

# THE hormone balance plan

Make wise food choices to reset your metabolism and lose weight

**Y**ou know the drill: Eat less. Exercise more. Lose weight. For decades, this simple equation has been the cornerstone of most weight loss plans. But for the 60 million Americans considered obese, and with four out of five dieters relapsing within a year, that calories-in-calories-out formula doesn't seem to add up. Some experts are rethinking traditional rules and focusing on another weight loss factor: imbalanced hormones.

“The conventional wisdom has been that there are no good foods or bad foods—that counting calories and eating everything in moderation is the answer. That’s a myth,” says Frank Hu, MD, PhD, professor of nutrition and epidemiology at Harvard School of Public Health. “Food can heavily influence the hormones and biological pathways that influence hunger, satiety, and fat accumulation, so you have to make wise choices.”

Toronto-based naturopath Natasha Turner, ND, author of *The Hormone Diet* (Rodale, 2009), explains that in a person with a healthy metabolism, hormones work in a complex symphony to assure you get enough to eat and use the fuel efficiently. The hormone ghrelin tells the brain that you're hungry; its alter-ego leptin alerts you to put the fork down. When you eat carbohydrates, insulin floods the bloodstream, ushering glucose into muscle cells for fuel and locking any extra glucose into fat cells for later use. When you're stressed, cortisol temporarily ignites a survival response, prompting you to crave high-calorie foods. Thyroid hormones influence your metabolism and how much energy you have, testosterone builds muscle, and glucagon burns fat. ➔



Unfortunately, age, menopause, chronic stress, or poor diets tend to throw this fragile system into chaos. “I have people come in all the time and say these low-calorie diets that once worked for them just don’t work anymore,” says Jade Teta, ND, coauthor of *The Metabolic Effect Diet* (HarperCollins, 2010). For the hormonally imbalanced (well over half of U.S. adults), slashing calories and hitting the treadmill can actually exacerbate the problem, raising stress hormones and thus boosting cravings and fueling more belly fat, even in otherwise thin people. The low-cal-and-cardio approach also lowers thyroid hormones, sapping energy and dropping metabolic rate, says Turner. The upshot: “If your hormones are out of whack, no diet plan will succeed.”

What steps are more likely to lead to successful weight loss? Because sleep deprivation can reduce leptin levels, commit to sleeping eight hours a night; focus on shorter, more intense workouts that build muscle and heighten resting metabolic rate (see “The Hormone-Balance Workout,” right); and choose foods that foster fat burning and squelch fat storage. Here’s how.

**Choose smart carbs (in moderation).**

When it comes to influencing fat storage, insulin is the mother of all hormones. Unfortunately, according to Duke University Lifestyle Medicine Clinic Director Eric Westman, MD, as many as two-thirds of Americans are “carbohydrate intolerant,” or insulin resistant, meaning their pancreas produces too much insulin in response to the presence of carbohydrates. To lose weight, these people must cut carbs. “This allows the body to reset its insulin response, and without carbohydrates in the equation it has no choice but to burn fat for fuel,” says Westman, author of *The New Atkins for a New You* (Simon & Schuster, 2010).

Start with a two-week period of sharp carb-cutting—down to 20 net grams per day—recommends Westman. “Net” carbs are total carb grams minus fiber grams, because fiber actually helps balance blood sugar and fill you up. Then slowly ramp up to a maintenance level of 50 to 100 net grams (the younger and more active the person, the higher the amount). Both Teta and Westman recommend loading

**THE HORMONE-BALANCE WORKOUT**

Are you hitting the treadmill but not dropping pounds? Beware: Too much cardio can spike muscle-eating stress hormones, like cortisol, and hinder thyroid hormones, leading to fatigue and slowed metabolic rate (the rate at which you burn calories at rest), says Natasha Turner, ND. Plus, long, moderate-intensity aerobic workouts tend to lower levels of the satiating hormone leptin, making you ravenous afterward, says Jade Teta, ND.

In contrast, both experts say, strength training along with short, intense cardio sessions stimulates fat-burning hormones like testosterone and human growth hormone, bolstering metabolism.

