## **Omega-6 doing** more harm than good?

## NIAMH MULLEN

LONG-established dietary recommendations to replace saturated fat with polyunsaturated fat has been called into question by a study suggesting increasing omega-6 linoleic acid could do more harm than good.

A re-analysis of data from the Sydney Diet Heart Study (1966-1973) of 458 men aged 30-59 who had a myocardial infarct or angina found substituting linoleic acid for saturated fats increased deaths from heart disease and all causes.

And an accompanying metaanalysis by researchers incorporating the revised data showed no benefit from omega-6 and a trend towards harm.

The Heart Foundation recommends using spreads and margarines made from canola, sunflower or olive oil and dairy blends instead of butter within a varied diet.

"The results of this study do not change our position on the importance of replacing saturated and trans fats with unsaturated fats in the diet," Heart PAGE 2 >

## **Omega-6:** more harm than good?

AS SEEN IN OBJECTION ■PAGE 1 Foundation national cardiovascular health director Dr Robert Grenfell said.

"We will continue to monitor the evidence relating specifically to linoleic acid."

In the original study, half of the participants were given Miracle brand margarine and liquid safflower oil. The other half were given no specific dietary instruction. Cholesterol levels decreased in the intervention group over the control group after 12 months.

However, the intervention group had a greater rate of allcause mortality compared to controls (17.6% vs 11.8%), increased CV mortality risk (17.2% vs 11%) and increased deaths from coronary heart disease (16.3% vs 10.1%).



Emeritus professor of medicine at Monash University, Mark Wahlqvist, said the results were extremely important but would be vigorously attacked by "omega-6 apologists".

Guidelines should be changed, he said, and the use of fatty spreads should be minimised.

"The guidelines should state the need to have a diversity of fats in the human diet and to have them from unrefined plant sources as much as possible."

Professor Peter Clifton, head of nutritional interventions at the Baker IDI Heart and Diabetes Institute, said the paper showed the difference in the number of deaths between the two groups was six.

"All you can really say is that they didn't prove the hypothesis, which was that you would see improvement on the [omega-6] polyunsaturated fats. It certainly doesn't prove that they are harmful," he said.

Professor Clifton said the margarine used was high in trans fat, which might explain the finding. Today, common margarine brands contain less than 0.5% trans fat.

"I don't think it will cause any heart foundations around the world to change their statements." he said.

BMJ 2013; online 5 Feb