

NIH News in Health

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Healthy Holiday Foods and Fun Make Smart Choices as You Celebrate the Season

Mashed potatoes and gravy, Grandma's apple pie, and other holiday favorites can be a joyous part of any celebration. But to feel your best, you know you need to eat in moderation and stay active. How can you avoid temptation when delicious foods and calories abound?

"From Halloween through New Year's, there's always a decision to make about food," says Dr. Marci Gluck, an NIH psychologist who studies obesity and eating behaviors. Tasty treats tend to appear more often at work and festive gatherings, and to come as gifts. They may also tempt you when grocery shopping. "As the holidays approach, it's important to think ahead and make a plan," Gluck says.

Consider your health goals for the holiday season, whether it's avoiding overeating, staying active, connecting with others, reducing stress, or preventing weight gain. You can plan to make time for buying healthy groceries, cooking at home, scheduling regular physical activity, and setting aside a little quiet time for yourself.

Gluck suggests you start by adopting a flexible mindset. "Many people have an attitude of all or nothing: either *I'm on a diet* or *I'm not on a diet*," she says. This "either-or" thinking can lead to negative self-talk, or being hard on yourself for small indulgences, overeating, or weight gain.



"Most people just throw their plan out the window when they think they've slipped up, and they 'fall off the wagon,'" Gluck says. "Celebrations don't have to derail your lifestyle. You'll have plenty of opportunities to follow your plan and eat healthy."

Look for opportunities to make healthy choices and feel good about them. "Small choices really can make big changes," Gluck says. "Each moment that you put something in your mouth or choose to exercise adds up over time. That can be true for weight loss or weight gain."

Around the holidays, we often find ourselves with too many food options, for too many days in a row. It can be challenging to decide what to eat and when to say no.

"Eat what you love—in moderation," suggests Jody Engel, a nutritionist and registered dietitian at NIH. Consider choosing items that are unique to the season, instead of eating foods you can have any time of the year.

When you feel the urge to splurge in unhealthy ways, Engel recommends trying something else first, like drinking a glass of water, eating a piece of fruit, or climbing a few flights of stairs. You might even consider walking around your house or office for

5 minutes or more. Such diversions might be enough to help you resist unhealthy temptations.

You could also try eating mindfully, Engel suggests. Slow down to really taste and enjoy your food. Eating more slowly also allows your body time to signal your brain when you're full, which takes about 20 minutes. If you eat too much too quickly, it's easy to gobble up as much as twice what your body needs before your brain even gets the message.

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Dr. Susanne Votruba, an NIH obesity and nutrition researcher, says it's a good idea to identify and avoid any "trigger foods"—foods that may spur you to binge or eat more than usual. Overeating can bring feelings of bloating, reflux, indigestion, and nausea.



Wise Choices Healthy Holiday Eating

- Enjoy a healthy breakfast to help prevent overeating later on.
- Eat what's best for you first. Fill at least half your plate with fresh fruit and veggies. You'll have less room for the rest.
- Bring a healthy dish to a party.
- Fruit by itself makes an excellent dessert. Try placing a bowl of clementines or apples on the holiday table.
- Avoid beverages that are high in calories and sugar.
- Keep a food journal to help track what you're eating.
- Instead of focusing on food, spend time with family, friends, and activities.
- Stay positive. If you eat more on some days, eat less on others. If you miss a workout, exercise a little longer the next day.

"Some people can eat less healthy foods in moderation and be fine, or have 'cheat days' where they allow themselves to eat whatever they want for a day and stay on track for the rest of the week," Votruba says. "Others may have to avoid certain 'trigger foods' completely, or they'll spiral into unhealthy eating patterns for the rest of the week or abandon their plan altogether. Everyone is different."

Because of these differences, Votruba says, it's important not to force food on other people. "Even if you don't have an issue with food, be aware of other people around you, and respect their choices," she says.

What if you do fall to temptation? "Every day is a new day when it comes to eating," Votruba says. "If you overeat one day, work to get back on track the next meal or next day."

While food is a big part of the holidays, remember that there are other paths to staying healthy. "Don't make the holidays be just about food," Votruba suggests. "The key is not only what you eat, but how much you're moving. Even little bits of extra exercise can be very helpful for everyone over the holidays."

