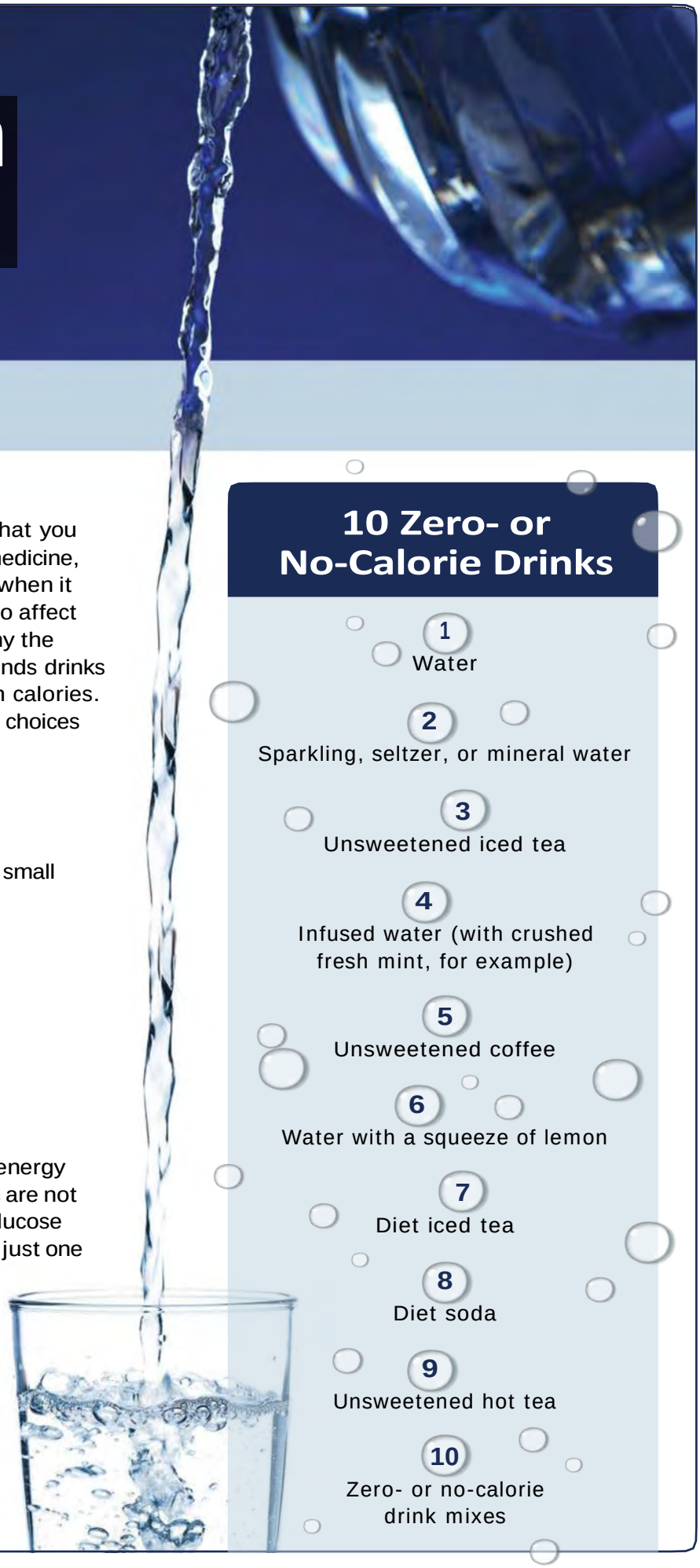
What Can I Drink?



Healthy Drink Choices

Managing diabetes involves balancing what you eat and drink with physical activity and medicine, if needed. Food often takes center stage when it comes to diabetes, but beverages can also affect your weight and blood glucose. That's why the American Diabetes Association recommends drinks that have zero calories or are very low in calories. Water is one of the healthiest and easiest choices you can make.

What Drinks Are Zero-Calorie or Very Low-Calorie?

All of these drinks provide no or just very small amounts of calories and carbohydrate:

- Water (still or sparkling)
- Unsweetened or diet teas
- Coffee
- Diet soda
- Other zero- and low-calorie drinks and drink mixes

What Drinks Should I Avoid?

Regular soda, fruit punch, sports drinks, energy drinks, sweet tea and other sugary drinks are not healthy choices. These will raise blood glucose and may have several hundred calories in just one serving! See for yourself:

- One 12-ounce can of regular soda has about 150 calories and 40 grams of carbohydrate. This is the same amount of carbohydrate in 10 teaspoons of sugar!
- One cup of fruit punch has about 100 calories (or more) and 30 grams of carbohydrate.

continued on next page

10 Zero- or No-Calorie Drinks

1. Water
2. Sparkling, seltzer, or mineral water
3. Unsweetened iced tea
4. Infused water (with crushed fresh mint, for example)
5. Unsweetened coffee
6. Water with a squeeze of lemon
7. Diet iced tea
8. Diet soda
9. Unsweetened hot tea
10. Zero- or no-calorie drink mixes

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What Can I Drink?

Bored with Water?

Here are some easy ways to jazz up plain water:

- **Squeeze in some zing.** A quick squeeze of lemon juice is delicious.
- **Infuse it with flavor.** Fill a pitcher with water and add sliced fruit or vegetables (oranges, berries, peaches, and cucumber are tasty), fresh herbs, or a combination of these fresh items to your water. Stick the pitcher in the refrigerator for a few hours so the flavors and aromas meld and you'll have a crisp, refreshing drink!
- **Use no- or low-calorie drink mixes.** Mix a single-serve packet with a bottle of water for an on-the-go option.

Or, choose other no-calorie drinks:

- **Opt for sparkling water for a change.** Or try seltzer, club soda or mineral water. Add a squeeze of lime or no-calorie flavoring for extra zing.
- **Try unsweetened tea and coffee.** Both are very low in calories and carbohydrate. Have you heard that the caffeine in these drinks causes dehydration? This effect is mild, so you can count coffee and tea as part of your total daily fluid intake.

What About Milk and Juice?

Low-fat and fat-free (skim or nonfat) milk and 100% juice with no added sugar are also healthy drink options. These drinks have more calories and carbohydrate than zero- and no-calorie drinks, but they also have important vitamins and minerals. In addition, milk provides protein. Just remember to control portion size, because the calories and carbohydrate can add up. Use a small glass instead of a large one to measure milk or juice. Some tips:

- **Choose low-fat (1%) or fat-free (skim or nonfat) milk.** Make sure that you count it in your meal plan. One cup of fat-free milk provides about 12 grams of carbohydrate, 80 calories, calcium and vitamin D.
- **Try plain (unsweetened) fortified soy, rice or almond milk.** These are great if you are lactose intolerant or don't like milk.
- **If you drink juice, choose juices that are 100% juice with no sugar added on the label.** Juice provides a lot of carbohydrate in a small portion, so count it in your meal plan and keep portions small. Just 4 ounces (1/2 cup) or less of juice contains 15 grams of carbohydrate and 60 calories.
- **Try low-sodium vegetable juice.** It has less carbohydrate than fruit juice, but plenty of vitamins. At just 50 calories and 10 grams carbohydrate for 1 cup, it's a healthy choice.

TOGETHER WE CAN STOP DIABETES
American Diabetes Association

Brought to you by SodaStream, a national supporter of Stop Diabetes®.

For more information about healthy foods and drinks, visit diabetes.org or call 1-800-DIABETES (800-342-2383).

Diabetes Food Hub

https://www.diabetesfoodhub.org/

To help you get set up to use the menu planner and grocery list

Go to: Login

Find: “new register here”

They will ask for:

Name

e-mail

address

phone number

create: a username and password

Select: Submit

Welcome note should appear

Browse recipes will give you all recipes

On the search bar select food types: i.e quick and easy veggie rich

Then in the filter select dinners.

Hovering over the recipe will give you the nutrition details as well as how long it takes to prepare and how many people it feeds. It will also show you how many people liked the recipe and didn’t.

Next: You star your favorite recipes:

Go up to plan meals and pull in your recipes from the side bar

(If you want more servings put the recipe in more then 1 time to adjust the grocery list)

Create a grocery list (you can e-mail it, download or print it)

In honor of Women's Health Week, here are 10 health myths no woman needs to listen to again!

Myth #1: Fresh produce is superior to canned or frozen produce.

Canned and frozen produce have nutrient contents comparable to that of even the freshest produce. But did you know that some "fresh" produce is picked long before it reaches the store? In this case, frozen may be *fresher* than fresh! Additionally, canned and frozen produce can be a helpful way to get more variety during winter, when fresh produce is either not available or too expensive.

The bottom line: Any vegetable is better than no vegetable at all.

Myth #2: Gluten is evil. If you cut it out, you will lose weight.

The gluten-free diet is not a weight-loss diet. In fact, there is no evidence that gluten itself causes weight gain. On the other hand, a diet consisting of whole grains (both gluten-containing and gluten-free varieties), fresh produce and lean meats, and that is low in refined carbs will leave you feeling better and more energized, and help you lose weight since you will be fuller longer.

The bottom line: The only people who need to avoid gluten are those who have a diagnosed autoimmune or digestive disorder such as celiac disease.

Myth #3: Organic food is healthier than conventional food.

Some studies comparing organic produce to conventional produce indicate that organic produce may have higher levels of vitamin C. However, these studies have not proven conclusively that organic produce is healthier than conventionally grown produce overall. There are a multitude of studies showing the benefits of conventional fruit and vegetable consumption.

The bottom line: Your emphasis should be on meeting fruit and vegetable intake, whether organic or not.

Myth #4: Sugar is bad; high-fructose corn syrup is of the devil.

High-fructose corn syrup is a man-made sweetener found in many types of processed foods and sweetened beverages. Currently, there is no evidence to show that high-fructose corn syrup is any less healthy than other types of sweeteners.

The bottom line: Too much added sugar, from any source, is not good for you.

Myth #5: Alcohol is good for you.

Recent studies have shown that alcohol may not be linked as strongly to disease prevention as previously thought, and that the adverse effects of alcohol consumption may outweigh the benefits. For instance, regular consumption of alcohol is directly associated with increased risk of developing several types of cancer, and the more alcohol you drink, the higher your risk.

The bottom line: If you consume alcohol, do so in moderation. This means consumption of no more than one drink a day for women or two drinks a day for men. And, do not consume it for the health benefits.

Myth #6: Taking a daily multivitamin promotes health.

Unless you have a deficiency, nutrients are best absorbed from foods, which contain vitamins and minerals in addition to dietary fiber and other natural compounds. This combination of nutrients will have overall positive health benefits that you can't get from multivitamins.

The bottom line: Routine supplementation in healthy individuals is not necessary.

Myth #7: Eating protein builds muscle.

Eating protein does *not* build muscle. Only exercise can build muscle! Regardless of whether you are an avid marathon runner or someone who enjoys regular physical activity, you will benefit from a balanced diet that is rich in fruits and vegetables, whole grains, lean meats and fish.

The bottom line: Cover just a quarter to a third of your plate with protein and your body will handle the rest!

Myth #8: Milk is essential for bone health.

Low calcium intake is linked to low bone mass and weakened bones. However, milk is not the only source of calcium in our diets. Non-dairy sources of calcium include leafy green vegetables such as collards and bok choy, plus soy products and baked beans.

The bottom line: In addition to calcium, other bone-building nutrients include potassium, magnesium, vitamin K and vitamin D.

Myth #9: Skinny is healthy.

Weight is not a good indicator of health. Someone can be in the normal BMI range, but not be fit. Alternatively, if someone is above the normal BMI range and is fit, they have better health outcomes than someone of the same BMI who isn't fit.

The bottom line: Instead of focusing on getting thin, focus on getting fit.

Myth #10: Your body needs a "cleanse" — whether a juice cleanse or a colon cleanse — every once in a while.

Our bodies already have a built-in detox system — our lungs, liver, kidneys and digestive tract all work together to eliminate toxins from our bodies. Detox diets set you up for even more weight gain when you go off of them, since they typically result in muscle loss.

The bottom line: Long-term detoxing will deprive your body of the essential vitamins, minerals and nutrients it needs to function. Choose an eating pattern that promotes health.

Julie Lanford, MPH, RD, CSO, LDN, is Wellness Director for Cancer Services, Inc. in Winston-Salem, NC. She blogs at Cancer Dietitian and can be found on Facebook and Twitter.

My Plate Planner

My Plate Planner Methods of Use

- Fill 1/2 of your plate with vegetables such as broccoli, carrots, cauliflower, and salad
- Fill 1/4 of your plate with lean meat, chicken or fish; this is about 3 ounces
- Fill 1/4 of your plate with a starchy choice such as 1/3 cup whole wheat pasta
- Add 1 serving of fruit
- Choose 1 serving of milk
- Add margarine or oil for preparation or addition at the table

Add other portions as needed to round out your meal plan.

For breakfast, use only half the plate.

For lunch and dinner, use the whole plate.

Meal Planning Guidelines

Carbohydrates

Choose any 3 servings at each meal.*

Choices include breads and starches, fruits, some vegetables and milk. If your meal plan is different, adjust the number of servings accordingly.

Examples of one serving of carbohydrates:

Breads and starches
- 1 slice bread or small roll
- 1/3 cup rice or pasta
- 1/2 cup cooked cereal or potatoes
- 3/4 cup dry cereal
- 1/2 cup corn

Fruits
- 1 piece, such as a small pear or apple
- 1 cup fresh fruit
- 1/2 cup canned fruit
- 1/2 cup fruit juice

Milk
- 1 cup skim or lowfat
- 1 cup sugar-free lowfat yogurt

Meats and proteins

Choose 1–3 servings per meal.*

Examples of one serving:
- 1 ounce lean meat, poultry or fish
- 1 egg
- 1 ounce cheese
- 1/4 cup lowfat cottage cheese

Fats

Choose 1–2 servings per meal.*

Examples of one serving:
- 1 teaspoon margarine, oil, or mayonnaise
- 1 Tablespoon salad dressing or cream cheese

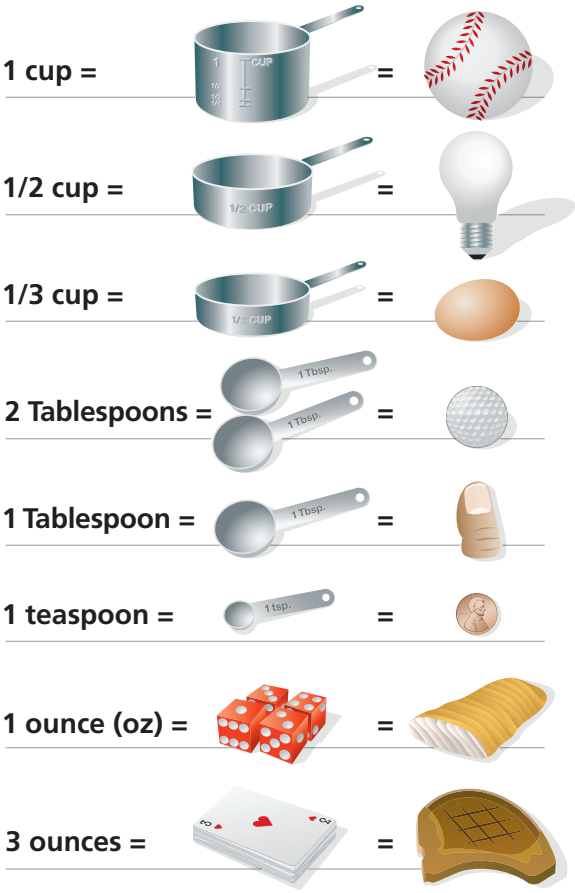
Free foods

Foods with less than 20 calories per serving.

Use as desired:*
- Most vegetables
- Sugar-free soda
- Black coffee or plain tea

*Note: If you have a personalized meal plan, the number of servings you choose per meal may be different.

Visual Tips for Portion Sizes



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Medicare Part B Patients: Call 1-877-231-5199 and mention reference code **EDO6500** to order your diabetes testing supplies.

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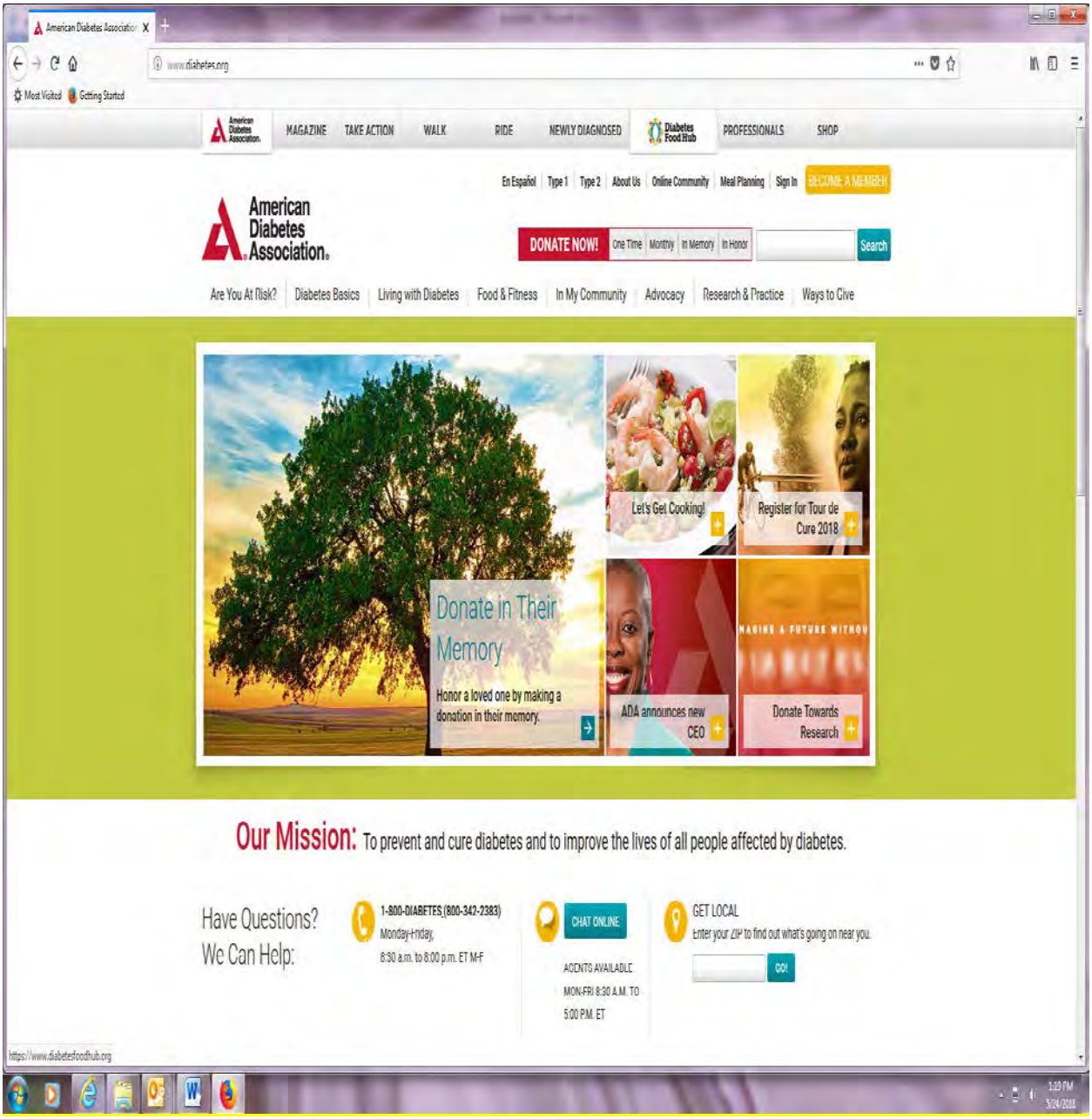

Go to www.diabetes.org and in the top row, rest your cursor on RECIPES and it turns to DIABETESFOODHUB for recipes and food discussions. Some may still say My Food Advisor on the recipes, but this is the new place to find this kind of content on food and recipes from ADA.

EAT THIS, NOT THAT

Small changes in what you eat can help you control your blood sugar, lose weight, and feel better.

Below is a list of foods many of us eat. The "Eat this..." foods have less sugar, salt, bad fats, or cholesterol. Choosing more "Eat this..." foods when you shop and when you eat can help you control your diabetes.

Instead of this		Eat this
Eggs	→	Egg whites
White bread	→	Wheat, whole-grain or multigrain bread
Whole milk, 2% milk	→	Fat-free milk, 1% milk
Butter, margarine, lard	→	Vegetable, canola, or olive oil; spray oils
Cheese	→	Low-fat or skim cheese
Flour (or fried) tortillas	→	Corn or whole-wheat tortillas
Refried beans	→	Whole beans, natural beans
Canned fruit in heavy/light syrup	→	Fresh, frozen, or canned fruit in its own juice
Canned vegetables	→	Fresh or frozen vegetables with no sauce
Cookies, cake, chips, ice cream	→	Fresh fruit, graham or animal crackers, angel food or sponge cake with fruit, low-fat yogurt
Fast food (hamburgers, fries)	→	Salads at fast-food restaurants are often healthy, good-tasting choices
Soda and other drinks with sugar	→	Water, diet soda, seltzer
Processed meats (hot dogs, Spam, bologna, salami)	→	Low-salt turkey, grilled chicken, low-fat (lean) meat, homemade tuna salad

Read food labels when you shop. Look for foods low in sugar, salt, saturated fat (the bad fat), and cholesterol. And, always remember to watch your portion sizes when you eat.

Eating is a habit, and changing habits takes time. Start by changing one or two foods. Then change another food every week or so. Eating new foods and trying new ways of cooking can be fun. Enjoy!

Provided as a FREE educational service on www.learningaboutdiabetes.org.
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Skipping Breakfast Can Be Hazardous Especially For Those With Diabetes

More and more Americans on-the-go are skipping the "most important meal of the day," not eating until lunch...

This tendency to miss breakfast has already been linked to the growing epidemic of obesity and cardiovascular problems in the U.S. -- and it may put the health of diabetics at risk as well. Until now, very little has been known about the effect of skipping breakfast on type 2 diabetics. It was common that people thought that skipping breakfast would lower our blood sugars and reduce our calories and we would lose weight.

Researchers, TAU's Prof. Daniela Jakubowicz and Prof. Julio Wainstein of the Wolfson Medical Center's Diabetes Unit, Prof. Oren Froy of the Hebrew University of Jerusalem, and Prof. Bo Ahrén of Lund University in Sweden. have found that, "fasting" until noon triggers major blood sugar spikes (postprandial hyperglycemia) and impairs the insulin responses of type-2 diabetics throughout the rest of the day.

Prof. Jakubowicz, added that, "It is quite remarkable that, for type 2 diabetic individuals, the omission of breakfast is associated with a significant increase in all-day blood sugar spikes and of HbA1C, which represents average blood glucose levels over the preceding three months."

The clinical study was conducted on 22 type 2 diabetics who averaged 56.9 years old, with a mean Body Mass Index of 28.2 kg/m2. Over the course of two days, the participants consumed precisely the same number of calories and the same balanced meal -- milk, tuna, bread, and a chocolate breakfast bar -- for lunch and dinner. The only difference was that one day they ate breakfast and the second day they fasted until lunch.

The researchers found that participants experienced extraordinary glucose peaks of 268 mg/dl after lunch and 298 mg/dl after dinner on days they skipped breakfast, versus only 192 mg/dl, and 215 mg/dl after eating an identical lunch and dinner on days they ate breakfast.

"This means that reducing the amount of carbohydrates in lunch and dinner will have no effect on reducing elevated glucose levels if diabetic individuals also skip breakfast," said Prof. Jakubowicz.

According to the researchers, pancreatic beta cells, which produce insulin, lose their "memory" due to the prolonged period between one evening's dinner and the next day's lunch. In other words, they "forget" their vital role. Therefore it takes additional time after lunch for the beta cells to recover, causing small and delayed insulin responses and resulting in an exaggerated elevation of blood glucose levels throughout the day. Another factor is that fasting until lunch increases the fatty acids in our blood, which renders insulin ineffective in reducing blood glucose levels.

In conclusion, it is highly recommended that type 2 diabetics not skip breakfast, because it causes major damage to the beta cell function and leads to high sugar levels, even if they don't overeat at lunch and dinner," said Prof. Jakubowicz. The researchers are planning to conduct a similar study on type 1 diabetics, who require daily insulin treatment.

Practice Pearls:

- Diabetics who skip breakfast provoke hazardous blood sugar spikes.
- Type 2 diabetics who 'fast' until noon risk day-long consequences of hyperglycemia.
- Reducing the amount of starch and sugars in lunch and dinner will have no effect on reducing elevated glucose levels if diabetic individuals also skip breakfast.

Science daily July 28th and Published in Diabetes Care and presented at the American Diabetes Association meeting June 2015.

Skipping Meals Promotes Belly Fat Storage, Increases Risk For Insulin Resistance

May 20, 2015 05:11 PM By Justin Caba@jcaba33

Skipping meals leads to abdominal weight gain. Photo courtesy of Shutterstock

Anyone looking to lose weight knows they have to restrict the amount of calories they consume, but how much and when they restrict those calories can make all the difference. A recent study conducted at Ohio State University has revealed that skipping meals not only leads to abdominal weight gain, but it can also lead to the development of insulin resistance in the liver.

"This does support the notion that small meals throughout the day can be helpful for weight loss, though that may not be practical for many people," Martha Belury, professor of human nutrition at Ohio State University, said in a statement. "But you definitely don't want to skip meals to save calories

because it sets your body up for larger fluctuations in insulin and glucose and could be setting you up for more fat gain instead of fat loss."

Belury and her colleagues divided mice into two groups: one group that was put on a restricted diet and a second group that was put on an unlimited diet. Mice from the restricted diet group received half of the calories that were given to the unlimited diet group in the first three days before having additional calories added. Although mice in the restricted diet group initially lost more weight compared to those from the unlimited diet group, they regained that weight as calories were added back into their diet.

By the end of the study, the weight of the restricted diet group was similar to the unlimited diet group. However, restricted diet mice had gained more weight around their midsection. Weight around the midsection of mice was likened to belly fat in humans, which is often associated with insulin resistance and higher risk for type 2 diabetes and heart disease.

