

Margarine link to lower IQ

IT became popular as a healthier alternative to butter.

But children who ate margarine every day had lower IQs than those who did not, a study has found.

At the age of three-and-a-half, they scored three points lower on intelligence tests than other youngsters.

Importantly, the link held even when parental occupation and other factors affecting wealth and class were taken into account, the study of children born in the mid-1980s showed.

By the age of seven, scores were six points lower - but only in children that had been underweight when born, suggesting that

**By Fiona MacRae
Science Reporter**

diet is particularly important for brain development in the more vulnerable.

Writing in the *Journal of Intelligence*, the researchers from New Zealand's Auckland University said it is unclear what lies behind the link.

However, trans fats may be to blame. The fats have been linked to memory problems in animal tests and may make it harder for the body to process healthier fats.

In the mid-1980s, trans fats formed up to 17 per cent of the mix of some margarines. Today, however, levels are around 1 per cent -

significantly lower than some butters. The discovery in recent years that the fats clog up the arteries, raising the risk of heart disease, has led to concerted efforts to cut levels in food.

However, the high amounts in the past may have hampered the development of today's adults.

The researchers, whose study showed that eating fish and cereal boosted intelligence, said: 'We found a number of dietary factors to be significantly associated with intelligence measures. The association between margarine consumption and IQ scores was the most consistent and novel finding.'

The researchers said that more work was needed to confirm if trans fats, which are formed when vegetable oil is solidified, were

at fault, or if something else was to blame. They said: 'Children who ate margarine daily had IQ scores that were up to six points lower compared to children who did not.'

'The impact of regular margarine consumption on intelligence now warrants further investigation in order to replicate these findings and to identify possible mechanisms that may underlie this association.'

Shan Porter, of the British Dietetic Association, said that margarine is generally healthier than butter but the high fat content means that both should be used sparingly.

A spokesman for the Food Standards Agency said that trans fat consumption in the UK is now below the recommended levels.