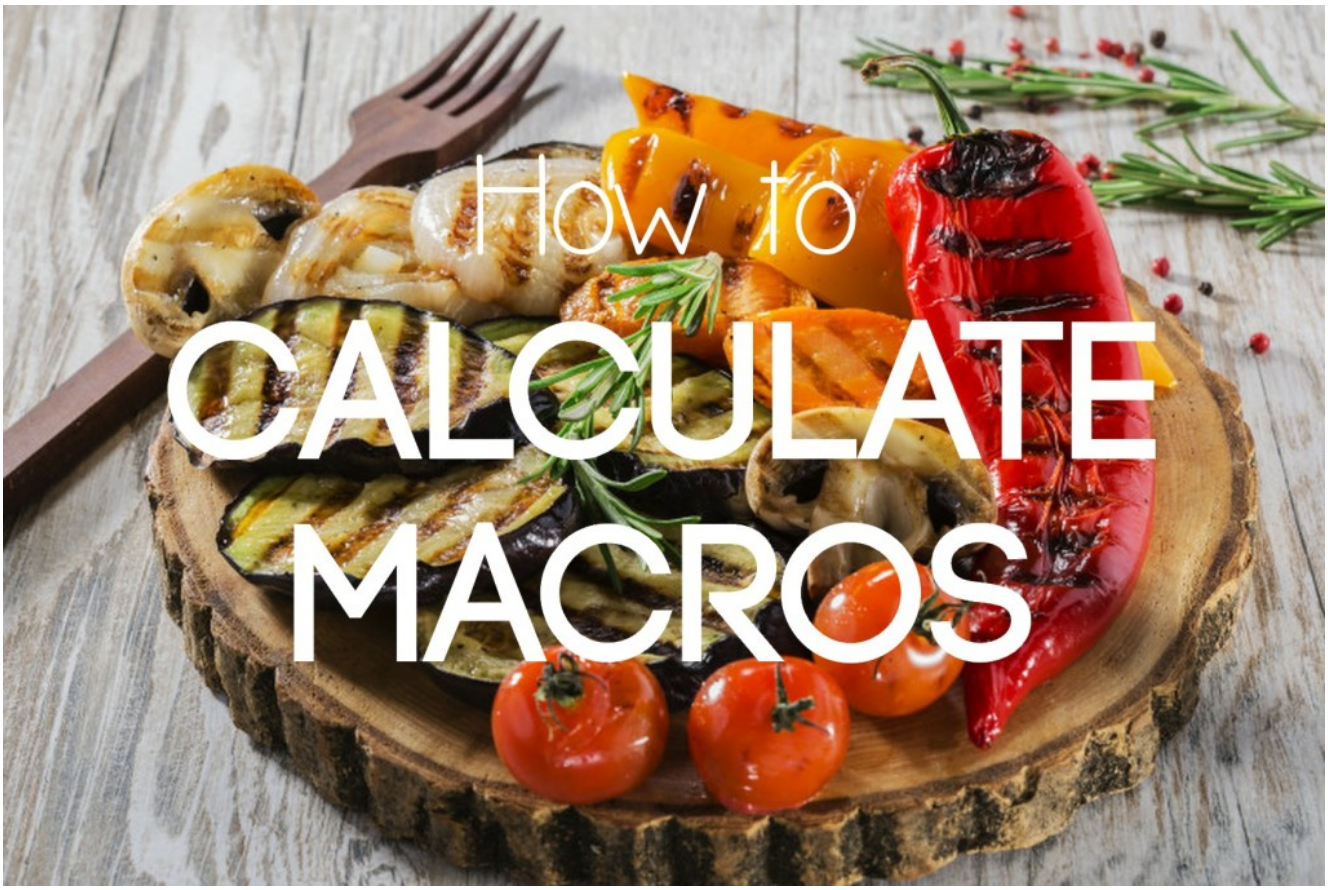
How to Calculate Macros



It can be difficult to know how many calories to eat per day, let alone how much of each macronutrient to eat. After all of my research I have found this calculation to be the easiest way. So grab a calculator along with a pen and paper and follow along.

Note: Remember calculating calories and macros is just an estimation. The only way to know exactly how much to eat is through trial and error. Any sort of measurement is going to have some degree of error. There are way too many factors, including genetic ones, to be sure of anything. Once you have your calculation give it a few weeks and see what happens; if you need to adjust up, adjust up; if you need to adjust down, adjust down.

The following should be taken as general advice. Consult your physician before starting any diet or nutrition plan. If you are under 18 years of age this formula will not be accurate. I

would also strongly suggest you don't obsess over your calories and macros. Eat well, exercise regularly, and have fun. Being hyper focused on diet/training can create disordered eating & body image issues. If you find yourself becoming obsessed with it all, it may be a good idea to step back and take a break from tracking for a while.

Estimating Requirements

The simplest method uses a standard 'calories per unit weight' (usually kgs) method. This calculates a total calorie requirement (TEE). It means you do not need to multiply it by an activity factor. The calculations are as follows.

