the actual manufacture of estrogen or decrease the rate of estrogen excretion from the body and cause a buildup of the hormone.

**What do they do when they get in there?** The main function of estrogens is to promote cell proliferation. For instance, they stimulate the lining of the uterus called the endometrium to produce more cells to prepare for a pregnancy. However, if left unchecked, it causes endometriosis which is an uncontrolled reproduction of endometrial cells. More than 70 million women and girls worldwide have this condition which can result in very painful periods, infertility and endometrial cancer.<sup>10[10]</sup>

Xenoestrogens also affect the cells' ability to take up thyroid hormones, resulting in symptoms of low thyroid even though blood tests indicate you are not low in thyroid hormone.<sup>11[11]</sup> And you aren't. It's just that those thyroid hormones aren't getting in the cell and doing their job. The result is weight gain and inability to lose weight.

And it results in estrogen dominance which carries with it all the problems I mentioned earlier.

**Where do we get these xenohormones?** (Overhead) They are everywhere-in the air we breathe, the water we drink, the foods we eat and all the creams and lotions and perfumes we slather our bodies with. Most xenoestrogens are derived from petrochemicals and include pesticides, industrial chemicals such as PCBs and dioxins, cleaners, plastics (water bottles, food containers) nail polish and remover, solvents and adhesives, car exhaust and even from preservatives in cosmetics and lotions and shampoos etc called methyl and propyl parabens.

The way we get them in our food is by eating meat from livestock fed estrogenic drugs to fatten them up and likewise with dairy products to make them produce more milk.

The way we get them in our water is two-fold. All the women using birth control pills and hormone replacement therapy excrete the hormones in their urine and the waste water treatment plants apparently are not able to remove it all. There are now detectable

---

<sup>9[9]</sup> Creating and Maintaining Balance, p 7

<sup>10[10]</sup> Creating and Maintaining Balance p76

<sup>11[11]</sup> Super Nutrition for Menopause, Ann Louise Gittleman. Weight Loss p.211

amounts of hormones in our water supply. So tap water is out of the question, however, it is also in plastics, so if you drink bottled water, you're also getting them.

### **Other ways to become estrogen dominant**

If xenoestrogens aren't bad enough, there is another factor that can cause estrogen dominance. Estrogen can be broken down into two pathways one of which is good and one is BAD. When it converts to the good estrogen metabolites, then we have all the benefits of estrogen and none of the bad. However, if it converts to the bad estrogen metabolites, then it causes all the bad and none of the good. So it's very important for estrogen to be metabolized correctly and we'll talk about how you can make sure of that in a minute.

On top of all this, women also get excessive estrogen through synthetic hormones in HRP and Birth Control Pills. anovulation, digestive problems, stress, poor diet and emotional issues are other ways to become estrogen dominant. An interesting side note is that Oriental women have 1/10<sup>th</sup> the rate of breast cancer as American women do. However, if they come here and are raised here, they have the same rate. Takes away the genetic factor.<sup>12[12]</sup>

### **What can we do to get away from them and get rid of them?**

We absolutely MUST do everything we can to reduce these xenoestrogens from our lives as much as possible. You can't get away from them all, but the effects are cumulative over a lifetime and therefore, anything that you can do from now on will make a difference.

There are at least 4 things we can do to get our hormones back in balance.

#### **1. Avoid xenoestrogens**

1. Drastically decrease reliance on pesticides of all sorts, including lawn and garden sprays as well as for bugs inside the house.
2. Eliminate or decrease consumption of meat and dairy products that have been fed estrogens. Use hormone-free meat and dairy products and buy organically grown food as much as possible.
3. Avoid exposure to solvents, 4. Avoid all synthetic hormones, such as Premarin, Provera, Birth control pills and spermicides.
5. Avoid drycleaning and plastic clothing like polyester.
6. Choose wood or stone tile floors rather than carpets. The glues and solvents in the backing of carpets emit toxic molecules for several years. For the same reason avoid particle board and fake wood paneling.
7. Don't drink or eat out of plastic containers. Again, bottled water in plastic bottles is no good. The obvious solution to this problem is to buy a reverse osmosis water filter for your home. Even if you buy water that is RO, if you store them in plastic you're not getting away from them. As much as is possible, I carry my own water from my own RO filter in a glass bottle. I try to store my food in glass with plastic lids, but at least the

---

<sup>12[12]</sup> Your Health, Dr. Becker

plastic isn't touching the food. I never microwave anything in plastic or use plastic wrap over the food. Use wax paper or paper towels. While I'm at it, never drink hot or acidic liquids, or really anything for that matter, out of Styrofoam. Within 15 minutes of drinking hot or acidic liquids out of Styrofoam, they can pick up measurable amounts of the styrene chemical in your blood.

