More discrepancies around saturated fat and cardiovascular diseases

To the Editor:

In his review on the influence of saturated fat on cardiovascular disease, Robert Hoenselaar pointed to several discrepancies between the official guidelines and the results from the relevant literature [1]. The habit to ignore or misquote results that contradict the dietary guidelines is not new, however. In 1995, I published a review [2] in which I mentioned some contradictory studies that should have been mentioned by the authors of three authoritative American reviews about diet and cardiovascular disease [3–5]. Only 2 of 12 groups of such studies were quoted correctly and in only one of the reviews. About half the studies were ignored. The rest were quoted irrelevantly, or insignificant findings in favor of the diet–heart hypothesis were inflated, or unsupported results were quoted as if they were supportive. Only one of six randomized cholesterol-lowering trials with a negative outcome was cited and in only one of the reviews. In contrast, each review cited two, four, and six non-randomized trials with a positive outcome, respectively.

The list of ignored or misquoted observations mentioned by Hoenselaar is even longer, as shown in another review of mine [6]. For instance, secular trends of national fat consumption and mortality from coronary heart disease in 18 to 35 countries (four studies) during different periods diverged from each other just as often as they coincided. In cross-sectional studies of coronary heart disease and atherosclerosis in different populations, one group of studies was supportive, six groups were partly supportive and partly contradictory, and in seven groups the findings were contradictory. I also referred to three cohort studies, where no association was found between the intake of saturated fatty acids (SFAs) and degree of atherosclerosis at autopsy. In three cohort studies, patients with coronary heart disease had eaten significantly more SFAs than had the controls, but the differences were trivial; in one study, they had eaten significantly less and in 24 studies no differences were seen.

In a more recent review, I identified 10 cohort studies (11 cohorts), where the stroke incidence and/or mortality was compared with the patients’ dietary habits. In seven cohorts, patients with hemorrhagic or ischemic stroke had eaten significantly less SFAs than had healthy controls, and no differences were found in the rest [7].

Furthermore, all meta-analyses and reviews in apparent support of the current guidelines have excluded the controlled, randomized unifactorial trial by Woodhill et al. [8], where 39 of 221 male patients with cardiovascular disease died in the group of patients who decreased their intake of SFA compared with only 28 of 237 in the control group.

A major contribution of saturated fat comes from dairy products, and all authoritative guidelines recommend a restriction of such food. However, in a meta-analysis of 10 cohort studies including more than 400,000 individuals, Elwood et al. [9] found that, compared with low consumers, the risks of myocardial infarction, ischemic stroke, and all cardiovascular events in high-consumers were 0.87 (0.74–1.03), 0.83 (0.77–0.90), and 0.84 (0.78–0.90), respectively. In a thorough review of the associations between dairy products and cardiovascular disease, Moreover, Tolstrup [10] found no strong evidence in support of the guidelines.

There are obvious reasons for revising the official dietary guidelines.

References


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