

Why you always have room for dessert

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No matter how stuffed you are after the main course you always have room for a little dessert. Here's a scientific explanation for the phenomenon some people call the "dessert stomach".

Most of us can testify to it. After two or three heaping portions of turkey, stuffing, mashed potatoes and gravy, cranberry sauce, sweet potatoes and Waldorf salad you're bursting at the seams. You're so satiated that you had to discretely place a crumpled napkin over that uneaten turkey wing on your plate.

But when panna cotta or the plum pudding arrives at the table you miraculously have room for that too.

This wondrous dessert miracle has now been given a physiological explanation.

The sugar in sweet foods stimulates a reflex that expands your stomach, writes senior researcher Arnold Berstad and assistant doctor Jørgen Valeur from Lovisenberg Diakonale Hospital in the latest issue of *The Journal of the Norwegian Medical Association*.

"If you eat dessert after you're actually feeling stuffed you're tricking your normal sensation of being full," they argue.

Your stomach is flexible

The stomach is a flexible organ. When you consume a large meal the walls of the upper section of the stomach relax to make room for the food.

How full you feel is closely associated with the pressure inside the stomach, which in turn is linked to how much the stomach has expanded to tackle the food.

"It appears that three factors collaborate in triggering the relaxing reflex," explains Berstad.

First of all, the sight and smell of food and the process of chewing and swallowing it have an effect. Secondly, the pressure of food against the stomach has its important impact. And thirdly, the duodenum "tastes" the components of the food.

Relaxing with sugar

All this information goes to the brainstem through particular nerves. A message is sent out again from the core of the brainstem which oversees the relaxation of muscles in the stomach wall, according to Berstad.

And so to dessert:

Glucose – or sugar if you will – stimulates this relaxation reflex.

"In this way it can decrease the pressure on the stomach and reduce the sensation of being full. A sweet dessert allows the stomach to make room for more food," the researchers write in the medical journal.

How comfortable it actually is to bamboozle your stomach with sugar and refill it to the pain threshold with crème caramel is another matter. The optimal use of dessert is really a question of moderation, according to the researchers.

Less full with just a taste

The best thing to do is to limit your consumption of dessert to just a taste of something sweet. This won't split your gut, and at the same time the small dose of sugar will trigger the dessert expansion. The result will probably be that you feel a little less full after your meal.

So a single bite of something sweet will actually make you more comfortable after a feast than if you had passed it by. But the exact balance between sugar abstention and too much of a good thing can be hard to achieve.

"The problem is that you don't know when to stop eating dessert. The brakes on carbohydrate consumption are five metres further down, at the lower end of the small intestine," says Berstad.

"Fat, however, is absorbed higher up in the system and triggers a high-placed brake. It makes you quickly full. If you eat one spoon too much of creamy gravy you risk getting nauseous and vomiting.

"This surely helps enable many people to eat fatty foods without gaining weight," concludes Berstad.

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 [Research indicates that the sugar in sweet foods stimulates a reflex which expands the stomach.](#)

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 [By eating dessert after you're really full you mislead your normal sensation of being sated. \(Photo:](#)

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[A Berstad & J Valeur, Dessertmage, Tidsskrift for Den norske legeforening,2011 \(Norwegian only\)](#) [10]

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