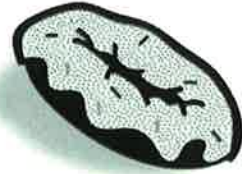




Super-Size Fast-Food Facts

by Sandy Stiefer



Fast foods can be a part of a healthy diet if you choose wisely. Start by avoiding super amounts of fat and calories.

Jeffrey and Gil walked into the Bigger Burger restaurant.

“Man, am I hungry!” said Jeffrey.

“Me too,” agreed Gil. “I’m going to have the Super-Doooper Mammoth Burger.” He reached into his pocket. “I have just enough money for a Super-Doooper Scooper of fries, too.”

“That’s a gut-buster,” Jeffrey said with a laugh. “I want something smaller. I’m going to get a Super-Doooper cola and the Side-of-Beef burger. With lots of mayo.”

“What are we going to do after we eat?” Gil asked.

“Digest the load and rest!” answered Jeffrey.

Fast food is not only fast, it’s inexpensive, convenient, and tasty. Many kids could eat it for every meal. In fact, some people do. Gil and Jeffrey have fast food three or four times a week. The number of people eating fast food has almost tripled in the past 20 years. There are 300,000 fast-food restaurants in the United States alone.

And the Center for Science in the Public Interest (CSPI) says nearly half of all food dollars is spent on food eaten away from home.

Fat Food, Fat You

Fast food, however, doesn’t rank high with health experts because of the fat and calories. We’re all familiar with the burgers, fries, fried chicken, tacos, burritos, and roast beef offered by fast-food restaurants.

Part of the reason fast food tastes good is its high fat content. The fat makes the food taste and feel good in your mouth. Certain amounts of fats are important to a healthy body. But the fats in fast foods are often saturated fats in meat and fried foods. You should not eat too much of these kinds of fats. Kae Fenster, a dietitian, says there are ways to stay away from these fats and still keep your taste buds happy. And if you cut down the amount of fat, you’ll knock out a lot of calories, too. That is because fat has more calories per gram.

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Smaller Portions

“Choosing regular-size portions is a very good idea,” Ms. Fenster says. If you go for the super sizes each time, you’re probably taking on a super-size portion of fat and calories. There is also the sodium (salt) to think about.

The extra-large burgers and fries and other fast-food servings are far larger than a standard serving size as set by the U.S. government. The sizes of servings you get in most restaurants actually equal several “normal” servings.

Ms. Fenster suggests that if you really are hungry, you can add foods to those regular-size portions. “A salad with low-fat dressing, a glass of low-fat milk, or a baked potato with chili or broccoli and cheese gives us more to eat and some important nutrients, too,” says Ms. Fenster. This is good advice because a typical fast-food meal is low in certain nutrients people need. According to the 2000 Dietary Guidelines for Americans report, almost 90 percent of Americans need to improve their diets. For example, fewer than 20 percent meet the daily recommendation for fruits.

According to the National Institutes of Health, more than half the U.S. population is overweight. Fast food is not entirely to blame. People simply don’t get the regular exercise they need to burn off the calories they take in. That leads to weight gain and even obesity (weighing 20 percent or more above ideal weight). Serving size certainly can play a part in the overweight picture. Every fast-food place has a larger-size option. If you order a combo or value meal, you get a big burger or sandwich, large-size fries, and large drink. For a few more pennies, you can get a bigger portion of fries or a huge drink. That may be a good deal for your wallet, but it’s not so good for your waist! The extra-big sizes go beyond what is considered a normal-size serving. Here, for example, are the normal-size servings of food set by the U.S. federal government.

- Meat: 3 ounces of meat, chicken, fish (the size of a bar of soap)

- Bread: one slice of bread, a tortilla, or half a small bagel

- Cheese: 1 ounce (one slice of American cheese)

Fast-food restaurants aren’t the only places where you should watch serving sizes. Many restaurants have large portions that are often equal to two to five normal-size servings of foods.

