

Do Diets Work?

Everyone's looking for the magical diet or pill to lose fat and build muscle. And, every year there's a new weight loss solution or body building scheme to do it. With all the media hype about these new diets and products, it's easy to forget the basics.

Bottom Line: To maintain weight, you must maintain an energy balance!

In other words, Calories In must equal Calories Out. "Calories In" includes what we eat and drink. "Calories Out" includes our resting metabolic rate (what we burn to maintain our physiological functions at complete rest), normal daily activities, and purposeful exercise. The only way to lose weight is to create a calorie deficit. One pound of fat equals 3500 calories. To lose a pound a week, that means creating a deficit of 500 calories per day (either by eating fewer calories and/or burning more in physical activity). To gain a pound a week, that means creating an excess of 500 calories per day. Whether or not those extra calories go towards building muscle or fat depends on whether or not you exercise.

Fad diets work (in the short term) because they cut calories. It makes no difference if it's a 40-30-30 plan, a very low carbohydrate diet plan, or a food-combining plan. All of these plans are low in calories.

Problems with Restrictive Dieting

When you restrict calories too low in an effort to lose weight very quickly, several negative things happen that can be disastrous to your weight, health, academic success, and social life:

- Your metabolism slows down. Your body slows down in order to adapt to the lower calorie intake (so it can function with less fuel). And, it actually begins holding on to every calorie you eat and storing it as fat (since it's not sure you will feed it later). This is why people who diet, usually gain back their weight (and then some!) once they start eating normally again.
- When you cut calories too low, you lose mostly water and muscle, not fat. Without enough calories and protein from food, your body starts breaking down its own muscle protein for fuel. When you lose muscle, you slow your metabolism down even more!
- Poor concentration, and low energy. After all, your brain, other vital organs, and muscles are deprived of fuel.
- Terrible mood. Starvation often results in increased depression and irritability.
- Food preoccupation. Your body is starving so your thoughts become consumed with food.
- Increased risk for binge eating. Your body wants to hoard as much food as possible in case it's forced to starve again.
- Rapid weight regain, usually in the form of fat.

So, to maximize fat loss (and minimize the drop in your metabolism, energy, mood, and grades), take it slow! Decrease your intake slightly by 300-500 calories per day and increase your exercise output. Aim for about 0.5-2 lb. weight loss per week. If you are very overweight, 2 lb. per week is acceptable. But, if you only have a few pounds to drop, the rate should not exceed 0.5-1 lb. per week.

The Truth About Low Carb Diets

Like all low calorie diets, low carbohydrate plans often result in weight loss. If you exclude carbohydrate-rich foods, you're eliminating a lot of calories. And usually, you get bored with the allowed protein and fat choices, so you don't make up the difference by eating more of these foods. Protein and fat also make you feel fuller, so you're not as hungry and don't eat as much.

The more moderate carbohydrate plans (like the Zone, 40% carbohydrates) are harmless and even have some positive attributes. Others that are very restrictive in carbohydrates (like the Atkins diet, 5-20% carbohydrates) can have many negative effects:

- **Dehydration:** Carbohydrate is stored with water as glycogen in our muscles and liver. When you don't eat carbohydrates, your glycogen stores become depleted and you lose all that water (NOTE: That's why you lose several pounds in the first couple of days). In addition, these diets create more metabolic waste (from protein and fat metabolism), which must be excreted with water in your urine.
- **Constipation:** These diets tend to be very low in fiber (since fiber is found in carbohydrate-rich foods). Fiber not only helps maintain bowel regularity, but it also helps lower blood cholesterol levels and reduces your risk for diverticulosis and hemorrhoids.
- **Heart Disease/Cancer:** These diets tend to be high in saturated animal fat and protein, which has been associated with high LDL ("bad") cholesterol levels, heart disease, and certain forms of cancer (like prostate and colon cancers). These diets also tend to be low in the protective, disease-fighting phytonutrients found in whole grains, vegetables, and fruits.
- **Bone Disease:** These diets tend to be low in calcium (since milk foods are high in carbohydrate and, therefore, often restricted). Worse yet, excessive protein intake causes greater calcium excretion in your urine.
- **Low Energy, Poor Work-Outs:** Carbohydrate stores in our muscles are what fuel high intensity work-outs (like weight training). You can't use fat or protein for fuel at high intensities. If your muscles are carbo-depleted, you won't have as much energy to lift as much weight. As a result, you won't build as much muscle. In addition, carbohydrate stores are critical for maintaining endurance during vigorous aerobic training. If your muscles are carbo-depleted, you'll fatigue sooner; and as a result, you won't be able to burn as many calories or body fat.
- **Bad breath:** When carbohydrate is lacking, fats are broken down to ketones, which give an acetone (nail polish remover) smell to your breath. High amounts of ketones may also disrupt the acid-base and electrolyte balance in your blood.

Low carbohydrate diets (like all fad diets) are something you "go on" and then you "go off." When you "go off," the weight comes right back. For permanent success, it's best to make small, healthy changes in your eating and activity patterns that you can live with forever. Gradually work towards a sensible, healthy eating plan that is 1) MODERATE in total carbohydrates (e.g. 45-55% of calories), 2) includes smaller portion sizes (no super-sizing!), 3) emphasizes HIGH QUALITY carbo choices (e.g. vegetables, fruits, whole grains, legumes, and low fat milk products), and 4) limits refined (e.g. white and/or processed) carbs to occasional treats.