"With the mice, this is basically binging and then fasting," Belury exaplined. "People don't necessarily do that over a 24-hour period, but some people do eat just one large meal a day. Under conditions when the liver is not stimulated by insulin, increased glucose output from the liver means the liver isn't responding to signals telling it to shut down glucose production. These mice don't have type 2 diabetes yet, but they're not responding to insulin anymore and that state of insulin resistance is referred to as prediabetes."

As the study continued, mice developed gorging eating habits that caused them to finish their daily amount of food in around four hours and fast for the remaining 20 hours of the day. Gorging and fasting among mice led to a spike and then a severe drop in insulin that causes a variety of metabolic issues. Mice from the restricted diet group often experienced elevations in inflammation and a higher activation of genes that lead to the storage of fatty molecules and plumper fat cells — predominantly in the midsection.

"Even though the gorging and fasting mice had about the same body weights as control mice, their adipose depots were heavier," Belury added. "If you're pumping out more sugar into the blood, adipose is happy to pick up glucose

and store it. That makes for a happy fat cell — but it's not the one you want to have. We want to shrink these cells to reduce fat tissue."

A similar study conducted at the Oregon Research Institute (ORI) found that skipping meals or restricting the number of calories you consume each day can actually make unhealthy food more attractive. When adolescents who willingly curbed their eating habits were shown pictures of unhealthy but appetizing food, brain imaging showed a spike in hyperactivity.

So, no matter the reason, skipping meals is depriving the body of essential nutrients.

Source: Kliewer K, Ke J, Belury M, et al. Short-term food restriction followed by controlled refeeding promotes gorging behavior, enhances fat deposition, and diminishes insulin sensitivity in mice. The Journal of Nutritional Biochemistry. 2015.

In order to stay healthy and avoid obesity, it is not only important to be careful what you eat. Tel Aviv University researchers have now found that it's not just what you eat, but also when. The Israeli research teams findings have been published in "Obesity".

Daniela Jakubowicz and her fellow researchers examined 93 obese women, who were randomly assigned to one of two isocaloric groups. Each consumed a moderate-carbohydrate, moderate-fat diet totaling 1,400 calories daily for a period of 12 weeks. The first group consumed 700 calories at breakfast, 500 at lunch, and 200 at dinner. The second group ate a 200 calorie breakfast, 500 calorie lunch, and 700 calorie dinner. The 700 calorie breakfast and dinner included the same foods.

By the end of the study, participants in the "big breakfast" group had lost an average of 17.8 pounds each and three inches off their waistline, compared to a 7.3 pound and 1.4 inch loss for participants in the "big dinner" group. According to Jakubowicz, those in the big breakfast group were found to have significantly lower levels of the hunger-regulating hormone ghrelin, and also showed a more significant decrease in insulin, glucose, and triglyceride levels than those in the big dinner group. More important, they did not experience the high spikes in blood glucose levels that typically occur after a meal.

Hence the saying, “Eat breakfast like a king, lunch like a prince and supper as a pauper”!!!

NUTRITION FACTS LABEL

Check serving size

Check total carbohydrate

(Sugars are part of total carbohydrate. Don't count twice.)

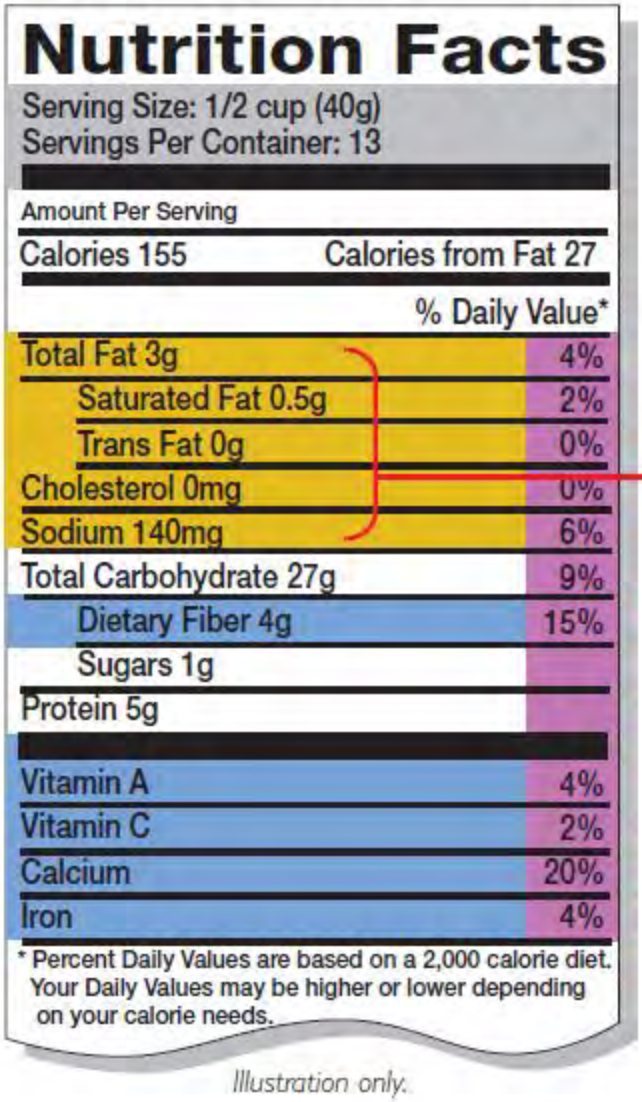

Illustration only.

Low fat is good

(3g or less)

Eat less of these

High fiber is good

(3g or more)

CONQUERING THE GROCERY STORE

American Association of Diabetes Educators
www.diabeteseducator.org

PLANNING AHEAD CAN HELP WITH DIABETES MANAGEMENT

Grocery shopping usually isn't at the top of anyone's list of fun activities. For people with diabetes it can seem especially overwhelming – The carbohydrates! The sugar! Making healthy choices! But with a little planning, grocery shopping can be a very effective tool in meeting goals, from managing blood sugar levels to losing weight.

"Planning ahead and shopping carefully are two great ways to take control, because you can get more out of your time and efforts," said Melissa Joy Dobbins, MS, RDN, CDE, a Chicago-area diabetes educator and spokesperson for the American Association of Diabetes Educators (AADE). "It keeps you focused so you'll buy more foods that are healthy and fewer that have little or no nutritional value. That way you don't have to rely on your willpower when you're back home to eat less of certain foods and more of others."

Successful grocery shopping is about focusing on what's healthy, nutritious and tasty, so you'll actually enjoy eating it. Diabetes educators can help people with diabetes make informed choices by explaining how different types of foods affect your diabetes, and sharing strategies about how to approach grocery shopping so it can help you meet your goals. They recommend starting with these tips:

- **First, make a list** – Create a list of items you need at the grocery store before you go. Think of the meals you'll make, the staples you're running low on and perhaps a new, healthy recipe or food item you'd like to try. Organize the list by food group to speed up the process and keep you on track. If nothing is written under the vegetable category, that's a red flag; think about what vegetables you want to eat, and consider searching for a new recipe that you can get excited about. Make copies of a standard list you can update every time you go, or try a smart phone shopping app.
- **Eat before you go** – It's never a good idea to go shopping when you're hungry; that's when you're more likely to make poor choices. Eat a healthy meal or snack.
- **Think inside the box, or bag or can** – Fresh fruits and vegetables are great, but they aren't your only option. Dried, canned and frozen fruits and vegetables offer nutrients, too, and can be healthy, easy and affordable additions to your diet. Look for fruits that are packed in juice rather than heavy syrup. Look for "low-sodium" or "no salt added" canned vegetables. Be aware that starchy vegetables such as peas, corn and potatoes contain more carbohydrates than other vegetables.
- **Read labels** – Look past the "sugar free" or "low fat" claims. Read the nutrition label for specific information (from fat to carbohydrates to vitamins), noting the amounts that one serving of that food provides. Specifically:
  - **Consider the carbohydrates** – Looking at sugar content is fine, but it's more important to consider the amount of "total carbohydrates," which affect your blood sugar. Work with a diabetes educator to learn how many grams of carbohydrates are appropriate for you to eat per snack, meal and day.
  - **Focus on fiber** – Choose whole grain bread, rice, pasta and cereal. Then look for those that are a good source of fiber (2.5 grams or more per serving) or high in fiber (5 grams or more per serving). A healthy diet includes 25 to 30 grams of fiber from foods a day. Other good sources of fiber are beans, vegetables and fruits.
  - **Hunt for healthy fats** – Fats are an important part of every diet, but it's important to lean towards those that are heart-healthy, such as olive and canola oil, avocado and nuts, limiting them if you are watching your weight.

Grocery shopping can be a useful tool for diabetes management, if you do it wisely. Find a diabetes educator near you who can help you determine the best way to harness its power.

The EdibleRx: Don 't Demonize Processed Food — 'Processed food' has erroneously become a euphemism for bad food. PRIMARY CARE 02.04.2015 0

COMMENTS I'm not sure anything garners more discussion in the nutrition world these days than the term "processed food." Everyone from nutrition experts (a non-standardized term that's used too broadly) to food writers to chefs recommend avoiding "processed food," because it's bad. And, woe to the health professional, who disagrees with any part of that statement. Is there a clear definition of "processed food?" In a word, no. Most foods are processed in some way. Processing can encompass a whole range of things that are routinely done to food to make them more palatable, including cooking, blanching, peeling, grinding, chopping, fermenting, canning, pureeing, baking, and so on. Unless you bite the apple while it's on the tree, it's probably processed in some way, as even washing a food is by Keith Ayoob, EdD, RD it's probably processed in some way, as even washing a food is processing it to some degree – you're making it cleaner to eat. Processing actually serves a helpful purpose. I'd never tell a patient of mine to eat raw meat, for example. Indeed, please do process it to the proper temperature to turn it into a food that is safe and healthful to eat. Even if you choose to eat raw fish as sushi, it needs to be scaled and cleaned, thank you. Again, more processing. Preserving food by drying, freezing, or canning has made it possible for people in the past and present to continue eating fruits and vegetables (or fish and meat) out of season or when availability and access to food is difficult or uneconomical. Yes, those organic raisins and canned garbanzo beans are "processed food." Organic refers only to the growing method – it doesn't mean the food is less processed. I'm a huge fan of low-fat milk and yogurt. Most days I eat both. Ironically, yogurt seems to have more of a halo, but it's also more processed. It has to undergo more processing than plain milk, which is processed minimally – just pasteurization and that's about it. Yogurt is pasteurized, but then fermented and flavored to produce something that consumers will like and eat. Should consumers be concerned about this extra "processing?" Not a bit. It's a great food and people would be better off eating yogurt instead of some of the stuff they now have as a snack or at breakfast. The

point here is that processed food has erroneously become a euphemism for bad food, and that's wrong. When people speak of "processed food" they usually refer to mass-produced stuff that is often packaged to make it convenient, and it often contains refined grains and added fats or sugars. Fine and well to cut back consumption there, and we should be telling our patients to eat fewer of those foods. Notice I said "fewer" rather than "none." Refined grains and some added fats and sugars crop up here and there but no need to demonize them, especially if the rest of the patient's diet is pretty good. But let's not jump on the "avoid-processed-food" bandwagon just so we're trendy. Health professionals need to be the voices of informed reason. The last thing we should be doing is reinforcing absolutes, especially in the absence of proper context.

Keith Ayoob, EdD, RD, is a pediatric nutritionist focused on obesity and heart health at the Albert Einstein College of Medicine in New York. His column appears here weekly. Ayoob works with dairy and soybean producers, Dannon, the Calorie Control Council, and the Disney organization. Most of this work is in the form of advice and consultation on nutrition policy issues. Ayoob disclosed financial relationships with dairy, soybeans, Dannon, the Calorie Control Council, and also Disney to provide advice and consultation on nutrition policy issues.

PORTION SIZES

WHEN YOU CAN'T MEASURE YOUR FOOD

Your Helpful Hands...

The best way to find out how much of a food you are eating, or your portion size, is to use measuring cups, spoons or a scale. Sometimes, such as when you eat out, you can't do this. Here are a number of ways you can use your hands to help you find out about how much you are eating.* The portion sizes in each food group use an adult *woman's* hand as a guide.

One fist clenched = 8 fluid ounces

- Cold and hot beverages

Two hands, cupped = 1 cup

- Breakfast cereal
- Soup
- Green salads (lettuce or spinach)
- Mixed dishes (chili, stew, macaroni and cheese)
- Chinese food

One hand, cupped = 1/2 cup

- Pasta, rice
- Hot cereal (oatmeal, farina)
- Fruit salad, berries, applesauce
- Tomato or spaghetti sauce
- Beans (cooked or canned)
- Cole slaw or potato salad
- Mashed potatoes
- Cottage cheese
- Pudding, gelatin

Palm of hand = 3 ounces

- Cooked meats (hamburger patty, chicken breast, fish fillet, pork loin)
- Canned fish (tuna, salmon)

Two thumbs together = 1 tablespoon

- Peanut butter
- Salad dressing
- Sour cream
- Dips
- Whipped topping
- Dessert sauces
- Margarine
- Cream cheese
- Mayonnaise

*Adapted from MyPyramid.gov. This handout is only a guide. The amounts of foods in your meal plan may be different.

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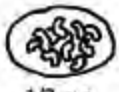
KNOW YOUR CARBS

Knowing how many carbohydrates (carbs) you eat can help you control your diabetes. Below is an easy way to find out how well you know your carbs. Circle only the food servings below that have about 15 grams of carbohydrate. If you get almost all of them right, great. If not, tell your doctor or diabetes educator you want to learn more about how counting carbs can help you control your blood sugar.

A
1 tablespoon of Sugar

B
1/2 Bagel

C
1 small apple

D 
1/2 cup cooked beans

E
8 ounces of fat-free milk

F
1 cup cooked rice

G
3/4 cup of Cheerios or Wheeties

H

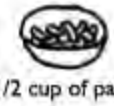
1 can of any regular soda

I
1 medium (6 ounces) boiled potato

J
1/2 cup cooked oats

K
1 slice of whole wheat bread

L
1/2 large muffin

M 
1/2 cup of pasta

N
1 small orange

O
1/2 cup of raw broccoli

P
4 ounces of any fruit juice

ANSWERS: Number of Carb Grams
A: 15, B: 30, C: 15, D: 15, E: 12, F: 46, G: 18, H: 40, I: 30, J: 15, K: 15, L: 30, M: 22, N: 15, O: 5, P: 15

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PEOPLE WITH DIABETES NEED TO EAT!

So do not feel like there is nothing out there for you anymore? Wrong!! Good food aplenty!

So what does a person with diabetes have to eat?

Protein **Fats** **Carbohydrates**

Food is made up of three types of foods- protein, fat and carbohydrates. The protein, does not raise your blood sugar much, when the portion is kept to the size of a deck of cards. Fat raises you and keeps it up for a long time- think pizza in the eve and a higher sugar the next morning. By far the biggest contributor to the blood sugar comes from the **carbohydrates**. So that is where we need some wisdom.

1carb choice = 15 grams of carbohydrate

Carbohydrate foods include not only the cake, cookies, ice cream you feel you can never have again, along with the sugar that comes from the fruits, breads, grains, pastas, milk. Then throw in those "starchy "vegetables- like peas, corn, potato, winter squash, lentils and beans. If you purchase these foods in a wrapper, so that there is a nutrition label on it, you look at the portion size first. Is this what you are going to eat, or is the portion only half of what you eat meaning you would have to half the numbers given.
So figure out how much you are having- that portion or double or half. Then go down to Total Carbohydrate and use only the __gm right after the wording.

So can I eat?

	For weight loss	**For weight maintenance**	**Snacks (if desired)**
Women	2-3 carb choices (30-45 grams of carbohydrate) per meal	3 to 4 (45 to 60 grams of carbohydrate) per meal	1 carb choice (15 grams of carbohydrate) per snack
Men	3 to 4 carb choices (45 to 60 grams carbohydrate per meal	4 to 5 carb choices (60 to 75 grams carbohydrate per meal	1 carb choice (15 grams carbohydrate) per snack

So the goals in diabetes are to eat lower salt, higher fiber and low fat choices in food. The fats are being expanded in the use of olive, canola and those liquid oils you know. In fact fish oil is given in prevention and treatment of heart disease.

The Free things are the non-starchy vegetables. Those starchy ones on the other page raise glucose.

Think of a 9" paper plate. **Not** one you can balance another serving on, but a 9 "plate. Now, visually cut it in half. That half is your carrots, green beans, lettuce, onion, mushrooms, summer squash or could be broccoli or cauliflower. Cut the other half into two parts – one is for your protein part and the other for a carb choice- like rice 1/3 c or a medium baked potato, or noodles ½ cup or 3 cups of popcorn. These are each worth about 15 grams of carbohydrate. Plus an 8 oz glass of milk is another 15 grams. You can see how they add up.

Since the protein (chicken, lean beef, pork chop, fish, cheese, tofu) does not raise you and the non- starchy vegetables do not raise you. But if we don't keep the portions right ie: go to 3 cups of noodles and the carb raises to 132 grams of carbohydrate! And you wonder why your glucose is high after pasta????

So it's -what is a source of carbohydrate and how much is the portion size and how many are you aiming for at a meal or snack.

Several resources for carb counting are the Merck "Count your Carbs", a meeting with Cheri Rott, RD, or the app or book Calorie King, Calorie Fat and Carbohydrate Counter. It is on Amazon or you can get it on your phone.

Applauding Fiber

In May of 2015 there was more evidence released that a high fiber diet helps protect against type 2 diabetes. It was presented in research published in DIABETOLOGIA, a respected journal.

The Imperial College London, looked at data on 29,238 Europeans tracked for an average of 11 years.

Those with the highest amount of fiber in their diet (more than 26 grams a day) were 18 percent less likely to develop type 2 diabetes than those with the lowest fiber intake (less than 19 grams a day), even after the team accounted for other dietary and lifestyle factors. Obesity was key. The researchers said that when a person's body mass index was accounted for, the benefits of a high fiber diet in warding off diabetes disappeared.

When they focused on specific types of fiber, they found that people who consumed the highest amounts of cereal and vegetable fiber were 19 and 16 percent, respectively, less likely to develop Type 2 diabetes than those with who consumed the lowest amounts of these types of fiber. Cereals accounted for 38 percent of total fiber intake in the study, and were the main source of fiber in all countries except France, where vegetables were the main source of fiber. Consumption of fruit fiber was not associated with a lower risk of diabetes.

The researchers also analyzed the findings of 18 other studies from the United States, Europe, Australia, and Asia. That analysis also found a lowering of type 2 diabetes risk as daily intake of fiber increased. "Taken together, our results indicate that individuals with diets rich in fiber, in particular cereal fiber, may be at lowest risk of type 2. Some other considerations in the benefits of fiber relate to improving control of blood sugar and decreasing insulin peaks after meals, and increasing the body's sensitivity to insulin."

The 25 Lowest-Carb Vegetables

It's not always easy to compare apples to oranges when it comes to carbs. Fruits and vegetables come in all shapes and sizes, and while it might seem like one is a lower-carb choice than another, it may just seem that way because of size and weight differences. We leveled the playing field for you here, so you can compare apples to apples ... so to speak!

Note: To help you visualize a rough idea of what amounts to a 50 gram portion, here are some examples: 10 grapes, 1/3 of a medium sized peach, 1/2/ cup chopped celery, or 2 extra long spears of asparagus.

#1 is ARUGULA!
It contains 2g of carbs in a 50-gram portion. One cup of arugula contains 1g of carbs.

#2 is CUCUMBER!
It contains 1g of carbs in a 50-gram portion. One-half cup of sliced cucumber contains 2g of carbs.

#3 is BROCCOLI RAAB!
It contains 1g of carbs in a 50-gram portion. One-half bunch of cooked broccoli raab contains 7g of carbs.

#4 is ICEBERG LETTUCE!
It contains 2g of carbs in a 50-gram portion. One cup of shredded iceberg lettuce contains 2g of carbs.

#5 is CELERY!
It contains 2g of carbs in a 50-gram portion. Two medium stalks of celery contains 2.5g of carbs.

#6 is WHITE MUSHROOMS!
They contain 2g of carbs in a 50-gram portion. One-half cup of raw sliced white mushrooms contains 2g of carbs.

#7 is RADISHES!
They contain 2g of carbs in a 50-gram portion. One-half cup of sliced raw radishes contains 2g of carbs.

#8 is TURNIPS!
They contain 2g of carbs in a 50-gram portion. One-half cup of cooked turnips contains 4g of carbs.

#9 is ROMAINE LETTUCE!
It contains 2g of carbs in a 50-gram portion. One cup of shredded romaine lettuce contains 1.5g of carbs.

#10 is ASPARAGUS!
It contains 2g of carbs in a 50-gram portion. One-half cup of cooked asparagus contains 3.5g of carbs.

#11 is GREEN PEPPER!
It contains 2g of carbs in a 50-gram portion. One-half cup of sliced green peppers contains 2g of carbs.

#12 is OKRA!
It contains 2g of carbs in a 50-gram portion. One-half cup of cooked sliced okra contains 3.5g of carbs.

#13 is CAULIFLOWER!
It contains 3g of carbs in a 50-gram portion. One cup of cooked cauliflower contains 5g of carbs.

#14 is YELLOW PEPPER!

It contains 3g of carbs in a 50-gram portion. One-half cup of sliced yellow pepper contains 3g of carbs.

#15 is CABBAGE!
It contains 3g of carbs in a 50-gram portion. One cup cooked shredded cabbage contains 8.5g of carbs.

#16 is RED BELL PEPPER!
It contains 3g of carbs in a 50-gram portion. One-half cup of sliced red pepper contains 3g of carbs.

#17 is BROCCOLI!
It contains 4g of carbs in a 50-gram portion. One cup of cooked chopped broccoli contains 11g of carbs.

#18 is SPINACH!
It contains 4g of carbs in a 50-gram portion. One-half cup of cooked spinach contains 3.5g of carbs.

#19 is BEETS!
They contain 4g of carbs in a 50-gram portion. One-half cup of sliced canned beets contain 12.5g of carbs.

#20 is GREEN BEANS!
They contain 4g of carbs in a 50-gram portion. One-half cup of cooked green beans contains 5g of carbs.

#21 is CARROTS!
They contain 5g of carbs in a 50-gram portion. One-half cup of carrots contains 6g of carbs.

#22 is KALE!
It contains 5g of carbs in a 50-gram portion. One-half cup chopped cooked kale contains 4g of carbs.

#23 is SUGAR SNAP PEAS!
They contain 5g of carbs in a 50-gram portion. One-half cup of whole raw sugar snap peas contains 1g of carbs.

#24 is ONIONS!
They contain 7g of carbs in a 50-gram portion. One-half cup of cooked onion contains 11g of carbs.

#25 is CORN!
It contains 10g of carbs in a 50-gram portion. One medium ear of corn contains 26g of carbs.

And there you have it! For more information on eating healthy with diabetes, visit www.dlife.com/food!

ABOUT FIBER

Foods that come from plants have parts that your body can't use. These parts are called fiber.

Why should I eat fiber?

Just as a broom cleans a floor, fiber helps "clean" things out of your body that you don't need or can't use for energy. Eating foods high in fiber can also help you:

- Keep your blood sugar under control after eating
- Lose weight by making you feel full when you eat sooner
- Lower "bad" cholesterol
- Make "going to the bathroom" easier (relieve constipation)

Foods high in fiber include vegetables, fruits, whole grains, nuts, oats, beans, and seeds.

How much fiber should I eat a day?

Adults should try to eat about 25 to 30 grams of fiber a day. Here is an example of one of the many ways to do this:

BREAKFAST:	½ cup of high-fiber cereal (10 grams); ¾ cup of raspberries (6 grams)
LUNCH:	2 slices of whole-wheat bread (4 grams); 1 small apple (2 grams)
DINNER:	1 cup of broccoli (5 grams); 1 cup of brown rice (3 grams)

TOTAL = 30 GRAMS

Here are other ways to add fiber to your meals:

- Eat whole-wheat bread instead of white bread
- Eat fruits with the skin instead of drinking fruit juices
- Add berries or nuts to your cereal or yogurt
- Eat fresh or dried fruits for your snack
- Add chickpeas or kidney beans to your rice dishes
- Include vegetables in most meals.

Add fiber to meals slowly. This will help you get used to eating more fiber. Drink lots of water every day. Water helps to keep fiber moving through your body.

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More Evidence Supports Higher Fiber Intake to Lower DM Risk

Effect might be largely due to weight loss linked to eating more grains and vegetables, experts say

WEDNESDAY, May 27, 2015 (HealthDay News) -- More evidence that a high fiber diet helps protect against type 2 diabetes has been presented in research published online May 26 in *Diabetologia*.

Dagfinn Aune, a Ph.D. student affiliated with Imperial College London, and colleagues looked at data on 29,238 Europeans tracked for an average of 11 years. Those with the highest amount of fiber in their diet (more than 26 grams a day) were 18 percent less likely to develop type 2 diabetes than those with the lowest fiber intake (less than 19 grams a day), even after Aune's team accounted for other dietary and lifestyle factors. Obesity was key, however. The researchers said that when a person's body mass index was accounted for, the benefits of a high-fiber diet in warding off diabetes disappeared.

When the researchers focused on specific types of fiber, they found that people who consumed the highest amounts of cereal and vegetable fiber were 19 and 16 percent, respectively, less likely to develop type 2 diabetes than those who consumed the lowest amounts of these types of fiber. Cereals accounted for 38 percent of total fiber intake in the study, and were the main source of fiber in all countries except France, where vegetables were the main source of fiber. Consumption of fruit fiber was not associated with a lower risk of diabetes.

The researchers also analyzed the findings of 18 other studies from the United States, Europe, Australia, and Asia. That analysis also found a lowering of type 2 diabetes risk as daily intake of fiber increased. "Taken together, our results indicate that individuals with diets rich in fiber, in particular cereal fiber, may be at lower risk of type 2 diabetes," Aune, who is also affiliated with the Norwegian University of Science and Technology, said in a journal news release. He believes other mechanisms may be at work as well, "for instance improving control of blood sugar and decreasing insulin peaks after meals, and increasing the body's sensitivity to insulin."

Full Text

Soluble fiber is a type of fiber that dissolves in water, and in so doing, transforms into a gooey, gummy, spongy mass that travels the length of the gut on its own timetable. But don't confuse this fiber's tendency to downshift digestive transit time with a constipating effect; rather, it is regulating.