Not All Bad

“Fast foods are not ‘bad’ foods,” says Kae Fenster. “Foods that are high in calories or fat or salt can be included in what we eat as long as we remember this: balance, moderation, and variety.” If you eat fast foods often, you should make choices so that you’re not always getting the high-fat and high-calorie meal. Here are ways you can eat healthier in fast-food restaurants:

- *Skip the mayo, special sauce, and bacon.*

Use mustard and ketchup for flavor instead.

- *Order the smaller size.* Be aware of serving sizes.

- *Choose grilled or broiled meat.* Skip the fried burgers and breaded, deep-fried chicken and fish.

- *Have a salad with low-fat dressing or a baked potato.* You’ll get more nutrients this way. Says Ms. Fenster, “If you really, really want some fries, get a regular-size order and split it with Dad or your friend . . . sharing is always fun.”

Ms. Fenster also suggests balancing what you eat each day. If you do have a typical fast-food meal, balance the rest of the day with healthier, lower-fat and lower-calorie food choices.

Life is busy and fast. We want our food fast, too. But we don’t need to gain weight that fast. Choose wisely when you eat fast foods. Unlike Jeffrey and Gil, you won’t need to sit down and rest when you’re finished.



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The Art of Watering

by Christina Björk and Lena Anderson

Now I'm going to tell you everything I know about watering plants, since it's VERY important to know, if you want your plants to survive.

Both the leaves and the roots of a plant need air to breathe and stay alive. If you water too much, the air can't push its way down through the soaking-wet soil and reach the roots. They will suffocate and the plant will eventually die.

That's why you should water only when it's needed.

But How Can You Tell When a Plant Needs Water?

Before watering your plant, check the soil. If it feels cold and moist, then it doesn't need water. If it feels dry, water it.

You can also knock on the pot. If you hear a "CLONK," the soil inside is dry (and has pulled away from the sides of the pot). Water immediately! If you hear a "CLINK," the soil is probably moist.

Water Deeply!

The worst thing you can do is to be stingy when you water your plants, so that the water can't reach down to the roots. (In the worst cases, the roots can even start growing UP in order to get to the water!) Deepwater your plants, so that the soil is wet all the way through. The excess water can run out into a draining dish under the pot.

I usually water my plants (the ones that need it, that is) before I eat breakfast. Then, when I'm finished eating, I go around and empty all the draining dishes.



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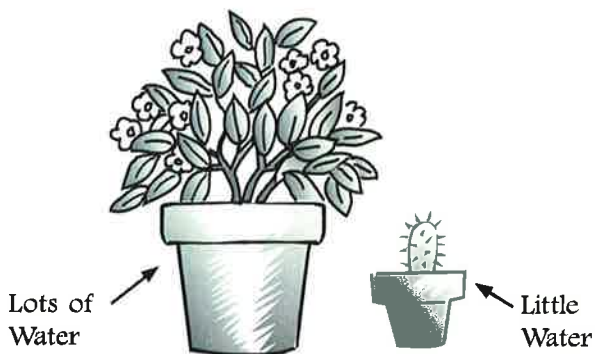


Plants do NOT like standing with their feet (I mean their roots) in water. I'm sure you can understand why.

If I didn't empty out all the excess water, the roots and soil could start to rot. Or start to crawl with small white worms. Yuck!

Not All Plants Need the Same Amount of Water

Large leafy plants and plants in big pots need more water than small plants in little pots. And desert plants, like cacti, need less water than tropical rainforest plants like ferns.



All plants need more water when they're growing and less when they're resting. And they will dry out faster in the summer (when it's hot) than in the winter.

Help!

I Forgot to Water My Busy Lizzie!

One day I noticed that one of my Busy Lizzies was drooping. Her soil was like a dry lump in the pot. I had forgotten to water her! What should I do?



