



The Estrogen Lowering Diet

The Estrogen-Lowering Diet

**Foods That Build Testosterone
And Eliminate Estrogen**

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THE GREAT HORMONAL ROLLERCOASTER

Our bodies are born with certain functions hardwired into them. For instance, our nerves shoot chemical messages from the brain to all parts of the body telling our limbs to move, our eyes to blink and even reminding us to breathe. Our arteries carry blood and nutrients to each of our organs. The colon shuttles toxins and waste out of the body. None of these functions could be accomplished, however, without hormones.

Hormones are chemical substances produced in the body that control and regulate the activity of our various cells or organs. In fact, the word *hormone* comes from the Greek word *hormao* which means to “put in motion.” And that’s exactly what hormones do. Hormones are essential for every activity of daily living, including the processes of digestion, metabolism, growth, reproduction, and mood control. Many hormones, such as the neurotransmitters, are active in more than one physical process.

When your hormones are balanced and doing their job, your body keeps humming along. But when there is too much or little of a particular hormone, things can go awry and result in a myriad of problems. We’re all familiar with the hormonal imbalance that occurs when a woman goes through menopause. But men can experience hormonal imbalances, too. As a result, men can experience an enlarged prostate, urinary problems, low sex drive, erectile dysfunction, diabetes, allergies, depression, fatigue, foggy thinking, increased risk of stroke, infertility, a rapid increase in weight and osteoporosis, to name just a few. Today most men experience at least one of these symptoms as early as age 40. And here’s the most interesting thing . . . the same hormone causing all of these problems in men is the same one that creates havoc in women during menopause — estrogen.

Yes, it’s true. Men — all men — have estrogen pulsing through their bodies. And it’s no accident of nature. Estrogen promotes healthy bones in men. When it is properly balanced with testosterone, estrogen can also guard against heart disease. Some scientists even think that estrogen can protect a man’s brain, helping to maintain focus and cognition. But, high levels of this hormone can cause a loss of muscle, weight gain, gynecomastia (affectionately known as “man boobs”), a decrease in libido and an increase in a man’s risk of developing prostate cancer. When estrogen levels skyrocket, a man can experience one or more of these health problems.

ARE YOU ESTROGEN DOMINANT?

A hormonal imbalance is a man-made phenomenon of modern life. The industrial world we live in today, exposure to a polluted environment and the Standard American Diet (SAD), all contribute to the body’s constant exposure to high levels of synthetic estrogens, which are the main cause of hormonal imbalance.

In order to understand how hormone imbalance begins, it's useful to look at the natural aging process. As a man gets older, the level of the male hormone testosterone decreases. At the same time, the ratio of testosterone to estrogen falls. Day in and day out exposure to environmental pollution and the estrogen-promoting chemicals in the products we use every day lower this ratio further.

These synthetic forms of estrogen, known as *xenoestrogens*, are found in the air, cleaning products, lotions, shampoos, water, and foods we use and consume every day. When these chemicals get into our bodies, they mimic estrogen.

Since excess estrogen is stored in fatty tissues, it's important to maintain a healthy weight. People who are overweight or obese have significantly higher levels of estrogen circulating throughout their bodies. Losing weight can reverse the effects of estrogen overexposure.

But this may be easier said than done. When there is too much estrogen in the body, it can lead to estrogen sensitive tissues. This causes larger adipose or fat cells in the body. Problem areas for men are the stomach and chest. This condition can also cause gynecomastia, the formation of firm breast tissue in men.

YOU ARE WHAT YOU EAT

Unfortunately, many of the chemicals we are exposed to daily come from the foods we eat. Pesticides, preservatives, synthetic colors, flavor enhancers, dough conditioners, fat and sugar substitutes, sulfites and nitrates are in thousands of the foods we eat every day. And researchers are constantly finding that many of these chemicals promote estrogen.

