Health effects of carbs: Where do we stand?

Bread glorious bread! It was once considered a status symbol, and has been nutritious dietary staple for all classes for millennia.

But starting in the second half of the 1990s, bread became so bad. So did the whole menu of starchy carbohydrates, such as pasta and potatoes, as well as sugary carbs including milk and cookies. Cue the Atkins Diet, and even “good for you carbs” such as fruits were off the table.

The argument of Dr. Robert Atkins, Dr. Agatston (of the South Beach Diet) and many others was that, because low-carb diets reduce insulin in the body, they reduce fat accumulation and eventually lead to fat burning. The way they saw it, drastically slashing carbs, and consequently consuming more protein and fat, was the only way to lose weight.

In the last decade, the medical view of carbs is becoming more balanced. To lose weight, we have to cut calories, and that can happen by cutting carbs or fat (or both), according to the recent report by the Dietary Guidelines Advisory Committee, which will reform the new U.S. Dietary Guidelines for Americans due out later this year. The report did not make specific recommendations to lower carbohydrates, although some criticize that omission.

The important thing is to pick a diet you can stick to. Atkins might be easiest for some; experts have suggested the high-protein and high-fat diet helps us feel full longer. For others, a more balanced strategy, such as Weight Watchers, may be the way to go.

Another nuance about carbs that has come out in recent years is that not all carbs are created equal. At least half the bread, pasta, rice and other grains we eat should be whole gains, such as whole-wheat and brown rice, instead of refined (think white bread, white bread), according to the U.S. Department of Agriculture My Plate recommendations.

I think Americans are slowly getting the message that … breads and grains are fine as long as they are whole grains so we get fiber and nutrients.

America understands that carbs are OK, especially if they are whole grains and “from Mother Nature,” such as fruits and vegetables, and low-fat dairy, and balanced with protein and good fats. Through the ages, however, exceptions have come to bear. Let’s take a look at the timeline.
2 million B.C. headline: Man cannot live on meat alone

The Paleo diet may be misunderstood: It might not have consisted of only meat, nuts, fruits and vegetables. Recent research suggests that starchy foods, especially potatoes, were also an important component of their diet. Meats alone might not have been enough to fuel early man's growing brain, and eating a healthy portion of carbohydrates might have been critical for our evolution into a highly intelligent species. Expects argue that, although recent Paleo-inspired diets heavy on meat and nuts might help us lose weight, they are probably not healthy overall.

3,000 B.C. headline: Thank the gods for bread

Two foods many of us consider carb-loading indulgences today – bread and beer – were stable foods in ancient Egypt and Greece. If there was anybody concerned about health hazards of carbohydrates thousands of years ago, they could rest assured that many of the grains they ate, such as faro (now considered a healthy ancient grain), were high in fiber and minerals.

800 B.C. headline: The upper class should not eat crusty bread

Our ancestors were pretty limited in their bread recipes when they started baking 30,000 years ago. They had to grind bread grains with rocks, which made a coarse whole grain loaf. But around 800 B.C., the Mesopotamians developed a method to grind grains into fine flour using flat, circular stones. This refined bread was hailed as a status symbol. But today it is seen as a less healthy form of bread.

1864 headline: New Kind of diet bans carbs

In Victorian London, William Banting, a morbidly obese undertaker, embarked on a new kind of diet. Banting saw a surgeon, named William Harvey, who told him to cut bread, potatoes, beer, sugar and milk. Harvey was inspired by a conference he had attended on diet and diabetes to create what is effectively a predecessor to the Atkins Diet. Banting dropped about 40 of his 200 pounds in a year and was so happy that he circulated his dietary advice in a free booklet called “Letter of Corpulence.”

1917 headline: Sliced bread is the best thing since – ever

Until the early 1900’s people had to slice their own bread. Cookbooks told them how to do it: Make thin slices with no crust for women and children, men could eat thick slices of crust.
1920 headline: Low-carb diet calms seizures

A Ketogenic diet, (based on eating low enough level of carbohydrates to force the body to burn fat), was developed in the early 1920s for people with epilepsy. The amount of carbohydrates the diet prescribed puts the Atkins Diet to shame: only 2% of daily calories from carbs, 8% from protein and 90% from fats, compared with breakdown of 4%, 32% and 64% in the Atkins Diet. Although the ketogenic diet fell out of fashion when antiepileptic drugs became available, it made a comeback in the 1990s, and today is recommended by the Epilepsy Foundation for children with hard-to-treat epilepsy. A 2008 study found the ketogenic diet was associated with a 75% decrease in seizures among children ages 2 to 16.