Try 30- to 45-minute workouts three times weekly, combining intervals (cardio bursts punctuated by brief rests) and strength training. On “off” days, walk for 30 to 60 minutes.

up on leafy greens and nonstarchy vegetables, such as asparagus, broccoli, string beans, okra, tomatoes, onions, and peppers, while steering clear of high-starch veggies like potatoes, corn, and beans. If you must have starchy produce, Teta recommends literally counting bites: Limit yourself to just 3, or up to 15, depending on how you tolerate carbs. Those who are more sensitive to carbs tend to put on weight around the midsection easily, are more prone to afternoon cravings and mood swings, and often see pounds return quickly as they ramp up carb intake. Keep your fruit intake to two servings a day, emphasizing high-fiber, lower-sugar options like berries, grapefruit, or apples; skip the high-sugar raisins, mangoes, and melons, says Turner.

Are there any no-nos? Blood-sugar-spiking potatoes, fruit juices, and sodas. In a study published in 2011 in the *New England Journal of Medicine*, Hu found that, of 121,000 U.S. participants, those who gained the most weight over four years were those who consumed the most potatoes and sweetened beverages. ➤➤

**Emphasize lean protein.** If insulin is the mother of fat storage, glucagon is the father of fat burning. One critical way to increase this hormone is to eat more protein, says Teta. “Protein is the most powerful fat-loss tool we have,” he says. Protein intake also suppresses the hunger hormone ghrelin and helps release muscle-building hormones, like testosterone, enabling people to avoid the muscle-wasting (what he calls the “skinny-fat” look) and sluggish metabolism that often accompany calorie-restriction diets.

But not all protein is created equal. In Hu’s 2011 study, eating red meat, usually higher in calories and saturated fat, was strongly associated with weight gain over four-year periods. Another recently published study found that those who ate a diet low in carbs but higher in animal protein had an increased mortality risk, particularly from cancer and cardiovascular disease, while those

#### HORMONE-BALANCE DIET: A SAMPLE DAY

- 6 a.m. Whey protein shake
- 8 a.m. Omelet with egg whites, 10 bites oatmeal, 1 apple, 1 cup blueberries
- 12 p.m. Large salad with grilled chicken and balsamic vinaigrette
- 2 p.m. Fiber supplement and protein bar
- 4 p.m. Apple with 2 tablespoons almond butter
- 7 p.m. Chicken burger (no bun), 10 bites baked sweet potato, steamed broccoli, steamed asparagus

Source: Jade Teta, ND.

who ate a low-carb diet high in plant-based protein had a lower mortality risk. “A lot of people think a low-carb diet needs to be loaded with steaks and bacon. That’s not the case,” says Hu.

When trying to lose weight and balance blood sugar, Teta recommends going easy on beans, which are high in protein but can be as much as 70 percent starch, and opting for lean poultry, fish, eggs, and game meat. Vegans should consider adding a rice, hemp, or nut protein powder supplement to their diets.

**Don’t fret about (most) fats.** Fat is essentially neutral in terms of influencing insulin. But fats, especially omega-3 fatty acids, do trigger satiating and fat-burning hormones and are a building block for cortisol, estrogen, progesterone, and testosterone.

Contrary to popular belief, recent studies have shown fat consumption does not significantly impact weight and, in some cases, hastens weight loss. For instance, in Hu’s study, increased intake of even full-fat dairy products (with the exception of those containing probiotics) had no effect on weight. Nuts, which are high in mostly monounsaturated fat, were closely associated with weight loss.

Topping the list of seemingly slimming foods was yogurt. “Microorganisms in fermented foods like yogurt may be beneficial for energy metabolism and appetite-reducing hormones,” Hu says.

When you’re building a hormone-balancing diet, Hu recommends getting 35 percent to 45 percent of calories from minimally processed carbohydrates (mostly the low-starch variety), and splitting the rest between lean protein and fats from polyunsaturated sources, like fish and monounsaturated sources, such as olive oil, avocado, nuts, and seeds.

**Time your intake.** Finally, remember that when it comes to balancing hormones with food, timing matters, Teta says. Eat within one hour of waking up to avoid the stress-hormone surge that comes with low blood sugar. Always eat protein with breakfast to steady your insulin levels throughout the day. Eat every three hours to avoid the hormonal chaos that accompanies low blood sugar and leads to hunger and cravings. Try not to pair fats and starches in the same meal (skip the potatoes with your salmon and have broccoli instead) because although fats are neutral, they can exacerbate insulin’s fat-storing action. And save the bulk of your carbohydrate intake for later in the day. One recent study published in the journal *Obesity* found that subjects who ate the bulk of their carbohydrates at dinner experienced fewer cravings throughout the day, had better blood sugar balance, and lost more weight. 🍌

Lisa Marshall is a health writer, endurance athlete, and recovering carbaholic who has upped her protein intake and is eating more frequent meals since reporting this story. She feels better already.