Soluble fiber still contributes to fecal bulk and is able to hold onto water, therefore contributing to stools that are soft, well-formed and easy to pass – the Platonic ideal of a poop. Generally, soluble fiber is found in the flesh of fruits, root vegetables and in cooked grains. Examples include beta glucan in oats and barley and pectin in apples and citrus fruits. Dried beans and legumes are an excellent source of soluble fiber.

Insoluble fiber is what you might call "roughage." When combined with water, its physical properties generally change very little; this is because it doesn't absorb water well. Therefore, insoluble fiber contributes bulk to the feces, helping to put pressure on the colon walls to stimulate a bowel movement. In this manner, insoluble fiber speeds up digestive transit time and is especially helpful when constipation is at issue. Insoluble fiber is found in the form of cellulose and hemicellulose from leafy veggies, fruit and vegetable skins or the bran layer of most whole grains; it's found in lignans from sesame or flax seeds and some mature vegetables. (A third type of fiber, called resistant starch, has some properties of both soluble and insoluble fiber. It's found in foods like beans, unripe bananas and potatoes that have been cooked and cooled.)

A variety of different fibers from different foods sources will deliver a variety of different and important health benefits. Therefore, in healthy people without bathroom woes, the ideal diet would contain a mix of both fiber types. Certain types of soluble fiber help lower cholesterol levels. Insoluble fiber has been credited with helping to prevent colon cancer, since it helps speed toxins and cancer-causing food compounds out of the body without haste. Some fermentable types of both soluble and insoluble fiber help increase calcium absorption from the diet and stimulate the growth and activity of the gut's most beneficial bacterial populations. Both types of fiber also help delay stomach emptying after a meal and therefore tend to help improve blood sugar control.

Generally, when constipation is a problem, a mix of both fiber types is helpful and well tolerated. But among people prone to diarrhea, urgent loose stools or "hyperdefecation" (increased frequency of bowel movements, even if they're not diarrhea), the mix of fiber in the diet may deserve more careful management. I often tell my patients with chronic diarrhea that soluble fiber in particular is their best friend: It helps slow down stool that's racing through the gut too quickly and can often consolidate trips to the bathroom for people who experience multiple, incomplete bowel movements in rapid succession.

Lots of insoluble fiber, conversely, can make things a whole lot worse (particularly if it's not balanced out by some soluble fiber), exacerbating a pre-existing tendency toward urgent, loose bowel movements. For these patients, it can be helpful to think of soluble fiber as the "anchor" of each meal, ensuring that a fruit, veggie, grain and/or seed rich in soluble fiber plays a starring role in the mix.

At the risk of overstating the benefits of this approach to dietary fiber manipulation, patients routinely describe the effect of so-called soluble fiber therapy as "life changing." Furthermore, the timing of fiber intake can play a role in managing symptoms. For people prone to urgent, loose bowels in the morning specifically, limiting insoluble-rich foods like salads at dinner and including a soluble-rich veggie (squash, skinless sweet potato), cooked grain (rice, pearled barley, quinoa) and/or soluble fiber supplement (Citrucel, Benefiber) can help smooth out choppy morning bowel patterns. If symptoms tend to occur in the afternoon or evening, having a super-soluble breakfast (like oatmeal, chia seeds and banana) can help keep things flowing smoothly later on in the day.

As you can see, there's a lot more to fiber than meets the eye – and more to know than what a typical nutrition label reveals. If you need help figuring out how to tweak the fiber content of your diet to optimize your health and digestive tolerance, consult a registered dietitian to help you navigate the supermarket shelves to your advantage.

WESTERN WISCONSIN HEALTH

Heart Health Facts

Small amounts of fat are essential for many body functions.

Fat is an essential nutrient that provides calories for energy. Calories for energy are also from carbohydrate, protein, and alcohol. Fat provides 9 calories per gram of fat, carbohydrate and protein provide 4 calories per gram and alcohol provides 7 calories per gram.

Besides providing calories fat helps our body absorb certain vitamins. Fat also insulates or pads our organs.

There are four types of fat in our diet. Each type of fat affects heart health:

MONOUNSATURATED FAT: **BEST** for heart health. Monounsaturated fats lower LDL the "*bad*" cholesterol, but do not affect HDL the "*good*" cholesterol

POLYUNSATURATED FAT: Certain polyunsaturated fats lower LDL levels, the "*bad*" cholesterol, but also lower HDL levels, the "*good*" cholesterol. Some polyunsaturated fats are beneficial. Omega 3 fats are recommended for heart health because Omega 3 fats lower triglyceride levels and may slightly raise HDL levels. Omega 3 fats also act to decrease plaque formation.

SATURATED FAT: Raise LDL levels and increase the risk of heart and artery disease.

TRANS FATS: **WORST** for heart health. Trans fats raise LDL levels and lower HDL levels. Most trans fats are found in processed foods. Hydrogenated oil or fat is a major source of trans fat.

Food & Nutrition

Almond Milk vs Cow Milk vs Soy Milk vs Rice Milk

Written by Brian Krans
Medically Reviewed by Peggy Pletcher, MS, RD, LD, CDE on September 17, 2014

Not too long ago, when being a milkman was a career option, the only thing you could expect to drown your cereal in was whole cow's milk. Now, dairy milk comes in all sorts of varieties: whole milk, 2 percent, 1 percent, skim (fat-free), and even lactose-free milk.

What's your favorite kind of milk? »

For those with dietary or allergy concerns, there are also alternatives to cow's milk. Almond, soy, and rice milk are popular alternatives to dairy, and they're becoming even more available in stores across the U.S.

Each type of milk has its advantages and disadvantages, depending on a person's diet, health, nutritional needs, or personal taste preferences.

For example, people in key development years — children over two, teens, and pregnant women — need proteins, vitamin D, and calcium. These are abundant in dairy milk. On the other hand, people who need to watch their calories or cholesterol — for weight reasons or heart health problems — should look to other options. Whole dairy milk contains more calories and cholesterol than any other milk.

In looking at the differences in these popular types of milks, you can determine which best suits your needs.

Dairy Milk

Whole milk is cow's milk with none of the fat removed. It contains 8 grams of fat per cup, 8.5 percent nonfat milk solids, and 88 percent water. As none of the milk's natural components are removed, it is high in natural **proteins**, fat, **calcium**, and **vitamin D**.

Other dairy milk has some or all of the fat removed. While whole milk has 150 calories in one cup, 1 percent milk has 110 calories, and skim milk has just 80 calories. Fat-free milk has all of the nutritional benefits of whole milk — a good source of protein, calcium, vitamins, and minerals — without the saturated fat and calories, though absorption of some vitamins may be reduced due to the lack of fat.

Lactose-free milk is processed to break down lactose, a natural sugar found in milk products. As with other milks, lactose-free milk is a good source of protein, calcium, vitamins, and minerals. The fat and cholesterol content of lactose-free milk varies, as it comes in 2 percent, 1 percent, and fat-free varieties.

The 3 Best Things About Dairy Milk

1. Whole milk can provide essential proteins and extra calories from fats, as well as vitamins and minerals for infants and the elderly.
2. Lactose-free versions are available for people who are lactose intolerance.
3. Widely available in grocery stores and convenience stores, including grass-fed and low-heat pasteurized milk options.

Con: Those that are not fat-free are high in saturated fat and calories, which is bad news for people with heart problems, high cholesterol, or those who are trying to lose weight. Dairy milk is also a common allergen for babies, children, and adults.

Almond Milk

Almond milk is made from ground almonds and is lower in calories than other milks as long as it is unsweetened. It's also **free of cholesterol**, saturated fat, and is **naturally lactose free**. Even though almonds are a good source of protein, almond milk is not. Almond milk is also not a good source of calcium. However, many of the brands available in the market are supplemented with calcium as well as vitamin D.

The 3 Best Things About Almond Milk

1. It’s low in calories and contains no saturated fat or cholesterol.
2. It’s good source of vitamins A and D.
3. It’s naturally lactose free.

Con: It’s not a good source of protein and, unless it is fortified, it contains no calcium, which is important for people with conditions like osteoporosis. (People who are allergic to almonds or nuts should avoid almond milk.) Some almond milk brands also contain carrageenan which may cause digestive issues in some people.

Soy Milk

Soy milk is made from soybeans. It’s a popular milk alternative for vegans and people who are lactose intolerant. Since it comes from plants, it is naturally free of cholesterol, low in saturated fat, and contains absolutely no lactose. Soybeans and soy milk are a good source of **protein**, **calcium** (when fortified), and **potassium**. Probiotic or fermented soy milk is also available and is an even better choice, especially for someone with high blood pressure.

The 3 Best Things About Soy Milk

1. It’s a good source of protein, vitamin A, B12, vitamin D, potassium, and isoflavones.
2. Soy milk contains almost as much protein as cow's milk, yet is lower in calories than whole milk and comparable to skim milk.
3. It contains very little saturated fat, which is important for those with heart conditions.

Con: Too much soy may be a problem for those with thyroid disease or other conditions. A 2008 Harvard study showed that higher intakes of soy-based foods caused fertility problems and lower sperm counts. Soy milk may also contain carrageenan.

Rice Milk

Rice milk is made from milled rice and water. It is the least allergenic of all of these products, which makes it a good choice for people with lactose or nut allergies. While rice milk can be fortified with **calcium** and **vitamin D**, it is not a natural source of either of these, just like soy and almond.

The 3 Best Things About Rice Milk

1. It’s the least allergenic of milk alternatives.
2. It can be fortified to be a good source of calcium.
3. Rice milk can be used by vegans.

Con: Rice milk is very high in carbohydrate and very low in protein, so it’s the least desirable choice for people with diabetes as well as people who want more protein, such as athletes or the elderly.

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Dietary Fat: the Good, the Bad and the Ugly

By DAVID L. KATZ

March 18, 2013 RSS Feed Print

David Katz

There was a time, not long ago, when all dietary fat was bad for our health. It was not truly bad, of course, but we talked ourselves into believing it was. How we responded behaviorally to that belief never made any sense, but that's a topic for other columns, past and future. For now, it suffices to note that we labeled all fat bad, and we were wrong.

One would think, and certainly hope, that having engendered years of public policy and massive shifts in the food supply and prevailing behavior with a misguided boondoggle, we would be extremely cautious about doing it again. But not so! Repeating the follies of dietary history has become something of an honored vocation, if not a national pastime.

Even in the aftermath of having been wrong about dietary fat in general, competing views about specific members of that large and diverse nutrient class are asserted with undiminished conviction.

The case has been made by one research group, for example, that dietary cholesterol (and therefore eggs) is as harmful as tobacco. This would be astounding, if true, because tobacco has long been recognized as an even more important cause of disease and premature death than poor diet. So, in other words, if this assertion about cholesterol were true, it would leave almost no room for any other aspect of diet to account for any harm, because all dietary harm would be accounted for already. Figuring this out is not rocket science.

The assertion about cholesterol is almost certainly wrong for this reason alone. But there are others. The study was led by an ardent proponent of vegan eating, and cholesterol, of course, is only found in animal foods. The study methods were extremely vulnerable to bias. And, there is a large body of evidence that, in the aggregate, all but eggsonerates the egg. Let's move on.

[See Cholesterol Management]

When we began to recognize that all fat wasn't evil, we needed a new villain. We chose saturated fat, and not unreasonably so. Around the world, diets high in saturated fats are associated with high rates of heart disease. But, of course, diets that derive lots of their calories (and, consequently, saturated fat) from meats, dairy, fried foods and so on, must derive less of their calories from alternatives—such as vegetables, fruits, nuts, seeds, beans, lentils and so on.

One of the perennial blind spots in nutrition epidemiology is that eating more of A either just means eating more altogether, which brings ills of its own—or eating less of B. And thus, the harms of A may be partly explained by losing the benefits of B. In our perennial rush to judgment, such subtleties are routinely trampled.

Simple reflections of this sort begin to suggest how we might have exaggerated the harms of saturated fat. Switching saturated fat to starch or sugar or trans fat could well be trading sideways, or even down.

But that would not necessarily fully absolve saturated fat, as many voices are now suggesting with unfounded zeal. The evidence we have about saturated fat is not limited to population studies. It includes mechanistic studies showing that certain prevalent saturated fatty acids found in dairy and meat—palmitic acid and myristic acid—induce inflammation and atherogenesis (the process that gums up our arteries).

[See Dr. Weil's Anti-Inflammatory Diet]

But the same kind of evidence indicates that other saturated fatty acids such as stearic acid, found prominently in dark chocolate but also in meat, and lauric acid, found in coconut, may be innocuous. All saturated fat is not created equal. We once applied this mistaken "can't differentiate baby from bath water" appraisal to all dietary fat. Instead of learning from it, we now apply the same broken method to classes of fat.

And that now extends to polyunsaturated fat of the omega-6 class. Among my more adamant and persistent of my correspondents are those trying to convince me that what we once thought true of saturated fat—namely, that it's bad—is actually true of omega-6 fat. I am told several times a week that it's this bad polyunsaturated fat that is the REAL cause of heart disease, cancer and our various other prevailing woes. Such thinking has even been distorted to the point of recommending bacon over tilapia.

[See Best Heart-Healthy Diets]

But this is just the same old misguided nonsense, tossed in a new direction. Omega-6 polyunsaturated fat is, in fact, essential for normal human function. Along with polyunsaturated fat of the omega-3 class, these groups make up the "essential fatty acids."

It's true that omega-6s induce inflammation. Omega-3s, in contrast, tend to be anti-inflammatory. Neither is good nor bad. They are nutritional yin and yang. We need them in balance, and both in balance with other nutrients.

Paleoanthropologists tell us that our native intake of omega-6 and omega-3 was in a ratio of between 1-to-1 and 4-to-1. In modern diets, we eat 11 to 20 times as much omega-6 as omega-3. Is that a problem? Yes. Does it make omega-6 bad? No. Being out of balance is bad.

This situation can likely be improved by eating more omega-3, and/or eating less omega-6, along with eating more monounsaturated fat. But we have no evidence that it would be improved by eating more saturated fat, as many now argue based on next to nothing.

For those preoccupied with omega-6s, cutting them is the one true answer. For those preoccupied with saturated fat or cholesterol, those remain the real problems. Those focused on omega-3s argue that increasing those should be the priority.

Even as factions skirmish over competing views of dietary fats, others see a basis for battle on a different war front altogether. Some contend that the only thing meaningfully wrong with our diets is the sugar, while others argue it's the dairy, and still others, the gluten. Others still argue it's all about carbs, or animal foods, or animal protein, or glycemic load, or lecithin. Some argue it is salt, others calories—while others still seek to exonerate both salt and calories entirely. And everyone, it seems, is sure they're right.

For the most part, those vindicating this or vilifying that are smart and well-intentioned people. The only thing I seem to have latched hold of that they have missed is this: If any one of them is right, then all the others are wrong.

Let that sink in. All of the world's major (and probably minor) religions count among their congregations devout, pious people who believe their group knows the true nature and intentions of the almighty. If any one of those groups is right, then all of the others are wrong. And, so, alas for the equally pious, devout people who happen to be seeking the wrong truth in the wrong temple!

In the parable of the Blind Men and the Elephant, John Godfrey Saxe allows for all of the competing religious views to be a little right, but mostly wrong. What's mostly wrong, of course, is that they don't allow for the possibility that others are at least as right.

For what it's worth, I have the same concerns about privileged claims to absolute truth in the realm of religion. Look at the hatred and troubles competing versions of absolute truth bring us. But religion is not my professional realm, and I will let others wrestle with theology. Epidemiology keeps me plenty busy—particularly as the same problem overtakes us.

It is a mistake—a grave mistake—to infuse the imperfections of an ever-evolving science with religious zeal. Let me state the obvious: No one has claim to absolute nutrition truth, or complete knowledge. No one. And be reminded that the wise and thoughtful and cautious allow for doubt, while hucksters and the deluded have a constant monopoly on certainty.

Renouncing claim to absolute knowledge of every tree does not leave us lost in the woods. We know what diets are associated with the best health outcomes. What do these diets tell us? Is it all fat, or saturated fat? Fructose or carbs? Cholesterol or omega-6s?

None of the above. The problem is imbalance. Bad combinations of questionable foods.

We know that a diet rich in vegetables and fruits; beans and legumes; nuts and seeds; whole, unrefined grains; fish; eggs; with or without seafood, lean meats, and dairy—and variations on such a theme—promotes health. Such a diet is relatively low in saturated fat, but not fixated on it. Such a diet is virtually devoid of trans fat, as that is found preferentially in processed junk.

Such a diet provides a balance of omega-6s (from nuts, seeds, grains and oils) and omega-3s (from nuts, seeds, fish and seafood). It provides monounsaturated oil from nuts, seeds, olives and avocado. It provides little added sugar, because most foods are close to nature. It provides for moderate sodium intake, because most sodium is added during food processing.

Focus on the forest of foods, in other words, and the trees will sort themselves out. Climb a tree, barking mad—and enjoy the show as the forest burns down.

The best way to choose the best fats is to choose the best foods in the right proportions. If you are expecting to find your way to better eating and health by selecting a single villain or savior, well—fat chance.

Some dietary fats are good for us. Balance and proportion are good for us. Some dietary fats are bad for us. Deficiencies, excesses and imbalances are bad for us.

Sweeping generalizations, exaggerated claims and a silly sequence of vindications and vilifications are downright ugly. It's far past time to chew the fat accordingly, and spit out what history abundantly proves is indigestible nonsense.

[See Recipe for Health]

Hungry for more? Write to eatandrun@usnews.com with your questions, concerns, and feedback.

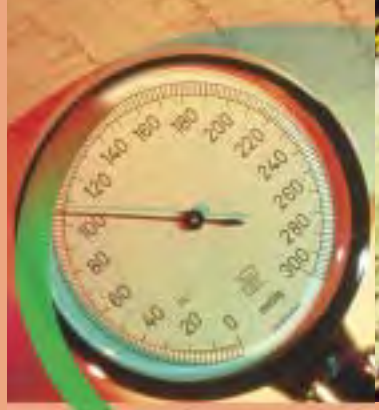
David L. Katz**, MD, MPH, FACPM, FACP,** *is a specialist in internal medicine and preventive medicine, with particular expertise in nutrition, weight management, and chronic-disease prevention. He is the founding director of Yale University's Prevention Research Center, and principal inventor of the NuVal nutrition guidance system. Katz was named editor-in-chief of Childhood Obesity in 2011, and is president-elect of the American College of Lifestyle Medicine.*

WESTERN WISCONSIN HEALTH

SOURCES OF DIETARY FATS

TYPE OF FAT	DIETARY SOURCES
Saturated (medium chain)	**Coconut and coconut oil** **Palm kernel oil** **MCT (medium chain triglyceride) oil**
Saturated (long chain)	**Dairy fats: Whole and 2% milk, whole milk cheese, butter, eggs (okay in moderation – egg whites unlimited)** **Animal fats: beef, veal, pork, chicken, lard, beef tallow** **Baked goods made with dairy and/or animal fats**
Monounsaturated Heart (healthy fat)	**Olives, olive oil** **Canola oil** **Avocados** **Nuts or nut oils: peanuts, almonds, pecans, walnuts, cashews, pistachios**
Trans Fatty Acids (worst fat)	**Food made with hydrogenated shortening: may include margarine, baked goods, cookies, crackers**
Polyunsaturated (omega 6) neutral	**Vegetable oils: corn, soybean, safflower, sunflower, sesame** **Wheat germ, soybeans, certain margarines**
Polyunsaturated (omega 3) (healthy fat – can help reduce inflammation especially EPA and DHA fat)	**Fish: salmon, herring, albacore tuna, sardine, trout, sablefish, eel (EPA &DHA)** **Plant foods and plant oils: canola, soybean, flaxseed, wheat germ, rice bran, english walnuts, broccoli, spinach, purslane (ALA)**

The type of fat or oil used in processing food determines the type of fatty acids found in the food.
The omega 3 content of fish is dependent upon whether the fish is wild or farmed. Eggs and meat may contain omega 3 fatty acids depending upon the animal feed.
The oil used in processing determines the fatty acid content of margarine.
Hydrogenation increases the saturation and trans fatty acids in processed food.



FACTS ABOUT

The DASH Eating Plan

Research has found that diet affects the development of high blood pressure, or hypertension (the medical term). Recently, two studies showed that blood pressure can be lowered by following a particular eating plan—called the Dietary Approaches to Stop Hypertension (DASH) eating plan—and reducing the amount of sodium consumed.

While each step alone lowers blood pressure, the combination of the eating plan and a reduced sodium intake gives the biggest benefit and may help prevent the development of high blood pressure.

This fact sheet, based on the DASH research findings, tells about high blood pressure, and how to follow the DASH eating plan and reduce the amount of sodium you consume. It offers tips on how to start and stay on the eating plan, as well as a week of menus and some recipes. The menus and recipes are given for two levels of daily sodium consumption—2,400 milligrams (the upper limit of current recommendations by the Federal Government's National High Blood Pressure Education Program (NHBPEP) and the amount used to figure food labels' Nutrition Facts Daily Value) and 1,500 milligrams.

Those with high blood pressure may especially benefit from following the eating plan and reducing their sodium intake. But the combination is a heart healthy recipe that all adults can follow.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health
National Heart, Lung, and Blood Institute

To view more information about The DASH Eating Plan, visit:
http://www.nhlbi.nih.gov/health/publish/heart/hbp/dash/

Mean sodium, mean calories, and mean sodium density of meals at 11 New York City fast-food chains by collection of customer receipts

Fast-food chain	Mean sodium, mg	Mean cal	Mean sodium density, mg/1000 cal
Burger			
•Burger King	1685	1008	1727
•McDonalds	1477	908	1782
•Wendy's	1631	907	1885
Sandwich			
•Au Bon Pain	1553	608	2842
•Subway	1883	768	2627
Fried chicken			
•Kentucky Fried Chicken	2397	958	2504
•Popeye's	2497	1050	2418
Pizza			
•Domino's	2465	1550	1545
•Papa John's	1561	652	2443
•Pizza Hut	2272	1017	2233
Tex-Mex			
•Taco Bell	1849	909	2093

Johnson CM et al. *Arch Intern Med* 2010; 170:732-734.

the heart.org
10 YEARS OF ONLINE CARDIOLOGY

Sodium

Tips for People with Chronic Kidney Disease (CKD)

NKDEP
National Kidney Disease Education Program

What Is Sodium?

Sodium is a part of salt. Sodium is found in many canned, packaged, and "fast" foods. It is also found in many condiments, seasonings, and meats.

Why Is Sodium Important for People with CKD?

Eating less sodium helps lower blood pressure and may slow down CKD. Talk with your provider about the right blood pressure goal for you.

One of the kidneys' important jobs is to filter sodium out of the body and into the urine. Damaged kidneys cannot filter as well as healthy kidneys can. This can cause sodium to stay in your body and make your blood pressure go up.

How Much Sodium Should I Eat Every Day?

Most people need to eat less sodium than they are eating. Aim for less than **1,500 milligrams** of sodium each day. Much of the sodium you eat does not come from a salt shaker. Sodium is added to the prepared foods you buy at the supermarket or at restaurants.

Foods *Lower* in Sodium

- Fresh or frozen fruits and vegetables • Rice, noodles • Cooked cereal without added salt
- Fresh meat, poultry, seafood • Low-fat, low-sodium cheese • Unsalted nuts
- Low- and reduced-sodium frozen dinners, peanut butter, salad dressings • Air-popped popcorn

Foods *Higher* in Sodium

- Bacon, corned beef, ham, hot dogs, luncheon meat, sausage • Bouillon, canned, and instant soups
- Boxed mixes, like hamburger meals and pancake mix • Canned beans, chicken, fish and meat
- Canned tomato products, including juice • Canned and pickled vegetables, vegetable juice
- Cottage cheese • Frozen meals • Frozen vegetables with sauce • Olives, pickles, relish
- Pretzels, chips, crackers, salted nuts • Salt and salt seasonings, like garlic salt
- Seasoning mix and sauce packets • Soy sauce • Salad dressings, bottled sauces, marinades
- Some ready-to-eat cereals, baked goods, breads • Ready-to-eat boxed meals and side dishes

How Do I Lower the Sodium in My Diet?

- Buy fresh foods more often.
- Cook foods from scratch, instead of eating prepared foods, "fast" foods, frozen dinners, and canned foods that are higher in sodium.
- Use spices, herbs, and sodium-free seasonings in place of salt. Check with your healthcare provider about using salt substitutes.
- Rinse canned vegetables, beans, meats, and fish with water to remove extra sodium.

Always read the Nutrition Facts label to compare foods. Choose foods with the lowest Percent Daily Value (%DV) for sodium. The %DV lets you see if a food is high or low in sodium. **5% or less is low and 20% or more is high.**

- Check the label on fresh meats and poultry. Sodium additives can be used to make meat last longer.

- Look for foods labeled: sodium free, salt free, very low sodium, low sodium, reduced or less sodium, light in sodium, no salt added, unsalted, and lightly salted.

Nutrition Facts

Serving Size: 1 cup (228g)
Servings Per Container: 2

There may be more than one serving in the package, so be sure to check serving size.

Amount Per Serving

Calories: 260 **Calories from Fat:** 120

	% Daily Value*
Total Fat 13g	20 %
Saturated Fat 5g	25 %
Trans Fat 2g	
Cholesterol 30mg	10 %
Sodium 660mg	28 %
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0 %
Sugars 5g	
Protein 5g	

Vitamin A 4% • Vitamin C 2%
Calcium 15% • Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet.

This number tells you the % DV for sodium in one serving.

Check the Ingredient Label for Added Sodium

- Salt (sodium chloride)
- Monosodium glutamate or MSG
- Baking soda (sodium bicarbonate)
- Baking powder
- Sodium nitrate
- Sodium sulfite
- Sodium phosphate
- Sodium alginate
- Sodium benzoate
- Sodium hydroxide
- Sodium propionate

For more information, visit *www.nkdep.nih.gov* or call 1-866-4 KIDNEY (1-866-454-3639).

The National Kidney Disease Education Program (NKDEP) encourages people to get tested for kidney disease and educates those with kidney disease and their providers about treatments that can help delay or prevent kidney failure. NKDEP is a program of the National Institutes of Health.