Because of the chemicals that saturate our food, the Western diet is pro-estrogen, causing excess estrogen. Meat and dairy products are chock full of hormones. Cows, pigs and chickens are given hormones, including estrogen, to encourage more and faster growth. Despite the danger to the people who ultimately eat the meat from these animals, the USDA refuses to label hormone-tainted meat. As a result, few American carnivores know that they're getting an extra dose of hormones with their burgers or chops.

Dairy is even worse. Recombinantly-Derived Growth Hormone (rBGH) is a genetically engineered hormone designed to increase milk production. Not only does rBGH promote excess estrogen, it contains high levels of another hormone—insulin-like growth factor-1 (IGF-1) — that causes cells to divide and reproduce. Although a number of small studies have found that excess IGF-1 can cause breast and prostate cancer, the FDA fast-tracked the approval of rBGH in 1993. They based their approval not on the standard two year testing process, but on a test that lasted only 90 days.

Fruits and vegetables are bathed with pesticides, many of which can disrupt your hormones. Although overwhelming evidence that these chemicals pose a threat to human health, conventional farmers continue to rely on pesticides. As a result, three-quarters of the produce on supermarket shelves contain estrogenic chemical residue.

So what's the solution? Choose organic, especially when you buy meat, dairy, fruits and vegetables. Unlike conventionally-grown foods, organic food is produced without pesticides, sewer-sludge, synthetic fertilizers, genetic modification, growth hormones or antibiotics. Yes, they are slightly more expensive than conventional foods, but they are actually more nutritious. A growing number of studies show that organically-grown fruits and vegetables contain higher levels of critical vitamins and minerals. A review of 41 studies comparing the nutritional value of organically grown and conventionally grown produce found that, on average, organic fruits and vegetables offer 27 percent more vitamin C, 21 percent more iron, 29 percent more magnesium and 13 percent more phosphorus than their conventional counterparts. Best of all, organic foods taste so much better!

THE PROBLEM WITH PLASTIC

Plastics are ubiquitous in modern life and it's especially useful for packaging and storing food. But while these plastic containers are convenient, many types of plastic can leech environmental estrogens into the foods you eat.

Here's a good example: polyvinyl chloride (PVC) and polystyrene (used to make those white clamshell take-out containers) contain chemical "plasticizers." Plasticizers are compounds that make hard plastics flexible. It's also what gives plastic wrap its stretch and clinginess. The most notorious of these is diethylhexyladipate (DEHA). Commonly used in deli wraps, DEHA migrates into foods that are high in fat, like cheese and hamburgers, as well as hot foods that come into contact with it. The problem is, DEHA is linked to hormonal abnormalities and has estrogen-like properties.

While it's impossible to avoid all plastics, you can reduce the amount you are exposed to. All plastics degrade with repeated use, especially when they are tossed into the dishwasher or microwave. Microwave-safe plastic means that a container probably won't melt in the microwave, but there's no promise that it won't leech chemicals into your food. Do not use ANY plastic containers that appear old, stained or worn, since bacteria can hide in scratches or scummy films. Opt for tempered glass or oven-proof ceramic when possible.

WHAT'S IN YOUR WATER?

Water is one of the most important nutrients you consume. In fact, 70 percent of the human body is made of water. Water is contained in the cells of the body (intracellular fluid), in the arteries and veins (blood plasma), and in the spaces between the blood vessels and cells (interstitial fluid). The body's water supply is responsible and involved in nearly every bodily process, including digestion, absorption, circulation and excretion.

While the human body can go for weeks without food, it can only survive for three days without water. Yet, the water most of us get from the tap is brimming with contaminants, including pesticide residue and estrogenic pharmaceutical drugs. One easy and affordable way to ensure that you are getting the cleanest water possible is to use a faucet-mount water purifier. These devices filter out up to 99 percent of contaminants, including estrogenic compounds.

What about bottled water? A recent study from Harvard Medical School warns that drinking out of plastic bottles can increase the amount of bisphenol A (BPA) that winds up in your body. In fact, the researchers discovered that drinking cold liquids from plastic bottles for just one week increased urinary BPA levels by more than two-thirds. If you heat those bottles — or leave them in a hot car — the Harvard team notes that BPA levels can be considerably higher.

