

ZONE VS. MACROS: ACCOUNTING FOR FAT IN PROTEIN

Tracking the amount of food you eat is key to accomplishing health, performance or aesthetic goals. While the Zone has been a staple in CrossFit, macronutrient (macro) tracking has become increasingly popular. Both programs require eating a prescribed amount of food every day, but caloric totals rarely match when the exact same meals are evaluated in each system.

This brief neither criticizes nor applauds either system, nor does it discuss how much of each macronutrient someone should eat. Instead, this brief demonstrates and explains the differences in caloric measurement between the two systems so athletes can optimize their approaches.

Precision and Hidden Calories

The Zone counts “blocks,” where one block is equivalent to 7 grams of protein, 9 grams of carbohydrate and 3 grams of fat. Food is generally assigned to one macronutrient group based on its primary source of calories. This means the Zone has “hidden calories”—calories not reflected in your daily total. Using an orange as an example, only 18 grams (2 blocks) of carbohydrates are tallied in the Zone despite the 2 grams of protein an orange also contains. These eight protein calories are hidden.

Counting one’s macros is inherently more precise, as it allows you to track every gram and calorie of every macronutrient in every food. This means all calories are accounted for. The Meal 1 table compares blocks, grams and calories for a single meal, with hidden calories highlighted.

Meal 1 (Chicken)						
Food	Protein (blocks)	Protein (g)	Carb (blocks)	Carb (g)	Fat (blocks)	Fat (g)
Chicken	4	28	0	0	0	4
Apple	0	0	2	18	0	0
Banana	0	1	2	18	0	0
Avocado	0	1	0	1	4	6
Total	4	30	4	37	4*	10
Calories	112	120	144	148	108	90

*4 blocks: 1.5 g of fat from the avocado plus 1.5 g assumed to be in the protein source (3 g total fat per block)

Meal 1 total calories according to blocks = 112 (protein) + 144 (carb) + 108 (fat) = 364

Meal 1 total calories according to macros = 120 (protein) + 148 (carb) + 90 (fat) = 358

For this meal, the Zone and macro approaches are essentially equivalent.

Fat: The Major Swing Variable

Fat has over double the caloric density of protein and carbohydrates (9 calories per gram of fat compared to 4 calories per gram of protein or carbohydrate). The fat content, specifically in your protein source, can add a significant number of calories to your diet depending on your choices. In the Zone, a block contains 3 grams of fat, with the assumption that half (1.5 grams) is from the protein source. When constructing meals, only 1.5 grams of fat are to be added per protein block.

This means a protein source with greater than 1.5 grams of fat per block of protein adds more calories to the diet than anticipated in the Zone system. A large egg is a block of protein, but it contains 4.5 grams of fat—3 grams of fat not accounted for by the Zone. A four-egg omelet would contain 12 grams of fat (108 calories) that are hidden in calculation. If an individual chooses protein such as ground beef (20 percent fat), pork cuts or eggs as dietary mainstays, the daily total calories may be significantly higher than intended (approximately 400 calories per day for a 16-block athlete, for example).

The Meal 2 table illustrates the increase in calories created by switching from chicken breast to ground beef (20 percent fat).

Meal 2 total calories according to macros = 120 (protein) + 148 (carb) + 216 (fat) = 484

Meal 2 (Ground Beef)						
Food	Protein (blocks)	Protein (g)	Carb (blocks)	Carb (g)	Fat (blocks)	Fat (g)
Ground beef (20% fat)	4	28	0	0	0	18
Apple	0	0	2	18	0	0
Banana	0	1	2	18	0	0
Avocado	0	1	0	1	4	6
Total	4	30	4	37	4	24
Calories	112	120	144	148	108	216

The substitution of a fattier protein source results in an approximately 35 percent increase in caloric intake over Meal 1.

Depending on your goals, taking some time to identify the fat content in your protein sources can be beneficial. For example,

individuals who are not leaning out or reaching health/performance goals on the Zone can evaluate and make changes as necessary. For those individuals attempting to use the standard fat prescription (1x), eliminating the additional 1.5 g of added fat in consideration of a fatty protein source can move the athlete closer to the intended prescription (Meal 3). If one eats lean meats all the time, precision is greater.

Meal 3 total calories according to macros = 116 (protein) + 144 (carb) + 162 (fat) = 422

This results in an approximately 18 percent increase in caloric intake from Meal 1.

Combination Items

Combination items can add significant calories to the diet depending on how they are blocked. A favorite go-to protein bar has a macronutrient split of 18 grams of protein, 25 grams of carbohydrates and 17 grams of fat. At 2.5 blocks of protein, 2.8 blocks of carbohydrates and 5.7 blocks of fat, the bar’s composition dictates that all calories from macronutrients should be accounted for. Treating the bar only as a fat source or carbohydrate source leaves too many hidden calories on the table—about 170-225 of them.

As a general rule, if the item contains at least a block of a macronutrient per serving, it should be accounted for—even if one macronutrient contributes more calories.

Meal 3 (Ground Beef, No Avocado)						
Food	Protein (blocks)	Protein (g)	Carb (blocks)	Carb (g)	Fat (blocks)	Fat (g)
Ground beef (20% fat)	4	28	0	0	0	18
Apple	0	0	2	18	0	0
Banana	0	1	2	18	0	0
Avocado	0	0	0	0	0	0
Total	4	29	4	36	0*	18
Calories	112	116	144	144	0	162

*Added fat blocks eliminated in consideration of the fat in protein source. The meal still contains fat, but it comes from the protein source entirely.

Fruit Variations

One of the benefits of the Zone diet is the “eyeball” approach that can be applied instead of weighing and measuring every item. In particular, fruit can be widely variable in size and, therefore, carbohydrate content. Particularly for the items that are frequently consumed in your diet, spend some time calibrating your eye to determine which banana is truly equivalent to 3 blocks. Assuming the individual is not getting all carbohydrates from extra-large fruit, significant hidden calories are likely not added; however, it is a factor that could affect daily precision.

Considerations for Application

Although hidden calories can make your daily Zone calorie or block totals imprecise, they might not be cause for concern. Consistency can trump precision in that a constantly imprecise diet still provides a solid baseline from which to make changes in pursuit of the optimal diet. For example, it does not actually matter if you consistently have 12 or 9 extra fat grams per meal as long as you are monitoring your diet’s effect on performance and aesthetic goals. If you realize you need to make adjustments and then do so, your consistent baseline will allow you to make those adjustments regardless of the system.

However, for those whose day-to-day diets are highly variable, sometimes choosing more combination items or fattier protein cuts will inconsistently add hidden calories to the diet. This can thwart health or performance goals because it is impossible to make precise adjustments from an inconsistent baseline. The more frequently one chooses leaner cuts of meat, the more precise the Zone will be, even when eyeballing.

Finally, while precision is laudable, food labels are not always 100 percent reliable, and the body is not sensitive enough such that small fluctuations in day-to-day totals are significant. Hitting within 10 grams of protein and carbohydrate goals and within 5 grams of fat goals for the day is precise enough when weighing and measuring. ■

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