

Consuming very much to maintaining a balanced weight.

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Diet Quality and Quantity Matter

It's no secret that a person's weight is directly proportional to the number of calories consumed: Your weight will stay the same if you eat the same number of calories that your body burns over time. You acquire weight when you consume more calories than your body burns. You lose weight when you eat less. But what about calorie source: does it matter if they come from fat, protein, or carbohydrate? For example, whole grains or potato chips? Diets like the Mediterranean or the "Twinkie" diets? What about calorie consumption's time and location: Is it true that eating breakfast helps maintaining a healthy weight easier? Is eating at fast-food places more difficult? [1].

Foods and eating patterns that protect against heart disease, stroke, diabetes, and other chronic illnesses have been studied extensively. The good news is that many of the foods that help prevent disease, such as whole grains, vegetables, fruits, and nuts, also appear to aid with weight loss. Many of the foods that increase illness risk-refined grains and sugary drinks, for example-also contribute to weight gain. According to conventional opinion, because a calorie is a calorie regardless of where it comes from, the greatest advice for weight loss is to eat less and exercise more. However, new research reveals that some meals and eating habits make it easier to control calories, while others make it simpler to overeat [2].

Dietary fat and weight

Low-fat diets have long been recommended for maintaining a healthy weight and general health. But the evidence isn't there: in the United States, the percentage of calories from fat in people's diets has declined over the previous 30 years, while obesity rates have grown considerably. According to clinical studies, eating a low-fat diet does not make losing weight any easier than eating a moderate- or high-fat diet. In truth, persons who follow a moderate- or high-fat diet lose the same amount of weight as those who follow a low-fat diet, if not more in certain situations. When it comes to disease prevention, low-fat diets don't appear to provide any significant health benefits [3].

Low-fat diets are generally high in carbohydrate, especially from quickly absorbed foods like white bread and white rice. Weight gain, diabetes, and heart disease are all linked to diets high in these items. (For more information, see Carbohydrates and Weight).

The type of fat people eat is significantly more essential than the amount for their health (see box), and there's some evidence that this is also true for weight loss. Increased consumption of unhealthy fats-trans fats in particular, but also saturated fats-was linked to weight gain in the Nurses' Health Study, which followed 42,000 middle-aged and older women for eight years-but not increased consumption of healthy fats—monounsaturated and polyunsaturated fats-was not [4].

More satiation: Protein consumers feel full on lower calorie than carbohydrate or fat consumers.

Greater thermic effect: Protein has a larger thermal conduction impact than some other macronutrients since it requires more energy to digest and store than other macronutrients, therefore it may help people burn more calories per day [5].

Improved body composition

Protein appears to help maintaining lean muscle mass during weight loss, which can enhance the power side of the energy equation.

Diets that are higher in protein and lower in carbohydrates enhance blood lipid profiles and other metabolic markers, which may help to prevent heart disease and diabetes. However, some high-protein foods are better for you than others: Red meat and processed meat consumption has been linked to an increased risk of heart disease, diabetes, and colon cancer.

References

1. Gharesifard B, Cortés J. Distributed continuous-time convex optimization on weight-balanced digraphs. *IEEE Transactions on Automatic Control*. 2013;59(3):781-6.
2. Naude CE, Schoonees A, Senekal M, et al. Low carbohydrate versus isoenergetic balanced diets for reducing weight and cardiovascular risk: a systematic review and meta-analysis. *PloS one*. 2014;9(7):e100652.
3. Horibe Y. An improved bound for weight-balanced tree. *Inf Control*. 1977;34(2):148-51.
4. Gharesifard B, Cortés J. Distributed strategies for generating weight-balanced and doubly stochastic digraphs. *Eur J Control*. 2012;18(6):539-57.
5. Royer S, Paré D. Conservation of total synaptic weight through balanced synaptic depression and potentiation. *Nature*. 2003;422(6931):518-22.

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