What to do? Instead of choosing a plastic water bottle, opt for aluminum instead. Many companies now make reusable aluminum water bottles, which don't leach BPA or other chemicals.

ESTROGEN-REDUCING FOODS

So far, we've talked about the things you should avoid. But what should you be eating to boost your testosterone levels and lower the amount of estrogen circulating throughout your bloodstream? Relax, there are plenty of tasty foods to enjoy that will do the job. Of course, you'll want to include lots of organic fruits and vegetables, as well as naturally-raised or organic meat and dairy. But there are some specific foods you should consider adding into your diet that can have a direct — and beneficial — impact on your hormonal balance. Here are the most effective:

Cruciferous Vegetables. This family of vegetables, which includes broccoli, cabbage, kale and Brussel sprouts, contains an antioxidant compound known as indole-3-carbinol. This antioxidant stimulates detoxifying enzymes and blocks estrogen receptors on cell membranes.

Dietary Fiber. Fiber increases the rate at which estrogen is excreted from the body. Fiber in the intestine also keeps excreted estrogen byproducts from being reassembled by bacteria and reabsorbed into the bloodstream. A recent

study reported that a half-cup serving of wheat-bran cereal each morning lowers the blood levels of estrogen. Because the effects of estrogen are cumulative, the benefits of fiber are also cumulative — eating fiber-rich foods confers a lifetime reduction of the risk for breast and prostate cancer. Try to get at least 35 grams of fiber each day. This may sound like a lot, but if you include at least one high-fiber food in each meal and snack, it's easier than you think. Fiber-rich foods include fruits, vegetables, beans and whole grains.

Green Tea. One study found that drinking green tea lowered levels of estrogen by 13 percent while black tea raises them. Green tea also contains epigallocatechin-3-gallate (EGCG), a polyphenol that has been credited with numerous health benefits like cancer prevention, protection from heart disease and stroke, and even weight loss. Aim to drink at least three cups of green tea daily.

Oatmeal. Oatmeal is able to stabilize estrogen levels while increasing the amount of testosterone in the body. The key compounds in oatmeal are avenacosides—a type of plant saponin that blocks the production of estrogen. Oatmeal is also a wonderful source of soluble fiber which further reduces estrogen. Opt for steel-cut oatmeal instead of instant rolled oats whenever possible.

Onions. These savory root vegetables help prevent testosterone from being converted into estrogen. Vegetables in the onion family include red, white and yellow onions, scallions, leeks and garlic. Enjoy them often!

Pomegranate. One study found that pomegranate juice, extract and oil were able to block estrogenic activity by up to 80 percent and prevent several types of hormone-dependant cancer cells from multiplying. Swap your morning glass of orange juice for a glass of pomegranate juice. You can also add pomegranate seeds to salads, yogurt and desserts.

HORMONE BALANCING MEAL PLANS

Here are a week's worth of menus to help you adopt a diet that reduces estrogen while boosting your testosterone levels. They include breakfast, lunch, a snack and dinner.

MONDAY

<u>Meal</u>	<u>Foods</u>
Breakfast	Scrambled egg whites; oatmeal; green tea
Lunch	Whole wheat pasta salad with grilled chicken
Snack	Natural peanut butter with whole wheat crackers
Dinner	Grilled organic beef or bison steak; roasted asparagus; large green salad with oil and vinegar dressing

TUESDAY

Meal

Foods

Breakfast

Scrambled egg whites; oatmeal; green tea

Lunch

Turkey sandwich with low-fat cheese on whole wheat bread; apple slices

Snack

Organic cottage cheese with sliced pineapple

Dinner

Tilapia filet; butternut squash; large green salad with oil and vinegar dressing

WEDNESDAY

Meal

Foods

Breakfast

Shredded wheat cereal with organic milk; fresh organic blueberries; green tea

Lunch

Whole wheat english muffin with lean ham, tomato, onion and organic cheddar cheese, toasted; organic pear