U.S. Department of Health and Human Services
National Institutes of Health

NIDDK National Institute of Diabetes and Digestive and Kidney Diseases

NKDEP National Kidney Disease Education Program

NIH Publication No. 11-7407 • Revised September 2011

The Scoop on Sweeteners

Sweeteners can be very helpful for both weight control and for the control of diabetes. There are two main types of sweeteners: **nutritive and non-nutritive.**

A **nutritive** sweetener is one that contains calories and provides energy. Examples of nutritive sweeteners are **sucrose, fructose, and sugar alcohols**. Nutritive sweeteners, which will raise blood sugar levels, are considered part of the total carbohydrate content of a diabetic's meal plan. Nutrition Facts labels, which are found on most packaged foods, will list nutritive sweeteners (sugars and sugar alcohols) as part of the total grams of carbohydrate.

Sucrose (table sugar) is a very common food additive, and almost impossible to avoid. There is no scientific reason to restrict its use, although foods that contain sugars are often high in total carbohydrate as well as fat. Diabetics need to be aware of sucrose' effects on blood sugar and use high sucrose foods discriminately.

Fructose (fruit sugar) may have a lower glycemic response than sucrose, but in the amounts used in foods, it is unlikely to have much clinical benefit. Excessive amounts can also cause diarrhea. Fructose is most often used in baking, canning, and freezing.

Sugar Alcohols- Sorbitol, Mannitol, Xylitol- also have a lower glycemic response, and because they are not completely absorbed, have about half the calories of other sugars. However, like fructose, in the amounts likely to be consumed and in the context of the total daily caloric intake, it is unlikely they will have much clinical benefit. Excessive amounts can also cause diarrhea.

Non-nutritive sweeteners are safe to use and can be helpful by reducing total carbohydrate/caloric intake, i.e., by substituting them for nutritive sweeteners. Women who are pregnant or breast feeding can use the non-nutritive sweeteners; research has shown they are safe for the baby as well. Children may also use the non-nutritive sweeteners. Examples of non-nutritive sweeteners include **Aspartame, Saccharin, Acesulfame-K and Sucralose (Splenda).**

Aspartame (EQUAL) is made from two amino acids (proteins). The name brand for Aspartame is Equal when used as a table top sweetener, and NutraSweet or NatraTaste when used in food products. It will lose its sweetness when heated for cooking and baking. A form of Aspartame has been developed to withstand heat, and can be found in some commercial products. There have been some complaints of dizziness and headaches, but most consumers find Aspartame acceptable. Aspartame contains phenylalanine (an amino acid), so it should

not be used by people with phenylketonuria. Products that contain Aspartame will include a warning.

Saccharin, the oldest sugar substitute, was widely used until a study in 1977 showed that large doses caused cancer in rats. However, there is no evidence that it causes cancer in humans. Saccharin is found in Sweet 'N Low and Sugar Twin. It tends to lose its sweetening power after exposure to high temperatures.

Acesulfame-K is the major ingredient in the table top sweetener, Sweet One, and when used in food products, Sunette. It is heat stable in cooking and baking. For best results, substitute half the sugar called for in a recipe with the equivalent amount of Sweet One.

Sucralose is the major sweetener ingredient in Splenda. It is the newest non-nutritive sweetener approved for use by the FDA. It is processed from sugar, but the resulting product is not well absorbed, and therefore not used by the body as an energy/calorie source. It is very stable in cooking and baking, and is used in baking, drinks, jams and processed foods.

A Word About Stevia

Stevia is a South American shrub whose leaves have been used for centuries by native peoples to sweeten beverages. It is virtually calorie-free and hundreds of times sweeter than table sugar. Although Japan has used stevia since the early 1970's, the US Food and Drug Administration stevia did not approve the use of stevia as a sweetener until 2008 or so.
New products using are coming out rapidly.

SUN CRYSTALS with Stevia is unlike any other sweetener- It is the only national retail brand that combines naturally sweet stevia and pure cane sugar to deliver its delicious sweet taste. Each packet of SUN CRYSTALS All Natural Sweetener has the sweetness of 2 teaspoons of sugar, yet only 5 calories.

Stevia has no effect on blood sugar levels- However, the pure cane sugar does provide a small amount of calories and 1g of carbohydrate per serving. Up to 3 packets of SUN CRYSTALS All Natural Sweetener count as a free food in meal plans for those with diabetes. Patients with diabetes who intend to consume more than 3 packets at a time need to count carbohydrates.

New SUN CRYSTALS with Stevia offers patients an excellent option for a 100% natural sweetener with a delicious sweet taste, the texture of sugar, and only 5 calories per packet. It is a great way to help better manage weight and wellness and eat more healthfully.
Info and free sample at www.suncrystals.com

PureVia and TrueVia are other stevia products.

Websites

www.splenda.com
www.Equal.com
www.nutrasweet.com
www.natrataste.com
www.sweetnlow.com
www.sweetone.com
www.sugartwin.com
www.sweetleaf.com
www.truvia.com
www.purevia.com/Faq.aspx#answer12
www.suncrystals.com

Nectresse is another artificial sweetener. It contains erythritol a sugar alcohol, MONK FRUIT, and molasses. It is made by the same company that makes Splenda.

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05/24/2014 Advantame FDA approved as the 6th high-intensity sweetener to be used in the US. Used in baked goods, non-alcoholic beverages, chewing gum, confections and frostings, frozen desserts gelatins and puddings, jams and jellies, processed fruits and fruit juices, toppings and syrups. It was not approved for use in meats or poultry. It is a crystalline powder used as a table top sweetener and in cooking, and not raise glucose values.

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Sugar Substitutes | *What You Need to Know*

What are sugar substitutes?
Sugar substitutes are chemical or natural substances that sweeten food and drinks without adding as many calories as sugar. Sugar substitutes are many times sweeter than sugar, so it takes less to provide the same level of sweetness. Some sugar substitutes are low in calories, while others have no calories. You may have also heard them called artificial sweeteners or non-caloric sweeteners.

Why are sugar substitutes added to food and drinks?
Sugar substitutes provide sweetness to food without the calories of sugar. This can be helpful if you are trying to control the amount of calories you eat or if you have diabetes and have to be careful about the sugar found in foods and drinks. Sugar substitutes are found in most of the "light," "reduced calorie" or "sugar-free" foods and drinks available today.

It's important to remember that simply eliminating sugar from your diet is not a perfect solution to your dieting needs. You should still focus on getting the majority of your calories through healthy food choices, such as fruits, vegetables, lean meats and whole grains.

What sugar substitutes are available in the United States?
The following sugar substitutes are available in the United States:

- Aspartame, which is also known by the brand names Equal and Nutrasweet
- Acesulfame K, which is also known as Sunett and Sweet One
- Saccharin, which is also known as Sweet 'N Low and Sweet Twin
- Sucralose, which is also known as Splenda
- Stevia, which is also known as PureVia, Truvia and SweetLeaf Sweetener
- Sugar alcohols, which include sorbitol, xylitol and maltitol

I've heard that sugar substitutes can cause cancer or other health problems. Is that true?
According to the National Cancer Institute, there is no proof that sugar substitutes cause cancer. There have also been many medical research studies on the sugar substitutes that are approved for use in the United States, and they have shown the sweeteners to be safe when used in moderation.

One exception is for people who have phenylketonuria (PKU). People who have PKU cannot have the sugar substitute called aspartame because they are unable to metabolize it.

How can I tell if a food or drink contains a sugar substitute?
Check the ingredient list for the names of sugar substitutes listed above. This list gives ingredients in descending order by weight.

How much sugar substitutes should be in my diet?
Unless you add it yourself, it is often hard to know exactly how much of a sugar substitute is in a food or drink. Although sugar substitutes have fewer calories than sugar, it's best to limit them and focus on healthy food choices, such as fruits, vegetables, lean meats and whole grains. These foods are the best sources of nutrition for your body.

I'm pregnant. Are sugar substitutes safe for me?
According to the American Academy of Pediatrics, aspartame is safe for pregnant women and their developing babies. There is also good evidence that acesulfame K, sugar alcohols and sucralose are safe for pregnant women when used in small amounts. Some doctors recommend avoiding saccharin and stevia because there isn't enough medical research to say whether or not these sugar substitutes are safe during pregnancy.

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Bibliography
See a list of resources used in the development of this information.

Written by familydoctor.org editorial staff

Created: 01/10

Experts skeptical of so-called “natural” sweeteners

By Tara Bannow The Bulletin Published Feb 5, 2015 at 12:11AM

Like most people, Mary Cluskey hears a lot about so-called “natural” sweeteners. You know the ones: agave nectar, stevia, monk fruit, et cetera.

“People seem to think that if you don’t consume something fresh and raw and in its natural state then it’s not healthy for you,” she said.

Cluskey, an associate professor in the Moore Family Center for Whole Grain Foods, Nutrition and Preventive Health at Oregon State University, said the line most people draw between “natural” foods and processed foods is, for the most part, an arbitrary one.

Nutrition experts agree that choosing a sweetener is a confusing task. Given all the different sources of information on the subject — many of them conflicting — it’s sometimes hard to know who to trust, especially with marketers throwing around words like “natural” and featuring leaves on their packaging.

Even stevia, a calorie-free sweetener adored by many, a natural foods enthusiast for its origins in the Stevia rebaudiana Bertoni plant, is thoroughly processed to become the powder form in which it’s consumed.

“If all we did was squeeze an agave leaf into our glass of iced tea or something, yeah, that would be more natural,” Cluskey said. “But the reality is, we don’t. It has to be isolated and concentrated.”

When it comes to sweeteners, a little processing is a good thing, Cluskey said. Truly raw sugar, for example, cannot even be sold in the U.S. because it contains naturally occurring environmental contaminants, she said.

‘Just keeps showing up’

Often just the perception that a food is natural can blind consumers to its potentially harmful properties.

Lori Zanini, a registered dietitian in Los Angeles and spokeswoman for the Academy of Nutrition and Dietetics, said her diabetic clients often tell her they can add honey to anything and it’ll still be good for them.

“It sounds funny, but people do that all the time,” she said.

Just because sweeteners like agave nectar — which is really more of a syrup than anything — honey and molasses are believed to be naturally occurring, people somehow don’t believe they’ll raise their blood sugar or cause them to gain weight like table sugar will, Zanini said.

Honey, in particular, is often touted for containing beneficial nutrients like iron. But that's a lot like the anti-oxidizing effects of dark chocolate: You'd have to eat so much of it to derive that benefit, it wouldn't be worth it, Cluskey said.

Likewise, agave nectar is touted for having a low glycemic index, meaning the sugars flow slowly into the bloodstream, releasing insulin gradually and keeping a person fuller longer. Plus, it's sweeter than sugar, so people will use less of it. That said, agave nectar has the same amount of calories and carbohydrates as sugar, according to the American Diabetes Association.

Recognizing sugar's contribution to the growing ranks who suffer from chronic conditions such as Type 2 diabetes and obesity, a number of organizations have created recommendations around daily consumption of added sugar, or sugar that doesn't occur naturally in food. The American Heart Association, for example, recommends women take in no more than 6 teaspoons, or 25 grams, from added sugars per day, and men no more than 10 teaspoons, or 38 grams, from added sugars per day.

But the U.S. Department of Agriculture found in 2010 that people between the ages of 19 to 79 take in an average of 20 teaspoons, or 79 grams, of added sugar per day.

Nearly 36 percent of that added sugar comes from soda and other sugar-sweetened beverages, the USDA found.

"We just continue to get evidence against why we should drink fewer sugar-sweetened beverages," Cluskey said. "It just keeps showing up and showing up."

Nutritive vs. non-nutritive

A simple way to think about sweeteners is to divide them between nutritive (those that contain calories) and non-nutritive (those that don't).

In the nutritive category, sugar alcohols, also known as polyols, are often added to gums and beverages that are labeled sugar-free. They contain two calories per gram, unlike sugar, which contains four calories per gram. The downside of sugar alcohols is they can have a laxative effect if consumed in large quantities, Zanini said.

Some non-nutritive sweeteners are extremely sweet, which means one would likely use less of them. Sucralose, for example, is 600 times sweeter than sugar. Aspartame is 180 times sweeter. Saccharin is 300 times sweeter.

Although some research has linked the non-nutritive sweeteners aspartame and saccharin to certain cancers, most medical organizations, including the American Cancer Society, National Cancer Institute, American Diabetes Association and the Academy of Nutrition and Dietetics, consider them to be safe.

Saccharin required a warning label for decades before a study in 2000 found the mechanism that triggers bladder cancer in rats that consume the sweetener does not exist in humans.

The Center for Science in the Public Interest, a nonprofit consumer advocacy group, recommends against saccharin consumption, but aspartame is at the top of its list of sweeteners to avoid. CSPI

points to independent studies that found it caused cancer in rats and mice. A 2012 study in the American Journal of Clinical Nutrition found drinking diet soda increased men's risk of non-Hodgkin lymphoma and multiple myeloma, but concluded it could have been by chance.

Cluskey said CSPI tends to be more conservative than other organizations about whether or not they consider products safe.

The most important consideration when choosing a sugar substitute is simply which one tastes the best to you, Cluskey and Zanini agreed. And what you plan to use it for.

"My main message is it's a personal decision," Zanini said. "They have to look at their overall eating plan and figure out what's best for them and what's their goal. Is their goal to lower their blood sugar? Is their goal to lower their calories? And what do they think tastes best to them?"

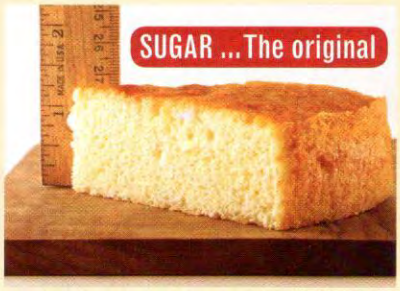
— Reporter: 541-383-0304,

tbannow@bendbulletin.com

Now you're cookin'!

Do sugar substitutes work in the kitchen? We replaced the sugar in our favorite white cake recipe with several different sweeteners. Now YOU can compare the results!

SUGAR ... The original



SUGAR
Calories per teaspoon: 16
Price: $1.99 per 5-lb. bag

Comment: Sugar may act solely as a sweetener, as in lemonade. Or it may provide volume, tenderness, browning, crispness, moisture, structure and sweetness, as in a cake or cookies.

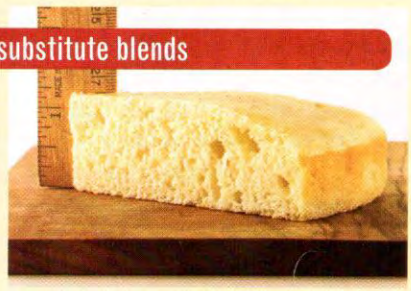
White cake: Notice the light crumb texture (structure), even browning (carmelizing), smooth flat top and high volume. The flavor was pleasantly sweet.

IN THE MIX ... The sugar-substitute blends

ASPARTAME-SUGAR BLEND
(Equal Sugar Lite)
Calories per teaspoon: 8
Price: $4.49 per 17.6-oz. bag

Comment: Equal Sugar Lite is a blend of aspartame, acesulfame potassium and sugar. For baking, simply use the same amount of *Equal Sugar Lite* as you would sugar. Because aspartame breaks down during prolonged heating, you may see mixed results if you use it for baking.

White cake: Compared to the sugar cake, there was less volume overall, a coarser texture and less browning. It was slightly gummy and didn't taste very sweet, as if the aspartame had lost sweetening power during baking.



SUCRALOSE-SUGAR BLEND
(Splenda Sugar Blend for Baking)
Calories per teaspoon: 20
Price: $6.39 per 2-lb. bag

Comment: This blend has about the same carbohydrate and calorie content as sugar, but you only need half the amount. Use it in baked recipes as long as the carbohydrate savings, flavor and cost work for you.

White cake: Notice there's less browning and volume than the sugar version. The texture is also more dense and less tender. The cake seemed gummy and had a slight aftertaste.

ALTERNATIVES ... The sugar substitutes

ASPARTAME
(Equal Spoonful)
Calories per teaspoon: 0
Price: $2.89 per 2-oz. can

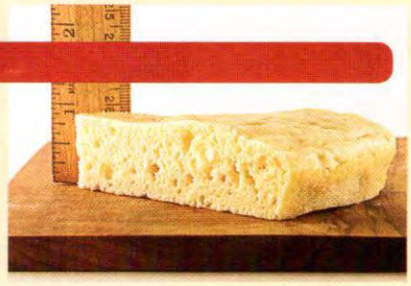
Comment: You can use *Equal Spoonful* measure for measure in place of sugar in cooking. However, aspartame loses sweetness when heated for a prolonged period of time, so it's best to add it to recipes after heating. Avoid using this product in baking.

White cake: Notice the lack of browning, compact texture, tunnels and low volume. The cake was gummy and tasted more like a biscuit because the sweetener had broken down in baking.

SACCHARIN
(Sweet 'N Low)
Calories per teaspoon: 0
Price: $3.65 per 3-oz. box

Comment: Saccharin is heat stable, but baked foods made with saccharin produce the best results when only part of the sugar is replaced, not all of it, as shown here. When cooking, use the equivalent amount suggested on the package for the amount of sugar. And if a recipe calls for brown sugar, use the brown sugar bulk form as the package directs.

White cake: Notice the extremely low volume, very light browning, and bumpy surface. The cake seemed dense, firm and rubbery and had a strong aftertaste.



SUCRALOSE
(Splenda Granular)
Calories per teaspoon: 2
Price: $8.07 per 9-oz. bag

Comment: Use this product to replace sugar in recipes where sugar is only needed for sweetening, rather than in baked recipes that require sugar for structure and browning.

White cake: Notice the lack of volume, very slight browning, and dense texture. Our cake was tough and gummy, and had a noticeable metallic aftertaste.

TATE & LYLE

"ALLULOSE 101" FACT SHEET

Allulose

Allulose is one of many different sugars that exists in nature. It was identified in wheat over 70 years ago and is present in very small quantities in certain fruits such as figs, raisins and jackfruit as well as in foods like caramel sauce, maple syrup and brown sugar. Tate & Lyle has developed a proprietary process to produce allulose on a commercial scale so manufacturers can offer consumers the best of both worlds: all the taste and texture of sugar – and 90% fewer calories than sucrose.

As a low-calorie sugar, allulose delivers both the satisfying taste experience and sweetness that – until now – only sugar could provide. Structurally, this monosaccharide (simple sugar) is absorbed by the body, but not metabolized, and is excreted intact primarily via the urine.

As a global provider of distinctive, high-quality ingredients and solutions, Tate & Lyle has developed a proprietary process to convert the carbohydrate in corn into allulose to make it available on a larger scale. The result is DOLCIA PRIMA® Allulose, the low-calorie sugar that helps food and beverage manufacturers offer the best of both worlds: all the taste and texture of sugar without all the calories.

DOLCIA PRIMA® Allulose

DOLCIA PRIMA® Allulose functions like sugar in recipe formulations but without all the calories. A significant number of consumers express the desire to avoid sugars so as to decrease caloric intake. However, individuals who regularly consume foods and beverages with no-calorie sweeteners say they miss the satisfying mouthfeel of sugar in these no- and low-calorie choices.

DOLCIA PRIMA® Allulose has a taste profile that is similar to sugar, with a clean, sweet taste. In fact, products formulated with allulose ranked at parity with full-sugar versions in preference taste tests across a variety of foods. Numerous sensory studies have been conducted on allulose, including dose response, synergy, temporal profile and mouthfeel.

Using DOLCIA PRIMA® makes low-calorie food and beverage options taste better, and it also enables manufacturers to reduce the calories in their full-calorie products. Allulose behaves like sugar, making formulation easier because it delivers many of the benefits that sugar offers:

- Tastes just like sugar
- Adds bulk and texture to products
- Browns when baking
- Depresses freezing point when making frozen products
- Works in synergy with certain high-potency sweeteners, such as sucralose and stevia, to enable even better sweetening systems
- Offers the same temporal profile, or perception of sweetness, as sugar
- Can be used in a range of products including beverages, yogurt, ice cream and baked products

FROM THEIR WEBSITE:

Ajinomoto North America, Inc.

1300 N. Arlington Heights Road

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Itasca, IL 60143

Phone: (773) 714-1436

Fax: (630) 250-1031

Customer Service Tel: (800) 456-4666

Customer Service Fax: (641) 969-4409

Web: http://www.ajiusafood.com

The newest sweetener to hit is **ADVANTAME** which is a new ultrahigh potency sweetener derived from aspartame and vanillin. It is about 20,000 times sweeter than sucrose and 100 times sweeter than aspartame. Advantame has a clean sweet taste very similar to aspartame, with only a slightly longer sweetness duration. Advantame has similar stability to aspartame in most applications, better stability in many other applications.

Due to its excellent taste and functionality along with very low cost in use, advantame can be used to partially replace sugar, high fructose corn syrup or other high potency sweeteners to reduce cost, and/or sugar content while maintaining the same taste profile or improving the taste and flavor profile of the products.

Advantame can also be used to enhance many flavors such as dairy, fruit, citrus, mint, etc and can be used to extend sweetness duration in chewing gum and improve the sweetness porofile of many confections.

Advantame is FEMA GRAS approved in Dairy, Frozen Desserts, Beverages, and Chewing Gum (FEMA#4716) and advantame has general use approval as a sweetener in Australia/New Zealand, the United States and European Union.

Press Release

For Immediate Release
2014.09.17

Contact: Stan Samples
678-303-2996

Calorie Control Council* comments on "Artificial sweeteners induce glucose intolerance by altering the gut microbiota", Nature** 17 September 2014

Summary: The study suffers from small sample sizes, unrealistic sweetener applications, and a dependence largely on rodent research. Findings should be interpreted with caution.

Statements from leading health organizations and other peer-reviewed published studies are contrary to the study findings.

Leading health organizations, including the Academy of Nutrition and Dietetics (AND), the American Diabetes Association (ADA) and the American Heart Association (AHA), as well as numerous scientific studies agree that low-calorie sweeteners can be used as a safe tool to help manage calorie intake, which, in turn can be helpful for both weight management and diabetes management. In contrast to the assertions made by the researchers of this study, the overall evidence from studies on low-calorie sweeteners, including numerous human studies, show that these sweeteners are safe and do not have adverse effects on blood glucose control. Investigators of more than 40 studies in people, including a recent meta-analysis of clinical trials and other available evidence, have concluded that the use of low-calorie sweeteners does not lead to either an increased risk of obesity or diabetes. The safety of low-calorie sweeteners has been confirmed time and time again by scientists and regulatory agencies around the world, including the U.S. Food and Drug Administration (FDA), the European Food Safety Authority (EFSA) and Health Canada.

The study suffers from several significant limitations.

The study by Suez et al., which concluded that low-calorie sweeteners lead to glucose intolerance and disruption in gut microbiota which in turn may be associated with increased obesity and diabetes, suffers from several limitations that diminish the generalizability of the findings.

MICE EXPERIMENTS

1. **Findings in mice may not be applicable to humans.** The research was conducted mostly in mice, which have biological processes and microbiota that are different from humans, thus making it potentially difficult to translate the study findings to humans. Further, the mice in the high fat diet group received 60% of their calories from fat, which is twice as much as recommended for humans.
2. **Limited testing.** The study shows results of only a single glucose tolerance test – there is no baseline glucose test for comparison.
3. **Testing results are inappropriately extrapolated.** The researchers make generalizations largely based on one sweetener, about sweetener effects, on glucose control or tolerance. These assumptions were based on limited information and despite absence of confirmation from larger, longer studies, including clinical trials in people.
4. **Too small a sample size to generalize.** The different experiments conducted in the study included only a few mice in each experimental group. The small sample sizes used in these experiments further limit the applicability of the study results to humans.
5. **Situations not reflective of real life.** The experiments were also conducted in situations that are not applicable to real life. In some experiments, mice were fed low-calorie sweeteners in their pure form, which are not readily marketed to humans; in other experiments, mice were fed low-calorie sweeteners as available in the marketplace, but at

a higher level than typically consumed. Some mice included in the study were also germ-free, an almost impossible scenario for humans with few exceptions unless in a restricted and controlled medical environment.

6. **Consumption of low-calorie sweeteners was associated with decrease in food intake.** Mice that were in the low-calorie sweetener groups had a dramatic increase in beverage consumption and an associated decrease in food intake. This change means that there was a significant change in the overall diet and nutrient consumption, even if the total calories remained the same. Therefore, less consumption of food and likely a reduced intake of fiber and protein rather than low-calorie sweetener consumption, and, may have led to the change in microbiota in those mice.
7. **Mice in the low-calorie sweetener groups did not gain weight.** The mice that were in the low-calorie sweetener group did not have any changes in weight. Therefore, it does not seem plausible for the researchers to conclude that the observed changes in microbiota or blood glucose response are related to obesity.

HUMAN EXPERIMENTS

The authors did examine humans. However, this research had some limitations that affect the ability to translate that study to the larger human population.

1. **The observational study included a small sample size that may not be applicable to all populations.** The observational study included 381 people, a relatively small sample size. There may be other confounders that may have influenced the outcome and it is not clear how the adjustments were made to address these confounding variables.
2. **The methods of the observational study may introduce recall bias.** This study introduces recall bias as consumers were asked to remember their past consumption of products containing low-calorie sweeteners. This potential bias may have affected the mean increase in HbA1C% that was reported, especially as there was no indication provided with regards to dose response and increase in HbA1C%.
3. **The experimental study included too small a sample size to generalize.** The study was conducted in only 7 individuals, an extremely small sample which makes it difficult to translate the results to the larger population.
4. **Sample not representative.** The participants in this study were nearly the same age (ages 28-36), which also makes it difficult to apply the study findings to the majority of the population.
5. **Too short a time period.** The experimental study was conducted over only one week. A longer trial with a larger, more diverse population would be more likely to generate findings that could be more statistically relevant and translatable to the human condition.
6. **Lack of control group and unrealistic consumption levels.** The experimental study did not include a control group and the amounts of low-calorie sweetener consumed by the participants were not levels that are typically consumed. These factors likely impact the generalizability of the study results.

“The study by Suez et al. contains several studies and experiments which have a number of limitations that are at odds with a large number of other peer-reviewed publications. Therefore, the results of the Suez et al. study warrant further research.

* The Calorie Control Council (the “Council”) is an international association of manufacturers of low-calorie, reduced-fat and “light” foods and beverages. Companies that make and use low-calorie sweeteners are among the Council’s members.