I quickly filled a big bowl with water and put Lizzie in it, with the water level up over the top of her pot. I left her like that for quite a while, until no more bubbles came to the surface.

And, believe it or not, after a couple of hours she began to recover and to stand up straight. Lizzie was saved!

Recipe for Plant Water

Plants don't like water right out of the tap. It's too cold, and it contains too much chlorine and often too much calcium. Water that is high in calcium is called "hard water." Rainwater, on the other hand, is "soft water," and plants love it—except here in the city, where rainwater is so contaminated by engine exhaust and industrial pollution that it is more likely to be harmful to plants.

That's why I make my own plant water:

I fill a watering can and several bottles with tap water (we use lots of water at my house these days). Then I let them stand overnight. By morning, the chlorine has evaporated

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and the calcium has sunk to the bottom. The water is just the right temperature, too, and plants like THAT. They don't want an ice-cold shower in the morning any more than you do!

So that I don't forget, I always refill my watering can as soon as I've watered my plants in the morning. That way, everything is ready to go the next day.

A Watering Can

A watering can is good to have. It should have a spout long enough to reach all the places you'll need to water.

If you don't have a watering can, you can use an ordinary bottle instead.

Shower Every Day!

Get yourself a spray bottle (mister) and give your plants a daily shower. They'll love it, since the air in heated rooms is almost always too dry for them.

The only time you should NOT spray a plant is when it is blooming. Busy Lizzie, for example, does not want to get her flowers wet—they can get ugly spots on them.

A Spray Bottle

A spray bottle costs a little money, but it can be used for other things around the house (like sprinkling the ironing). So maybe you won't have to pay for one with your allowance . . .



Built on Thin Air!

by Nick D'Alto

Take a deep breath, because some of tomorrow's biggest buildings might be inflatable. Find out why—and then design one of your own!

- 1 Inside Indiana's RCA "Hoosier" Dome, a capacity crowd of 60,000 sports fans roars its approval as the home team takes the field. The great vaulting roof above their heads covers an unbelievable 8 acres (3.2 hectares) and weighs more than 200 tons. And yet the same air those spectators use to breathe (and cheer) is holding up that roof.
- 2 WHAT?
- 3 Welcome to the intriguing world of *pneumatic architecture*: structures supported by pressurized air. Forget those tons of steel and concrete in conventional buildings—tomorrow's biggest structures might be built on thin air. Let's see how these ideas hold up (ahem!).
- 4 Pneumatic structures offer many unique advantages. They're lighter than traditional structures and help engineers design larger buildings at lower cost. Some are even portable—perfect for concerts, fairs, or emergency shelters. Where conventional construction might take months or years, inflatables puff to size in a day. Presto, an instant city!
- 5 In fact, pneumatic structures are popping up everywhere. Olympic villages and the World's Fair at Osaka, Japan, have featured breathtaking inflatable pavilions. Pneumatic river dams can inflate to hold back floodwaters, and then deflate to permit shipping; they're already in use around Japan. The U.S. military is even using immense inflatable shelters to protect their giant radar dishes.
- 6 Space Age membranes are making these new buildings possible. Indiana's RCA "Hoosier" Dome and the 10-acre (4-hectare) Silverdome in Pontiac, Michigan, are sheathed with a cloth made of fiberglass coated with Teflon. It's just $\frac{1}{32}$ of an inch thick (0.08 centimeters)—yet pound-for-pound, it's stronger than steel. Still, these super-roofs stretch nearly 1,000 feet (300 meters) in diameter, and weigh in at half a million pounds (over 225,000 kilograms).