Snack

Tuna on whole wheat crackers

Dinner

Whole wheat pasta with marinara sauce; steamed zucchini; whole wheat bread dipped in extra virgin olive oil

THURSDAY

Meal

Foods

Breakfast

Scrambled egg whites; oatmeal; green tea

Lunch

Grilled organic chicken breast on top of a large green salad with oil and vinegar dressing

Snack

Organic string cheese; whole wheat crackers

Dinner

Wild salmon filet; broccoli; butternut squash; large green salad with oil and vinegar dressing

FRIDAY

Meal

Foods

Breakfast

Scrambled egg whites; oatmeal; green tea

Lunch

Whole wheat wrap with sliced turkey breast, roasted red pepper, chopped cucumber, chickpeas and mayonnaise; strawberries

Snack

Organic ricotta cheese with cubed pear and cinnamon

Dinner

Stir-fry of cubed tofu, sliced mushrooms, snap peas, broccoli flowets, diced carrots and onions tossed with sesame oil; brown rice

SATURDAY

Meal

Foods

Breakfast	Shredded wheat cereal with organic milk; fresh organic blueberries; green tea
Lunch	Whole wheat english muffin with lean ham, tomato, onion and organic cheddar cheese, toasted; organic pear
Snack	Tuna on whole wheat crackers
Dinner	Grilled organic chicken breast; Brussel sprouts; green beans; large green salad with oil and vinegar dressing

SUNDAY

Meal

Foods

Breakfast	Spinach omelet; whole wheat toast, fresh organic blueberries, green tea
Lunch	BLT on whole wheat toast with avocado; one orange
Snack	Organic cottage cheese mixed with salsa; whole wheat crackers
Dinner	Broiled halibut; pearled barley; green beans; large romaine and kale salad with oil and vinegar dressing

DIETARY DO'S AND DON'TS

Admittedly, this is a lot of information to remember when you shop for food or sit down to a meal. To simplify things, here are some “do’s” and “don’ts” that, if followed, can give you a good foundation to build upon with the ultimate goal of keeping your hormones in balance.

DO reduce your overall calorie intake. Reducing calorie consumption increases your levels of a hormone called SHBG (sex hormone-binding globulin) which is a glycoprotein that binds to sex hormones, specifically testosterone and estrogen. SHBG keeps estrogen from stimulating the growth of healthy and cancerous cells in areas of the body sensitive to estrogen levels like the prostate. Scientists believe that calorie reduction has the same effect on other estrogen-influenced disorders.

DO eat more fiber-rich foods including whole grains, beans, legumes, fresh fruits and vegetables.

DO take a probiotic supplement. While the liver breaks down estrogen before sending it to the digestive tract for elimination, bacteria in the intestines can turn these breakdown products back into estrogen. The hormone can then be re-absorbed through the intestinal wall. Taking *Lactobacillus acidophilus* supplements daily can provide your body with the beneficial microbes that compete with the estrogen-forming bacteria.

DO include phytoestrogens in your diet. Phytoestrogens are plant-derived estrogens that compete with and counteract both environmental estrogens

and the body's natural estrogen. Soy is the best-known source of dietary phytoestrogens. Tofu, tempeh, soy-beans, soy milk and miso are all tasty ways to increase your soy consumption.

DON'T overindulge in alcohol. Consuming even moderate amounts of alcohol raises estrogen levels. The link between alcohol and hormone-dependant cancers may even be stronger than other dietary links. Limit yourself to no more than one drink per day.

DON'T drink too much caffeine. Two or more cups of coffee or four cans of soda a day can increase estrogen levels. Limit yourself to one to two cups of coffee per day, and try to cut out soda altogether.

DON'T unnecessarily expose yourself to pesticide residue. Shop for organic fruits and vegetables whenever you can.

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