What Is Ash in Food?

By Michael Baker



Woman reading ingredients on a box in grocery store. Image Credit: Monkey Business Images/Monkey Business/Getty Images

If you have started paying more attention to the nutrient content of your food, you might notice that "ash" frequently turns up as a component in most foods. While you might picture the leftover residue at the bottom of your fireplace, ash actually is a much more general term that can refer to a number of substances in your food.

Identification

Ash refers to any inorganic material, such as minerals, present in food. It's called ash because it's residue that remains after heating removes water and organic material such as fat and protein. Food scientists "ash" foods so that they can examine this leftover material to better determine a food's content. Ash can include both compounds with essential minerals, such as calcium and potassium, and toxic materials, such as mercury. Generally, any natural food will be less than 5 percent ash in content, while some processed foods can have ash content of more than 10 percent.

Uses

While sources such as the U.S. Department of Agriculture's nutrient database can easily show you the ash content of most foods, this tells you little about their nutritional value. Rather, you should be more concerned with the specific mineral makeup of the food, such as keeping a low sodium intake and getting enough essential minerals. One type of food most associated with ash content is flour, which often denotes its "ash count." While bakers once considered flour with a lower ash content as more pure, this is not the case today, as high-protein flours and flours made from wheat grown in mineral-rich soils can be pure and have a high ash count.

Misconceptions

Some fad diets focus on the pH of ash in food. The ash material in animal products and grains is acidic, while the ash in fruits and vegetables is alkaline. The claim is that eating more alkaline ash foods changes the pH of your blood and targets harmful cells such as cancer. This, however, is false, according to allergy and immunology specialist Gabe Mirkin. The ash in the food you eat can change the pH of your urine, but not your blood's or anything else in your body. Changing the pH of your blood actually would be quite harmful to your organs.

Pet Food Ash

Concerns about ash content also swirl around food you buy for your pets. This particularly was the case with cat foods, as veterinarians once suspected high ash content was related to feline lower urinary tract disease. Research has disproved this, according to the Pet Food Association of Canada. In fact, limiting your pets to food with low ash content can be harmful, depriving them of essential minerals such as calcium and manganese.

References & Resources

People Are Reading

- 1 Acid-Ash Diet Foods
- 2 Food & Stool Color
- 3 Foods That Have BHA

You May Also Like

- 1 Sodium Carbonate vs. Sodium Bicarbonate
- 2 How to Calculate Energy From Foods
- **3** Glycemic Index of Brown Rice vs. Parboiled Rice