

Myth vs. Fact

The Human Chorionic Gonadotropin (hCG) Diet

According to the National Institutes of Health (NIH), about two-thirds of adults in the United States are overweight or obese, putting them at risk for health problems like diabetes and heart disease. Many people—about 114 million—struggle to lose weight, spending \$60 billion or more on weight loss products each year.

Experts agree that the healthiest way to lose weight is gradually, through lifestyle changes—making healthy food choices, watching portion size, and exercising each day. Still, many dieters are drawn to the quick weight loss promises of the human chorionic gonadotropin (hCG) diet. They wonder: Does it work? Is it safe?

Decades of scientific research have shown that hCG does not help people who are overweight or obese to lose extra pounds. So why do people lose weight on the hCG diet? Doctors say it's not the hCG. People lose weight because they're only eating 500 calories per day on the diet. Experts worry that this diet puts people's health at risk.

In general, women need 1,600 to 2,400 calories per day and men need 2,000 to 3,000 calories per day to maintain a healthy weight. Following a healthy diet when eating only 500 calories a day is possible. But eating so few calories could be unsafe and should be done only under a doctor's guidance. Even if you're not dieting, using hCG could be harmful.

This fact sheet was developed to address myths about the hCG diet, to provide facts about its use, and to suggest safer options for losing weight.

What exactly is hCG?

Human chorionic gonadotropin is a hormone produced during pregnancy to help nourish the growing fetus. The U.S. Food and Drug Administration (FDA) approved hCG for a number of medical uses. Doctors most often prescribe it to treat infertility. hCG helps a woman's eggs to mature and be released from the ovaries.

The hCG diet has not been proven to help people lose weight, and it may be harmful.

Health care providers understand that hormones are powerful and must be prescribed with caution. A bit too much or too little of any hormone can result in health problems. For this reason, doctors must keep a close watch on treatments that affect hormone levels.

Besides using hCG to treat infertility and other approved purposes, some people have been using hCG hoping to lose weight and reshape their bodies. The FDA has never approved hCG for this purpose, however.

According to the FDA, there is no scientific proof that hCG increases weight loss beyond what people lose from cutting back on calories. Many research studies have shown that hCG does not move fat away from problem areas in the body or decrease the feeling of hunger that goes with low-calorie diets.

What if you want to try the hCG diet anyway?

People are using two types of hCG to try to lose weight—prescription hCG, which is given by injection (using a needle), and hCG dietary supplements, taken by mouth as drops or pills. Health professionals have concerns about both types.

Risks of Injected hCG

Women

- irregular periods and vaginal bleeding
- ovarian cysts
- blood clots
- breast tenderness
- headaches
- possible increased long-term risk of breast cancer for pre-menopausal women

Men

- breast enlargement
- breast tenderness
- blood clots
- decreased sperm production and infertility



The Hormone Foundation promotes the prevention, treatment, and cure of hormone-related conditions through outreach and education. To find an endocrinologist, a physician who specializes in hormone diseases and conditions, and to obtain free publications, visit www.hormone.org or email hormone@endo-society.org. The Endocrine Society is the world's oldest, largest, and most active organization devoted to research on hormones and the clinical practice of endocrinology.

Prescription hCG

Doctors worry that injectable hCG—which can affect sex hormones in both men and women—can cause harmful or unexpected effects.

Doctors also worry that hCG might not be safe in those with liver, kidney, or heart disease.

hCG Dietary Supplements

hCG is a protein, so it is broken down as food when taken by mouth. This process makes it inactive, meaning the hCG contained in drops and pills will have no effect on the body.

A homeopathic form of hCG is sold widely as an over-the-counter supplement. Homeopathy seeks to trigger the body to heal itself by giving very small doses of highly diluted substances. Most homeopathic products are so diluted that none of the healing substance—in this case, hCG—remains.

Whether or not an over-the-counter product actually contains hCG, doctors have concerns about the safety of dietary supplements. The FDA does not regulate food supplements the way it regulates prescription drugs. So trying to figure out if a particular product is safe can be confusing.

Internet sites selling hCG products online, for example, often do not list the ingredients in their product. Even when ingredients are clearly listed on the package, there is no guarantee that the contents are exactly what the package says. Supplements can contain too much or too little of the ingredient you want—or none at all. They can contain potentially harmful substances that aren't listed on the label. Even a product labeled “natural” is not necessarily safe.

The FDA and the Federal Trade Commission (FTC) recently warned companies that sell homeopathic hCG products that they are breaking the law by selling drugs that have not been approved, and by making unproven claims about their effects. The FDA and FTC also caution that these products may be unsafe.

What about the 500-calorie diet?

A 500-calorie diet makes it hard to meet our nutritional needs. We need more than 40 different nutrients for good health and should be eating 5 to 9 servings of fruits and vegetables a day. Multivitamins are not a solution to eating a poor diet. A very low-calorie diet can also cause gallstones, an irregular heartbeat, and other health problems.

Some people with health problems related to their weight might be candidates for a very low-calorie diet, but they must be carefully supervised by a health professional.

Losing Weight Safely

Doctors agree that the best way to lose extra pounds and keep them off is to eat a healthy diet with plenty of whole grains, vegetables—including legumes like peas and beans—and fresh fruits, and to limit fried foods or fatty meat products. Drinking water instead of sugary sodas and being sure to exercise for 30 minutes a day, most days of the week, are also key.

For more information on safe ways to lose weight, in general, and a safe very low-calorie diet, in particular, please visit the NIH Weight-Control Information Network Web sites shown below:

- <http://win.niddk.nih.gov/publications/index.htm#consumer>
- http://win.niddk.nih.gov/publications/low_calorie.htm

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