Fish oil pills for mum may boost offspring's co-ordination

21/12/2006 **– The infants of mothers who received fish oil supplements during pregnancy had improved hand-eye coordination, says a new study.**

Researchers from the University of Western Australia based their findings on 98 pregnant women, who were either given daily supplements of fish oil or olive oil from 20 weeks of pregnancy until the birth of their babies.

The small study only included women who did not regularly consume more than two weekly portions of fish and were non-smokers. Only 83 mother completed the study.

Starting at 20 weeks' gestation until birth, the pregnant women were assigned to receive either a daily dose of 4 grams of fish oil (Ocean Nutrition, Canada, providing 1.1 grams of eicosapentaenoic acid (EPA) and 2.2 grams of docosahexaenoic acid (DHA)) or the same dose of olive oil, providing 2.7 grams of n-9 oleic acid).

Once the kids had reached two and a half years of age, the cognitive performance of 72 children was assessed (33 in the fish oil group and 39 in the olive oil group) using a battery of tests, including the Griffiths Mental Development Scales (GMDS), the Peabody Picture Vocabulary Test (PPVT), and the Child Behaviour Checklist (CBCL).

While no significant differences were observed in overall language skills and growth between the two groups of children, the researchers report that the children whose mothers had taken fish oil supplements had higher scores for receptive language (comprehension), average phrase length, and vocabulary.

They also report that high levels of omega-3 fatty acid in cord blood were strongly associated with good hand-eye coordination, while low levels of omega 6 fatty acids, found in many vegetable oils, were not.

The study does have several limitations, most notably the small size of the study population.

The research adds to the healthy reputation of omega-3 fatty acids that is seeping into consumer consciousness, based largely on evidence that it can aid cognitive function, may help protect the heart against cardiovascular disease, and could reduce the risk of certain cancers.

Such reports have seen the number of omega-3 enriched or fortified products on the market increase.

However, fears about dwindling fish stocks and the presence of pollutants, such as methyl mercury, dioxins, and polychlorinated biphenols (PCBs), have pushed some academia and industry to start producing omega-3s from alternative sources, such as algae extraction or transgenic plant sources. Most extracted fish oils are molecularly distilled and steam deodorised to remove contaminants.

The European omega-3 market was worth around €160m (£108m) in 2004, and is expected to grow at rates of 8 per cent on average to 2010.