



Meat and meat substitute equally satiating

A few years ago, consumer research found that meat substitutes don't make you feel as full as real meat. But meat substitutes have improved a lot recently, so professor of Food Reward and Behaviour Liesbeth Zandstra has taken a new look at this question.

'Previous research showed that people were eating two veggie burgers for one meat burger because otherwise they didn't feel full,' says Zandstra, who is also a Science Leader at the Unilever Foods Innovation Centre Wageningen. 'If that is the case, it could be an obstacle to the protein transition that is so badly needed.'

Zandstra carried out a study on the feeling of satiation produced by meat and meat substitutes.

'Meat substitutes have more protein and fibre than in the past'

She tried to stay as close as possible to the actual situation for consumers. 'We made meat and veggie versions of chicken and

vegetable curry and of pasta bolognese with mince and a tomato sauce. To make the veggie version, we replaced each gram of meat with a gram of meat substitute without considering the macronutrient composition of the meal. After all, your average consumer doesn't match nutrients: they simply replace a serving of minced meat with an equally large serving of veggie mince.'

No difference

Zandstra did not find any difference in feelings of hunger and satiation between meat and meat substitutes. 'Meat substitutes have improved enormously in the past five to ten years,' she says to explain the different results compared with the previous consumer studies. 'Veggie products often contain more proteins and dietary fibres than in the past, and those nutrients play a key role in making you feel full.'

'You could say our conclusion isn't very exciting,' admits Zandstra. 'But it is a positive result as it means nowadays the issue of satiation doesn't have to be an obstacle to the consumption of meat substitutes.' DV