



Gram and Calorie Conversions

Why do fuel percentages differ when food is measured in calories and grams?

Since protein and carbohydrates each contain 4 calories per gram and fat contains 9 calories per gram, the percentages must also reflect this difference.

For example, take the *Fat Loss/Weight Maintenance* percentages for 400 calories of food: 200 calories of carbs (50% of total calories), 100 calories of protein (25% of total calories), and 100 calories of fat (25% of total calories). Divide each fuel by its respective calorie-per-gram conversions and you end up with 50 grams of carbs (60% of total grams), 25 grams of protein (30% of total grams), and 11.1 grams of fat (10% of total grams). It's as easy as that! But here is how it is calculated in case you want to do this on your own (all totals are rounded up to the nearest 100th):

400-calorie or 86.1-gram meal

Carbohydrates:

200 calories (50% of total calories) ÷ 4 calories per gram = 50 grams (60% total grams)

Protein:

100 calories (25% of total calories) ÷ 4 calories per gram = 25 grams (30% of total grams)

Fat:

100 calories (25% of total calories) ÷ 9 calories per gram = 11.1 grams (10% of total grams)

You can use the same calculation for the *Accelerated Fat Loss* plan percentages: 40 percent of carbohydrate and protein calories and 20 percent of fat calories correspond to 45 percent of carbohydrate and protein grams, and 10 percent of fat grams.