**Suez J, Korem T, Zeevi D, Zilberman-Schapira G, Thaiss CA, Maza O, *et al.* Artificial sweeteners induce glucose intolerance by altering the gut microbiota. *Nature*, 2014; doi: 10.1038/nature13793.

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Study Finds Low-Calorie Sweeteners Not Associated with Sweet Cravings

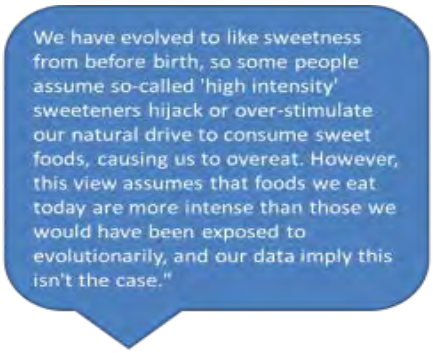
ATLANTA (October 30, 2014) —A recent study has concluded that low-calorie sweeteners, including sucralose, are not associated with increased cravings.

In the study, researchers set out to determine if low-calorie sweeteners would cause increased sweet cravings when compared to sugar. They conducted four separate experiments, each with around 400 participants. In the experiments, each participant drank water mixed with sugar or mixed with different sweeteners, including sucralose. They were then asked to rate their perceived sweetness of the samples on a scale from 0 to 100, with 100 being the sweetest sensation they could imagine.

The results found that the various low-calorie sweeteners such as sucralose did not have greater sweet sensations, or cause cravings, when compared to sugar. The researchers concluded that, "Our data indicate that NNS [non-nutritive sweeteners] are not super-stimuli with regard to perceived sweetness intensity. That is, although NNS may have greater binding affinity to sweet receptors, this does not imply NNS over stimulate sweet receptors as has been implied previously." Finally, they added that "present data suggest that NNS do not result in deleterious health effects by over-stimulating sweet taste receptors to produce hyper-intense sweet sensations."

While there have been speculations that low-calorie sweeteners cause people to gain weight because they lead to consumers craving sweets, these research results provide further evidence that low-calorie sweeteners do not overpower peoples' taste buds or lead them to crave sweeter foods. Further, these results support previous scientific literature that suggest low-calorie sweeteners can assist people in losing and managing their weight while allowing them to enjoy the foods they love..

Antenucci RG, Hayes JE. Nonnutritive sweeteners are not supernormal stimuli. *Int J Obes*, 2014; doi: 10.1038/ijo.2014.109.



John Hayes, director of the Sensory Evaluation Center at Penn State and one of the research scientists on the study
Source: Penn State News at PSU.edu

WESTERN WISCONSIN HEALTH

Healthy Snacks for Persons with Diabetes

Snacks can be part of a healthy meal plan and a great source of quick energy. They help prevent hunger between meals and overeating at meal times. Tips for snacking:

- Snacks should be at least 2 hours (ideally 3-4) after a meal.
- Eat larger snacks during the most active time of your day and smaller snacks in the less active part of your body.
- Fruits, vegetables, and whole grains make great snacks. A whole grain food can be found by looking for the word "**whole**" in front of the grain on the ingredient list (i.e. *whole* wheat flour).
- Not all snacks are healthy, so it's important to make good choices. Avoid high fat, high calorie, low-nutrition snacks (candy, doughnuts, cookies, chips, fruit drinks, soda pop). **See healthy snacks listed below.**

Snacks with less than 5 grams carbohydrate

Vegetable/Fruits

3 celery sticks with 1 tbsp. peanut butter or lite cream cheese
5 baby carrots or grape tomatoes
½ cup raw vegetables (peppers, carrots, broccoli, cauliflower, cucumber, tomatoes)
+1 tbsp. lite ranch, guacamole or Dijon mustard
1 cup salad greens, raw vegetables with 1-2 tbsp. oil and vinegar based dressing
¼ of a whole avocado
¼ cup berries
4 oz. vegetable juice*
5 green olives*
8 black olives*
2 dill pickles*

*watch portions: can be high in sodium

Protein

1 hardboiled egg
1 piece string cheese*
1 oz. luncheon meat*
1 oz. beef jerky (flavored is high in sodium)
½ cup tuna, egg or chicken salad (made with lite mayo) in a lettuce leaf
2 tbsp. nuts* or seeds*

Grains

1 cup lite popcorn*
2-3 whole wheat crackers

Other

Sugar free gelatin (plain or with 2 tbsp. whipped topping)
Sugar free popsicle
2 sugar free hard candies

Sugar free beverages (Sugar Free Kool-Aid, Crystal Lite, etc)

Snacks with 10-20 grams carbohydrate

1 small fruit (apple, orange, pear)
1 cup berries or cut up fruit
1 frozen fruit bar
1 cup apple slices or 1 medium banana + 1 tbsp. peanut butter
Ham and pineapple skewers (alternate low-salt deli ham and chinks of pineapple)
1 cup raw vegetables (peppers, carrots, broccoli, cauliflower, cucumber, tomatoes)
+ tbsp. lite ranch, 2 tbsp. guacamole or Dijon mustard or hummus
1 cup chicken noodle or vegetable soup
3-5 cups lite popcorn
1 small, whole grain granola bar
2 small squares graham crackers topped with 1 tbsp. lite cream cheese and
3 grapes (sliced) or low sugar jam
2 rice cakes +1 tbsp. peanut butter or 1 oz. low-fat cheese
10-15 baked tortilla chips +1/4 cup salsa
1 oz. whole wheat crackers + 1 oz. cheese or ½ cup tuna salad
½ sandwich (1 slice wheat, whole grain or rye bread + 2 oz. lean meat + mustard)
Mini pizza (1/2 whole grain bagel, English muffin or sandwich thin topped with pizza or spaghetti sauce,
Vegetables and shredded mozzarella cheese
1 cheese quesadilla (6" whole wheat tortilla +1 oz. shredded cheese) + ¼ cup salsa
Hummus roll-up (6" whole wheat tortilla + 2 tbsp. hummus + diced red pepper)
¼ cup cottage cheese + ½ cup fresh or lite canned fruit
¼ cup nuts/seeds or trail mix
2 tbsp. dried fruit
4-6 oz. Greek yogurt
6 oz. light, sugar-free yogurt
1 sugar free fudgesicle
1 cup sugar free hot chocolate

Snacks with 25-35 grams carbohydrates

I large, whole grain granola bar
½ cup trail mix or nuts
1 small whole grain bagel, English muffin or sandwich thin +2 tbsp. peanut butter or 1 oz. melted cheese
Sandwich (1 slice wheat, whole grain or rye bread +2 ox. Lean meat + mustard)
6-8 whole grain crackers +1 slice cheese
½ cup oatmeal topped with 1 tsp. brown sugar and 1 tbsp. raisins
4 small squares graham crackers + ½ cup skim or 1% milk
¾ cup whole grain cereal + ½ cup skim or 1% milk
6 oz. lite, sugar free yogurt with ¼ cup low-fat granola
6 oz. lite, sugar free yogurt + ¾ cup berries
Yogurt smoothie
½ cup pudding with ½ banana (sliced)

Adapted from U.P Diabetes Outreach Network
Paula Ackerman, MS, RD, CDE

Published on *Diabetic Living Online* (http://www.diabeticlivingonline.com)

Easy Low-Carb Snack Ideas

If your next meal seems hours away, choose one of these diabetic snacks to ease those hunger pains. A cinch to put together, each snack idea has 15-20 grams of carb per serving.

Low-Carb Snack Ideas for People with Diabetes

If you need a pick-me-up between meals, a snack with 15-20 grams of carbohydrate is often the answer. For someone with diabetes, it's important to eat a fiber-filled and nutrient-rich snack to curb the appetite before the next meal, says Angela Ginn-Meadow, a registered dietitian and a spokesperson for the American Dietetic Association. Talk to your health care provider about whether a snack will work in your meal plan.

Grapes and Grahams

Want a crunchy, sweet treat that's quick and easy to whip together? Spread 1 tablespoon light cream cheese on 2 graham cracker squares and top with 1/4 cup halved grapes.

Fruit and Nut Yogurt

Need a snack that will help you go the extra mile? Sprinkle 1 tablespoon dried cranberries and 1 tablespoon toasted slivered almonds atop a 6-ounce carton of plain fat-free Greek yogurt. Greek yogurt has more protein than its regular counterpart to keep you satisfied longer, and the sweet cranberries will balance the tangy zip of the yogurt.

Cereal Nut Mix

Get a good dose of fiber by mixing 1/2 cup unsweetened miniature shredded wheat cereal, 1 tablespoon dried cranberries, and 1 tablespoon roasted pistachio nuts. By using unsalted nuts, you'll keep the sodium to a record low of 2 milligrams.

Pear and Cheese

Pears and cheese go together like peanut butter and jelly. So next time you need a hearty snack, choose a small pear and a light cheese stick. The cheese will help you meet your calcium goal by providing 16 percent of your daily needs, and the pear provides 4 grams of fiber, getting you that much closer to the recommended 25-35 grams a day.

Tuna Salad Crisps

Tuna salad doesn't have to be reserved for lunch. Combine 2 ounces of drained water-packed light tuna with 1 teaspoon light mayonnaise and 1 teaspoon Dijon-style mustard, and spoon the mixture atop 2 rye crisps for a satisfying snack packed with heart-healthy omega-3 fatty acids.

Avocado-Tomato Open-Face Sandwich

Mash 1/4 of a peeled avocado and stir in a dash of garlic salt. Spread onto a slice of toasted whole grain bread and top with a couple of tomato slices for a snack that is packed with flavor and fiber. Even with the generous amount of avocado, this snack contains only 150 calories.

Bananas About Chocolate

For a treat that's both decadent and healthy, slice half a banana and dip it in 1/2 ounce melted dark chocolate. Studies suggest that components in dark chocolate can help lower blood pressure.

Guacamole and Veggies

For a crunchy, south-of-the-border snack, dip 1/2 of a red sweet pepper, sliced, and 1/2 cup carrot sticks in 1/4 cup purchased guacamole. You'll cover your daily needs for vitamin A with the carrots, plus you'll more than meet your daily vitamin C needs thanks to the sweet pepper strips.

Mini Pizza

For a super quick snack anyone will love, toast half of a round whole grain sandwich thin and top with a couple tomato slices, one sliced fresh mushroom, and a couple tablespoons of shredded reduced-fat mozzarella cheese. Pop it under the broiler for 1 to 2 minutes for a warm, melty treat. The best part -- it's only 100 calories.

Ham and Pineapple

For a low-fat snack that's sure to please, cut 1 ounce of thinly sliced deli ham into long strips and fold the slices accordion style. Skewer the folded ham slices with chunks of pineapple. Stick to 3/4 cup pineapple, and look for lower-sodium ham.

Chips and Dip

Craving something crunchy? Go for the classic combination of chips and salsa. Choose 1/4 cup of your favorite salsa, whether it's mild, medium, or hot, and 3/4 ounce baked tortilla chips.

Yogurt and Fruit Parfait

For a fun, flavorful way to get 25 percent of your daily calcium needs, whip up a quick fruit and yogurt parfait. Layer a 6-ounce carton of fat-free lemon-flavor yogurt with 1/3 cup fresh raspberries and 3 tablespoons puffed wheat, kamut, or millet cereal. Be sure to choose yogurt that is sweetened with an artificial sweetener.

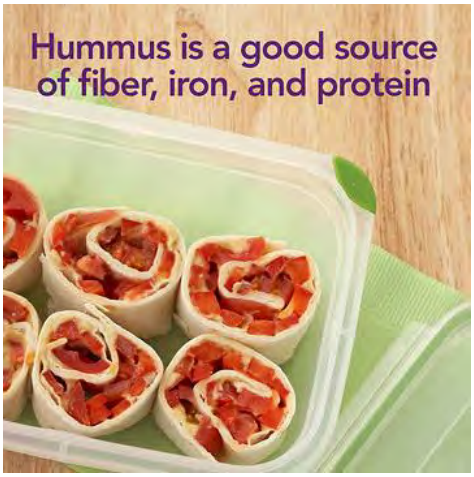
Cucumber-Topped Rye Crisps

Rye crisps make an all-star snack because they are fat-free, low in sodium, and oh, so crunchy. Jazz them up by spreading 2 rye crisps with 2 tablespoons light onion-flavor cream cheese and topping with 1/4 cup sliced cucumber.

Strawberries and Fruit Dip

Strawberries pick up the slack to provide vitamin C in the summer when oranges are out of season. For a creamy dip to serve with a cup of fresh strawberries -- which will provide 150 percent of your daily vitamin C needs -- stir together 1 tablespoon light cream cheese and 1 tablespoon low-sugar orange marmalade.

Hummus Roll-Ups



Add some veggies to your diet with these simple, flavorful roll-ups. Spread 2 tablespoons purchased hummus on an 8-inch low-carb tortilla. Top with 1/4 of a red sweet pepper, sliced, and four quartered cherry tomatoes. Roll up the tortilla and cut into 1-inch slices for bite-size treats.

Dried Apricots

Dried apricot halves are a humble little snack, but eight of them will satisfy your sweet tooth and provide 20 percent of your daily vitamin A needs.

Yogurt

Choose 6 ounces of light yogurt for a carb-friendly snack. Not only is creamy yogurt cool and sweet, it's a great source of calcium, too.

Orange

If you're hungry for a snack, grab one small orange and get a juicy dose of vitamin C as well as fiber, which helps keep blood glucose under control.

Frozen Fruit Bar

Next time those hunger pangs hit, pick a frozen sugar-free fruit bar--it will treat your sweet tooth and might also have extra vitamin C.

Graham Crackers

They're not just for kids! Graham crackers are convenient, portable, and offer that oh-so appealing crunch. Grab three graham cracker squares to get 15-20 g of carbs.

Milk

For a boost of calcium and a dash of creamy goodness, down a 10-ounce glass of skim or 1 percent milk. Opting for low-fat milk is good for your heart, too, because whole milk has five times more saturated fat.

Bread with Peanut Butter

When you need a more filling snack, spread one slice of whole wheat bread with 1 tablespoon of peanut butter. It's a hearty treat that's packed with protein and has heart-healthy monounsaturated fat.

Popcorn

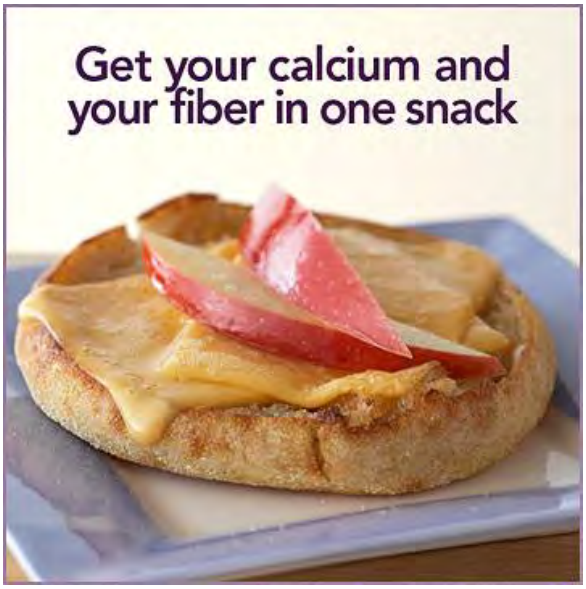
If you have a hankering for a crunchy snack, skip the chips and grab 3 cups of light popcorn (no salt, no butter). Plus, popcorn is easy to grab on the go and full of fiber.

We show you how to read food labels. [51]

Apple

Apples come in so many varieties, it's easy to find the perfect flavor. Choose one small apple at snack time for a serving of fruit that's also a good source of soluble and insoluble fiber, which helps prevent cholesterol buildup.

English Muffin with Cheese and Apple Slices

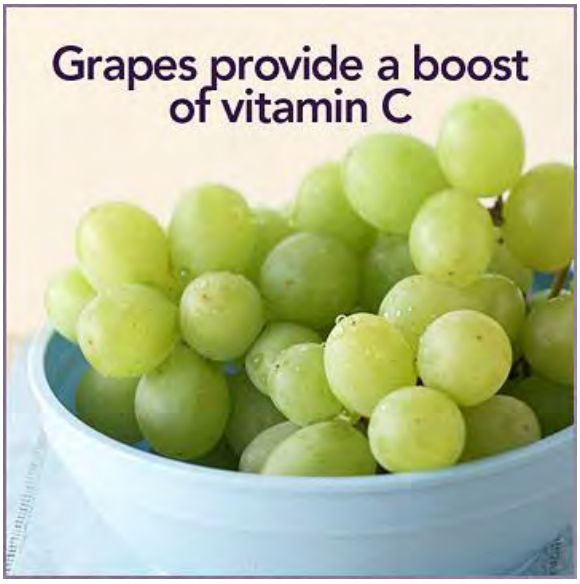


Want a snack with ooey-gooey melted cheese? You're in the right place with this combo snack that includes half of a whole wheat English muffin, 1 ounce low-fat cheese, and a couple of apple slices (about 1/4 of a small apple). Set it in a toaster oven or under the broiler for a few seconds for a chewy snack that hits the spot.

Strawberries and Cottage Cheese

For a snack that mixes a serving of dairy with a serving of fresh fruit, combine 1 cup of strawberries and 1/2 cup low-fat cottage cheese. The combo provides a boost of vitamin C and calcium to your day.

Grapes



Grape fans unite! Whether you love green, red, or Concord, pick 1 cup of your favorite grapes and munch away for a carb-friendly snack that's full of vitamin C.

Crackers with Peanut Butter

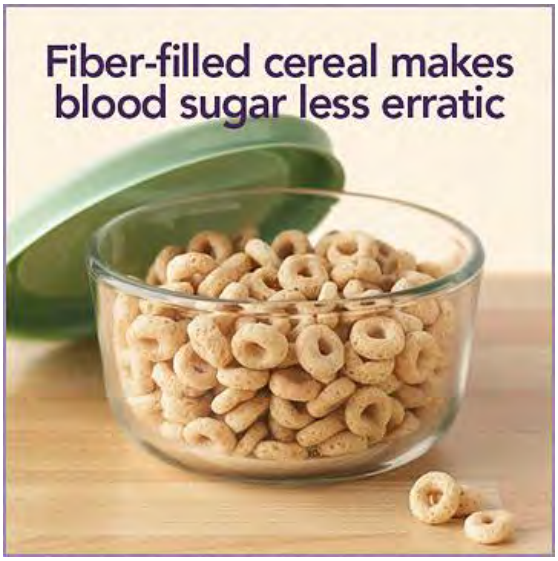
A little bit salty and a little bit sweet, a little bit crunchy and a little bit creamy, this snack combines the best of all worlds. Put together four of your own peanut butter cracker sandwiches

or buy a 4-pack from the vending machine. Just make sure to use only 2 teaspoons of peanut butter total to keep it carb-friendly and opt for low-sodium crackers to keep sodium at bay.

Pudding with Banana Slices

Yes, you can have pudding! Just grab 1/2 cup of your favorite sugar-free pudding flavor, top with a few slices of banana, and you're good to go. Look for versions of pudding with calcium for an extra health boost. Plus, convenient snack packs make it even easier to take this treat with you.

Cereal



It works for toddlers and for grown-ups! Tote 3/4 cup of Cheerios for a crunchy, fiber-filled treat.

Carrots with Ranch Dressing

For a boost of beta carotene, fiber, and vitamin A, you can't do much better than snacking on 15 baby carrots with 2 tablespoons light ranch dressing. Many supermarkets sell individual snack packs of carrots, too.

Pita Bread Pocket with Hummus

Hummus isn't just a fun party dip, it's a great everyday snack option, too. Made from ground garbanzo beans (chick peas), hummus is a flavorful way to get your fiber. Spread 1 tablespoon of hummus on half of a pita bread pocket (1 ounce) for a delicious low-fat snack.`

HEALTHY COOKING TIPS

How food is prepared can be just as important in controlling diabetes as the food you eat. Here are some healthy cooking tips you may find helpful:

Skim fat from the top of soups and stews. Fat floats to the top as soups and stews chill. Just skim off the fat, reheat, and eat.

Limit salt. Don't add salt to food or cook with salt. Season foods with herbs, spices, vinegar, wine, or lemon juice.

Eat or cook with skim or 1% milk instead of whole milk or 2% milk.

Grill, broil, roast, stir-fry, or poach only low-fat meats.

Use lemon or lime on fish and vegetables instead of butter or sauces.

Prepare foods using vegetable oil sprays instead of oil, shortening, or butter. Small amounts of canola or olive oil are best if you use oils.

Prepare chicken or turkey without the skin. Trim fat off meats before cooking.

Use only low-fat or fat-free milk, yogurt, cheeses, and meats in recipes.

Steam vegetables using water or a low-fat, low-salt broth.

Cook with whole-grain products (such as brown rice, oatmeal, barley, bran) rather than refined-grain products.

Add vegetables to casseroles and salads.

Healthy cooking tips are the same for people with or without diabetes. Talk to your diabetes educator, dietitian, or doctor for more information.

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Heart Healthy Dining Out Tips

Eating out is fun, and it's often easier than cooking. But be aware that many restaurant foods are high in fat, salt and sugar!

Here are some tips on staying healthy when eating out:

- Avoid 'starving' yourself before eating out, especially at all-you-can-eat buffets! You're more likely to eat too quickly, eat the less healthy foods, and overeat.
- Ask questions! Explain to the wait staff what you need. They may be able to offer more healthy alternatives.
- Consider sharing a main entrée or ordering an appetizer for the main course. Have the wait staff bring you a doggy bag, and save half your entrée for another meal.
- Order baked, broiled, poached, steamed, grilled, roasted or boiled foods. Avoid fried, sautéed, and breaded foods.
- Order broth-based soups. Avoid cream and butter-based soups. Avoid greasy crackers; stick with plain soda crackers.
- Order steamed or raw, plain veggies without cream sauce.
- Order fresh fruits, angel food cake, sorbet or frozen yogurt for dessert. Share dessert with a friend. Avoid sweet, creamy desserts.
- Order low-fat salad dressings and other added fats "on the side", and use only small portions. Go easy on cream-based/mayonnaise-type salad dressings. Avoid the bacon bits, croutons and shredded cheese toppings.
- Take advantage of fresh fruits and veggies on the salad bar. Avoid any cream based 'salads' (macaroni, potato salads, etc).

More tips on Dining Out:

Italian: Avoid cream/white/cheese sauces. Order the 'red' (tomato based) sauces. Try a vegetarian pizza; avoid sausage, pepperoni and 'double cheese' pizza.

Mexican: Order bean-based dishes. Limit/avoid guacamole, sour cream, refried beans, cheese and chips. Try salsa instead.

Asian: Try hot and sour soups; steamed veggies, steamed rice. Order meats cooked in broth or steamed with vegetables.

Indian: Try lentil or bean dishes. Try baked (Tandoori) chicken or grilled meats. Avoid coconut milk. Try pita bread.

Family-Style: Try grilled chicken breast on a bun; avoid breaded meats. Order mustard instead of mayonnaise-based dressings. Avoid cheese sauces, 'special' sauces. Try a baked potato with toppings 'on the side', and use them sparingly.

DRUGS THAT INTERACT WITH

GRAPEFRUIT JUICE

Alpha and Beta adrenergic blocker: carvedilol
Androgen hormone inhibitor: finasteride
Anthelmintic: albendazole
Antiarrhythmics: amiodarone, quinidine
Antibiotics: clarithromycin, erythromycin, troleandomycin,
Anticoagulants: warfarin
Antiepileptic: carbamazepine
Antifungal: itraconazole
Antihistamine: foxfenadine
Antihyperlipidemics: atorvastatin, fluvastatin, lovastatin, simvastatin
Antineoplastics: cyclophosphamide, etoposide, ifosfamide, tamoxifen, vinblastine, vincristine
Antitussive: dextromethorphan
Antivirals: amprenavir, indinavir, nelfinavir, ritonavir, saquinavir
Anxiolytics: alprazolam, buspirone, midazolam
Calcium Channel Blockers: diltiazem, felodipine, nicardipine, nifedifine, nimodipine, nisoldipine, verapamil
Erectile dysfunction drugs: sildenafil, tadalafil
Hormone Replacement Drugs: cortisol, testosterone, estradiol, progesterone, methylprednisolone,
Hypnotic-sedative: triazolam
Immunosuppressants: cyclosporine, sirolimus, tacrolimus
Opiod analgesics: alfentanil, fentanyl, sufentanil
Selective serotonin reuptake inhibitors: fluvoxamine, sertraline,
Xanthine: theophylline

ALCOHOL AND DIABETES

Drinking alcohol may be OK if you can answer YES to the following:

	YES	NO
1. My blood sugar is under good control	☑	☐
2. I know how to avoid (prevent) and treat low blood sugar	☑	☐
3. My doctor or the diabetes clinic says it is OK to drink alcohol	☑	☐

How much can I drink?

One drink a day for men and women. Two drinks a day for men (only men) may also be OK.

How to drink alcohol:

- Drink with a meal or with foods high in carbohydrate
- Drink slowly and don't drink alone
- Check your blood sugar often
- Always have a low blood sugar snack handy
- Make sure someone with you knows you have diabetes

If you drink, remember:

Alcohol can cause a sudden drop in blood sugar, especially in type 1 diabetes. There may be no warning. You could even pass out.

Summary:

If you don't drink alcohol now, don't start. No one needs to drink alcohol. If you do drink alcohol, it is always best to drink only a small amount.

Talk to your doctor

or diabetes educator for more information.

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Cinnamon's Role in Diabetes Treatment

In a new meta-analysis, patients with type 2 diabetes who took cinnamon displayed improved fasting blood glucose and cholesterol levels, but showed no significant changes in HbA1c levels....

In the past, cinnamon's glucose lowering effect has been studied in several randomized controlled trials (RCTs), but their results either lacked power due to the small sample sizes or results were just inconsistent. Allen et al, conducted a more recent meta-analysis of randomized controlled trials looking at cinnamon's effect on patients with type 2 diabetes.

The RCTs included in the analysis studied the effects cinnamon had on diabetic patients vs. those who did not have diabetes (control group). Lab values were then obtained to measure these effects and either included: glycated hemoglobin (A_{1c}), fasting plasma glucose, total cholesterol, low-density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol (HDL-C), or triglyceride levels. Weighted mean differences among these levels were then calculated between the treatment group and control group.