8. Choose shampoos, cosmetics, lotions and soaps made without petrochemicals and the preservatives methylparaben and propylparaben. The parabens have definite estrogenic affects.

9. Don't use air fresheners, fabric softeners and scented laundry soaps. Try to use chemical free soaps.

These are all steps you can take to reduce the amount of xenoestrogens from getting in your body, but there are also supplements that can help the liver detoxify excess estrogen and get rid of it, and also make sure the estrogen follows the good pathway of metabolism.

## **2. Assist the liver in removing excess estrogen**

The liver rids the body of excess hormones by secreting chemicals such as glucuronic acid to disarm them so they can be eliminated. However, a poor diet that has too much sugar and red meat can cause the release of a bacterial enzyme known as beta-glucuronidase. This enzyme inhibits glucuronic acid from rendering the excess hormone harmless and allows it to continue circulating in your body.

Gee, it seems we can't win for losing. But not to fear, because there are compounds in nature to come to our rescue.

**Calcium d-glucurate**, found in many fruits, and vegetables including grapefruit, apples, oranges, broccoli and Brussels spouts, slow the release of the enzyme glucuronidase. Results of studies show this compound to have preventive and therapeutic activity against a number of cancers, including breast, liver, prostate, and colon. Researchers have demonstrated that calcium D-glucarate contributes to healthy cell development and estrogen metabolism.

**Rosemary** has been shown to increase liver enzymes that deactivate xenoestrogens.

**Sulforaphane**, a phytochemical also found in cruciferous and other vegetables is another aid. Drug companies are all over this one, trying to figure a way to alter it and patent it and sell it for breast cancer to the tune of \$6000. 00 a month.<sup>13[13]</sup>

We also have a product called **Choline/Inositol Complex** that helps the liver detoxify excess estrogen, whether your own natural, whether from synthetic hormones or xenoestrogen.

## **3. Assist estrogen metabolism**

---

<sup>13[13]</sup> Lecture by Lorna Vanderhague on Hormone Health, Anaheim Expo West 2004

You can find another natural estrogen detoxifier in the cruciferous vegetables such as broccoli, cauliflower, Brussels sprouts and cabbage. Known as Indole 3 Carbinol (I3C), this compound has OVER 500 clinical studies that have shown it can help the body detoxify excess estrogens. It is converted in the body into DIM and it helps ensure that estrogen follows the good pathway of metabolism.<sup>14[14]</sup> This in turn can “free up” Testosterone thereby improving libido. Healthy estrogen metabolism also combines with exercise to support a more active fat-burning metabolism. The ‘good’ estrogen metabolites resulting from taking DIM assists the specific fat-burning hormones, called catecholamines, that are produced during exercise to release stored fat. Basically the good estrogen metabolites help fat cells release more fat.<sup>15[15]</sup>

#### **4. Supplement with beneficial estrogens**

Not all estrogens are bad though. Our bodies require this hormone for proper functioning, but it should be the estrogen naturally created in our bodies, and it should be present in proper proportion with progesterone. Balance is the key. There are also “good” estrogens, namely those from plants called phytoestrogens. These beneficial estrogens can act as allies in reinstating or maintaining hormone balance.

Phytoestrogens are plant-based substances with weak estrogenic activity. They are considered hormone balancers because they have both mild estrogenic and antiestrogenic effects. They can compete with the more potent xenoestrogens by vying for receptor sites on cells. They get in those parking places instead of the bad ones thereby limiting the activity of the more potent xeno as well as natural estrogens. They provide a balancing effect based on what the body needs. If there is too much estrogen, phytoestrogens will block estrogenic activity. If the body does not have enough estrogen, they will provide mild estrogenic activity.

Phytoestrogens can be found in foods including flaxseeds, soybeans, lentils, chickpeas, fennel, celery and parsley. They are also in herbs like Vitex or chaste tree berry, dong quai, red clover, black cohosh, wild yam and others.

