

Hormones are chemical messengers produced by glands and transported via blood to organs where they regulate biological processes such as hunger and appetite, sleep, stress, blood sugar control, and reproduction. Good nutrition optimizes hormone production and balance. Regular physical activity also plays a protective role in hormone balance.

The Hormone-Diet Connection

Hormones impact our body and mind in many ways. They interact with one another, and respond to our emotions and behaviors. What does this have to do with diet? Here are some examples:

Leptin is a hormone that decreases appetite. It's released into the body after eating and signals you to stop eating. It turns out that sleep deprivation interrupts healthy leptin levels, increasing your appetite even when you don't need food energy.

Cortisol is a hormone that is response to things like waking up in the morning, exercising, and stress. It also balances energy by "knowing" which food fuels (carbs, fat, or protein) to process at a given time. When cortisol is released too often (such as when we're under a lot of stress), it cannot optimally perform its job to regulate appetite, blood sugar control, and weight.

Estrogen is a sex hormone that fluctuates in women with every menstrual cycle. When too high, it can cause weight gain, headaches, mood swings, and increase risk of certain diseases.

Insulin is a hormone that regulates the amount of sugar in the blood. When insulin does not work properly, it can lead to insulin resistance, weight gain, inflammation, and diabetes.

Thyroid hormones regulate energy levels, body temperature, metabolism, blood pressure, weight, and heart rate. Abnormally high or low thyroid hormones require medical intervention. But diet can help keep your thyroid functioning properly.

Melatonin is released at night to help us sleep. Certain foods inhibit melatonin production, while others encourage it. Some foods, notably plant foods, are good sources of melatonin.

The Nutritional Fixes

A hormone-friendly diet contains the nutrients necessary to support hormone production as well as hormone breakdown when it is no longer needed by the body.

To make leptin work for you, prioritize sleep. To get great quality sleep, cut off caffeine at mid-day and avoid food and alcohol within 2 hours of bedtime. Eat a nutrient-rich diet and avoid overeating. Try a meal swap – a larger mid-day meal and lighter evening meal.

Stress management is your first defense against cortisol going haywire. But diet is important too – an anti-inflammatory diet, based on whole plant foods and low in saturated fats, processed foods, added sugars, and alcohol, is helpful. Get adequate omega-3 fats (found in fish, walnuts, and flax), beans, lentils, and whole grains.

Eliminate excess estrogen by consuming a diet high in fiber. Lignans found in flaxseeds, sesame seeds, and cruciferous vegetables (broccoli, brussels sprouts, etc.) are particularly helpful.

Fiber-rich, slow-digesting whole plant foods help to optimize insulin sensitivity. Minimizing ultra-processed carbs and fats, particularly added sugar and saturated fats, is key to healthy insulin response.

For healthy people (not with thyroid disease), foods that can optimize thyroid hormone production and action include iodine-rich seaweed (think sushi) and selenium-rich foods like Brazil nuts and hazelnuts.

While exposure to light is the most significant driver of melatonin regulation, a nutrient-rich diet helps optimize melatonin production. Some foods containing melatonin include tomatoes, olive oil, strawberries, and grains.