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Letters to the Editor

Letter to the Editor re: Linoleic acid and coronary heart disease. Prostaglandins Leukot. Essent. Fatty Acids (2008), by W.S. Harris

Dear Editor:

Using the framework of a systematic review and meta-analyses, Harris [1] claimed that consumption of 5–10% of energy as linoleic acid (LA) “reduces the risk of coronary heart disease (CHD) relative to lower intakes”. He further concluded that “reducing LA intakes to less than 5% energy would be more likely to increase, not decrease, risk for CHD”. However, he failed to cite critical evidence that gives a deeper insight. In all meta-analyses, inclusion criteria are of paramount importance in reaching a valid conclusion [2]. Regrettably, Harris excluded two studies with increased cardiovascular events and mortality [3,4] and one that concluded that lower LA diets are more effective for CHD prevention [5]. One included study had serious confounders including greater long chain Omega-3 intake in the LA intervention group [6].

Ironically, Harris emphasized LA's impact on LDL-cholesterol but overlooked the fact that LA lowers the Omega-3 Index, which he regarded as a more valid marker of CHD risk [7]. Those who accept Harris' claims for the Omega-3 Index [7] giving valid predictions of CHD risk should examine the clear evidence coming from Vancouver [8–10] that lower dietary intakes of LA raise tissue long chain omega-3 and lower omega-6 acids, changes that benefit humans. The combined available data and flawed meta-analysis do not justify concluding that high LA diets reduce CHD. On the contrary, careful consideration suggests that LA reduction is likely a better strategy for CHD prevention. The widespread consumption of diets with more than 2% energy as LA should be recognized for what it is—a massive uncontrolled human experiment without adequate rationales or proven mechanisms.

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Response to Letter to Editor re: Linoleic acid and coronary heart disease

Dear Editor

I appreciate the opportunity to respond to the comments of Ramsden et al. (ref) regarding my summary of the evidence supporting the cardioprotective effects of linoleic acid (LA). They took issue with two aspects of the review: the meta-analysis of

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Christopher E. Ramsden

University of North Carolina—Chapel Hill School of Medicine, CB #7200, Chapel Hill, NC 27599-7200, USA
E-mail address: cramsd@med.unc.edu

Joseph R. Hibbeln

Laboratory of Membrane Biochemistry and Biophysics and the National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, Bethesda, MD 20892-2088, USA

William E. Lands

College Park, MD 20740, USA

randomized trials examining the effects of diets rich in saturated fat vs. those rich in vegetable oils, and the effects of LA on the omega-3 index. With respect to the meta-analysis, they contend that three studies [1–3] should have been included, and that one [4] should not have been. They felt that Leren [4] should have been excluded because of the possibility of confounding due to the simultaneous recommendation to increase the intake of foods rich in omega-3 fatty acids. This is a valid criticism, but interestingly, Ramsden et al. also contend that the Lyon Diet