Dear Alice,

I've read that to lose weight, a person has to eat a low-fat diet. But, I've also read that to lose weight, the calories consumed have to be less than the calories expended. So, if a person consumes fewer calories than are expended, why does it matter if they come from fat or some other source?

Signed,
Confused

Answer

Dear Confused,

Not to confuse you more, but both philosophies could be considered correct. People do have to expend more calories, or energy, than they consume in order to lose weight. But the overall quality of a person's diet (variety of food, including plenty of fruits, vegies, and whole grains) is also very critical.

When fewer calories are taken in, each food really counts. Choose foods that offer nutrients full of vitamins, minerals, and other beneficial substances. Good health is not just about the number on the scale, but more about eating a varied diet. So, include carbohydrates, proteins, some fat, and fiber, along with those vitamins and minerals, rather than eating only one nutrient. Don't forget phytochemicals (plant chemicals found in tomatoes, garlic, onions, broccoli, cauliflower, cabbage, carrots, apricots, citrus fruits, leafy green vegetables, soybeans, and other fruits and vegetables), too. For more information about what foods provide which nutrients, read Food guidelines ? How much is a serving? and search Go Ask Alice's Nutrition & Physical Activity archive.

Here's a list of specific functions of nutrients:

- **Carbohydrates**: (in grain products, fruits, and veggies) provide energy; this is the fuel used first; the brain and central nervous system run only on glucose, a carbohydrate
- **Protein**: (in dairy, meats, legumes, and eggs) required for growth and maintenance; it produces antibodies, enzymes, and hormones as well as repairs muscle tissue and forms hair and nails, among other structures in the body
- **Fat**: (in dairy and meats) facilitates absorption of vitamins A, D, E, and K; helps maintain structure and health of all cells; and, is required in the synthesis of hormones
- **Vitamins and Minerals**: involved with numerous chemical reactions in our bodies

By taking in most calories from one source, the body won't operate efficiently because there will be deficiencies in other areas. Damage from insufficient nutrient intake can occur long before effects are felt. The following list offers some health problems that can result from specific nutrient restricted diets:

### Low Carbohydrate Diets
- Fatigue
- Dehydration
- Constipation
- Muscle weakness
- Irritability
- Elevated blood cholesterol and triglyceride levels
- Kidney problems
- Calcium depletion

### Low Protein Diets
- Fatigue
- Frequent colds / low immunity
- Anemia
- Diarrhea
- Weakness
- Hair loss / nail thinning

### Very Low-fat Diets
- Vision Problems
- Cold Intolerance
- Bone loss
- Hemorrhage from impaired blood clotting
- Vitamin and mineral deficiencies

So, what do you need to know when planning what to eat for weight loss and weight management? In general, lower fat diets are recommended because, if properly planned, they are healthier and more fulfilling. With high fat diets, calories add up quickly because fat provides nine calories per gram (protein and carbohydrate each supply four calories per gram). You may crowd out key nutrients and not be totally satisfied on a high fat diet. In addition, high fat diets have been connected to the development of heart disease, some cancers, and gall bladder disease, among other ills.

By replacing foods high in fat with foods low in fat, but higher in protein or carbohydrates, the number of calories are automatically cut down (if you don't eat a greater quantity). Substituting a high fat food with a high fiber food will help keep folks feeling full and content with fewer calories as well. Many carbohydrate-rich foods are also high in fiber. Since humans can't digest fiber, it adds bulk and is filling and satisfying, which are among its healthy benefits.

As you can see, it does matter where the nutrients come from. And, balance is key. If your calories are mostly from fat, you may end up taking in too many calories, possibly leading to weight gain. On the other hand, if you're limiting calories to lose weight while on a high fat diet, you probably won't be satisfied because you'll be eating a small amount of food. In the long run, sticking with this eating plan might not be the best idea because it's nutritionally limited. You may also find it helpful to meet with a registered dietitian to discuss your weight loss goals and your particular eating preferences to help you come up with an eating plan that
suits your needs. You'll have a better chance of being happy with your eating, managing your weight more easily, and being healthy to boot!

Alice!
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Nutrition & Physical Activity
Optimal Nutrition
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Nutrients

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Resources

Columbia Health Nutrition Services (Morningside)
Student Health Service Nutrition Services (CUMC)
Published date:
Apr 30, 1999
Last reviewed on:
Jul 08, 2015

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