



## No magic 'zone' for burning fat

Have you heard about the 40:30:30 diets, sports bars, powders, and no doubt soon to come, TV dinners? What is this all about?

For some time we have considered writing about this 40:30:30 "zone" concept. Until now, we haven't, because we thought this would be a passing fad. However, the "zone" concept now forms the basis of a small industry for people selling 40:30:30 books and food products.

Here's what it's all about. Around 1995, a diet book titled

"The Zone" was published. It proposed that eating too much carbohydrate decreases the ability of the body to burn fat by increasing the insulin (a hormone) in the blood. The author proposed that the perfect diet should provide 40% of the calories from carbohydrate, 30% of the calories from protein, and 30% of the calories from fat. Eating in this 40:30:30 ratio or "zone" is supposed to allow the body to burn more fat.

Is the 40:30:30 "zone" concept really scientific cutting edge nutrition? Do these diets really burn fat? Is this really based on science? And how can a person achieve this ratio?

There is no evidence that a 40:30:30 meal will cause less

fat to be stored or more fat to be burned than any other ratio when the same amount of calories are consumed. The 40:30:30 ratio diets (or any other weight loss diet) will keep you in the "fat burning zone" only if you eat less calories than you need.

In particular, the original "zone diet" is a low calorie diet when followed exactly. And the way the diet obtains this 40:30:30 ratio is by decreasing foods high in carbohydrate such as pasta, potatoes, rice, bread and many sweet fruits.

Many people claim that they have lost weight on 40:30:30 diets and feel better eating that way. The weight loss is due to the diet being low in calories. Also, some people's diets may be too high in carbohydrate and calories. In this case, changing to a 40:30:30 diet could be a change in the right direction, but just too far in that direction. But eating too many 40:30:30 sports bars above your calorie needs is just like eating too many candy bars.

One positive factor for The Zone diet is that it promotes the consumption of the lower carbohydrate vegetables and most Americans don't eat enough vegetables. This could improve the diets of many people.

Some promoters of these diets

claim that 30% of calories from fat is considered to be a "low fat" diet. The common recommendation by a wide variety of authoritative organizations is to eat less than 30% of calories from fat. In other words, 30% is considered to be an upper limit for healthy fat intake. It is not a low fat diet, nor is it a goal to reach. A true low fat diet is more like 15% of calories from fat.

However, we find that all this percentage stuff just confuses most people.

What you see on food labels is "grams of fat." The simplest thing is to just keep fat intake around 40 to 50 grams of fat per day. This is enough fat for most people and should provide enough of the essential fatty acids if the fat comes from a wide variety of foods.

Also, the "best" percent of calories to consume from the various nutrients depends on how many calories are being consumed. For example, we require a certain amount of protein, not a percentage of the diet. If the total calories in a diet are low, the percent of calories from protein must go up for the amount of protein to stay the same.

Our goal is long term health, not ratios that sometimes work.

---

Alan Titchenal, Ph.D, CNS and Joannie Dobbs, Ph.D, CNS  
are nutritionists in the Department of Human Nutrition, Food and Animal Sciences,  
College of Tropical Agriculture and Human Resources, UH-Manoa.  
Dr. Dobbs also works with the University Health Service.

---