

# As summer heat cranks up, our appetites may cool off

June 27 2024, by Laura Williamson

---



Credit: Matheus Alves from Pexels

Summer is in full swing, and some parts of the U.S. have already experienced record-high temperatures. Exposure to extreme heat—the leading cause of weather-related deaths—can lead to heat exhaustion, heat stroke and added strain on the heart and kidneys, exacerbating

underlying conditions such as cardiovascular disease and respiratory illnesses.

But extreme heat can also have a more subtle effect on the body, influencing how much and what people want to eat. In short, as temperatures rise, appetites may drop.

Researchers say there's a reason for that.

## **High temperatures, low appetites**

Digesting food and storing its nutrients uses energy, which generates heat, said Dr. Allison Childress, a registered dietitian nutritionist and an associate professor of practice in the nutritional sciences department at Texas Tech University in Lubbock.

"There are definite differences in [calorie intake](#) in cold weather versus hot," she said. "A calorie is a measure of heat. In a [cold environment](#), you need to burn calories to create heat in the body. People in a hot or warm environment don't eat as many calories because it heats the body up."

While the mechanisms linking [temperature](#) and appetite aren't fully understood, [animal research](#) suggests that higher ambient temperatures may lower the production of the gut hormone ghrelin, which stimulates hunger in the brain, said Dr. Gordon Fisher, a kinesiology professor and assistant dean for research in the School of Education and Human Sciences and the department of human studies at the University of Alabama at Birmingham.

"Communication between thermoregulatory processes in the brain and the stomach may play a role in the regulation of food intake," he said. "But we have not been able to identify an exact mechanism to explain

this."

## **During a heat wave, eat this, not that**

Experts say some foods bring more heat than others—and not just because they're spicy.

When temperatures rise, people are less likely to crave foods that require greater digestive efforts and increase the body's heat production, Childress said. "But that doesn't mean the body doesn't need protein or fiber when it's hot out." To get the recommended amounts, she suggests people eat smaller amounts of both more frequently throughout the day.

In general, Fisher said, avoid foods that are higher in caloric content.

Experts say staying hydrated—which is always important—becomes even more so when temperatures rise.

Water is best for hydration, Childress said. But some people don't like its taste. She suggests adding flavor with a slice of orange or cucumber.

"Low-fat dairy milk can be a good option because it's a fluid you can drink cold and also has a lot of nutrients," she said.

Fisher warned against drinking alcohol or beverages high in caffeine. "They both have dehydrating effects that can lead to increased water loss," he said.

But moderate amounts of caffeine are fine, Childress said.

"Unsweetened iced coffee and iced tea can be hydrating as long as you consume them in moderation," she said. "Any fluid is better than no fluid."

Beverages aren't the only source of hydration, Fisher said. Foods can provide about 20% of the body's fluid intake.

"Melons, berries, lettuce, celery, tomatoes, cucumbers, soups, slushies and yogurts are just a few foods that are high in water content and also provide cooling effects," he said.

"Foods that have a lot of water like fruits and vegetables give us that cooling effect plus typically we eat them cold," Childress said.

But just because a food is served cold doesn't mean it will help cool the body down, she said.

"A popsicle or cold beverage can give immediate relief, but if there are calories in those things, we end up digesting those calories and they eventually increase the body temperature slightly," she said.

## **Heat and food insecurity**

Not only can [extreme heat](#) make people less interested in eating, it can also make it harder to grow and obtain food.

"Heat waves in general can lead to a decrease in agriculture growth and lead to increases in food prices," Fisher said.

And, they can make it harder for people to get to the places that sell food.

Heat waves not only affect the food supply, they "can also affect the desire to leave the house," Childress said. And for people who lack transportation, walking long distances becomes more difficult.

"People who live in food deserts, far away from the food, are a lot less

apt to go out to shop when it's really hot outside," she said. "They skip it. Food insecurity can be worse in extreme weather. It's also a problem when it's very, very cold outside."

Childress suggested stocking up on food when hot weather is in the forecast to reduce the need to go out.

Provided by American Heart Association

Citation: As summer heat cranks up, our appetites may cool off (2024, June 27) retrieved 17 July 2024 from <https://medicalxpress.com/news/2024-06-summer-cranks-appetites-cool.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.