Does Eating Too Fast Affect Weight Loss? Transcript

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Why Eating Slowly Matters

We've all heard the advice to eat slowly, but does that really make a difference, or is just one of those old folk tales that gets repeated over and over again?

Well, researchers decided to put it to the test with an innovative study design. Check it out. "Does Eating Too Fast Affect Weight Loss?" Eating slowly is often advised for weight management, but does it really matter how fast we eat?

If you give people a meal, but half are given small spoons and told to eat slowly, and the other half are given big spoons and told to eat quickly, an amazing thing happens.

The slow group not only ended up feeling more satiated at the end of their meal, but they did so after eating less of it. They felt more full eating less.

Satiety Hormones and Meal Timing

Prolonged meal duration can allow for more time for our body's own "I'm full" satiety signals to develop before an excess of calories have been consumed.

The slower we eat, the more time our body has to catch up. As Harvard's "Healthy Weight Checklist" puts it: "Slowing down at meals can help avoid overeating by giving the brain time to tell the stomach when it's had enough food." We evolved for millions of years trying to extract calories from undomesticated fruits and vegetables, which are much tougher, more fibrous.

Our body is built to expect us to take our time when eating. When we eat "anorexigenic," meaning "appetite–suppressing hormones," such as GLP-1 and PYY, are released from cells lining our intestines into our bloodstream.

These hormones then have to travel to our brain to flick the satiety switch to get us to slow down. This process takes time. Preload studies, where you feed people a small first course 1, 5, 15, 30, or 60 minutes before the main meal, show that this fullness feedback loop can take between 15 and 30 minutes to fully tamp down their appetites.

This helps explain the eating-fast-or-slow study results. The fast group was done eating in under nine minutes.

Evidence From Eating-Rate Studies

The slow group, on the other hand, stopped after 29 minutes. Even though they ended up eating less overall, their brain had time to kick in, thereby giving them a stronger sense of satiety.

In a meta-analysis of eating rate and obesity, every one of the population studies found that those who eat faster are at higher risk of obesity (approximately doubling their odds).

In a behavioral treatment program for obesity, those who were able to extend their average meal length just four minutes lost more weight over a seven-month period.

There's lots of ways you can extend meal duration, like taking smaller bites, chewing longer, or choosing foods that just take longer to eat. The "cephalic phase" of digestion starts before food even hits our stomach.

"Cephalic" means "in the head." There are nerves traveling straight from your brain to your mouth.

The Cephalic Phase of Digestion

That's how even the thought of food can get us salivating. And the nerves are a two-way street. Signals coming from your mouth can tip off your brain to what's coming down the pike.

To test the effect of this back-and-forth on appetite, you can insert a tube down someone's throat to compare regular eating to sneaking the same amount of food directly into their stomach.

Removing the experience of the taste, smell, and texture of the food left people feeling significantly less full even though they ended up with the exact same amount of food in their stomach.

This wasn't just a psychological effect. Objective measures, such as slowed stomach emptying times, prove that sensations from the mouth translate into physical fullness.

Another way to study the cephalic phase response is to use so-called "sham feeding," less delicately known as the "chew-and-spit" technique. You can double the insulin levels in people's blood within 15 minutes just having people chew on some pizza, even if they don't swallow any of it.

Based on the signals coming from the mouth, your brain can anticipate how much insulin is going to be needed to handle the coming load and tries to get a head start.

Why Whole Foods Keep You Fuller

So, you can see how the cephalic phase response could work in concert with the digestive hormone feedback loop. It would take the average person about 20 minutes to eat 10 cups (1 kg) of apple slices, whereas drinking the same number of calories of apple juice would take about two minutes.

Not only would the 20 minutes allow the time for your "stop-eating" hormones to make it up your brain, the apples offer 18 more minutes of oral exposure, and more than 10 times the signals directly from your mouth to the brain that you're chowing down.