

Reset Your Hormones to Beat Belly Fat

While you never want fat hanging around your waist, for many people it's often the first place it goes and the last place it leaves when you gain a few pounds. Believe it or not, love handles aren't just unattractive, carrying weight around your abdomen is bad for your health – worse than carrying weight on your hips or thighs – and is a key indicator of a hormonal imbalance. If you have struggled to lose weight or keep it off, I guarantee that your hormones are at play. Your hormones control every aspect of weight loss including your metabolism, where you store your fat, your appetite and even your cravings! This means *any form* of hormonal imbalance will sabotage your efforts – regardless of your diet and exercise habits.

Extra belly fat can indicate one or more of the following hormonal imbalances: high estrogen, low testosterone, low DHEA (a hormone of the adrenal glands), high insulin and high cortisol. Abdominal fat also sets a risky stage for aging, increasing the risk of heart disease and diabetes. A program to get rid of this stubborn fat must include proper diet, exercise, sleep and, of course, motivation. All of these components work well to instill a healthy balance that allows fat loss to occur. We will talk more specifically about each of the hormonal players in this process, and my suggestions for supplements that can help get you back on track.

1. High Insulin: Insulin is an essential substance whose main function is to process sugar in the bloodstream and carry it into cells to be used as fuel or stored as fat. A primary cause is excess intake of sugar or carbohydrates typical of many diets today. This includes nutrient-poor carbohydrates such as processed foods, sugary drinks and sodas, packaged low-fat foods, along with insufficient protein intake, inadequate fat intake, and deficient fibre consumption. Insulin resistance may also be attributed to lack of exercise, overindulging in alcohol, stress, a family history of diabetes, high blood pressure and excess body fat, especially around the abdomen. Chronically high levels of insulin can also lead to a pre-diabetic condition called metabolic syndrome (or insulin resistance) and type 2 diabetes, which only furthers weight gain. It is currently estimated that 1 out of every 4 North Americans has insulin resistance.

Hormone Diet Solution: Bump up your protein. Sticking to about 20 to 25 grams of each per meal and about 15 to 20 grams per snack is probably a good place to start, depending on your body size and workout schedule. Men should add an extra 10 g of protein per meal and 5 g per snack. Higher protein intake keeps your blood sugar balanced and your insulin levels low – a metabolic must for appetite control and fat loss. Protein also packs a hormonal punch because it stimulates the activity of many of our fat-burning and appetite-controlling hormones when we consume it in the right amounts. A higher-protein diet helps to shed stubborn belly fat, according to a study published in *Diabetes Care* (March 2002). Researchers compared a high-protein diet with a low-protein diet in 54 obese men and women with type 2 diabetes.

Those on the high-protein diet had significantly greater reductions in total and abdominal fat mass and a greater reduction in LDL cholesterol. Your best protein options are those that are lowest in fat like chicken, turkey, low-fat cheese, such as ricotta or cottage cheese, omega-3 eggs and shellfish, such as scallops, which are 100% protein.

2. High Cortisol: Persistently elevated levels of the stress hormone, cortisol, are very detrimental to your health as well as to your body composition. If you suffer from a mood disorder such as anxiety, depression, post-traumatic stress disorder or exhaustion, or if you have a digestive issue such as irritable bowel syndrome, you can bet your body is cranking up your cortisol. Not only does it increase your appetite and cravings, it causes a loss of muscle mass, libido and bone density, and also contributes to depression and memory loss. In other words, chronic stress makes us soft, flabby and much older than we truly are! Study after study shows that stress causes abdominal fat – even in people who are otherwise thin. Researchers at Yale University, for example, found slender women who had high cortisol also had more abdominal fat. More results published in the journal of *Psychosomatic Medicine* in 2000 established a link between cortisol and increased storage of abdominal fat.

Hormone Diet Solution: Sleep enough and eat at the right times. You must sleep at least 7.5 to 9 hours per night. Sleep deprivation makes us wake up with higher amounts of the stress hormone cortisol, which fuels appetite and increases our cravings, particularly for sugary and carb-laden treats, *even when we have eaten enough*. Not only does poor sleep pack on pounds, good sleep actually helps you to lose weight by influencing the hormones that control your appetite and increase your metabolism. A 2004 study at the University of Chicago was the first to show sleep as a major regulator of appetite-controlling hormones – it boosts leptin, the hormone that tells you to put down the fork. In the same year, researchers at the Stanford School of Medicine found that subjects who had only five hours of sleep per night experienced an increase in their BMI, *regardless of diet and exercise*. Also, if your blood sugar levels are on a rollercoaster all day, you can bet your cortisol is as well. You can reduce the stress associated with blood sugar imbalance by eating a high protein breakfast within one hour of rising and avoiding more than a 3-4 hour gap between meals or snacks.