#### **5. Increase Fiber**

#### **6. Take a multivitamin**

### **SYNDROME X**

We’ve already talked about Syndrome X being one of the results of too much cortisol, but I’d like to talk more in detail about it and what you can do to reverse it, aside from getting cortisol down. Because you can have Syndrome X and not have high cortisol. Syndrome X is also called Metabolic Syndrome and has at its core, what we call insulin resistance.

Many people with Syndrome X are easily recognizable because of their accumulation of abdominal fat (they look apple-shaped) and their high waist-to-hip ratio. Research has

---

<sup>14[14]</sup> Creating and Maintaining Balance p 23

<sup>15[15]</sup> All about DIM, FAQ p 20

clearly shown that the higher a person's WHR ( the bigger one's waist circumference compared to his or her hip circumference), the higher his or her risk for developing syndrome X.

Other signs and symptoms of Syndrome X is high cholesterol and triglycerides, high blood pressure, feeling spacey or fuzzy thinking, being irritable and angry, exhausted, difficulty concentrating, craving for carbohydrates and sweets

Let's talk about insulin. Insulin is a hormone that the pancreas secretes when we eat sugar or carbohydrates and determines how our bodies will use those starches. Not only does insulin regulate blood-sugar levels, it is also responsible for getting fat stored in our fat cells, getting sugar stored in our liver and muscle cells as glycogen, and getting amino acids directed toward protein synthesis or muscle building. Due to these varied actions, insulin is sometimes thought of as a 'storage' hormone because it helps the body put all these great sources of energy away in their respective places for later. That's great, but it is exactly the opposite effect of what the body experiences during the stress response – when the heart and muscles need lots of energy and need it fast.

One of the first signals the body sends out –via cortisol-during stress is one that screams, “NO MORE energy storage!” and that means shutting off the responsiveness of cells to the storage effects of insulin. When cells stop responding to insulin, they are able to switch from a storage or anabolic mode to a secretion or catabolic mode- so fat cells dump more fat into the system, liver cells crank out more glucose, and muscle cells allow their protein to be broken down to supply amino acids for conversion into even more sugar. This is ok if it doesn't happen very often, but telling the body's cells to ignore insulin on a regular basis, as happens with chronic stress, can lead to a condition known as insulin resistance and predisposes a person to the development of full-blown diabetes.<sup>16[16]</sup>

Normally, insulin controls appetite by keeping blood sugar levels fairly constant. However, the mechanism that regulates insulin can be thrown off balance when it is forced to work overtime on processing excess sugars and starches, causing too much insulin to enter the blood.

Immediately after a meal or eating sugar, the blood sugar levels rise, causing the pancreas to secrete insulin to help get the blood sugar levels back to normal by getting the sugar out of the blood and into the cells. All cells have receptor sites that allow insulin to get the sugar in the cell and out of the blood. When the levels become low, we feel hungry and eat, thus beginning the process all over again.

With time and after doing this over and over because of eating too much sugar, the high blood levels of insulin lead to insulin resistance, a condition that occurs when the cells no longer react to the hormone. The pancreas reacts by releasing even more insulin into the

---

<sup>16[16]</sup> The Cortisol Connection p 29

blood, which only worsens the problem, as the rising insulin simply increases the cells' resistance.<sup>17[17]</sup>

### **What can we do?**

There's a lot of things that are very effective at improving insulin resistance:

Exercise lowers IR

Nutrients such as: Magnesium, Chromium, Vanadium, Alpha Lipoic Acid, Gymnema Sylvestre, and Banaba and Green Tea are just a few things that are great.

Increase Fiber

Avoid refined carbs and sugar. Eat protein and complex carbs as in vegetables<sup>18[18]</sup>

### **The Right Diet**

The right diet is a balanced diet. High this or low that is unbalanced. In the book, Your Fat is Not Your Fault, p 55 says,

...It's also been discovered recently that high-protein, ketogenic diets may cause changes in the fat cells, making them 10 times more active in sequestering fat than they were before you went on the diet. So when you go off the diet, you continue to accumulate fat at a frightening rate...

I believe that last diet you'll ever need is found in The Rosedale Diet. This should be the last book you ever need to read and follow to be healthy and lose weight.

---

<sup>17[17]</sup> Weight Loss

<sup>18[18]</sup> Syndrome X