Australian seafood
brimming with omega-3

Before tucking in to your next dish of yabbies, oysters, orange roughy or salmon, you might like to ponder their relative health benefits. A study by CSIRO Marine Research has shown Australian seafood contains higher levels of omega-3 oils than other protein sources. And in terms of oil content and composition, not all seafoods are equal.

The study, funded by the Fisheries Research and Development Corporation (FRDC), looked at the amount of oil and individual oil components such as omega-3 fatty acids in 200 seafood species. It found most Australia

Omega-3 oils are active against coronary heart disease, high blood pressure and rheumatoid arthritis. They also aid the function and development of the infant brain and retina and in studies by CSIRO Human Nutrition have been shown to protect against heart rhythm disorders.

Another beneficial oil found in seafood is arachidonic acid (AA), an omega-6 polyun-saturated fatty acid which is a precursor of prostaglandins (modulators of hormone activity) and other eicosanoids (physiologically

He says the natural oils in marine plant life, planktonic crustacea and other plankton are consumed by fish (and other higher food chain organisms) in varying degrees, depending on feeding habitat. Feeding varies with availability, geographic location, and reproductive status. Elliott says migrating species most likely would show greater variation in composition as they are likely to store lipids before migration. Another theory is that DHA/EPA ratios rise with progression up the food chain, beginning with low DHA levels in marine algae.

A large database of information is being analysed to tease out evidence supporting various hypotheses and relationships, but Elliott says further studies will be needed to explain the complex nature of diet and physiology on lipid composition.

Results of the seafood oil study are summarised in a manual called *Seafood the good food*, which outlines the level of the beneficial oils alongside pictures of each seafood species. The manual is