

Rational weight loss: Basic concepts

Everyone knows how to lose weight: eat less, exercise more. This advice is as useless as the formula for making money in the stock market: buy low, sell high. If we knew how to do that, we'd all be rich. And thin!

FOR most of my professional career, I've never known how to answer the question, "Doctor, how can I lose weight?" Scientific evidence shows that 95% of people fail to lose weight and keep it off for more than a few months. Sure, most of us can shed a few pounds using the latest fad diet or miracle drug. Very few can maintain the weight loss. Their weight yo-yos up and down. Repeatedly losing and gaining weight is probably worse than not losing weight at all.

It's even more awkward when people want me to endorse their particular weight-loss scheme. The founders of most of these systems make them up out of thin air. They're like the hucksters who promise, "Give me all your money and I'll make you rich." (Note: one system that works well for many is Weight Watchers, which is certainly not a scam.)

One way you know there's no proven weight-loss system is there are so many of them. How many solutions are there to treat acute appendicitis? One: take out the appendix. How many ways are there to get rich? A million, and most of them make money only for their promoters.

So is losing weight hopeless? I no longer believe so. There is a growing body of scientific information showing that losing weight is possible. Moreover, you can keep it off. But asking how can you lose weight may be the wrong question.

The new evidence

Much of what I'm presenting here is from Dr. David Heber, Director of the UCLA Center for Human Nutrition. A great deal comes from his new book, *The L.A. Shape Diet*. I highly recommend this book. It's particularly good at explaining what to do: how to change your shape in the manner I recommend here. At this writing it's hard to find in stores. You may have to buy it on line.

The new scientific evidence regarding weight loss yields some startling new perspectives on the topic. Most pointedly, it's not just a matter of "eat less, exercise more."

New evidence suggests the following:

- Not all fat is equal. Fat on your hips, thighs, and chest probably does not threaten your health. But fat tissue within the abdominal cavity is highly metabolically active and can make you deathly ill.
- Losing weight is not mainly about eating less. That doesn't work for most people because your appetite center gets even: you simply pig out later. It's about eating smart, choosing what to eat and when to eat it. Included in this topic is timing your meals, eating the right foods, the role of fresh produce, caloric density, and the "Glycemic Index."
- Another key issue is managing craving. Closely related is addressing "comfort food" and eating to

deal with emotions when you're not hungry.

- Finally, it's actually possible to burn fat. Certain foods can do this, but the most important fat burner is muscle.

Let's address these one at a time.

Not all body fat is equal

The current emphasis on the epidemic of obesity stresses the incredible dangers of being overweight. Fat tissue increases insulin levels, raises blood pressure and blood sugar, and damages blood vessels. It commonly leads to diabetes, heart attacks, strokes, kidney failure, and other horrors. Losing weight clearly reduces the risk for all these illnesses and the death and disability they bring.

But it appears that the only fat that does this lies within the abdominal cavity, attached to the intestines and other deep structures. Most of our fat is superficial: it sits between skin and the underlying muscle. This "subcutaneous" fat has much less metabolic activity.

Indeed, a recent *New England Journal of Medicine* article shows that using liposuction to remove twenty pounds of fat from beneath the skin had *no* benefit on insulin or blood sugar levels! This is astonishing until you realize that liposuction can't reach the fat within the abdominal cavity, which lies deep to the abdominal muscles. That's the fat one has to worry about.

Healthful Hints

“Toxic mold”

I’ve found myself describing fat within the abdominal cavity (“interabdominal fat”) as “toxic mold.” (Of course it’s not really mold or any kind of foreign material, but this provides the right mental picture.) Excessive interabdominal fat literally poisons you, in the same way that people have been poisoned by toxic mold growing in their homes. And just as moisture within the walls of your house predisposes to mold, certain foods promote toxic interabdominal fat.

How can you tell if you have too much deep abdominal fat? Measure your waistline! Men’s waists should measure 30-39 inches (about 80-100 cm). If your waist exceeds 40 inches (100 cm), you have way too much interabdominal fat. For women, the desirable range is 25-35 inches (70-90 cm), and it’s time to worry when your waist exceeds 36 inches (90 cm).

Weight doesn’t matter as much as shape. One lesson of the importance of interabdominal fat is that your shape matters more than weight per se. If you work out, bulk up, and slim down as recommended here, you may not lose an ounce. But you’ll be a lot healthier.

When to eat

If you want to double your weight, do what sumo wrestlers do to become really fat: eat one meal per day in the evening. If you want to lose weight, space out your meals over the day. Whatever you do, don’t skip breakfast. Try to shift your eating from evening to earlier in the day.

Eating right: Low fat or low carbs?

We’re in the midst of a raging controversy over whether we should eat a low fat diet or [cut carbohydrates](#), like the Atkins or South Beach diets. Which is better, low fat or low carbs?

Of course, the answer is “yes”: low on both.

What’s left is a *high-protein diet*. Eating more protein helps control appetite, and it reduces the chance you’ll lose muscle mass, not fat, as you diet. (Extra muscle helps you burn fat, as we’ll see shortly, so losing muscle in a crash diet increases weight gain later.)