Plan ahead for how you'll add physical activity to days that might otherwise involve a lot of sitting. Get the whole family involved, Engel suggests. "You have to make an effort to incorporate exercise into days of big eating," she says. "Otherwise the day will come and go."



Web Links

For more about healthy holiday choices, click the "Links" tab at: newsinhealth.nih.gov/issue/Nov2016/Feature1

Sign up to walk or run a community race. Enjoy catching up with family or friends on a walk or jog instead of on the couch. In between meals, take a family hike at a nearby park, stroll around your neighborhood, or play a game of flag football.

The emotions of winter celebrations come into this picture, too. "Joy, sadness, and stress are associated with overeating during the holidays," Gluck says. "People who are emotional eaters may be particularly vulnerable to temptations around the holidays."

If holiday stress causes you to derail your healthy plans, consider ways to reduce stress and manage emotions. These might include talking to a trusted friend, meditation, physical activity, or just getting outside.

"If you know you have a difficult time during holidays, plan outings once or twice a week with people who make you feel happy," says Gluck. "If it's in your best interest, also feel okay about declining invitations without feeling guilty."

Support your family and friends, too. Encourage them to eat healthy during celebrations and throughout the year. If you're serving dinner, consider baking, broiling, or grilling food instead of frying. Replace sour cream with Greek yogurt, and mashed potatoes with mashed cauliflower. Make take-home containers available ahead of time, so guests don't feel they have to eat everything in one sitting.

See the Wise Choices box for more healthy eating tips. And happy, healthy holidays to all—from *NIH News in Health*. ■

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Don't Toss the Floss!

The Benefits of Daily Cleaning Between Teeth

You may have seen or heard news stories suggesting that you can forget about flossing, since scientists lack solid evidence that you'll benefit from cleaning between your teeth with a sturdy string. But many dentists may beg to differ. They've seen the teeth and gums of people who floss regularly and those who haven't. The differences can be striking.

"Every dentist in the country can look in someone's mouth and tell whether or not they floss," says Dr. Tim Iafolla, a dental health expert at NIH. Red or swollen gums that bleed easily can be a clear sign that flossing and better dental habits are needed. "Cleaning all sides of your

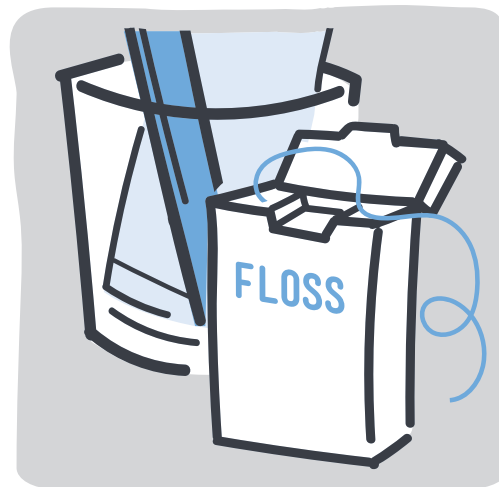
teeth, including between your teeth where the toothbrush can't reach, is a good thing," Iafolla says.

If dentists—and maybe even your personal experience—suggest that regular flossing keeps your mouth healthy, then why the news reports? It's because long-term, large-scale, carefully controlled studies of flossing have been somewhat limited.

Researchers have found modest benefits from flossing in small clinical studies. For instance, an analysis of 12 well-controlled studies found that flossing plus toothbrushing reduced mild gum disease, or gingivitis, significantly better than toothbrushing alone. These same studies reported that flossing plus brushing might reduce **plaque** after 1 or 3 months better than just brushing.

But there's no solid evidence that flossing can prevent periodontitis, a severe form of gum disease that's the leading cause of tooth loss in adults. Periodontitis can arise if mild gum disease is left untreated. Plaque may then spread below the gum line, leading to breakdown of bone and other tissues that support your teeth. Periodontitis develops slowly over months or years. Most flossing studies to date, however, have examined only relatively short time periods.

Another research challenge is that large, real-world studies of flossing must rely on people accurately reporting their dental cleaning habits. And people tend to report what they think is the "right" answer when it comes to their health behaviors—whether flossing, exercising, smoking, or eating. That's why well-controlled studies (where researchers closely monitor flossing or perform



the flossing) tend to show that flossing is effective. But real-world studies result in weaker evidence.