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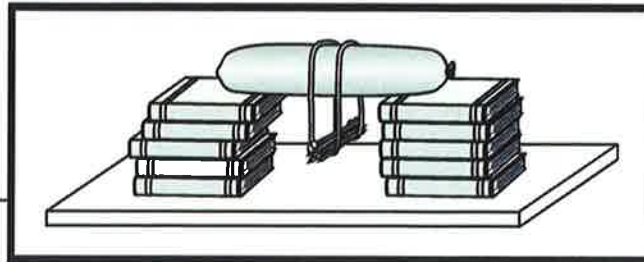
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- 7 How can thin air support such immense structures? Banks of electric fans create the pressure. But the entire pressure is just a measly 5 pounds (2.25 kilograms) per square foot (per 0.09 square meter) above atmospheric pressure—you can push much harder than that. In fact, spectators can't feel any effects when they're inside the building (i.e., breathing is normal).
- 8 But apply that tiny pressure over the entire roof, and the force is astonishing. In fact, while most roofs want to cave in, air-stressed stadiums must be strapped down with cables, just to stop their roofs from being blown away. Even a puncture is no problem—just run the fans harder.
- 9 What's next for inflatables? In the countryside, mines or oil refineries might disappear beneath giant inflated domes that would protect workers from rain and wind. Or we might be using a photo-transparent "shell," designed to regulate light and heat, as an "umbrella" for an entire city.
- 10 And we might not construct that domed city on Earth. That's because inflatables are proving the ideal solution for the new architecture of space. Compared with conventional structures, inflatables are up to ten times lighter. That's good news, because it costs \$4,500 per pound (\$10,000 per kilogram) to put a payload into orbit.
- 11 It's also great because extraterrestrial architecture reaches a colossal scale, with telescopes a mile wide and giant "solar sails" to propel spacecraft using the pressure of sunshine. A pneumatic space antenna can stow in a capsule no bigger than a desk, and then inflate to an unbelievable 10 million square feet (over 900,000 square meters). Such superstructures have an added advantage: When they inflate, they "build" themselves—meaning no space walks to assemble the framework. Since they can't use air, these inflatables are blown to size using charges of inert gas.
- 12 But are they strong? Graphite/Kevlar membranes tested at the Marshall Space Flight Center boast tear strength of over one million pounds per square inch. Still, you'd have to stack three of these "superskins" to match the thickness of one sheet of paper. They have to be strong to resist puncture from the micrometeorites¹ that course through space. When our first colonies reach the moon or Mars, don't be surprised if the inhabitants are living and working inside a complex that is transparent and inflatable.
- 13 Until we do get there, we can verify the futuristic physics of pneumatic architecture by building an inflatable structure of our own.

¹**micrometeorites:** tiny particles of meteoric dust

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Build It! Tensile-Stressed Bridge



You'll Need:

- One long party balloon
- 18-inch (46-cm) loop of string
- 12 8d ("eight-penny") common nails

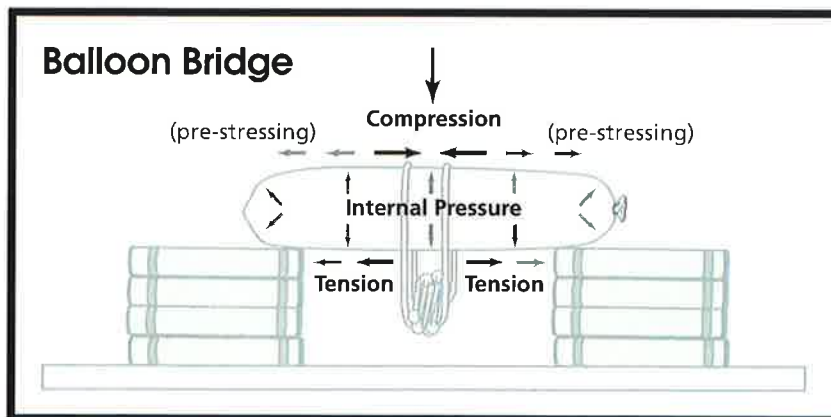
Inflate the balloon and loop the string around it as shown. Then span your "balloon bridge" across two stacks of books about 12 to 15 inches (30 to 38 centimeters) tall.