Among the 10 RCTs included in the study, cinnamon doses ranged from 120 mg/d to 6 g/day for 4 to 18 weeks. It was found that the intake of cinnamon did decrease levels of fasting plasma glucose, total cholesterol, LDL-C, and triglyceride levels. It was also shown to increase levels of HDL-C, but it had no significant effect on A1c levels.

In conclusion, cinnamon's antiglycemic effect in diabetic patients shows its consumption to be beneficial. However, since this meta-analysis does not focus on a standard dose of

cinnamon to take among patients with diabetes, its clinical use is still limited.

Allen RW, et al. Cinnamon Use in Type 2 Diabetes: An Updated Systematic Review and Meta-Analysis. 2013; 11(5): 452-459.

Sweetened Drinks May Boost Depression, Coffee Reduce It

Megan Brooks

January 09, 2013

New observational research hints that regular consumption of sweetened beverages, particularly diet soda, may raise the risk for depression in adults, while drinking coffee may protect against depression.

"Our research suggests that cutting out or down on sweetened diet drinks or replacing them with unsweetened coffee may naturally help lower your depression risk," Honglei Chen, MD, PhD, from the National Institutes of Health, Research Triangle Park, North Carolina, said in a statement.

In an email to *Medscape Medical News*, Dr. Chen emphasized, however, that the biological mechanisms behind the associations "are not well-understood" and "more research is needed to confirm these findings."

Dr. Chen will present the research at the upcoming American Academy of Neurology 65th Annual Meeting in March.

Beverages and Depression

"A few earlier studies reported that coffee consumption was associated with fewer suicides," Dr. Chen told *Medscape Medical News.* "Last year, the Nurses' Health Study reported that coffee consumption was associated with lower risk of depression. To the best of our knowledge, our study is the first prospective study on sweetened beverages and depression," Dr. Chen said.

The study team prospectively evaluated intake of sweetened beverages, coffee, and tea in relation to depression among 263,925 US adults aged 50 to 71 years at the outset. Beverage consumption was assessed in 1995-1996. In 2004-2006, a total of 11,311 participants reported being diagnosed with depression.

All analyses, Dr. Chen said, were based on "extreme" exposures, which they defined as 4 or more cups or cans per day versus nondrinkers.

The results showed that people who drank 4 or more cups or cans of soda per day were 30% more likely to develop depression than those who drank no soda, whereas those who reported this level of intake of fruit punch were about 38% more likely to develop depression. People who drank 4 cups of coffee per day were about 10% less likely to develop depression than those who drank no coffee.

Table 1. Beverage Intake and Risk for Depression With 4 or More Cans or Cups per Day vs None

Beverage	OR (95% CI)
Soda	1.30 (1.17 - 1.44)
Fruit punch	1.38 (1.15 - 1.65)
Coffee	0.91 (0.84 - 0.98)

All *P* for trend < .0001. CI, confidence interval; OR, odds ratio.

The risk appeared to be greater for people who drank 4 or more cups or cans of diet soda, fruit punch, or iced tea, as opposed to the same amount of regular soda, fruit punch, or iced tea.

Table 2. Depression Risk With Diet vs Regular Sweetened Drinks (4 or More Cans/Cups per Day vs None)

Beverage	OR (95% CI)
Soft drinks	
Diet	1.31 (1.16 - 1.47)
Regular	1.22 (1.03 - 1.45)
Fruit punch	

Diet	1.51 (1.18 - 1.92)
Regular	1.08 (0.79 - 1.46)
Iced tea	
Diet	1.25 (1.10 - 1.41)
Regular	0.94 (0.83 - 1.08)

"Consistently, constituent-based analyses showed higher depression risk with aspartame intake (ORs between extreme quintiles: 1.36; 95% CI 1.29-1.44) and lower risk with caffeine intake (OR 0.83; 95% CI 0.78-0.89)," the researchers report.

Dr. Chen said the analyses were adjusted for "many socioeconomic and lifestyle factors, and only included cases that reported a diagnosis at least 4 years after the dietary assessment. However, we could not exclude the possibility of confounding by other factors or the possibility that individuals at higher risk for depression were drawn to sweetened drinks."

The study was supported by the National Institutes of Health, the National Institute of Environmental Health Sciences, and the National Cancer Institute. The authors have disclosed no relevant financial relationships.

American Academy of Neurology's 65th Annual Meeting. Abstract 2257. Released January 8, 2013.

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Cite this article: Sweetened Drinks May Boost Depression, Coffee Reduce It. *Medscape*. Jan 09, 2013.

Coffee, Alcohol Affect Diabetes – 12 Year Study

Coffee, Alcohol Affect Diabetes – 12 Year Study: In a very large cohort of African-American women in the US, (late onset diabetes) was studied for 12 years. Tea and decaffeinated coffee showed no relation with diabetes, but the regular moderate intake of both caffeinated coffee and alcohol appeared to reduce the risk of contracting late onset diabetes significantly. This paper is particularly important because some previous studies have not shown a strong association between alcohol and the risk of cardiovascular disease among African-Americans. African-Americans, especially women, tend to drink little alcohol, yet are at markedly increased risk of late onset diabetes. In the present study, the approximately 30% lower risk for moderate alcohol drinkers was about the same in these African-American women as has been found in many previous studies of Caucasians. Am J Clin Nutr 2010;92:960.

Four Cups of Tea, Coffee Seem to Protect Against Diabetes

Drinking lots of coffee and tea every day -- even decaf -- might keep diabetes away, new research shows. Each additional cup of coffee consumed in a day was associated with a 7% reduction in the excess risk of diabetes....

According to Rachel Huxley, PhD, of the George Institute for International Health in Sydney, Australia, in a meta-analysis of 18 studies, drinking three to four cups of coffee per day was associated with a 25% lower risk of diabetes than drinking two cups or less per day (RR 0.76, 95% CI 0.69 to 0.82). There were similar results for decaf coffee and tea.

"If such beneficial effects were observed in interventional trials to be real, the implications for the millions of individuals who have diabetes, or who are at future risk of developing it, would be substantial," the researchers concluded in the Dec. 14/28, 2009 *Archives of Internal Medicine.*

Over the years, a variety of investigators have reported that coffee and tea consumption are inversely associated with Type 2 diabetes. To sort out the data, Huxley and colleagues conducted a meta-analysis of 18 prospective studies between 1966 and July 2009 with information on 457,922 patients.

The researchers found a significant inverse relationship between coffee consumption and subsequent risk of diabetes. Each additional cup of coffee consumed in a day was associated with a 7% reduction in the excess risk of diabetes (95% CI 0.91 to 0.95, $P<0.001$).

The researchers said the heterogeneity across studies was independent of effects involving gender, geographic region, or the method of diagnosis vs. self-report.

Six of the studies reported on the association between drinking decaffeinated coffee and subsequent risk of diabetes.

A pooled summary estimated that those who drank more than three to four cups of decaf coffee per day had about a third lower risk of diabetes than those who didn't drink any decaf (RR 0.64, 95% CI 0.54 to 0.77). Seven studies also looked at the association between tea and diabetes risk. Again, pooled summaries showed that patients who drank more than three to four cups of tea per day had about a 20% lower risk of diabetes than those who drank no tea (RR 0.82, 95% CI 0.73 to 0.94).

The researchers noted that the coffee findings may be an overestimate due to "small-study bias," and cautioned that any possibility that the association between coffee and diabetes risk is age-dependent warrants further investigation.

The findings suggest that the protective effects of tea and coffee may not be solely related to the effects of caffeine, but rather involve a broader range of chemical constituents including magnesium, lignans, and chlorogenic acids, the researchers wrote.

Tea catechins, for example, may decrease glucose production in the gastrointestinal system, leading to lower levels of glucose and insulin, and green tea in particular may prevent damage to pancreatic beta cells.

The study was limited by the potential for uncontrolled confounding, and because it precludes a more detailed analysis of the effect of adjustment for confounders at an individual level. Also, it may be limited in its generalizability because only 20% of cohorts were from nonwhite populations.

Lars Rydén, MD, of the Karolinska Institute in Sweden, a spokesperson for the European Society of Cardiology, called the study a "cautiously and carefully conducted meta-analysis."

"There are sometimes claims that coffee may do harm, that it may increase the propensity to cardiovascular disease, but there is no evidence for this," Dr. Rydén said. "The message is that people may drink coffee safely. Coffee from this point of view may actually be of benefit, as well as reducing the risk of getting diabetes -- although the reduction is small."

But Rydén noted that other lifestyle issues are far more important than coffee intake. "Coffee helps, but other things are even more important," he said. "Those who are overweight should reduce their bodyweight by 5% to 10% -- not too much -- and include physical activity, such as a brisk walk for 30 minutes a day. Then those people who are at risk of developing diabetes will reduce this risk by 40 to 50%."

Practice Pearl:

- Explain that in a meta-analysis of 18 studies, tea, coffee, and decaf coffee were associated with a significantly reduced risk of Type 2 diabetes.

Huxley R, et al "Coffee, decaffeinated coffee, and tea consumption in relation to incident Type 2 diabetes mellitus" Arch Intern Med 2009; 169(22): 2053-63.

Coffee may reduce risk for type 2 diabetes

Need an excuse to drink yet another cup of coffee today? A new study suggests that increasing coffee consumption may decrease the risk for type 2 diabetes.

The apparent relationship between coffee and type 2 diabetes is not new. Previous studies have found that drinking a few cups or more each day may lower your risk - with each subsequent cup nudging up the benefit.

This most recent study, published in the journal Diabetologia, was more concerned with how changing coffee consumption - either increasing it or decreasing it over time - might affect your risk.

The conclusion: People who upped their consumption by more than a cup per day had an 11% lower risk of type 2 diabetes compared with people whose consumption held steady. Decreasing coffee consumption by the same amount - more than a cup a day - was associated with a 17% increased risk of type 2 diabetes.

The data is based on an analysis of more than 120,000 health professionals already being followed observationally long term. Researchers looked at the study participants' coffee drinking habits across four years to reach their conclusions.

Just how much coffee each day provides a benefit?

"For type 2 diabetes, up to six cups per day is associated with lower risk," said Shilpa Bhupathiraju, a research fellow at the Harvard School of Public Health and lead study author, citing previous research. "As long as coffee doesn't give you tremors, doesn't make you jittery, it is associated with a lot of health benefits."

In the case of diabetes, the reasons behind the supposed protection conferred by coffee are not clear, but there are theories based on animal research.

One involves chemicals present in coffee - phenolic compounds and lignans - that may improve glucose metabolism, according to Bhupathiraju. She added that coffee is rich in magnesium, which is also associated with a lower risk of type 2 diabetes.

Coffee drinking linked to longer life

Wait, though. Before you scramble out to purchase your fourth latte of the day, it is important to note that the type of coffee matters.

Lattes and other types of specialty drinks - often laden with sugar - were not studied. The type of coffee involved in this study tended to be a simple eight-ounce cup of black coffee containing about 100 milligrams of caffeine.

"People think of (increasing their intake) as going and drinking an extra blended drink," said Bhupathiraju. "We are not talking about 'frappuchinos' or lattes. It's black coffee with milk and sugar."

Coffee good for you, but it's OK to hold back

And while coffee may be associated with a reduction in some chronic diseases (not just diabetes, but cardiovascular disease, certain cancers, and - according to a New England Journal of Medicine study - with a longer life, overall) scientists are still reluctant to call coffee a panacea.

That doesn't mean you can't enjoy one more cup in the meantime.

Post by: Stephanie Smith -CNN Medical Producer
Filed under: Diabetes • Diet and Fitness

Caffeine Comeback for Patients with Arrhythmia

John Mandrola

May 14, 2015

For years and years, physicians—including me—have told patients with atrial and ventricular arrhythmia to forgo the pleasures of chocolate and coffee.

A study presented during a featured poster session at the Heart Rhythm Society 2015 Scientific Sessions suggests we were wrong.[1] Thank goodness. (I'll pause a moment for a sip of espresso.)

The joyous poster was born from the database of the Cardiovascular Health Study, which is a population-based cohort in the US. CHS began in 1989 and followed more than 5000 patients over the age of 65.

Investigators from San Francisco, St Louis, and Portland asked the question of whether the common dogma of caffeine avoidance in patients with atrial and ventricular ectopy was wise. It is an important question because the antioxidant properties of dark chocolate, coffee, and tea may confer health benefits. Plus, we ask patients with arrhythmia to give up many of life's pleasures—calories and alcohol and sometimes triathlons, for instance. If we also take their coffee or chocolate, we surely do a lot.

The research team quantified premature atrial contractions (PACs) and premature ventricular contractions (PVCs) in the 1414 individuals who were randomly assigned to have 24-hour Holter monitors. They then compared that data with self-reported food frequency questionnaire and did the usual statistics to assess for associations.

They found none. Coffee, tea, and chocolate consumption did not associate with PAC or PVC frequency.

The authors noted CHS was the largest cohort study to look at dietary data and cardiac ectopy. And their findings suggest "clinical recommendations advising against the consumption of caffeinated products in patients with PACs and PVCs should be reconsidered."

Comments

The first thing to note is the title of the poster. The authors used the term "healthy" caffeinated products for a good reason. They looked at natural

products like chocolate, coffee, and tea—not amped up, calorie-laden sports drinks. Recall that a cup of black coffee has less than 10 calories.

Second, we can agree that observational trials have weaknesses. They used self-reported diet questionnaires, the groups were not randomized, and 24-hour samples of ectopy may not be representative of overall arrhythmia burden.

Yet the findings align well with prior heart-rhythm data. This 2014 meta-analysis of caffeine risk in patients with atrial fibrillation concluded that the relationship was inverse.[2] Habitual caffeine consumption may actually reduce AF risk.

The caffeine-health narrative was just covered in the *New York Times*.[3] Dr Aaron Carroll, an Indiana University pediatrician, health policy professor, and explanatory health journalist, summed up the evidence on "healthy" caffeine products and came to the conclusion that "it's way past time that we stopped viewing coffee as something we all need to cut back on."

This abstract changes my practice. And here we have a medical reversal that is cause for celebration.

JMM

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3. Carroll AE. More consensus on coffee's benefits than you might think. *New York Times*, May 11, 2015. Available here .

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What A Can of Coca-Cola Really Does To Your Body

Soda stimulates the brain's reward and pleasure centers similarly to heroin….

According to the World Health Organization (WHO), the recommended daily allowance for sugar consumption is no more than 6 teaspoons per a day. A 12-oz can of Coca-Cola contains about 10 teaspoon of sugar. The high amounts of fructose corn syrup, refined salts, and caffeine found in soda contributes to high blood pressure, diabetes and obesity when regularly consumed. Those who drink 1-2 cans of sugary beverages a day are 26% more likely to develop type 2 diabetes.

Within 20 minutes of consuming a 12-oz can of Coca-Cola, blood sugar levels spike, which causes a burst of insulin release. Caffeine absorption is complete after 40 minutes causing blood pressure to rise and adenosine receptors in the brain to be blocked, which prevents drowsiness.

Dopamine production is increased after 45 minutes of consumption to stimulate the reward and pleasure center of the brain, similarly to how heroin works. The phosphoric acid, which masks the sweetness of the soda, also binds to calcium, magnesium, and zinc, preventing them from being absorbed and utilized for processes such as bone growth.

After an hour, the diuretic effects of caffeine kicks in causing urinary excretion of the bonded calcium, magnesium, and zinc, as well as sodium, electrolyte, and water. Finally, a sugar crash occurs, causing irritability and drowsiness.

This process occurs not only for Coca-Cola, but for all caffeinated carbonated beverages. However, this does not mean that soda should be completely banned from your diet. Soda consumption will not do any major harm in small amounts when part of a balanced diet and lifestyle. Like everything else, the key is moderation.

Practice Pearls:

- A 12-oz can of Coca-Cola contains about 10 teaspoon of sugar. That one can of soda has more sugar in it than recommended by the World Health Organization for an entire day.
- The high amounts of fructose corn syrup, refined salts, and caffeine found in soda contributes to high blood pressure, diabetes and obesity when regularly consumed.
- Those who drink 1-2 cans of sugary beverages a day are 26% more likely to develop type 2 diabetes.

"Consumption of Sugary Drinks in the United States, 2005-2008," accessed 31 July 2015. Additional source: Harvard School of Public Health, "Soft Drinks and Disease," accessed 31 July 2015.

Fair Food Facts

For people with diabetes, a day at the fair can be fun, yet challenging. With many tempting foods available it can be tough to stick to your food plan. This resource is designed to provide you with information to help you count carbs and make good food choices. To lessen the impact on your glucose levels, try splitting food with a friend. Walking at the fair will also help you handle the extra carbs and calories and be sure to watch your intake of fried foods, which can be high in fat and carbs. Remember to stay hydrated by drinking water instead of sweetened, high carb beverages. Enjoy the day!

Food	Serving	Calories	Carb Grams	Carb Choices	Fat Grams	Fiber Grams
Baked potato (plain)	1 (6 oz)	158	35	2	0	4
Belgian waffel on stick (plain)	1	278	35	2	12	1
Blooming onion with dip	1 onion	1565	186	12	84	25
Blueberry muffin	1 medium	300	55	4	6	4
Bratwurst on bun	1 (4 oz)	420	25	2	27	1
Brownie	2 - ¾ inch sq.	227	36	3	9	1
Burrito with beef and beans	1 (9 oz)	495	55	4	17	11
Caramel apple	1 medium	243	54	4	4	4
Caramel corn with peanuts	1 cup	240	46	3	4	2
Chicken nuggets	6 (4 oz)	278	16	1	18	0
Chili dog on bun	1	290	28	2	15	1
Chili with beans	1 cup	310	15	1	17	7
Chow mein (no noodles)	1 ½ cups	150	15	1	5	3
Cinnamon roll	1 large	309	42	3	14	2
Coleslaw	¾ cup	183	17	1	13	3
Corn dog	1	210	25	2	10	2
Corn on the cob with butter	1 cob	148	33	2	2	2
Cotton candy	1 serving	220	56	4	0	0
Croissant with butter	1 medium	231	26	2	12	2
Éclair with custard	1	233	22	2	14	1
Egg roll	1 - 5 inch	210	20	1	11	2
Enchilada with beef	1 (7 oz)	290	21	2	12	3

NOTE: Some servings listed may be smaller than what is actually served. One "carb choice" equals 15 grams of total carbohydrate.

STOP DIABETES
American Diabetes Association.

International Diabetes Center
Park Nicollet

Food	Serving	Calories	Carb Grams	Carb Choices	Fat Grams	Fiber Grams
Enchilada with chicken	1 (7 oz)	235	17	1	5	1
Foot long hot dog on bun	1	560	39	3	35	2
French bread (plain)	1 medium slice	180	35	2	2	2
French fries	1 small serving	248	30	2	13	3
Fried cheese curds	5 ounces	533	34	2	34	2
Fried chicken breast with skin	1 piece (5–6 oz)	320	4	0	15	0
Frozen yogurt, vanilla (soft)	½ cup	114	17	1	4	0
Fudge	1 ounce	116	21	2	3	0
Funnel cakes	1 cake (3 oz)	356	49	3	16	1
Gyro with meat	1	510	42	3	29	2
Hamburger on bun	¼ pound	426	32	2	23	2
Ice cream	½ cup	137	16	1	7	2
Juice	8 ounces	120	28	2	2	2
Kettle corn	6 cups popped	210	24	2	12	3
Kolache (filled with fruit)	1	210	37	3	5	1
Lefse (plain)	1 sheet	120	22	2	2	1
Lemonade	8 ounces	67	16	1	0	0
Mini-doughnuts	5	270	38	3	10	0
Pancake	1 - 6 inch	175	22	2	7	0
Peanuts (in shell)	10	58	2	0	5	1
Pizza, small with cheese	1 slice (thin crust)	192	17	1	10	1
Popcorn (oil-popped)	6 cups popped	330	38	3	19	7
Potato chips	12–18 (1 oz)	155	14	1	10	2
Pretzel (soft)	1 large (6 oz)	485	100	7	4	3
with cheese	1 ounce	77	4	0	6	0
Scone (plain)	1	420	59	4	17	1
Shake, vanilla	12 ounces	369	49	3	16	2
Snow cone with syrup	1	270	68	5	0	0
Spaghetti with meatballs	1 ½ cups	412	52	4	14	4
Stir fry with meat (no rice)	1 ½ cups	244	22	2	8	2
Stuffed green pepper with beef	1	439	43	3	20	5
Sub sandwich with cold cuts	1 - 6 inch	456	51	4	19	4
Sub sandwich with meatballs	1 - 6 inch	580	70	5	23	4
Taco with beef	1 - 7 inch	214	20	1	10	3
Tortilla chips	6 - 12 (1 oz)	138	19	1	7	2
Turkey burger on bun	1	279	22	2	10	2
Turkey drumstick with skin	1 drumstick	363	0	0	19	0
Veggie burger on bun	1	239	31	2	7	4

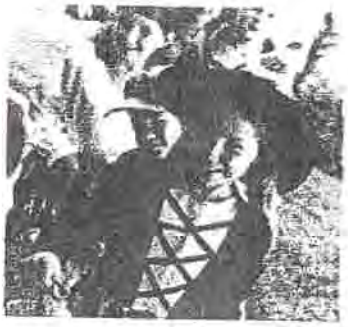
NOTE: Some servings listed may be smaller than what is actually served. One "carb choice" equals 15 grams of total carbohydrate.

Brought to you by your diabetes educator and dLife

Halloween Candy Carb Chart

Here's a list of some common Halloween candies to help manage your sweet tooth and the Halloween season.

Candy	Size/Package	Carbs (g)
3 Musketeers	16 gram fun-sized bar	12g
3 Musketeers	2.13 oz bar	46g
Baby Ruth	2 oz. Bar	37g
Baby Ruth	1 fun size	17g
Blow Pop sucker	One sucker	13g
Butterfinger	2 oz. Bar	41g
Butterfinger	22 gram fun-sized bar	15g
Candy corn	15 pieces	15g
Dum Dum suckers	One sucker	5g
Gummy Bears	11 pieces	30g
Heath Bar	1.4 oz. Bar	25g
Hershey's Almond	3 minis	15g
Hershey's Almond	1.45 oz. bar	20g
Hershey's Kisses	6 pieces	16g
Hershey's Milk Chocolate bar	snack size	10g
Jolly Rancher	1 piece	6g
Kit Kat bar	3 piece bar	10g
Kit Kat	1.5 oz. Package	26g
Licorice	3 6-inch Twizzlers	15g
M&M's	"Halloween" mini box	10g
M&M's, plain	mini pack	15g
M&M's, plain	1.69 oz. bag	34g
M&M's, peanut	mini pack	13g
M&M's, peanut	1.74 oz. bag	30g
M&M's, peanut butter	1.69 oz. bag	27g
Milky Way	2.15 oz. bar	43g
Milky Way fun-sized bar 14g	fun-sized bar	14g
Nestle's Crunch	1.5 oz.	28g
Nestle's Crunch	4 mini bars	26g
Reese's Cups	2 regular-sized 1 oz. cups	18g
Reese's mini cups	4 1 oz. mini cups	16g
Skittles	15 pieces	15g
Skittles	mini pack	17.5g
Snicker's	fun size	12g
Snickers	2.07 oz. Bar	36g
Snickers	20-gram fun-sized bar	12g
Starburst	4 pieces	16g
Sweet Tarts	mini packs - 5 packs	13g
Tootsie Pop	1 pop	16g
Tootsie Roll midgets	12	30g
Tootsie Rolls	2 bars	23g
Twix	2 2 oz. Cookies	37g
Warheads	5	13g
Whoppers'	8 pieces	15g
Whoppers'	1 small pouch	16g
Wonka Pixie Stix	Each (about 6 inches in length)	2g



Candy, candy everywhere!

You may get spooked by all the ghosts and goblins out on Halloween night, but as long as you plan for it, one thing you won't have to be scared of is your blood glucose level.

Be sure to work with your D-team and plan how you'll handle the extra carbs from your favorite Halloween treats.

Here's a carb count list of the 20 most popular Halloween candy

Download the full list

Candy	Size/Package	Carbohydrates
3 Musketeers	Fun Size bar (16 g)	12 g
Air Heads	1 Mini Air Head bar	11 g
Baby Ruth	Fun Size bar	12 g
Brach's Candy Corn	22 pieces (40 g)	36 g
Butterfinger	Fun Size bar (21 g)	15 g
Junior Mints	1 small box	11 g
Kit Kat	3 2-piece bars	28 g
M&M (peanuts)	Mini pack	13 g
M&M (plain)	Mini pack	15 g
Milky Way	Fun Size bar	12 g
Reese's Peanut Butter Cups	1 package (2 cups)	29 g
Skittles	Mini pack	18 g
Snickers	Fun Size bar	12 g
Sour Patch Kids	1 package (17 g)	16 g
Starburst	4 pieces	16 g
Swedish Fish	1 package (17 g)	16 g
Sweet Tarts (small, hard)	5 pack of 3 candies	13 g
Twix	Fun Size piece	10 g
Twizzlers	1 Twizzler (10 g)	8 g
York Peppermint Patties (13.6 g)	1 piece	11 g

Candy	Size/Package	Carbs (g)
3 Musketeers	16 gram fun-sized bar	12g
3 Musketeers	2.13 oz bar	46g
Baby Ruth	2 oz. Bar	37g
Baby Ruth	1 fun size	17g
Blow Pop sucker	One sucker	13g
Butterfinger	2 oz. Bar	41g
Butterfinger	22 gram-fun sized bar	15g
Candy corn	15 pieces	15g
Dum Dum suckers	One sucker	5g
Gummy Bears	11 pieces	30g
Heath Bar	1.4 oz. Bar	25g
Hershey's Almond	3 minis	15g
Hershey's Almond	1.45oz. bar	20g
Hershey's Kisses	6 pieces	16g
Hershey's Milk Chocolate bar	snack size	10g
Jolly Rancher	1 piece	6g
Kit Kat bar	3 piece bar	10g
KitKat	1.5 oz. Package	26g
Licorice	3 6-inch Twizzlers	15g
M&M's	"Halloween" mini box	10g
M&M's, plain	mini pack	15g
M&M's, plain	1.69 oz bag	34g
M&M's, peanut	mini pack	13g
M&M's, peanut	1.74 oz bag	30g
M&M's, peanut butter	1.69 oz bag	27g
Milky Way	2.15 oz bar	43g
Milky Way fun-sized bar 14g	fun-sized bar	14g
Nestle's Crunch	1.5 oz	28g
Nestle's Crunch	4 mini bars	26g
Reese's Cups	2 regular-sized 1 oz cups	18g
Reese's mini cups	4 1-oz mini cups	16g
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Tootsie Pop	1 pop	16g
Tootsie Roll midgets	12	30g
Tootsie Rolls	2 bars	23g
Twix	2 2-oz. Cookies	37g
Warheads	5	13g
Whoopers	8 Pieces	15g
Whoppers	1 small pouch	16g
Wonka Pixie Stix	Each (about 6 in. in length)	2g

Tips for Teens with Diabetes

Make Healthy Food Choices

National Diabetes Education Program

Learn more about food and how to make healthy food choices if you have diabetes.