1972 headline: Atkins says we have been dieting all wrong

Dr. Robert Atkins turned the low-calorie, low-fat diets on their head when he published his book, Dr. Atkins’ Diet Revolution. The diet advocates eating only 20 to 40 grams of carbohydrates a day, much less than the 200 to 300 recommended by the American Heart Association, and all the meat, cheese, and fat you want. The principle is that, if you deprive your body of carbs, it will start burning fat for energy. Although doctors criticized the diet – and Atkins initially resisted the idea of studying the diet scientifically - research over the years has supported that it causes rapid weight loss and (or possibly because) it increases satiety. Following the diet for a year leads to about as much weight loss as Weight Watchers, although more people quit the Atkins Diet (48%) than Weight Watchers (35%), which combines healthy eating and moral support.

1980s headline: Minimizing carbs could help manage cancer

Studies started coming out in the 1980s that very-low-carb ketogenic diets could reduce the size of tumors in lab mice with range of cancers, including prostate and brain. Since then, patient case reports have suggested that the diet, along with cancer therapy and vitamins supplementation, could possibly help keep malignant brain tumors from spreading and make breast cancer less aggressive, while possibly improving mood and sleep. The idea is that low levels of blood sugar as a result of a low-carb diet could starve cancer cells, which need more glucose than healthy cells.

1991 headline: Carb-oholics!

Carbohydrates are not just bad for your waistline – they can be habit-forming too, our bodies make too much insulin after we eat high-carbs foods, which in turn makes us crave more crabs. Over time, we can develop insulin resistance, which increases the risk of developing diabetes. To break free from this vicious cycle, they recommended having carbs for only one meal of the day taking dietary supplements to control insulin levels.
2002: headline: Cut carbs to help your heart

Although the Atkins Diet made doctors worry the unbridled consumption of fats would boost heart disease, a 2002 study provided some of the first evidence to the contrary. The study, which was funded by the Atkins Foundation, found that healthy men who ate a very-low-carb diet for several weeks did not have higher levels of LDL (bad) cholesterol, and actually had lower levels of triglycerides (fat in the blood) and increases in HDL (good) cholesterol.

More recent research suggests the message should be updated to say that low-carb diets can be heart-healthy if they are rich in plant-based fat, but not animal fats, which has been termed the “ECO-Atkins” diet.

2004 headline: Dear masses, low-carb not exactly same as low-calorie

The low-carb craze has hit a fever pitch. A survey finds that 22% of Americans want to cut carbs. Inspiration to do so is everywhere. The South Beach Diet came out in 2003 to offer a more realistic and possibly healthier way than the Atkins Diet to reduce carbs. (It is more open to consumption of “good” carbs such as fruit than Atkins and limits consumption of saturated fats.) It attracted high-profile followers, such as Bill Clinton.

All the interest in slashing carbs spawns big business, too. Many chain restaurants, such as Ruby Tuesday and T.G.I. Fridays, add low-carb choices to their menu and grocery stores stock up on low-carb pastas, cereals, ice-cream, etc. However, experts worry that many of these options are just as high in calories as their full-carb counterparts, and will not really help consumers lose weight.

2012 headline: Grains hurt the brain, increase risk of Alzheimer’s

Some foods and diets have long been making headlines because of their potential role in brain health. Fruits, vegetables, Mediterranean diets low in calories have all been linked to better cognitive function in older people. But sugary foods and carbohydrates have been suspected to harm brain health, and a 2012 study gave more credence to this possible effect.

Among a group of Minnesota residents 70 to 89 years old, those who consumed the highest level of carbohydrates were 89% more likely to develop mid cognitive impairment or dementia over nearly four years, whereas those with diets high in protein and fat were 21% and 44% less likely, respectively. High-carb diets could impair cognition because they increase sugar levels in the brain and because oxidative stress, the author of the study suggested.
2015 headline: For weight loss, cutting fat may be better after all

A new study carries out the most stringent comparison of low-carb and low-fat diets. The verdict: People lose more weight on low-fat diets. In a small group of obese people, those who cut fat in their diet (by 85%) lost about 1.2 pounds in a week, whereas those who cut carbs (by 60%) lost about 0.7 pounds. Both diets had the same number of calories.

The researchers point out that they came to the “opposite conclusion” as other studies, possibly because they held the participants in a lab for two weeks where they did not have access to any other food. Previous studies have mostly asked participants to follow a diet on their own, and hoped they didn’t cheat and consume extra fat or carbs.

Although the study may confuse or upset low-carbs diets proponents, the lead author stated that, “(i)t doesn’t take down the concept of a low-carb diet: they make you less hungry and feel more full, people may stick to them better. … This research is only taking down one proposal, which is that the only way one you can lose body fat is by reducing carbs.


How to end your sugar addiction

While food accounts for a large portion of the added sugar in our diet, many expects recommended cutting bad sugary beverages to reduce daily intake. Consumption of sugary drinks might lead to an estimated 184,000 deaths each year worldwide, according to research published in the Journal Circulation, an update American Heart Association conference presentation. In the following:

**Soda - Coca-Cola:** A 20- ounce bottle has 65 grams of sugar, which is the same amount of sugar found in five Little Debbie Swiss rolls.