26 to 30 kcals/kg/day for normal, healthy individuals with sedentary lifestyles doing little physical activity [12.0-14 kcal/pound]
31 to 37 kcal/kg/day for those involved in light to moderate activity 3-5 x a week with moderately active lifestyles [14-16 kcal/ pound]
38 to 40 kcals/kg/day for those involved in vigorous activity and highly active jobs [16-18 kcal/ pound].

For those involved in HEAVY training (eg: athletes) – the demand is greater:
41 to 50 kcals/kg/day for those involved in moderate to heavy training (for example: 15-20 hrs/ week training) [18.5-22 kcal/ pound]
50 or above kcals/kg/day for those involved in heavy to extreme training [> 22 kcal/ pound]

Using the Above to Recalculate Based on Goals

You then need to increase or decrease your intake based on your goals (eg: lose fat or gain muscle). For this do not use a 'generic calorie amounts' (eg: 500 cals day) to add /

remove. Instead calculate a % of your maintenance. Why? The effect of different calorie amounts is going to be different based on someones size/ total calorie intake. For example subtracting 500 calories a day from a 1500 total intake is 1/3rd of the total calories, where 500 calories a day from 3000 total intake is only 1/6th of the total. The results will therefore be markedly different on an individuals energy level & weight loss. Generally:
To ADD weight: ADD 10-20% of the TEE to your TEE calories
To LOSE weight: SUBTRACT 10-20% of the TEE to your TEE calories
Then monitor your results and adjust as required.

Macronutrient Needs

Once you work out calorie needs, you then work out how much of each macronutrient you should aim for. This should not be

based on a ratio of macro intakes. (eg: ’30:40:30 or 40:40:20′) Your body doesn’t care what % intake you have. It works based on sufficient quantity per mass.

Protein
Researchers acknowledge that protein becomes more important in the context of lower calorie intakes, or lower carb intakes. Recent evidence also suggests that protein intakes of 2.2-3g/kg in lean athletes help with maintaining lean mass, and the physiological and psychological stressors associated with high volume or intense training. Most people find higher protein intake better for satiety, partitioning, blood sugar control and hypertrophy. So unless you have medical reasons for lower protein, or unless guided by a sports nutritionist or physician I would suggest the guidelines below.

<u>General ‘bodybuilding’ guidelines:</u>
Moderate bodyfat, Moderate training load, moderate calorie = 2.0-2.5g per lean kg weight (about 0.9-1.2g per pound)
Low bodyfat or Very Low Calorie, Low Carb, High training load = 2.2-3g per lean kg weight (1.0-1.3g per pound)
High bodyfat, high calorie, Low training load = 1.6 to 2.2g per lean kg weight (.75-1g per pound)

Fats
Generally speaking, although the body can get away with short periods of very low fat, in the long run your body needs fat to maintain testosterone, health, satiety, and sanity. Additionally any form of high intensity training will benefit from a fat buffer in your diet – which controls free radical damage & inflammation.

<u>General guidelines:</u>
Average or low bodyfat: 1-1.5g fat/ kg body weight (between 0.4-0.7g total weight/ pounds). But up to 2g/kg might be needed.
High bodyfat: 1-1.5g fat/ kg LEAN weight (between 0.4-0.7g LEAN weight/ pounds). But up to 2g/ kg lean might be needed.

Low calorie dieting: You can decrease further, but as a minimum, I would not suggest any less than about 0.30g/ pound.

Carbs

Carbs are important for athletes, active individuals, & those trying to gain muscle. Carbs help with workout intensity, muscle recovery health, & satiety. There are no specific 'requirements' for carbohydrate intake, so the general guidelines are as follows:

For 'general gymers'- find the calories left over from subtracting fats/ protein from your TEE:

Remaining calories = Total calorie needs – ([protein grams x 4] + [fat grams x 9])

grams carbs = (remaining calories) / 4

<u>For example:</u>

My daily calorie intake for fat loss is 1750 calories.

My protein intake is calculated to be 135g per day.

135 x 4 = 540 calories per day of protein

My fat intake is calculated to be 60g per day.

60 x 9 = 540 calories per day of fat

1750 (daily calories) – 540 (protein) – 540 (fats) = 670 (calories per day left to go towards carbs)

670 / 4 = 168g carbohydrates per day.

So my macros are 168g carbs/135g protein/60g fat

If you are an athlete involved in high volume training I would suggest you calculate a requirement for carbs to start with:

Moderately active: 4.5 – 6.5 g/ kg (about 2 – 3g/ pound)

High active: 6.5 – 8.5 g/ kg (about 3 – 4g/ pound)

Intense activity: + 8.5g / kg (more than 4g/ pound)

Then find your protein as above and use fats for remaining cals from your TEE:

Remaining calories = Total calorie needs – ([protein grams x 4] + [carb grams x 4])

grams fats = (remaining cals)/ 9

I hope this helped you to calculate your calorie and macro intake and remember this is only an estimate. Track your progress for 2-4 weeks and adjust accordingly.

Adapted from Emma Leigh's version.