"The fact that there hasn't been a huge population-based study of flossing doesn't mean that flossing's not effective," Iafolla says. "It simply suggests that large studies are difficult and expensive to conduct when you're monitoring health behaviors of any kind."

While the scientific evidence for flossing benefits may be somewhat lacking, there's little evidence for any harm or side effects from flossing, and it's low cost. So why not consider making it part of your daily routine?

Talk to your dentist if you have any questions or concerns about your teeth or gums. If flossing is difficult, the dentist may recommend other ways to remove plaque between teeth, such as with a water flosser or interdental cleaners. "If you need help learning how to floss, or if you don't think you're doing it right, your dentist or hygienist will be happy to show you how," Iafolla says. "It helps to know the proper technique." ■



Wise Choices Daily Care for Teeth and Gums

There's a right way to brush and floss your teeth.

- Gently brush your teeth on all sides with a soft-bristle brush and fluoride toothpaste. Use small circular motions and short back-and-forth strokes.
- Brush carefully and gently along your gum line.
- Lightly brush your tongue to help keep your mouth clean.
- Clean around your teeth with dental floss. Work the floss gently between the teeth until it reaches the gumline.
- Curve the floss into a C shape against one tooth and slide it into the space between the gum and the tooth. Move the floss up and down. Do this for both sides.
- If you have trouble flossing, a floss holder or other cleaning device may help.
- Rinse after you floss.

If you're unsure, ask your dentist to show you the right way to floss.



Definitions

Plaque

Sticky, colorless film that can lead to tooth decay and gum disease.



Web Links

For more about tooth and gum care, click the "Links" tab at: newsinhealth.nih.gov/issue/Nov2016/Feature2

Health Capsules

For links to more information, see these stories online:
newsinhealth.nih.gov/issue/Nov2016/Capsule1

Cone Snail Venom Reveals Insulin Insights

The marine cone snail has an unusual survival mechanism that offers new insights for managing diabetes. The snail releases an insulin-containing venom that acts within seconds to stun nearby fish, so they're easier to capture and eat. Scientists have been fascinated by how rapidly this insulin works compared to human insulin.

Insulin is important for people because it helps maintain blood sugar (glucose) levels. When glucose levels rise, such as after a meal, insulin is released into the bloodstream and travels throughout the body. When insulin binds to special cell-surface structures called receptors, it triggers cells to take in the glucose needed for energy. Diabetes arises when this

process doesn't work correctly. Many people rely on injections of synthetic insulin to manage their diabetes, and rapid action can be crucial.

Human insulin is stored in the body in clusters of 6. To work, the 6 parts must first separate, which might take up to an hour. In contrast, the insulin in cone snails is small and fast acting. It lacks the portion that would hold insulin clusters together.

An NIH-supported research team, based partly at the University of Utah, analyzed the 3-D structure of cone snail insulin. Despite its smaller structure, the snail insulin could bind and turn on the human insulin receptor.

"We found that cone snail venom insulins work faster than human

insulins by avoiding the structural changes that human insulins undergo in order to function—they are essentially primed and ready to bind to their receptors," says study coauthor Dr. Michael Lawrence of the Walter and Eliza Hall Institute of Medical Research in Australia.

These findings provide insights that could help scientists design rapid-acting insulins that might help to manage diabetes. ■

Alzheimer's Genes and Family History

Do you wonder if Alzheimer's disease runs in your family? If a grandparent, parent, aunt, or uncle has had Alzheimer's, will you have it, too?

NIH's new easy-to-read booklet, *Understanding Alzheimer's Genes: Know Your Family History*, can help you answer these and other questions. The publication describes what genes are, how they relate to Alzheimer's disease, and what it means if you have a family history of the disease.

Genes contain information passed down from your parents. They affect many aspects of your health, including your likelihood

of developing Alzheimer's. Your chance of getting the disease may be higher if you have certain variant genes. However, having a parent with Alzheimer's disease doesn't always mean that you'll develop it.

This 20-page booklet has tips for creating a family health history and joining a clinical trial or research registry. It also provides steps you can take if you're at increased risk for Alzheimer's disease.

Go to www.nia.nih.gov/alzheimers/publication/understanding-alzheimers-genes to view the booklet online or to order a free print copy. Or call 1-800-438-4380 to learn more. ■

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