Calories In, Calories Out

Food and drink give our bodies energy to do everyday activities as well as planned physical activities. This energy is measured in calories. The amount of calories we eat or drink help us lose, gain or maintain body weight. Consuming calories below our body’s calorie needs can lead to weight loss. On the other hand, consuming too many calories can lead to weight gain. In order to maintain a healthy weight, we must balance the energy (a.k.a. calories) we take in with the energy we use up during exercise and everyday activities.

Unfortunately, most Americans take in too many calories while using too few. This trend has led to weight gain and an epidemic of overweight and obesity in America. Out of desperation to “re-balance the equation” many people turn to fad diets for weight loss.

In the 1980’s and early 90’s the popular fad diet trend was to cut back fat intake. Today many popular fad diets recommend to cut back (or cut out) carbohydrate intake. Why the change? Some people think that the increasing waist band of many Americans from the 1980s through today is the result of following a low-fat or fat-free diet. Many reduced fat or fat-free processed foods replace fat with carbohydrate or sugar. The increased intake of these foods by some Americans has led to higher carbohydrate intake. Some blame weight gain on this increased carbohydrate intake. In reality, many Americans had been focusing solely on cutting out fat, while ignoring their increasing portion sizes and calorie intake. For these people following a low-fat diet trend led to excess calorie intake from both fat and carbohydrate. The end result was weight gain.

The increase in calorie intake from carbohydrates over the past decade has partially contributed to the recent push to cut back on carbohydrate intake. Ironically, those processed foods of the 1980s and 90s that reduced or removed their fat are now adding back the fat and cutting out the carbohydrate. The problem with this is change is that calories still aren’t being reduced. Without reducing overall calorie intake below calorie needs, weight loss is NOT possible.

What is the Calorie Difference Between Regular, Reduced Fat & Low Carbohydrate?

Knowing that calories count, take a look at how regular, reduced fat, and low carbohydrate snack foods compare:

<table>
<thead>
<tr>
<th>Snack Food</th>
<th>Type</th>
<th>Cals</th>
<th>Fat (g)</th>
<th>CHO (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanilla Ice Cream</td>
<td>Regular</td>
<td>140</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>98% fat free</td>
<td>90</td>
<td>1.5</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Low CHO</td>
<td>130</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

07/2005

THE UNIVERSITY OF ARIZONA
COLLEGE OF AGRICULTURE AND LIFE SCIENCES
TUCSON, ARIZONA 85721

JACLYN MAURER, PhD, RD
Research Specialist, Sr.
Department of Nutritional Sciences

This information has been reviewed by university faculty.

ag.arizona.edu/pubs/health/az1360.pdf
Are Fad Diets Working?

NO! Despite a 33 billion dollar a year weight loss industry, the percent of obese American adults have increased from 12% in 1991 to 21% in 2001. Clearly, something isn’t working. Many Americans are going astray by believing that carbohydrate, fat, or protein alone is causing weight gain without looking at the whole picture.

Choosing The Right Type of Fat, Carbohydrate & Protein

Not all fat, carbohydrate or protein is created equal. Follow these guidelines to help you make healthier, more nutritious choices.

Fat (9 calories per gram) - As a general rule of thumb get most of your fat from heart healthy fats. These fats are unsaturated and liquid at room temperature. Examples include plant and fish oils. Other healthy fats, not liquid at room temperature, include the fat in nuts.

Limit saturated fats, which are bad for your heart health, to less than 7-10% of your total calorie intake. These fats are typically solid at room temperature and include the fat on meat, butter, margarine, and hidden fats in food.

Carbohydrate (4 calorie per gram) – Carbohydrates are found in fruits, vegetables, grains, cereals, pasta, legumes, beans, milk and milk products, and cakes, cookies, pies, pastries, sweet breads, processed snack foods, candy and soda. As a general rule of thumb, it is a good idea to cut back on the amount of processed carbohydrates (snack foods, baked goods, candy, regular soda) that you eat. Instead consume carbohydrate from whole fruits & vegetables, whole grains, cereals & pastas, beans & legumes, and low-fat milk and milk products. These carbohydrate food choices are full of nutrition and standard servings are low in calories and saturated fat.

