

Letter to the Editor

Comment on Ramsden *et al.*

Ramsden *et al.*⁽¹⁾ purport to show that interventions which contain α -linolenic acid (ALA) as well as linoleic acid (LA) reveal benefit whereas those which contain LA alone do not reveal any benefit. I have concerns about this conclusion. First, the 95% CI of the mean change in total coronary events overlap; so the two groups are not statistically different. The most important determinant of event reductions was the length of the intervention; and the studies using ALA-rich oil were much longer in duration than the LA-only studies. If only participants who had been on the diet for 1 year or more in the Minnesota experiment were to be assessed, then the ratio of total coronary events was fifty-four in the treatment group and fifty-eight in the control group. Most of the ALA studies were of the secondary-prevention type while the largest LA study, the Minnesota experiment, was of the primary-prevention type, and hence the number of coronary events was relatively small (2.7% of participants) as opposed to the Oslo study, which was a secondary-prevention study, in which 34% of participants had an event. The LA 'veterans trial', being conducted in a much older population, also has a high event rate (40%). *Trans*-fatty acids may also play a role – the experimental polyunsaturated fat diet which incorporated soft margarines containing *trans*-fats would have increased *trans*-fat intake as was the case in both the Sydney study and the Minnesota study, compared to the control diet, unless only liquid oil was used as in the Oslo Diet

and Heart Study and the Medical Research Council soya study. Finally, if the Oslo study is excluded because of the large amount of fish oil in the diet, as Hooper *et al.*⁽²⁾ did in their meta-analysis, then all significance is lost. In short, in my view, ALA is not superior to LA and both are unproven at lowering CVD events in controlled trials.

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doi:10.1017/S0007114511004466

References

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2. Hooper L, Summerbell CD, Higgins JP, *et al.* (2001) Dietary fat intake and prevention of cardiovascular disease: systematic review. *BMJ* **322**, 757–763.