The problem with low-carb diets is it’s easy to load up on fat and high-calorie foods.

Warning! If you have kidney disease or impaired kidney function, check with your doctor before starting a high-protein diet. Some scientific evidence suggests too much protein may harm your kidneys if they have already been damaged. This is not a risk for those with normal kidneys.

Eating right: Caloric density

Caloric density is the simple notion that some foods have a lot of calories per gram, and some very few. For example, to eat 100 calories of lettuce, you need a bucketful. One tablespoon of butter has the same 100 calories. You get roughly the same number of calories in two oranges, 1-1/2 apples, or a third of a chicken breast.

High caloric density foods typically add weight much faster than they satisfy your hunger. The worst offenders are foods high in fat: cheese, pizza, mayonnaise, and salad dressings. Fast foods are typically high in caloric density and offer low nutrition.

The right kind of carbs

The term “carbohydrates” encompasses [a multitude of foods](#), from simple sugars to starch and dietary fiber. I don’t recommend extreme restrictions on carbohydrates. Rather, you should avoid the ones that get you into trouble, particularly those that raise your blood sugar and insulin levels. How can you tell?

One system is called the “Glycemic Index.” *Glucose* is the main sugar in your blood. It becomes elevated if you are diabetic. Your body converts most sweet and starchy foods to glucose, but does so at different rates depending upon the food. Most doctors believe that quickly digested foods cause a rapid elevation in glucose level and are more apt to lead to diabetes and fat accumulation than foods that are absorbed more slowly.

High Glycemic Index foods promote interabdominal fat.

The Glycemic Index measures how fast your intestines absorb sweet and starchy foods. Each food has its own number, actually a percent that ranges from 0 to 100. By definition, glucose (simple sugar) has a Glycemic Index of 100: it’s absorbed into your body 100% as fast as glucose. A carbohydrate with a Glycemic Index of 50 is absorbed half as fast as glucose.

Healthful Hints

The higher the number, the faster the absorption, and higher the resulting blood sugar and insulin elevations. Lower numbers are better. According to this system, you should shoot for carbohydrates with a Glycemic Index of 55 or less.

It turns out [the Glycemic Index may be over-hyped](#), and there is scarce scientific data proving its value. But the concept appears solid, particularly when you compare which foods have a high Glycemic Index and which are low.

High Glycemic Index foods include candy, donuts, potatoes, bread, rolls, cookies, crackers, and most snack foods. White rice has a high Glycemic Index, but brown rice is lower. Ditto foods made from white vs. whole-wheat flour. Most fast foods have a high Glycemic Index. Most fruit, vegetables, beans, and other whole foods are lower. (Remember, lower is better.)

Eating right: Fresh produce

Very few Americans get the 4-5 helpings a day of fresh fruits and vegetables the [US government](#) has recommended for a healthy diet. It turns out even this number is too low.

People who eat 8-10 helpings a day of fresh fruit and vegetables are much healthier than those who eat less, whether one measures obesity, blood sugar, blood pressure, or risk of cancer or heart disease. And they find it easier to lose weight.

So to lose toxic fat, feel better, and look better, have three helpings of fresh produce with each meal. (Rice, baked potatoes and french fries don't count as fresh produce.)

Managing craving: Trigger foods can sink the best diet

As described earlier, a high-protein diet and 8-10 helpings a day of fresh fruits and vegetables actively reduce your hunger and promote fat loss. But there's one other factor you need to take into account: comfort foods or "trigger foods."

Make a list of the 5 to 10 foods you crave the most when you're upset or want a reward. These should include foods that make you feel better emotionally, or which you often eat more of than you intended, or that help calm you down when you're upset. Typically these are the foods in your diet with the highest Glycemic Index and lowest nutritional value.

See if you can figure out which emotional needs these foods address. Can you meet these needs some other way? Which of these foods are you willing to eliminate from your diet? Which can you limit to a small portion just once a month?

Burning fat: Building muscle

One of the most important tricks to change your shape is increase muscle mass. Each pound of muscle burns 14 calories a day, much of it in your sleep. Ten new pounds of muscle

burns an extra 140 calories a day, enough to change the direction your scale is heading. Indeed, the reason it becomes harder to lose weight as we grow older is we lose muscle with age. You can regain most of this muscle.

Dr. Heber's book includes a number of exercises for building muscle. Basically, lift weights or do calisthenics like push-ups, chin-ups, or sit-ups. Dumbbells weighing 10-20 lbs suffice for building upper body mass. You can increase muscle in a few minutes a day, without breaking a sweat.

Burning fat: Aerobic exercise

Doing something that feels good and makes you pant and sweat for half an hour a day makes a tremendous difference. The trick is to mix up different exercises that are comfortable and convenient. Mostly, this requires trial and error to find the right balance for you. In addition to its other health benefits, aerobic exercise modifies muscle metabolism, so your muscles burn fat for the next 2-3 days after exercising.

Foods that burn fat

Caffeine burns fat, as do hot peppers (cayenne and Tabasco sauce, for example). Black and especially green tea helps as well. These effects are probably small, but every little bit helps. One warning: too much caffeine is addicting and can elevate blood pressure.