Inflated beams and ribs are feather-light compared with steel, yet they can stiffen structures and make them incredibly strong. Here's a simple way to prove that.

Watch It Work

Weight down the bridge by hanging nails across the two loops in the string, one at a time (see illustration below). How many nails can the balloon carry before it deflects (sags) noticeably under the load?

Since the balloon is a thin-skin or "membrane" structure, inflating it "pre-stresses" its skin, putting its entire surface under tension (or pulling force). That's one reason inflatable structures are so strong. The bridge can't fall until compression (crushing) along its top cancels out all that tension. If your balloon bridge supports all the nails (about 2 ounces, or 57 grams), it is carrying about 50 times its own weight!



Fender Benders: Legal Dos and Don'ts

by Armond D. Budish



The car ahead of you stops suddenly. You hit the brakes, but you just can't stop in time. Your front bumper meets the rear end of the other car. *Ouch!*

When automobiles meet by accident, do you know how to respond? Here are 10 practical tips that can help you avoid costly legal and insurance hassles.

1. Stop! It's the Law.

No matter how serious or minor the accident, stop immediately. If possible, don't move your car—especially if someone has been injured. Leaving the cars as they were when the accident occurred helps the police determine what happened. Of course, if your car is blocking traffic or will cause another accident where it is, then move it to the nearest safe location.

2. Zip Loose Lips.

Watch what you say after an accident. Although this may sound harsh, even an innocent "I'm sorry" could later be construed as an admission of fault. Also be sure not to accuse the other driver of causing the

accident. Since you don't know how a stranger will react to your remarks, you run the risk of making a bad situation worse.

3. Provide Required Information.

If you are involved in an accident, you are required in most states to give your name, address and car registration number to: any person injured in the accident; the owner, driver or passenger in any car that was damaged in the accident; a police officer on the scene. If you don't own the car (say it belongs to a friend or to your parents), you should provide the name and address of the owner.

What should you do if you hit a parked car and the owner is not around? The law requires you to leave a note with your name, and the other identifying information previously mentioned, in a secure place on the car (such as under the windshield wiper).

4. Get Required Information.

You should obtain from the others involved in the accident the same information that you provide them with. However, if the other driver refuses to

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cooperate, at least get the license number and the make and model of the car to help police track down the owner.

5. Call the Police.

It's obvious that if it's a serious accident in which someone is injured, the police should be called immediately. That's both the law and common sense. But what if the accident seems minor? Say you're stopped, another car taps you in the rear. If it's absolutely clear to both drivers that there is no damage or injury, you each can go your merry way. But that's the exception.

6. Identify Witnesses.

Get the names and addresses of any witnesses, in case there's a legal battle some time in the future. Ask bystanders or other motorists who stop whether they saw the accident; if they answer "yes," get their identifying information. It is also helpful to note the names and badge numbers of all police officers on the scene.

7. Go to the Hospital.

If there's a chance that you've been injured, go directly to a hospital emergency room or to your doctor. The longer you wait, the more you may jeopardize your health and the more difficult it may be to get reimbursed for

your injuries if they turn out to be serious.

8. File a Report.

Every driver who is involved in an automobile incident in which injuries occur must fill out an accident report. Even if the property damage is only in the range of \$200 to \$1,000, most states require that an accident report be filed. You must do this fairly quickly, usually in 1 to 30 days. Forms may be obtained and filed with the local motor vehicle department or police station in the city where the accident occurred.

9. Consider Filing an Insurance Claim.

Talk with your insurance agent as soon as possible after an accident. He or she can help you decide if you should file an insurance claim or pay out of your own pocket.

10. Don't Be Too Quick to Accept a Settlement.

If the other driver is at fault and there's any chance you've been injured, don't rush to accept a settlement from that person's insurance company. You may not know the extent of your injuries for some time, and once you accept a settlement, it's difficult to get an "upgrade." Before settling, consult with a lawyer who handles personal injury cases.

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