

## CALORIES

The most important determinant of what we weigh is the amount of energy in the food we consume, and that energy is measured in calories (Nestle & Nesheim, 2012)

Calorie is a unit of energy. In nutrition, calories refer to energy consumption through eating and drinking, and energy usage through physical activity (Nordqvist, 2016)

To calculate the calories, you need only mathematics. When you eat foods, the body burn the food: 4 Cal per gram of protein, 4 Cal per gram of carbohydrates and 9 Cal per gram of fat. Therefore, if you know the composition and amount of food, you have only to multiply for these quantities to know the total calories.



For example: If you eat a low-fat yoghurt

<b>Carbohydrates</b>	4.9	x 4 cal/g	19.6 Cal
<b>Proteins</b>	4.4	x 4 cal/g	17.6 Cal
<b>Fats</b>	0.1	x 9 cal/g	0.9 Cal
<b>Water</b>	89.8	X 0 cal/g	C Cal
		<b>TOTAL</b>	38.1 Cal per yoghurt

## How many calories do you need?

The official Dietary Reference Intakes (DRI) published by the national academies of Sciences, Engineering and Medicine recommends that for an adult, 45 to 65 percent of calories should come from carbohydrates, 20 to 25 percent should come from fat and 10 to 35 percent should come from protein (Trumbo et al, 2002)

**Carbohydrates** should consist mostly of whole grains. The consumption of whole grains provides more nutrients (vitamins and minerals) as well as greater amounts of fiber, all of which can help to stave off cardiovascular disease and cancer (ACSM, 2013)



**Protein** is another macronutrient that is often perceived as the *building block* of muscle in the body. The protein is required for muscle growth (ACSM, 2013)

**Fat** (nutrient that is often thought of as bad) is required for proper bodily function. Monounsaturated fats (olive oil) and polyunsaturated fats (sunflower oil) should be consumed in higher amounts than saturated fats (butter). The reason is because saturated fats lead to increased risk of heart disease because they increase blood levels of LDL (ACSM, 2013)

Although to individual level, it is different. Every person is different. This is due to the metabolism of every person (genetic, lifestyle, physical activity, age, sex, hours of sleep, ...)

You can to calculate the daily caloric with this tool:

[http://www.freedieting.com/tools/calorie\\_calculator.htm](http://www.freedieting.com/tools/calorie_calculator.htm)

When you eat 500 calories, a chocolate ice cream or broccoli, the body don't burn o save calories in the same manner. Every food digested of different form and a food contribute different calories depends of the form cooking, temperature, ingredients, time of the year, ...



Don't forget:

- Satisfy all nutritional needs.
- Protect an individual from hunger between meals, provide a sense of well being.
- Parallels normal eating habits and tastes as much as possible

*Adapted from Kantor*

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