

Fish oil diet feeds brains of toddlers

Study shows Omega-3 improves pre-school learning skills

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The behaviour of pre-school children improves dramatically when given a daily dose of fish oils, according to the first study made into dietary supplements for young people under the age of three.

After just six weeks of daily doses of Omega-3, parents reported a transformation in the behaviour and learning abilities of children as young as 20 months old.

The study has gained the attention of Professor Robert Winston from the Institute of Reproductive & Developmental Biology at Imperial College London who revealed in last year's BBC series, *Child Of Our Time*, how fish oils can calm disruptive children aged six and upwards.

'The data has been extremely impressive,' said Winston, who will discuss the study tomorrow at a debate on the potential impact of Omega-3 on childhood development. 'The evidence is getting ever stronger that children who have diets poor in Omega-3 are not achieving their natural potential.'

Omega-3, polyunsaturated fats found in significant amounts only in oily fish and offal, make up a quarter of the grey matter of the brain and are vital to brain and eye development.

Research into the effect of fish oil supplements on older children, pregnant women and young offenders have all identified powerful benefits, but this is the first time the impact has been tested on pre-school children.

The Observer has seen interim results for the Durham-based study of 60 children aged between 20 months and three years, which was launched three months ago and is due to run for a year.

The results reveal dramatic improvements in the performance of underachieving toddlers, many of whom had been disruptive and unable to concentrate.

Children were assessed for their motor skills, IQ, reading, spelling and behaviour, and the study identified a huge reduction in symptoms of the sort associated with attention deficit and hyperactivity disorder.

The biggest improvements, however, were observed in the children's concentration and behaviour. 'The performance of almost 60 per cent of the children involved has improved dramatically,' said Dr Madeleine Portwood, educational psychologist for Durham local education authority and lead investigator at the Durham Sure Start trial. 'We saw children whose learning skills went from being six months below their chronological age to absolutely normal in just three months.'

'Some two-year-olds went from having a vocabulary of 25 single words to being able to use whole sentences, while others were able to sit down and concentrate for the first time in their lives.'

Portwood, who is also speaking at the debate, believes it is vital to focus on helping children to reach their full potential before they get to school.

'If we help them when they are three years old, they will not have had a chance to fail,' she said. 'But if we wait until they are older, they will have suffered years of alienation and possibly irreparable damage to their self-esteem.'

The trial is part of a broader, Child Progress Profile research project being held by the Peterlee Sure Start scheme using fish oil supplements called Eye Q, made by the company Equazen.

'A spin-off of the children's improvement was a vastly improved bonding between parent and child which led to a significant increase in their learning,' said Portwood.

Lisa Darrell, mother of 20 month-old Lottie, has found her daughter's concentration has improved noticeably since joining the study three months ago.

'She now watches people and tries to imitate them, instead of rushing around not taking any notice,' said Darrell. 'Lottie has always had a very balanced diet so I was sceptical that a daily supplement would make any difference, but the changes have been unmistakable.'

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