A medium piece of fruit only has 60 calories while 1 cup of leafy greens has around 25 calories.
If you do go “low carbohydrate,” it is ok to reduce processed carbohydrates, but keep fruits, vegetables, whole grains, and low-fat milk in your diet since they contain vitamins, minerals, fiber, and phytochemicals (plant chemicals) that help prevent some chronic diseases and including certain types of cancer.

**Protein (4 calories per gram)** – There are two main types of protein, animal and plant. Both are great sources of protein. When choosing animal protein sources, choose lean animal proteins like skinless chicken/turkey, lean ground beef, meats trimmed of visible fat, and low-fat or fat-free milk and milk products. When choosing plant protein sources choose a variety every day and stick with lower fat versions, like beans, beans cooked without added fat, and soy products or other soy-based meat alternatives.

**Alcohol (7 calories per grams)** – Alcohol also provides calories. If you do not drink alcohol, it is recommended that you do not start. If you do drink alcohol it is recommended that you consume no more than 1 drink per day if you are a woman or 2 drinks per day if you are a man. Alcoholic beverages can contribute significantly to caloric intake and intake should be monitored.

---

**One Drink Equals:**
- 12 ounce beer - 150 calories
- 1.5 ounce 80 proof distilled spirits - 100 calories
- 5 ounce wine - 100 calories

**Diet Composition**

What is the best diet? The percentage of carbohydrate, protein and fat in a healthy diet differs based on a person’s individual needs. As a general rule of thumb, your diet should include a variety of foods that provide a mix of carbohydrate, protein and fat. The majority of calories should come from carbohydrates (45% to 60%, higher if you’re very active) with the remaining from moderate amounts of healthy fats and lean protein sources. An easy way to do this is to fill two-thirds of your plate with whole grains, fruits, and vegetables and the remaining one-third with lean protein.

**How Much Should I Eat?**

This may be the most important factor to consider when trying to achieve and maintain a healthy weight. As long as calories in = calories out, you can maintain your weight. However, as the amount of food (portion size) you eat increases, so do the calories (calories in). If the amount of calories used up (calories out) do not increase to compensate for the higher calorie intake, then weight gain will result.

A registered dietitian or physician can help assess how much you should be eating daily to help lose, gain or maintain a certain body weight.

**Control Your Portions!**

Paying attention to the portion size of the food and drink you consume can significantly help you control your calorie intake.

When choosing portion sizes remember the following tips:

1. Fat is high in calories so keep portion sizes of fat like butter, oil, regular salad dressing, and mayonnaise small – about the size of your thumb tip.

2. Whole fruits and vegetables are low in calories and contain many nutrients. Increase the size of your meal, without excessively increasing calories by adding more servings of fruits and vegetables.

   One serving = 1 medium piece of fruit, ½ cup cut fruit, ½ cup cooked or 1 cup raw vegetable

**Control your portions by:**

- Eating portions the size of your fist
- Splitting your entrée when eating out
- Asking that your meals be split in half and one half placed in a doggy bag before bringing the meal to your table
- Serving your meals on smaller plates (this makes it look like there is more food)
- Storing snack foods in small bags (portion control)
Adding fruit & vegetables to meals (these low calorie, high fiber, high nutrition foods help fill you up, not out)

Saying “NO” to super sizing

Paying attention to and enjoying your food

Avoiding nibbling –snacks, like a meal, should have a beginning and an end

**The Bottom Line**

Overall, Americans are eating too much and for some it’s too much carbohydrate, other, it’s too much fat or protein. In general we are just eating MORE calories than we use during our daily activities.

*If you choose to follow a low-fat, low-carbohydrate, or any other type of diet, remember . . . CALORIES COUNT!*

**References**

