



Structure determines eating rate

Eating one raw apple takes longer than eating apple puree made from one apple. That is mainly due to the differences in texture. Lise Heuven, a PhD candidate in Sensory Science & Eating Behaviour and Food Quality & Design, investigated how the eating rate works and what you can do to influence it.

Eating rate is an important factor in food and energy intake. The texture of the food largely determines how fast you eat: mushy food is easier to swallow. When you're eating, your brain and stomach send signals indicating how full you feel. The slower you eat, the less food (and therefore energy) you consume before getting that 'full' signal.

Heuven: 'In this study, we looked at the effect

'Adding a sauce increases the eating rate by about 30 per cent'

of the hardness of individual components of a pasta meal and the addition of a sauce on the eating rate.' Test subjects

were given various dishes with al dente or well-cooked pasta (penne) and carrots, with or without sauce.

The study shows that how fast you eat a meal is an average of how fast you eat the individual components. Heuven: 'Previously we thought the eating rate was determined by the component you spend longest on. That turns out not to be the case. You take longer eating individual pieces of crispy carrot than a pasta meal with crispy carrots and soft penne. If you add a sauce, the eating rate increases by about 30 per cent.'

According to Heuven, 'If you want to design a meal with a certain eating rate, for example for someone with obesity, this means you need to tackle all the components.' She recently published her first paper on this study. DV