**Soda - Pepsi:** A 20 - ounce bottle contains 69 grams of sugar, each Little Debbie Swiss rolls containing an estimated 13 grams of sugar.
Juice - Minute Maid: 100% Apple juice 15.2-ounce bottle contains 49 grams of sugar, which is about the amount of sugar in 10 Oreo cookies.

Juice - SunnyD original: A 16-ounce bottle contains 28 grams of sugar. Each of these six Oreos contains 4.6 grams of sugar.

Tea - Arizona-Green Tea with Ginseng and Honey: A 23 ounce can contains 51 grams of sugar, which is the about the same as 20 Hershey’s Kisses.

Tea - Lipton lemon Iced Tea: there are 32 grams of sugar in a 20-ounce bottle of iced tea. Each of these 12 Hershey’s Kisses contains approximately 2.5 grams of sugar.


Milk - Generic Skim milk: An 8ounce glass of skim milk has 11 grams of sugar. A single Starburst candy has 2.7 grams of sugar.

Milk - Silk Vanilla Soymilk: A glass of Vanilla Soymilk has about 8 grams of sugar, which is equal to the amount found in three starburst.

Juice - Naked Berry Blast: a 15.2-ounce bottle has 29 grams of sugar, eight Chips Ahoy cookies contain about 3.6 grams of sugar.

Juice - Bothouse Farms Berry Boost: You’d consume 24 grams of sugar by drinking this Bothouse Farms Berry Boost 15.2 ounce bottle – or by eating 6 Chips Ahoy cookies.

Sports drink: Gatorade thirst Quencher Cool Blue: A 32-ounce Gatorade bottle has 56 grams of sugar the same that can be found in approximately five Reese’s Peanut Butter Cups.

Sports drink: Powerade Mountain Blue Blast: has 56 grams of sugar, five Reese’s Peanut Butter Cups has about 11 grams of sugar.
Iced coffee: Starbucks Iced Flavored Latte: a Grande Starbucks Iced Flavored Latte with 2% milk and your choice of syrup has about 28 grams of sugar. The same amount of sugar is in a 2.5 Krispy Kreme donut.

Iced coffee: Dunkin Donuts Iced Caramel Latte: a 16-ounce Dunkin Donut Iced Caramel has 37 grams of sugar. Krispy Kreme Donut has 11 grams of sugar.

Source: [http://www.cnn/2015/09/30/health/ending-sugar-addiction/index](http://www.cnn/2015/09/30/health/ending-sugar-addiction/index)

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**How strong is the science behind the U.S. Dietary Guidelines?**

**The Good News:** American are consuming less calories. The bad News Americans still have a long way to go in how they divvy up calories.

**Water over sugary Drinks** – Americans in almost every age and ethnic group have been weaning themselves off soda and fruit drinks and substituting for Healthier choices like water.

**Not enough Fruit and Veggies** – increasing our intake of fruits and veggies could play a part in improving the U.S. diet. There has been a slight up stick in consuming these healthy foods since 2003.

**Trans Fats decrease** – Americans have made huge strides in improving their diets by eliminating Tran Fats. Although much of that is due to changes in the manufacturing process.

**No Budging on the Fast Food** – Despite all the reports of Fast Food’s ill effects on Health, Americans have only been slightly scaling back their intake.

**Going Nuts** – Grain based desserts such as cookies appear to be waning in popularity while healthier snack like nuts are taking off.
The U.S. Dietary Guidelines for American influence nearly every aspect of how we eat, from the information on food labels to the ingredients in school lunches to the nutrition advice doctors give.

They’ve updated every five years, and new guidelines are expected this fall, after a report from the Dietary Guidelines Advisory Committee.

The committee’s leader has emphasized the importance of including only the best medical evidence and said all committee members are vetted.

But an article published Wednesday in the British Medical Journal said the report used to set the guidelines might be biased and could come from an incomplete survey of the current research.

The 2015 report “used weak scientific standards (which) seems to have made the report vulnerable to intended bias as well as outside agendas.

Nutrition experts said the debate likely won’t change the guidelines or the way consumers eat – but it may spark frustration as they try to get a clear answer: What does a healthy diet look like?

The research behind a healthy diet

The 2015 dietary guidelines report relied on existing reviews of the evidence base, rather than conducting original reviews

The result is that the 2015 dietary guidelines report overstated the evidence for the health risks of saturated fats and understated the importance of a low-carbohydrate diet. Although the recent report broke with earlier publications by exonerating cholesterol and avoided a limit on total fats in the diet, it did state that saturated fats should not exceed 10% of total calories.