Does the right diet help you sleep?

PhD candidate Auke Verkaar of Human Nutrition & Health is researching the relationship between diet and sleep. Earlier this month, she published new research results. Text Dominique Vrouwenvelder

'We know some foodstuffs affect our sleep,' says Verkaar. 'Take alcohol. It reduces the time we need to fall asleep but it negatively impacts the quality of our sleep in the second half of the night. Foodstuffs that contain a lot of tryptophan, an amino acid that our bodies use to make the sleep hormone melatonin, seem to have a positive effect on sleep. But in real life we don't eat individual foodstuffs; we eat combinations that make up our diet. That is why I wanted to see whether there is a relationship between sleep and diet.'

Objective data

Verkaar got access to a large volume of research data from a long-term study by the research hospital Erasmus MC, which included objective data on sleep and questionnaires on diet. For each participant, she calculated five scores as indicators of how closely their eating habits fitted the five diets she wanted to examine. 'They were: a diet in line with Dutch nutritional guidelines; the Mediterranean diet; a mostly healthy diet; an



PhD candidate Auke Verkaar could use objective sleep data measured by movement sensors. • Photo Shutterstock

unhealthy diet; and a traditional Dutch diet. The traditional Dutch diet contains a lot of potatoes, cheese, red meat and processed meat.'

'In this study, we had access to objective sleep data where sleep was measured using movement sensors,' says Verkaar. 'Other researchers in similar studies only used subjective measures of sleep quality, namely questionnaires.' Verkaar hoped to find evidence that healthy diets are associated with better sleep (less time spent awake, sleeping longer or sleep of a higher quality).

Lack of proof

'But unfortunately we didn't find any convincing proof,' says Verkaar. 'We conclude there is no association between diet and these sleep indicators: none of the diets had an association with any of the sleep indicators.

'We conclude there is no association between diet and these sleep indicators'

There were also no differences between men and women, or between young and old. At first I was a bit disappointed with the results, but in fact it's particularly important to publish such findings. A lack of proof is also valuable knowledge and can help guide future research.'