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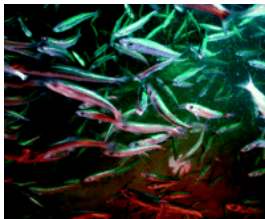
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Letter

Risks and benefits of omega 3 fats

Health benefits of omega 3 fats are in doubt

EDITOR—In their systematic review of observational studies and randomised controlled trials Hooper et al conclude that omega 3 fats do not have a clear effect on overall mortality, combined cardiovascular events, or cancer.¹



We do not agree with their approach of pooling α linolenic acid (which is of vegetable origin) with omega 3 fatty acids from fish. Furthermore, fatal and non-fatal cardiovascular events, as well as different types of (patient) populations, were pooled in this meta-analysis. On the basis of previous reviews in this field, each of these combinations could blur a clear view on the health effects of omega 3 fats. Several metaanalyses have shown a favourable effect of fish intake and intake of fish fatty acids on stroke and fatal coronary heart disease.²⁻⁴ For α linolenic acid, the epidemiological evidence is less convincing, and randomised controlled trials are lacking.

Data from many epidemiological studies and the GISSI-Prevenzione trial show that omega 3 fats from fish protect against heart disease. Although the trial by Burr et al (DART-2)⁵ in patients with angina should not be ignored, it is hard to interpret these adverse findings in light of previous studies. A different conclusion would be derived from the review by Hooper et al if these data were omitted, favouring a cardioprotective effect of omega 3 fats from fish. The pooled relative risk of 0.83 (95% confidence interval, 0.75 to 0.91) that would then be obtained is in line with the meta-analysis of Bucher et al.⁴

Most epidemiological studies and randomised controlled trials indicate a protective effect of omega 3 fatty acids from fish against fatal cardiovascular events. The advice for healthy people and myocardial infarction patients to consume oily fish regularly does not confer adverse risks to health and is fully justified on the basis of current scientific evidence.

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References

1. Hooper L, Thompson RL, Harrison RA, Summerbell CD, Ness AR, Moore HL, et al. Risks and benefits of omega 3 for mortality, cardiovascular disease, and cancer: systematic review. *BMJ* 2006;332: 752-60. (1 April.)[Abstract/Free Full Text]
2. He K, Song Y, Daviglius ML, Liu K, Van Horn L, Dyer AR, et al. Accumulated evidence on fish consumption and coronary heart disease mortality: a meta-analysis of cohort studies. *Circulation* 2004;109: 2705-11.[CrossRef][ISI][Medline]
3. Whelton SP, He J, Whelton PK, Muntner P. Meta-analysis of observational studies on fish intake and coronary heart disease. *Am J Cardiol* 2004;93: 1119-23.[CrossRef][ISI][Medline]
4. Bucher HC, Hengstler P, Schindler C, Meier G. N-3 polyunsaturated fatty acids in coronary heart disease: a meta-analysis of randomized controlled trial. *Am J Med* 2002;112: 298-304.[CrossRef][ISI][Medline]
5. Burr ML, Ashfield-Watt PA, Dunsan PD, Fehily AM, Breay P, Ashton T, et al. Lack of benefit of dietary advice to men with angina: results of a controlled trial. *Eur J Clin Nutr* 2003;57: 193-200.[CrossRef][ISI][Medline]

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