



Less ADHD and more brain activity after diet

Increased activity is seen in the precuneus, part of the cerebrum, in boys who experience a dramatic reduction in ADHD symptoms after going on a diet. The greater the behavioural improvement, the more activity in this brain area.

Wageningen researchers made this finding in a study of 53 boys with ADHD aged between eight and ten. An fMRI brain scan to determine brain activity was made at the start and after five weeks of the diet. The study results were published mid-November in the journal *Scientific Reports*. 'This is an important step in the research on nutrition and ADHD,' says Saartje Hontelez of the Host-Microbe Interactomics chair group. 'We showed that the subjective observation by the parents of an improvement in behaviour after the diet was confirmed by the brain scans.'

Around 6 per cent of children in the Netherlands have ADHD, an attention deficit disorder with hyperactivity. The

symptoms can be reduced considerably if the children adopt the strict Few Foods diet, also known as the RED diet.

An earlier study, in which Wageningen researchers were also involved, showed that about 60 per cent of the children no longer met the criteria for ADHD after being on the diet. They then underwent a follow-up process of one to two years to determine exactly which foodstuffs triggered the disorder.

It is known that the activity in the precuneus increases in children with ADHD after treatment with the drug Ritalin. 'Our findings tie in nicely with what is already known about this brain area,' says Hontelez.

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