

Western diet link to ADHD

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A new study from Perth's Telethon Institute for Child Health Research shows an association between ADHD and a 'Western-style' diet in adolescents.

The research findings have just been published online in the international *Journal of Attention Disorders*.

Leader of Nutrition studies at the Institute, Associate Professor Wendy Oddy, said the study examined the dietary patterns of 1800 adolescents from the long-term Raine Study and classified diets into 'Healthy' or 'Western' patterns.

"We found a diet high in the Western pattern of foods was associated with more than double the risk of having an [ADHD](#) diagnosis compared with a diet low in the Western pattern, after adjusting for numerous other social and family influences," Dr Oddy said.

"We looked at the [dietary patterns](#) amongst the adolescents and compared the diet information against whether or not the adolescent had received a diagnosis of ADHD by the age of 14 years. In our study, 115 adolescents had been diagnosed with ADHD, 91 boys and 24 girls."

A "healthy" pattern is a diet high in fresh fruit and vegetables, [whole grains](#) and fish. It tends to be higher in omega-3 fatty acids, folate and fibre. A "Western" pattern is a diet with a trend towards takeaway foods, confectionary, processed, fried and refined foods. These diets tend to be higher in total fat, saturated fat, refined sugar and sodium.

"When we looked at specific foods, having an ADHD diagnosis was associated with a diet high in takeaway foods, processed meats, red meat, high fat dairy products and confectionary," Dr Oddy said.

"We suggest that a Western dietary pattern may indicate the adolescent has a less optimal fatty acid profile, whereas a diet higher in [omega-3 fatty acids](#) is thought to hold benefits for mental health and optimal brain function.

"It also may be that the Western dietary pattern doesn't provide enough essential micronutrients that are needed for [brain function](#), particularly attention and concentration, or that a [Western diet](#) might contain more colours, flavours and additives that have been linked to an increase in ADHD symptoms. It may also be that impulsivity, which is a characteristic of ADHD, leads to poor dietary choices such as quick snacks when hungry."

Dr Oddy said that whilst this study suggests that diet may be implicated in ADHD, more research is needed to determine the nature of the relationship.

"This is a cross-sectional study so we cannot be sure whether a poor diet leads to ADHD or whether ADHD leads to poor dietary choices and cravings," Dr Oddy said.

ADHD is the most commonly diagnosed childhood mental health disorder and has a prevalence of approximately 5%. ADHD is known to be more common in boys.

Provided by Research Australia

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