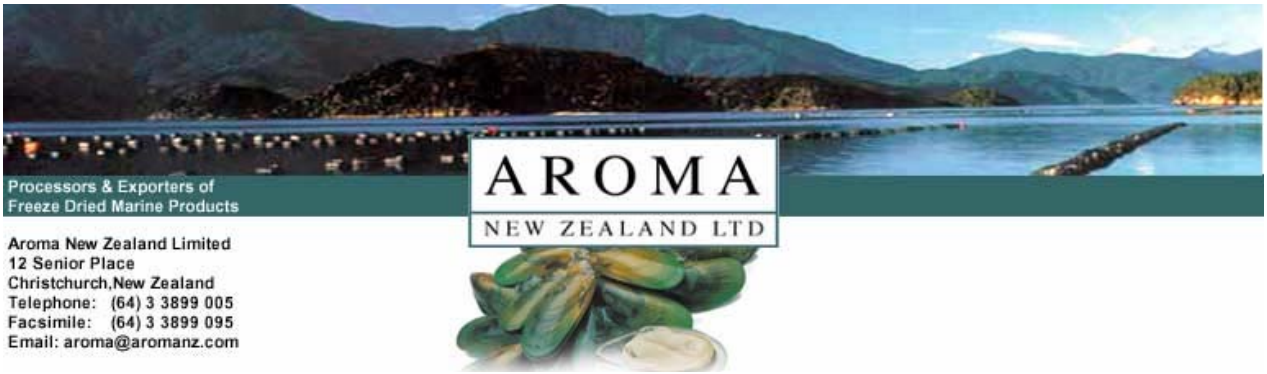

Fatty fish diet to protect the heart, new evidence

17/12/2001 - **A diet rich in fatty fish may protect the heart and blood vessels by reducing inflammation, according to researchers, Reuters reports this week.**

The investigators found that individuals with the highest cell levels of docosahexaenoic acid (DHA), a type of omega-3 fatty acid found in fish had lower levels of C-reactive protein in their blood. C-reactive protein (CRP), a marker of blood vessel inflammation, is associated with risk of heart disease.

The findings *"suggest a novel mechanism by which fish consumption may decrease the risk of coronary artery disease,"*Dr. Trine Madsen from Aalborg University in Denmark, and colleagues reported in the November issue of the American Journal of Cardiology.

Omega-3 fatty acids may protect against inflammation, which is thought to contribute to the build-up of plaque inside arteries, by inhibiting the formation of inflammation-promoting proteins, the researchers noted.

Previous studies have found an association between high blood levels of CRP and increased heart attack risk in otherwise healthy individuals. Elevated CRP may also signal the risk of additional heart attacks in people who already suffer from heart disease.

The study included 269 patients aged 39 to 77 who were undergoing angiography, a modified x-ray scan of the heart's arteries. Study

volunteers answered questions about their diet, particularly in regards to fish intake.

Researchers measured omega-3 polyunsaturated fatty acid levels in cell membranes, which reflect a person's dietary intake in the previous days to weeks. Researchers also measured CRP levels in blood.

Individuals whose CRP levels were in the lowest quartile had significantly higher levels of DHA in cell membranes. There was no difference in CRP levels between people who had suffered a heart attack and those who did not, results indicated, but individuals whose arteries had narrowed from a build-up of plaque had significantly higher CRP levels than individuals with no arterial narrowing.

"The inverse correlation between CRP and DHA may reflect an anti-inflammatory effect of DHA in patients with stable coronary artery disease," Madsen's team concluded