3. High Estrogen: Abdominal fat in men increases the conversion of testosterone into estrogen. As estrogen levels rise, so does the tendency to accumulate more abdominal fat, fuelling the situation. The risk of prostate cancer also increases with higher estrogen levels. A premenopausal woman with high levels of estrogen (also known as estrogen dominance) will likely have PMS, too much body fat around the hips and difficulty losing weight. Menopausal women and, yes, men too, may experience low libido, memory loss, poor motivation, depression, loss of muscle mass, and increased belly fat.

Hormone Diet Solution: A blood or saliva test can assess your levels. If levels are high, consider a product with indole-3-carbinol, green tea, and turmeric – all three help to rid the body of excess negative estrogen and correct the balance of estrogen to testosterone. Adding ground flax, chia seeds and/or a non-psyllium fiber supplement will also assist your body to eliminate harmful estrogen.

4. Low Testosterone: Testosterone levels decrease as abdominal fat converts it to estrogen, and also with increasing stress. While you are under stress, your body will tend to make more stress hormone (cortisol) than testosterone. Testosterone levels tend to taper off with aging, obesity and stress, but today men are experiencing testosterone decline much earlier in life. This is quite an alarming finding, considering low testosterone has been linked to depression, obesity, osteoporosis, heart disease *and* even death. Researchers from the University of Washington found that men with low testosterone are more likely to develop a potbelly and other body fat. They also found that testosterone may prompt the loss of body fat when deficient levels are replaced. Other signs that you may have low testosterone levels include a loss of muscle tissue, depression, and decreased strength, stamina, drive and motivation. If you have your testosterone levels measured with a blood test, be sure to ask that both free and total testosterone be measured.

Hormone Diet Solution: The herb tribulus terrestris may help raise levels by reducing the binding of testosterone to sex hormone-binding globulin (SHBG) without side effects. Zinc supplements may also help raise testosterone levels, as will weight training. Ensure sufficient intake of protein for healthy levels of testosterone too.

5. Low DHEA: DHEA is a hormone produced by the adrenal glands. It is a precursor to estrogen and testosterone and also helps to counteract the negative effects of cortisol. Often touted as the anti-aging hormone, DHEA influences our ability to lose fat and gain muscle. It boosts libido and helps us feel motivated, youthful and energetic.

Hormone Diet Solution: DHEA levels are best measured in the blood or saliva and replacements should only be taken when a deficiency has been diagnosed. I prefer low dosages of 5-25 mg twice daily with meals. You should test your DHEA levels after 4 to 6 weeks of taking the supplement to avoid taking in excessive amounts, which can be harmful. Relora, an herbal supplement, is also known to significantly reduce cortisol and raise DHEA within only two weeks of use. I recommend one cap in the morning and two at bedtime.

6. Low Growth Hormone: This omnipotent hormone affects just about every cell in the body and has a major impact on our feelings, actions and appearance. Because this regenerative hormone tends to decline with age, growth hormone supplements are often promoted as a way to slow the effects of aging. Growth hormone is released during deep sleep and while we exercise.

It's essential for tissue repair, muscle building, bone density, and healthy body composition. A 2007 study from the *Journal of Clinical Endocrinology & Metabolism* linked abdominal obesity in postmenopausal women with low growth hormone secretion, elevated inflammatory markers and increased risk of cardiovascular disease.

Hormone Diet Solution: When we sleep in total darkness, melatonin is released, triggering a very slight but critical cool-down in the body. As body temperature drops, growth hormone is released and works its regenerative magic. If we sleep with lights on or eat too close to bedtime, the natural cool-down process will not take place, putting us at risk of low levels of both melatonin and growth hormone. By sleeping in a cool room in pitch darkness, and including short intense 30-minute strength-training sessions three times a week, you can naturally boost growth hormone levels.