Healthy foods give you energy to live, learn, and be active.

Put it all together...

great tips for a healthier you →

Be healthy, happy, and active!

Why eat healthy foods?

Healthy foods give you energy to live, learn, and be active. They help you to:

- Grow at a healthy rate and stay active.
- Keep your blood glucose (GLOO-kos), also called blood sugar, in balance—not too high and not too low.
- Lose weight slowly, if needed, under your doctor's care.

Do teens with diabetes need to eat special foods?

No, they do not. Meals that are healthy for teens with diabetes are great for everyone—you, your family, and your friends.

How does food affect my body?

drink water

Food is the fuel that our bodies use for energy. The three main sources of fuel are carbohydrates (CAR-boh-HY-drates), protein, and fat. The body changes these fuels into glucose for energy or stores them as fat. Eating a balance of foods that contain carbohydrates (carbs for short), protein, and fat every day will help keep your blood glucose close to normal. It may also keep your weight where you and your doctor want it to be.

Fats are a good source of fuel for the body and help you grow. Fat does not make blood glucose go up but too much fat can make you gain weight. Some fats are better for you than others.

Choose the types of **fats that keep your heart healthy**:

- Small portions of low-fat salad dressing, mayonnaise, and margarine.
- Small amounts of nuts, olives, and olive oil.
- A slice of avocado.

Choose these high fat foods less often. They are **not healthy for your heart**:

- Butter, stick margarine, and regular mayonnaise.
- Fried foods like potato chips and french fries.
- Meats with fat on them, bacon, deli meats, and hot dogs.
- Cakes, cookies, pies, and other desserts.

Protein helps build strong muscles and bones. Foods with protein do not make blood glucose go up like carbs do. **Having protein in your meal can help you feel less hungry.**

Foods that are a good source of protein include:

- Meat and poultry without skin or extra fat.
- Fish, low-fat cheese, and eggs.
- Natural peanut butter and soy products like tofu.

be active

Carbs are a great source of energy for our bodies. Many foods contain carbs. Some are better for you than others. If you eat too many carbs at one time, your blood glucose may get too high. **Learn to eat the right amount at meals and snack times to keep your blood glucose in balance.**

Choose carbs that have lots of fiber:

- Whole grain foods—whole wheat bread and crackers, oatmeal, brown rice, and cereals.
- Lentils and dried peas or beans such as kidney, black, white, split, or black-eyed. These foods are also a good source of protein.
- Fresh fruits and vegetables from every color of the rainbow—red, orange, yellow, white, green, blue, and purple.
- Other good sources of carbs include non- or low-fat dairy foods, soy milk, pasta, potatoes, corn, squash, and yams.

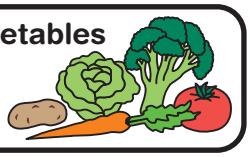
Choose these carbs less often:

- white bread • white rice • sweetened fruit drinks
- regular soda • sweets and desserts

What should I eat? "Your Healthy Food Guide" gives ideas about what kinds of foods are good for you. Remember, this is only a guide. Ask your doctor or dietitian about making a meal plan just for you.

Your Healthy Food Guide

Vegetables



Aim for 2 1/2 to 3 cups a day. Here are choices that equal 1 cup:

- 1 cup cut up raw or cooked or vegetables
- 2 cups leafy salad greens
- 1 cup vegetable juice

Choose dark green and orange vegetables as often as you can.

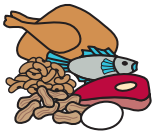
Fruits

Aim for 1 1/2 to 2 cups a day. Here are choices that equal 1 cup:

- 1 cup cut up raw or cooked fruit
- 1 cup fruit juice
- 1/2 cup dried fruit

Choose fresh whole fruits as often as you can.

Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts



Aim for 5 to 6 ounces a day. Here are choices that equal 1 ounce:

- 1 ounce lean meat, fish, or chicken
- 1 egg
- 1 tablespoon peanut butter
- 1/2 ounce nuts
- 1/4 cup cooked dry peas or beans such as kidney, white, split, or blackeye
- 1/4 cup tofu

Milk, Yogurt, and Cheese

Aim for 3 cups a day. Here are choices that equal 1 cup:

- 1 cup nonfat or low-fat milk or yogurt
- 1 1/2 ounces cheese

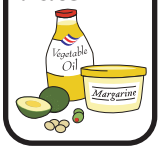
Breads, Cereals, Rice, and Pasta

Aim for 6 to 7 ounces a day. Here are choices that equal 1 ounce:

- 1/2 cup of cooked cereal
- 1/2 cup cooked rice or pasta
- 1 cup ready-to-eat cereal
- 1 slice of whole grain bread
- 1/2 small bagel or 1 small muffin

Choose whole grain foods for at least 3 of your 6 choices.

Heart-healthy Fats



One serving is

- 1 teaspoon vegetable, olive, or canola oil
- 1 teaspoon tub margarine
- 5 large olives or 1/8 avocado
- 1 tablespoon low-fat mayonnaise
- 2 tablespoons low-fat salad dressing

How much should you eat?
You get most of the fat your body needs from other foods you eat—so choose only a few extra servings of these heart-healthy fats each day.

Source: USDA (www.usda.gov)

Regular Soda, Candy, Cookies, and Desserts

If you choose to eat these foods, have a very small amount and **not every day**.

What about sugar, sweets, and desserts? Am I allowed to eat them again?

Most people like the taste of sweet foods. Small amounts of foods that contain sugar can be part of a healthy meal plan.

Desserts such as cakes, muffins, pies, cookies, and ice cream contain a lot of fat as well as sugar. If you choose to eat any of these sweet foods, just have a small amount at the end of a healthy meal. Have a piece of fruit if you are still hungry.

Avoid regular soda, sweetened fruit drinks, and sports drinks as they are all high in sugar. Drink water instead.

How much should I eat?

The amount of food you need to eat each day varies with your age, sex, height, and activity level. The amounts in **"Your Healthy Food Guide"** are right for girls age 11 to 17 or boys age 11 to 14 who get 30 to 60 minutes of physical activity each day. If you are a boy older than 14, or if you want to enter your own height or activity level, visit **www.mypyramid.gov**.

Ask your doctor or dietitian about making a meal plan just for you, especially if you need to lose weight. Being active and eating smaller amounts of food and fewer sweet or fatty foods can help you lose weight in a healthy way. You will keep your heart healthy, too.

It is best to spread your food out over the day. Eat breakfast, lunch, dinner, and a snack—check out your options with your doctor or dietitian. You will have a good supply of energy and you will not get too hungry.

eat smart

For fun, take the "Portion Distortion Quiz" at **http://hp2010.nhlbihin.net/portion**. You will learn how today's serving sizes compare to portions 20 years ago. You will also see how much physical activity you need to do to burn up the extra calories in today's food portions.

Put it all together.

- Learn about healthy foods and make healthy choices at each meal and snack.
- Ask your health care team to help you make and use a healthy eating plan.

- Choose water to drink.
- Be physically active for at least 60 minutes every day.
- Take the correct amounts of insulin or pills, if you need them to manage your diabetes, and check you blood glucose at the times planned with your health care team.
- Keep screen time to two hours or less a day. This includes time watching TV, playing video or computer games, and using the computer.

Don't let diabetes stop you!

- Use this tip sheet to help you reach your goals!

Special thanks to the teens who helped create this tip sheet

Francine Kaufman, M.D., Head, Center for Diabetes, Endocrinology and Metabolism at Childrens Hospital Los Angeles and Janet Silverstein, M.D., Professor and Chief, Pediatric Endocrinology, Department of Pediatrics, University of Florida, Gainesville, FL reviewed this material for technical accuracy.

Not sure how to deal with all this?

To learn more check out...

National Diabetes Education Program
to get free copies of other tip sheets for teens:
- *What Is Diabetes?*
- *Be Active*
- *Stay at a Healthy Weight*
- *Dealing With the Ups and Downs of Diabetes*
- *Lower Your Risk for Type 2 Diabetes*

www.YourDiabetesInfo.org • 1-888-693-NDEP

American Association of Diabetes Educators to find a diabetes educator near you www.diabeteseducator.org 1-800-338-DMED (1-800-338-3633)

American Diabetes Association for help to manage diabetes www.diabetes.org/planetD 1-800-DIABETES (1-800-342-2383)

American Dietetic Association to find a dietitian near you www.eatright.org • 1-800-366-1655

Bam! Body and Mind website for help to stay healthy www.bam.gov

Children With Diabetes website for more about kids and families with diabetes www.childrenwithdiabetes.com

Juvenile Diabetes Research Foundation International for help to manage diabetes www.jdrf.org • 1-800-223-1138

National Association for Health and Fitness that promotes physical activity www.physicalfitness.org • 1-716-583-0521

National Diabetes Information Clearinghouse for more about diabetes www.diabetes.niddk.nih.gov • 1-800-860-8747

Nutrition and Physical Activity website for healthy eating tips and the Kids Walk to School Program www.cdc.gov/nccdphp/dnpa/publications

WIN – Weight-control Information Network for weight control help
- *Take Charge of Your Health! A Teenager's Guide to Better Health*

www.win.niddk.nih.gov/publications/take_charge.htm 1-877-946-4627

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

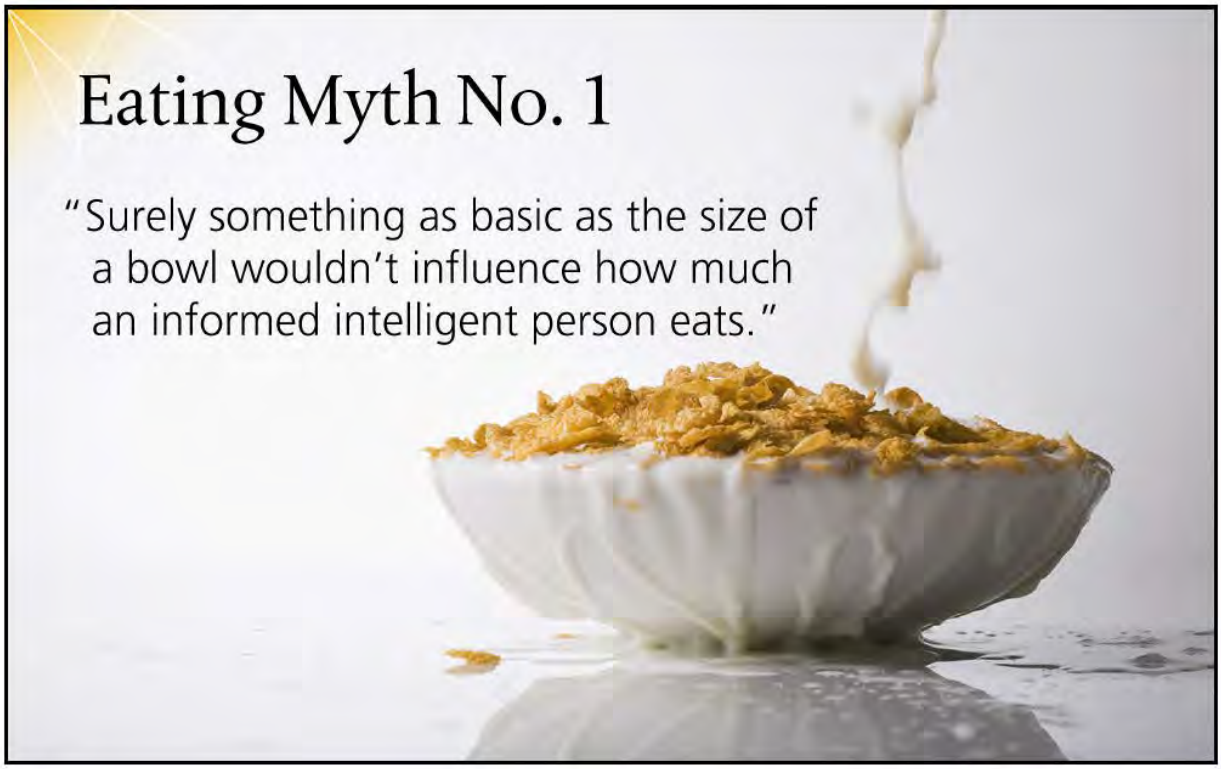
NDEP National Diabetes Education Program

Control your Diabetes. For Life.

www.YourDiabetesInfo.org

The U.S. Department of Health and Human Services' National Diabetes Education Program is jointly sponsored by the National Institutes of Health and the Centers for Disease Control and Prevention with the support of more than 200 partner organizations. www.YourDiabetesInfo.org or 1-888-693-NDEP

Revised November 2007 NIH Publication No. 08-5295 NDEP-66



There are booby traps in our homes that cause mindless eating. Start by stocking the home with healthier choices vs high sugar, high fat snacks/foods.

Look at your dishes that you eat off of. There is an experiment, where *intelligent* persons were told that eating off of a larger plate created larger portions. Surely they would not be victim to this, smart persons that they are! But in an experiment where MBA students were given a 90 minute lecture on this concept and then brought back in 6 weeks to eat Chex Mix from large or small bowls. The folks who used the larger bowls ate 153 extra calories per session! Using smaller plates and tall skinny glasses vs short fat glasses makes a difference in our mind's eye. And that is what we are fighting at times.

Do you know how many times per day you make decisions about food? The estimate is about 200 times per day.

When asked do you remember the last time you overate and to the point of regret and why? 93% of people remember the situation. Reasons were given as celebrating, 49% said for the taste of the food, and 39% said they were overly hungry before eating. In the movie theater experiment at Mount Prospect, they aged fresh popcorn to 5 days old (stale), but fed it in large containers to movie goers. At first taste they thought it wasn't very good and stopped, but as the movie went on they kept at it and took in 35% more in the larger containers than the smaller ones.

These illusions are really hard to break.

Some Herbs That Might Cause Surgery Problems

Many common herbs can pose a risk during surgery. For example, some can interact with anesthetics or increase the risk of bleeding during surgery. Research on these problems is only just beginning. Here are examples of possible complications that doctors suspect herbs may cause during or after surgery.

ECHINACEA: allergic reactions; when used for less than eight weeks, diminished effectiveness of immunosuppressive drugs; when used for more than eight weeks, suppressed immune system leading to poor wound healing or infection

EPHEDRA (ma huang): disturbances of blood vessel function and blood circulation, heart attack, stroke, interactions with some anesthetics and other drugs; the Food and Drug Administration (FDA) has issued warnings about ephedra's many dangers.

GARLIC: increased bleeding risk

GINGER: increased bleeding risk

GINKO: increased bleeding risk

GINSENG: increases in heart rate or blood pressure, interference with anti-clotting medicines, increased bleeding risk, too-low blood sugar levels

KAVA: prolonged sedation; FDA has issued a consumer advisory, warning that kava can seriously damage the liver

ST. JOHN'S WART: prolonged sedation; changes blood levels of many other drugs

VALERIAN: prolonged sedation

In addition, there's a chance that an herb may interact with some of the drugs used during surgery. And even if the herb itself is safe, there's no guarantee that the bottle actually contains that herb and is free of unlabeled drugs, additives, or contaminants.

Taken from diabetes forecast Aug 2003

FOOD FACTS

From the U.S. Food and Drug Administration

Dietary Supplements

What You Need to Know

You've heard about them, have probably used them, and have even recommended them to friends or family. But how much do you really *know about dietary supplements?*

Yes, some can be beneficial to your health — but taking supplements can also involve health risks. Read on for important information for you and your family about dietary supplements.

Q What are dietary supplements?

A Dietary supplements include vitamins, minerals, and other less familiar substances — such as herbals, botanicals, amino acids, enzymes, and animal extracts (see box at right). Dietary supplements are also mareketed in forms such as tablets, capsules, softgels, and gelcaps. While some dietary supplements are well understood and established, others need further study.

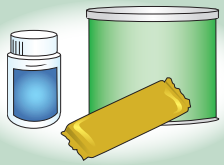
Q What are the benefits of dietary supplements?

A Some supplements can help assure that you get an adequate dietary intake of essential nutrients; others may help you reduce the risk of disease. However, supplements should not replace the variety of foods that are important to a healthful diet — so, be sure you eat a variety of foods as well.

Unlike drugs, supplements *are not intended to treat, diagnose, prevent, or cure diseases*. That means supplements should not make claims, such as "reduces arthritic pain" or "treats heart disease." Claims like these can only legitimately be made for drugs, not dietary supplements.

Some Common Dietary Supplements:

- Acidophilus
- Echinacea
- Fiber
- Ginger
- Glucosamine and/or Chonodroitin Sulphate
- Minerals
- Omega-3 Fatty Acids
- St. John's Wort
- Saw Palmetto
- Vitamins



Note: These examples do not represent either an endorsement or approval by FDA.

Q Are there any risks in taking supplements?

A Yes. Many supplements contain active ingredients that have strong biological effects in the body. This could make them unsafe in some situations, and hurt or complicate your health. For example, the following actions could lead to harmful — even life-threatening — consequences.

- Combining supplements
- Using supplements with medications (whether prescription or over-the-counter)
- Substituting supplements for prescription medicines
- Taking too much of some supplements, such as vitamin A, vitamin D, and iron

Some supplements can also have unwanted effects *before*, *during*, and *after* surgery. So, be sure to inform your health-care provider, including your pharmacist, about any supplements you are taking — especially before surgery.

Before making decisions about whether to take a supplement, see your health-care provider and/or a registered dietitian. They can help you achieve a balance between the foods and nutrients you personally need.

Q Who's responsible for the safety of dietary supplements?

A Dietary supplements are *not* approved by the government for safety and effectiveness before they are marketed. If the dietary supplement contains a NEW ingredient, that ingredient will be reviewed by FDA (not approved) prior to marketing — but only for safety, not effectiveness.

The manufacturers and distributors of dietary supplements are responsible for making sure their products are safe BEFORE they go to market. Manufacturers are required to produce dietary supplements in a quality manner and ensure that they do not contain contaminants or impurities, and are accurately labeled.

Manufacturers will also be required to report all serious dietary supplement related harmful effects or illnesses to FDA starting January, 2008.FDA can take dietary supplements off the market if they are found to be unsafe or if the claims on the products are false and misleading.

Q How can I find out more about the dietary supplement I'm taking?

A If you want to know more about the product you are taking, check with the manufacturer or distributor about:

- Information to support the claims of the product
- Information on the safety and effectiveness of the ingredients in the product
- Any reports of adverse effects or events from consumers using the product

Q How can I be a smart supplement shopper?

A Although the benefits of some dietary supplements have been documented, the claims of others may be unproven. If something sounds too good to be true, it usually is.

Be a savvy supplement user. Here's how:

- Watch out for false statements like:
  - A quick and effective "cure-all"
  - Can treat or cure diseases
  - "Totally safe" or has "no side effects"
- Be aware that the term *natural* doesn't always mean *safe*.
- Don't assume that even if a product may not help you, at least it won't hurt you.
- When searching for supplements on the Web, use the sites of respected organizations, rather than doing blind searches.
- Ask your health-care provider for help in distinguishing between reliable and questionable information.
- Always remember — safety first!

What should I do if I have a reaction to a dietary supplement?

You, your health-care provider, or anyone else should report a serious problem from the use of any dietary supplement directly to **FDA's MedWatch Program** at:

- **1-800-FDA-1088** (toll-free phone number)
- **1-800-FDA-0178** (fax)
- **www.fda.gov/medwatch/how.htm** (Web site)

FDA would like to know whenever the use of a dietary supplement causes you to have a serious reaction or illness, even if you're not certain that the product was the cause, and/or you did not visit a doctor or clinic.

For further information, visit:

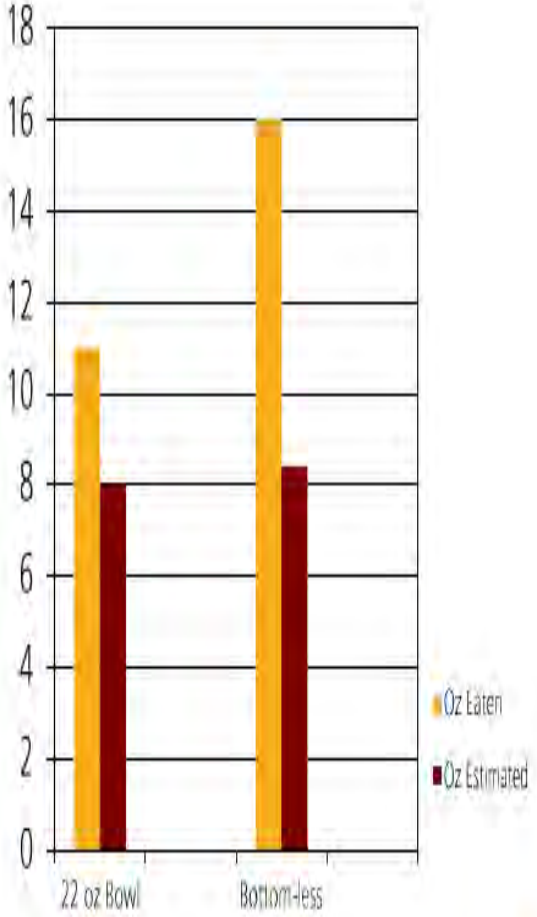
www.fda.gov/Food/DietarySupplements/default.htm

The Bottomless Soup Bowl

- Would You Keep Eating if Your Bowl Never Emptied?
  - "Clean Plate Club" – Some people use empty bowls and plates as a cue they're done eating
    - If bowl isn't empty, they keep eating
    - What if it never empties?
  - We Designed a Bottomless Bowl
    - Brought in 60 adults for a free lunch
    - Half got 22-oz normal bowls; half got 22-oz bottomless bowls
    - Pressure-fed under the table, slowly refills
    - What does this look like?

Bottomless Soup Bowls Lead to Bottomless Appetites

- Results
  - People kept eating
  - Ate 73% more until stopping
  - Yet, they didn't think they ate more.



University of Nebraska Lincoln
Cooperative Extension in Lancaster County
444 Cherrycreek Road, Suite A, Lincoln, NE 68528
Phone: 402-441-7180 Web site: lancaster.unl.edu/food

The Power of One Dietary Change in Losing Weight

12 Easy Ways to Eat 100 Less Calories Per Day

Alice Henneman, MS, RD, Extension Educator

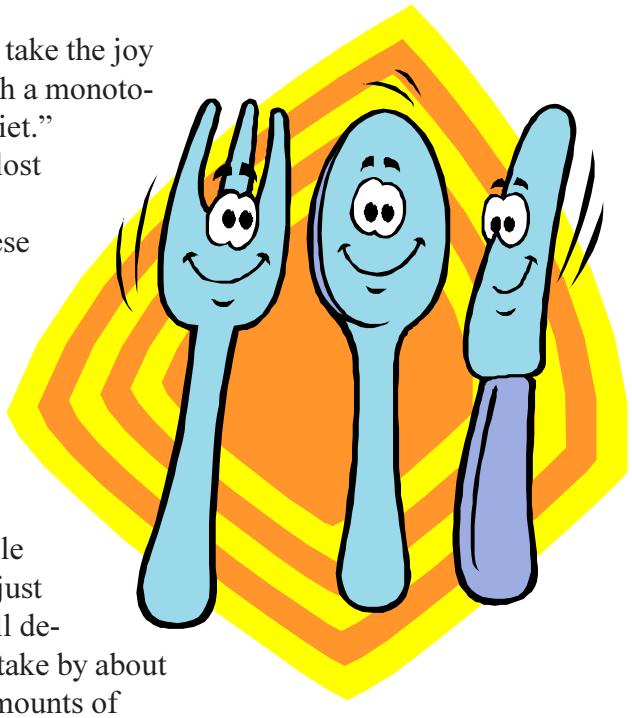
What do 10 pounds of fat look like? For a rough estimate, imagine 40 sticks of butter or margarine or 10 1-pound cans of vegetable shortening.

Looks like a lot ... yet how many of us add this much weight in a year without realizing it until our pants fit a little tighter or our belt runs out of notches?

Chew on This

It takes an excess of about 3,500 calories to gain a pound. Break that into smaller bites and 100 extra calories a day can put on about 10 pounds a year. The GOOD NEWS is LOSING 10 pounds can be as easy as eating 100 calories LESS each day for a year.

Sometimes, we're too hard on ourselves when we're trying to lose weight. We eat some pretty awful-tasting foods, forgo getting together with friends if food is involved, or take the joy out of eating through a monotonous and limited "diet." While people have lost hundreds of pounds through some of these methods, it's often the same 10 pounds over and over again!



ONE dietary change may be all it takes. Here are some simple changes, involving just ONE food; each will decrease your daily intake by about 100 calories. The amounts of calories saved are approximate; check Nutrition Facts labels on specific foods for exact amounts.

As a general rule, the "Dietary Guidelines for Americans, 2000" recommend a gradual weight loss of no more than 1/2 to 2 pounds per week. The Guidelines also recommend losing weight under the guidance of a healthcare provider, especially for obese children and older adults, the Guidelines advise. If you'd like to lose more than 10 pounds over the next year, try two or more of the following changes daily.

It's difficult to obtain adequate nutrients if you consume less than 1,200 calories per day; supervision by your physician is especially important when dropping below this level. It's beneficial for most people to increase their activity level AND eat less.

University of Nebraska Cooperative Extension educational programs abide with the non-discrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.

Single Dietary Changes Equal to about 100 calories

1. Modify Your Milk

Instead of drinking two cups of whole milk, switch to two cups of 1% lowfat milk or skim milk. The nutrients are comparable.

