



Macro cheat sheet

The key numbers for calories and macros

Energy per gram

Protein	4 kcal
Carbohydrates	4 kcal
Fat	9 kcal
Alcohol	7 kcal
Fiber	2 kcal

Atwater factors. Fiber: value from the EU Food Information Regulation (FIC) for nutrition labeling.

Protein per day

Muscle gain	1.6 to 2.2 g per kg body weight
Most lifters (ISSN)	1.4 to 2.0 g per kg body weight
Dieting, lean and trained	2.3 to 3.1 g per kg fat-free mass
Per meal	about 0.25 g per kg or 20 to 40 g, every 3 to 4 hours

Fat

Rule of thumb minimum	not long-term below about 20% of calories
While dieting (Helms et al.)	15 to 30% of calories
General guideline (DGE)	about 30% of calories

Splitting it up in four steps

1. Set target calories: maintenance plus surplus (gaining) or minus deficit (dieting).
2. Set protein: grams per kg times body weight, times 4 gives the calories.
3. Set fat: share of target calories, divided by 9 gives the grams.
4. Fill the rest with carbs: remaining calories divided by 4.

Carbohydrates and fiber

Carbs fill the remaining calories once protein and fat are set. More carbs usually support training performance. Fiber: at least 30 g per day (DGE).

Worked example (sample values)

Starting point	80 kg, target 2600 kcal
Protein 2.0 g/kg	160 g = 640 kcal
Fat 25%	650 kcal = 72 g
Carbohydrates	2600 - 640 - 650 = 1310 kcal = 328 g

The TDEE calculator and macro calculator on [leanislaw.app](#) give you your own numbers.

Sources

Jäger R et al. (2017): International Society of Sports Nutrition Position Stand: protein and exercise. J Int Soc Sports Nutr 14:20.

Morton RW et al. (2018): A systematic review, meta-analysis and meta-regression of the effect of protein supplementation on resistance training-induced gains in muscle mass and strength in healthy adults. Br J Sports Med 52:376-384.

Helms ER, Aragon AA, Fitschen PJ (2014): Evidence-based recommendations for natural bodybuilding contest preparation: nutrition and supplementation. J Int Soc Sports Nutr 11:20.

Deutsche Gesellschaft für Ernährung (DGE): D-A-CH-Referenzwerte für die Nährstoffzufuhr.

Verordnung (EU) Nr. 1169/2011 (LMIV), Anhang XIV.

General information, not medical advice. If you have a medical condition, pain or are pregnant, get medical clearance first.