2. Modify Your Mayo

Switch from two tablespoons of regular mayonnaise to two tablespoons of low-fat mayonnaise.

3. Rethink Your Drink

Substitute a 12-ounce can of a diet soft drink at 0 calories for a similar amount of a regular soft drink at 150 calories.

Or, drink a cold glass of water, perhaps with a slice of lemon! This strategy also may help you eat less in other ways. According to Dr. Barbara Rolls, Pennsylvania State University nutrition professor and author of *Volumetrics: Feel Full on Fewer Calories*: "Various liquids are processed by different mechanisms in the body. The hunger and thirst mechanisms are quite separate. A soft drink will trigger thirst mechanisms, not hunger mechanisms, and add calories without satisfying hunger. You may end up consuming more total calories than if you didn't take the drink."

4. Downsize Your Drink

If you've been drinking a 20-ounce container of a regular soft drink, switch to a 12-ounce container size.

5. "Dress," Don't "Drown" Your Salad

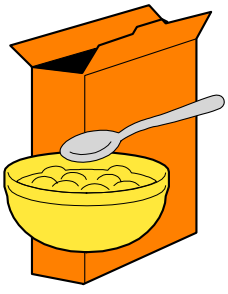
Pam Anderson (*How to Cook Without a Book, Broadway Books*, 2000) advises about 1 tablespoon of oil and a teaspoon of vinegar for each 1-1/2 cup portion of salad.

In *How to Make Salad* (Boston Common Press, 1998), the test kitchen staff for *Cook's Illustrated* magazine advise 1/4 cup of vinaigrette should be enough to dress 2 quarts (8 cups) of loosely packed salad, an amount they suggest for 4 servings. That means each 2-cup serving of salad greens should have about 1 tablespoon of dressing on it.

TIP: Dressing slides off damp salad greens and collects in the bottom of the salad bowl. You'll get more flavor with less dressing if salad greens are washed and thoroughly dried. Bagged lettuce that's pre-washed and labeled "ready to eat" should be dry enough as is. If you need to wash salad greens, the easiest way to dry them is in a salad spinner. Pack lightly to avoid overcrowding and bruising the greens. After spinning, pat off any remaining moisture with clean paper towels. If you don't have a spinner, dry greens thoroughly with clean paper towels.

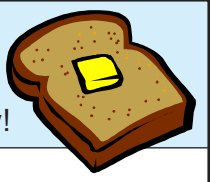
If you've been using 3 (or more!) tablespoons of dressing per two cups of salad, try cutting back to 1-1/2 tablespoons of dressing or less. Or experiment with some of the reduced calorie versions — even then, your salad will taste best if "dressed," not "drowned."

6. Size up Your Cereal Bowl



A study reported in the *Journal of the American College of Nutrition* (June, 2001) found the amount of cereal eaten by adults was approximately twice the serving size listed on the box. That's not necessarily bad, but may be one place calories are sneaking into meals. Check the portion size you're pouring in relation to the size cited on the box; decide if you're pouring more calories than desired. Try eating from a smaller bowl to aid in portion control.

7. Watch Your Bread and Spread



Limit the amount of bread (or rolls) and spread eaten before the main course to one serving when dining out. You always can eat more later if you're still hungry!

8. Count Your Cookies

A single medium-sized cookie easily can have about 100 calories. Often we pop two or more into our mouths before we realize it. If you feel you're not getting enough "crunch" by limiting yourself to one cookie, try eating an apple instead — the calories are similar.

9. Top Your Potato with Fewer Calories

It's easy to slather a couple of tablespoons of butter or margarine (200 calories/2 tablespoons)on a baked potato. Try switching to sour cream; you can have as much as a fourth cup for 100 calories. For even fewer calories, use one of the light or fat-free sour creams. Or, substitute yogurt for sour cream.

10. Lessen Your Liquor

If you drink alcohol, limit your daily consumption to one drink for women and two drinks for men as recommended by the Dietary Guidelines. A typical 5-oz. glass of wine has 100 calories; a 12-oz. serving of beer, 150 calories; and 1 1/2 ounces of distilled spirits, 100 calories.

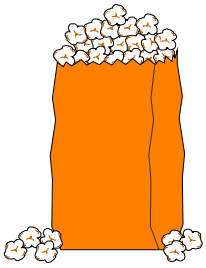
11. Be Size-wise with Fast Food

Try one or more of these strategies the next time you visit your favorite fast food restaurant and you easily can save 100 or more calories:

- Skip the mayonnaise when ordering your favorite fast food burger. If you're not very hungry, perhaps a "small," "regular," "junior" or whatever term is used by the restaurant for its smallest burger, may be enough for you.
- Order the smallest size of fries or split them with a friend.
- Instead of fries, consider a side salad with a fat-free or reduced calorie dressing. It's still important to check the calories on the salad dressing. Many salad dressings come in packets; a reduced calorie dressing still may contain around 100 or more calories per packet. Refer back to tip number 5 — your salad might taste just fine without using the whole packet.
- Order a diet soft drink or plain water. See tips 3 and 4 for more about this.

Most fast food places offer nutrition information, including calories, at their restaurant. Many also provide nutrition information on their company Web site. At your next opportunity, total the calories you obtain from your favorite fast food meal. For many adults and children (age 2 and older), a calorie range somewhere between 1,600 to 2,200 is sufficient. It's easy to consume one-half or more of your daily caloric needs at one fast food meal, especially if you're super-sizing portions!

12. Practice Portion Control with Popcorn



Popping microwave popcorn can be a daily occurrence in many workplaces and homes. It's easy to eat half a bag or more at a sitting. While even TWO cups of the more buttery popcorns may weigh in at 100 calories or less, the entire package might yield 10 or more cups, or possibly over 500 calories! To gauge how many cups of corn you're consuming, one cup is about equal in size to a baseball or to your fist.

Microwave popcorn can be a great snack. If you'd like more than a few cups, experiment with some of the lower-fat versions.

Fermented Foods for Better Blood Sugar

Did you know that fermented foods like pickles and sauerkraut have anti-diabetes properties?

By Elizabeth Keyser

Tangy, tingling, sour: it's that indescribable "fifth taste" known as *umami*. Foods that have been fermented deliver umami and they also have unique health benefits, especially for people with diabetes. Fermentation is one of the oldest methods of preserving food. It's what transforms milk into yogurt; cabbage into sauerkraut and Korean *kimchi*; soybeans into miso; and fruit into vinegar. The best part is that research shows that these foods are good for your blood sugar levels. The acids in fermented foods—lactic and acetic acid—interfere with carbohydrates' turning into blood sugar, thereby reducing spikes. These benefits can carry over to the next meal—but that's not all.

Silent Health Boosters

The good bacteria in fermented foods break down carbohydrates into acids, and promote the growth of more friendly bacteria. When we eat fermented foods, friendly bacteria are allowed to thrive in our intestines, guarding our cells and fighting off the bad bacteria that can make us sick. They may also boost immune response, lower bad cholesterol, raise good cholesterol, and even have anti-carcinogenic properties.

Modern methods of making yogurt, sauerkraut, miso, and other fermented products tend to take shortcuts, slashing fermentation and aging times. That means fewer health benefits and less flavor. Shop at natural supermarkets, specialty markets, health-food stores, and farmstands whenever you can to find these healthy foods made the traditional way.

One of the best and easiest things you can do for your health is to eat one cup of yogurt a day. Along with being a great source of protein and calcium, yogurt comes with myriad health benefits, thanks to the friendly bacteria produced during fermentation. Buy plain yogurt that says

it has “live, active cultures” or is “probiotic.” Check the fine print for *lactobacillus casei, L. acidophilus,* and *bifidus*.

If you’re not someone who likes eating yogurt as-is, try using it in salad dressings and marinades. Also, cucumbers and yogurt make a classic cooling dish to serve with spicy foods.

Want to get elegant? Create an easy first-course soup. Chop ripe tomatoes, and cook them in a small amount of olive oil for ten minutes to reduce some of the liquid. Purée in a food processor, and strain through a fine sieve. Season with a pinch of salt. Mix the liquid into enough yogurt (that’s come to room temperature) to keep the tomato color bright. Ladle into espresso cups, garnish with small basil or mint leaves, and top with a sprinkle of sea salt.

Cabbage: Sauerkraut and Kimchi

Sauerkraut is a Northern European dish made from shredded cabbage fermented with salt at a low temperature in a covered jar. The salt draws out liquids, creating brine that keeps the cabbage in an oxygen-free environment. There, beneficial bacteria transform it into a tart and healthy side dish that makes a tasty companion to rich meats, like sausages. (The cabbage brine is a folk remedy for constipation.)

Kimchi, a Korean dish, is made from whole cabbage leaves fermented with salt, garlic, hot pepper, and fish sauce (a fermented condiment made from anchovies). Spicy, garlicky, and sometimes fizzy, kimchi goes well with grilled beef.

Olives

Olives, which are too bitter to eat right from the tree, are made edible and savory by soaking in lye and fermenting in salt brine. Today, most grocery stores carry selections of Greek and European olives in the salad bar sections. Beware, however: canned black olives are not fermented, and have little flavor.

When storing tasty salad-bar olives in your refrigerator, submerge them in brine or olive oil to keep them for weeks. A bowl of olives is an easy addition to a platter of appetizers. Or buy a jar of tapenade—this chopped olive spread is great with raw vegetables and apple slices. You can also cook with whole, pitted olives. Braise or bake chicken thighs with olives and dried apricots (first, soak them to rehydrate) to add sweet and salty flavors.

Miso

Asian cultures use fermentation to transform soybeans into foods like soy sauce and miso. Japanese in origin, miso is a paste made by fermenting soybeans (or sometimes barley or rice) in a two-step process that converts the beans' carbohydrates into lactic acids. Rich, roasty-flavored miso can be used in salad dressings or marinades, but one of the tastiest ways to enjoy it is in miso soup. Made with *dashi* (broth from seaweed and bonito fish flakes) mixed with miso paste, the soup gets protein from cubes of soft tofu, and is garnished with scallion. Look for "slow-fermented" miso made with no artificial additives.

Vinegar

Vinegar is fermented alcohol. It can be made from pure alcohol (white vinegar), wine (red wine vinegar), apple cider (cider vinegar), rice (rice wine vinegar), malted barley (malt vinegar), or fruit (apple cider vinegar, for example). Vinegar is created when bacteria causes alcohol to convert into acetic acid. The health benefits of vinegar were heralded even before the ancient Romans, who drank it mixed with water and honey. Use vinegar in dressings and marinades, or drink it diluted as a tonic. It plays an important role in the flavor of this Easy Russian Borscht, balancing the sweetness of the beets.

Acetic acid, the acid in vinegar, is anti-microbial, which makes it a great preserving medium. The cucumber pickles you buy on the shelf in the grocery store aren't fermented at all. Instead, they're preserved in brine solutions made of vinegar, salt, and water, and heated in a water bath to prevent spoilage. The pickles don't develop the complex flavors that fermentation gives. That's why sugar and spices, like dill, are often added to the brine. It's fun to make homemade pickles, and it also allows you to curb the sugar in the brine. The vinegary brine is what provides all the health benefits—and, most importantly, thwarts the effects of carbs on blood sugar.

Elizabeth Keyser is an award-winning journalist who has written about food, health and nutrition for newspapers, magazines, websites and blogs. She is dLife's recipe editor.

Go back to the beginning of this feature.

SOURCES

Yang, H.J.[1], D.Y. Kwon, H.J. Kim, M.J. Kim, D.Y Jung, H.J. Kang, D.S. Kim, et al."Fermenting Soybeans with Bacillus LicheniformisPotentiates their Capacity to Improve Cognitive Function and Glucose Homeostasis in Diabetic Rats with Experimental Alzheimer's-Type Dementia." *European Journal of Nutrition*. February 2015. https://www.ncbi.nlm.nih.gov/pubmed/24700374

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Read more: http://dlife.com/slideshows/fermented-foods/#ixzz4xO00j0SE
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THE GLYCEMIC INDEX

The glycemic index, or GI, uses a scale of numbers from 1 to 100 to rank carbohydrate foods by how quickly a serving size of each raises blood sugar. Why is this important? Because carbohydrates, or carbs, such as rice, pasta, bread, and fruit, raise blood sugar more, and more quickly, than fats or proteins do.

Carbs with low glycemic index numbers (from 1 to 55) are better carbohydrate food choices for good blood sugar control because they raise blood sugar slowly.

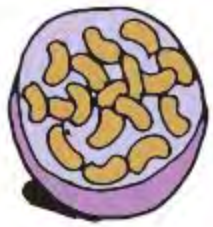
Are you making good food choices to control your diabetes? To help you find out, check the table on the following pages, which list the glycemic index number of 100 commonly eaten carbs.

FOOD	Glycemic Index (glucose = 100)	Serving size (grams) 43 grams (g) = 1.5 ounces
BAKERY PRODUCTS AND BREADS		
Banana cake, made with sugar	**47**	60
Banana cake, made without sugar	**55**	60
Sponge cake, plain	**46**	63
Vanilla cake made from packet mix with vanilla frosting (Betty Crocker)	**42**	111
Apple, made with sugar	**44**	60
Apple, made without sugar	**48**	60
Waffles, Aunt Jemima (Quaker Oats)	76	35
Bagel, white, frozen	72	70
Baguette, white, plain	95	30
Coarse barley bread, 75-80% kernels, average	**34**	30
Hamburger bun	61	30
Kaiser roll	73	30
Pumpernickel bread	56	30
50% cracked wheat kernel bread	58	30
White wheat flour bread	71	30
Wonder™ bread, average	73	30
Whole wheat bread, average	71	30
100% Whole Grain™ bread (Natural Ovens)	**51**	30
Pita bread, white	68	30
Corn tortilla	**52**	50
Wheat tortilla	**30**	50

BEVERAGES (250mL = 8 ounces)		
Coca Cola®, average	63	250 mL
Fanta®, orange soft drink	68	250 mL
Lucozade®, original (sparkling glucose drink)	95±10	250 mL
Apple juice, unsweetened, average	**44**	250 mL
Cranberry juice cocktail (Ocean Spray®)	68	250 mL
Gatorade	78	250 mL
Orange juice, unsweetened	**50**	250 mL
Tomato juice, canned	**38**	250 mL

FOOD	Glycemic index (glucose = 100)	Serving size (grams) 43 grams (g) = 1.5 ounces
BREAKFAST CEREALS AND RELATED PRODUCTS		
All-Bran™, average	**55**	30
Coco Pops™, average	77	30
Cornflakes™, average	93	30
Cream of Wheat™ (Nabisco)	66	250
Cream of Wheat™, Instant (Nabisco)	74	250
Grapenuts™, average	75	30
Muesli, average	66	30
Oatmeal, average	**55**	250
Instant oatmeal, average	83	250
Puffed wheat, average	80	30
Raisin Bran™ (Kellogg's)	61	30
Special K™ (Kellogg's)	69	30
GRAINS		
Pearled barley, average	**28**	150
Sweet corn on the cob, average	60	150
Couscous, average	65	150
Quinoa	**53**	150
White rice, average	89	150
Quick cooking white basmati	67	150
Brown rice, average	**50**	150
Converted, white rice (Uncle Ben's®)	**38**	150
Whole wheat kernels, average	**30**	50
Bulgur, average	**48**	150
COOKIES AND CRACKERS		
Graham crackers	74	25
Vanilla wafers	77	25
Shortbread	64	25
Rice cakes, average	82	25
Rye crisps, average	64	25
Soda crackers	74	25

FOOD	Glycemic index (glucose = 100)	Serving size (grams) 43 grams (g) = 1.5 ounces
DAIRY PRODUCTS AND ALTERNATIVES		
Ice cream, regular	57	50
Ice cream, premium	**38**	50
Milk, full fat	**41**	250 mL
Milk, skim	**32**	250 mL
Reduced-fat yogurt with fruit, average	**33**	200
FRUITS		
Apple, average	**39**	120
Banana, ripe	62	120
Dates, dried	**42**	60
Grapefruit	**25**	120
Grapes, average	59	120
Orange, average	**40**	120
Peach, average	**42**	120
Peach, canned in light syrup	**40**	120
Pear, average	**38**	120
Pear, canned in pear juice	**43**	120
Prunes, pitted	**29**	60
Raisins	64	60
Watermelon	72	120
BEANS AND NUTS		
Baked beans, average	**40**	150
Blackeye peas, average	**33**	150
Black beans	**30**	150
Chickpeas, average	**10**	150
Chickpeas, canned in brine	**38**	150
Navy beans, average	**31**	150
Kidney beans, average	**29**	150
Lentils, average	**29**	150
Soy beans, average	**15**	150
Cashews, salted	**27**	50
Peanuts, average	**7**	50



FOOD	Glycemic Index (glucose = 100)	Serving size (grams) 43 grams (g) = 1.5 ounces
PASTA and NOODLES		
Fettucini, average	**32**	180
Macaroni, average	**47**	180
Macaroni and Cheese (Kraft)	64	180
Spaghetti, white, boiled, average	**46**	180
Spaghetti, white, boiled 20 min, average	58	180
Spaghetti, wholemeal, boiled, average	**42**	180
SNACK FOODS		
Corn chips, plain, salted, average	**42**	50
Fruit Roll-Ups®	99	30
M & M's®, peanut	**33**	30
Microwave popcorn, plain, average	**55**	20
Potato chips, average	**51**	50
Pretzels, oven-baked	83	30
Snickers Bar®	**51**	60
VEGETABLES		
Green peas, average	**51**	80
Carrots, average	**35**	80
Parsnips	**52**	80
Baked russet potato, average	111	150
Boiled white potato, average	82	150
Instant mashed potato, average	87	150
Sweet potato, average	70	150
Yam, average	**54**	150
MISCELLANEOUS		
Hummus (chickpea salad dip)	**6**	30
Chicken nuggets, frozen, reheated in microwave oven 5 min	**46**	100
Pizza, plain baked dough, served with parmesan cheese and tomato sauce	80	100
Honey, average	61	25

Source: www.health.harvard.edu/newsweek/Glycemic_index_and_glycemic_load_for_100_foods.htm

Provided as a FREE educational service on www.learningaboutdiabetes.org.
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All My Food Facts

FoodFacts, Inc.

Free for a Limited Time/iOS

For your patients with weight issues, food allergies, and other health issues not normally covered in food information apps, this app takes dietary concerns a step further. Included in the app are features tracking: Diet, Ailment, Allergy, Ingredient and Nutrition Tracker, Calorie Counter, Food Diary & Food Scanner. Patients can: track calories to lose weight; select allergens and specific ingredients to avoid; and choose issues such as Heart Disease to see what foods to avoid/have.

From the FoodFacts iTunes store page:

How It Works:

Personalize and Set Your Foodfacts

- set your profile with gender, age, activity level, height and weight
- set your goals with foods you are eating (i.e.: calories, carbohydrates, fat, sugar, etc.)
- select the allergies you want to avoid
- select the specific ingredients you want to avoid
- select from our list of ailments for what is ailing you and see what food to avoid/have

See What's Really In The Foods You Are Eating & How They Rate

- scan, browse categories and search products
- see a detailed product view of each food and all the allergens in it
- see all the number of ingredients in each food broken down to controversial, non-controversial, and ingredients you have selected to avoid.
- see all the nutrition facts for each food
- see why we give each food our food score (A-F) from our "Things To Know"
- see what foods to avoid based on your allergies/avoids and from the ailments you've selected.
- see what foods to have from the ailments you've selected

Create a Food Diary

- add and keep track of what you are eating daily for breakfast, lunch, dinner and snacks
- keep track of all the calories you are consuming with each food and your limit
- make favorites, create a history and save meals
- set reminders to keep track

See Your Personalized Outcome

- see how your foods rate for daily, weekly and monthly for breakfast, lunch, dinner & snacks
- see how many ingredients you have eaten for daily, weekly, and monthly
- see the goals you have set for daily, weekly, and monthly

Available at the iTunes store:

All My Food Facts

Also check out : Calorie MaMa – picture your food and get nutrition details
Figwee – Gives portion in picture and by moving the picture can change reduce the portion
Fooducate- search for food by name or label and it grades, highlights healthier options
My Fitness Pal

WESTERN WISCONSIN HEALTH

This document will help assist in finding nutritional information for grocery shopping, restaurants, weight loss, smart phone applications, online food diaries, track blood pressures, recipe analysis and more.

Websites to help find nutrition for restaurants	
www.sparkpeople.com/resource/sparkdining.asp	Great online guide to healthiest food choices and several fast food and casual restaurants.
www.treyweirmedia.com/iphone	Type 2 friendly. Is designed to help you find restaurants that serve "diabetic friendly" food. You can search by city, state, zip code or you current GPS location. Downside is it only includes chain and fast food restaurants
Websites to help with motivation for weight loss	
www.stickk.com	Online commitment site, you set goals and if you choose set a financial incentive to achieve them
www.loseitorloseit.com	A site where you pay money based on how much you want to lose and if you meet your goal you get your money back
Smart Phone Applications	
www.gomeals.com	iPhone application—free at Ap store
www.appshopper.com/healthcare-fitness/tap-track	iPhone application to look up foods and keep a record costing about $4
www.mynetdiary.com	Online diary with support from a dietitian. Also have iPhone and Blackberry applications for a fee
www.loseit.com	Application for web and iPhone. Can track calories, carbs, fat, etc. weight loss motivators also
www.myfitnesspal.com	Free application for iPhone and Android allow you to keep food records, analyze recipes, and track weight loss
ShoppingWell	Free application for iPhone and Android that helps you identify foods that fit your diet needs such as diabetes, high blood pressure and Celiac disease. You can use the barcode scanner at home or in the grocery store to scan foods and find out if they are a good match for your diet.
Grocery IQ	Free application for iPhone and Android that helps make a shopping list that also includes weekly ads and manufacturer sales/coupons to help you get the best bang for your buck!
Misc. Applications	

www.giplanner.com/iPhone	Calculates the overall glycemic index and glycemic load for individual meals. Provides carbohydrate, protein and fat analysis. The free version has a limited number of foods.
Online food diaries FREE	
www.fatsecret.com	Free online food diary
www.my-calorie-counter.com	Free online food diary, registration required
www.gyminee.com	Searchable food database, must register to use online food diary, called online fitness social network
www.fitday.com	Free online food diary, registration required
www.nutridiary.com	Free online food diary, registration required
Free for basic, fee for enhanced full version	
www.nutrihand-inc.com	Free online food diary, enhanced version is available for a fee Registration
www.nutrawatch.com	Free online food diary, registration required, more comprehensive version available for a fee
www.calorieking.com	Food diary for purchase Claims to have the largest food database.
Food record and track blood sugars	
www.diabetescare.net	Free application, requires registration, food diary, blood glucose tracker, recipe suggestions
www.livestrong.com/diabetes-journal	An application to keep track of food intake, blood sugars, etc.
Food diaries available for purchase	
www.weightbydate.com/food-diary.htm	Food diary software for purchase to use on your computer or handheld device
www.life-food-diary.qarchive.org	List of several different types of diaries available for purchase
www.mealformation.com	Food diary, food database and recipe database available for purchase
Recipe Analysis	
www.caloriecount.about.com	Online food diary that also allows you to enter your own recipes and it will do the nutritional analysis for your recipes (attached instructions)

HEALTHY MEAL MAKEOVERS

Bryan, an accountant, husband, and father of two young boys, is also the top chef in the family as he arrives home on most weekdays before his accountant wife. While healthy, family meals are important to him, the nutrition quality often gets put on the back burner as time is king. The meal needs to be fast and easy to make so his limited repertoire of dinner options consists of pasta, hot dogs, veggie burgers, and hamburgers. Bryan reached out to me asking, "I need some help with fast and healthy recipes, but I don't have the time at night or on the weekend to find dinner ideas. Do you have any suggestions?"

Understanding his dilemma, I knew there *had* to be an app for this so I scoured the Internet. Surprisingly, there are numerous available and affordable apps designed with busy families in mind.

Here is what I uncovered:

Source: Eating Well

Eating Well's Healthy In A Hurry app offers 200 free recipes that you can sort by categories. Since they know that time constraints are the biggest factor when it comes to getting a healthy meal quickly on the table, a key feature of this app is that you can search by preparation time—15 minutes, 30 minutes, 45 minutes, or 1 hour. Each recipe has a beautiful and delicious image and includes a detailed nutrition analysis, which is vetted by their team of registered dietitians. The app is easy to use, which makes selecting a fast and healthy dinner simple. It is designed for iPhone, iPad and Android users.

The Cooking Light Quick and Healthy Menu Maker app provides more than 300 recipes and lets users design delicious, quick menus in an interactive way. You can swipe through the thousands of gorgeous photos of chicken, beef, pork, fish and vegetarian entrées and then add two sides plus one dessert to make healthy and complete dinners. If your selections exceed *Cooking Light's* nutrition recommendations, the app alerts you with green and red indicators. It is available for $3.99 and designed for iPad and iPhone.

SparkRecipes offers a free app that is linked to the "world's largest healthy recipes website" serving up over 450,000 recipes. The app allows you to search by not only preparation time but also ethnic cuisine and course. Uniquely, all of the recipes have been tried and tested by novice cooks just like you, so success is guaranteed. It can be downloaded to your iPhone and will automatically resize each recipe so that it is easy to view while preparing in your kitchen.

Meal Makeovers app was developed by two registered dietitians with a passion for feeding families with a super healthy diet. Meal Makeovers features healthier versions of classic recipes families love, such as kid-friendly Spinach Mac & Cheese, Have-It-Your Way Tacos, and Turkey Meatballs (new recipes are added weekly). The app also provides a customized shopping list, nutritional analysis, podcasts, and cooking and mealtime tips videos. It is available for $1.99 for both the iPhone and iPad.

Also check out GOMEALS powered by CalorieKing. This is a free service of Sanofi-Aventis US. It was created specifically for persons with diabetes. Available for Android and iPhone, iPad, and iPad touch. www.GoMeals.com is the site or twitter.com/GoMeals. It can track where you are eating, the meal selection and give you the total nutrition breakdown, or search foods individually.

Keep your eyes open, there are literally hundreds of apps out there now for following diabetes foods, exercise and numbers.

The app SHOPWELL will help with nutrition information as you are shopping, you can scan the UPC and product content is broken into Carb, Fat, Fiber etc.

ORIGINALLY PUBLISHED ON THE BLOG NUTRITION AND YOU!.