

Letter to the Editor

Sir:

In view of the increasing importance of palm oil products in food, the following facts may be of interest to your readers:

1. Palm oil is not a highly saturated fat. It contains almost exactly 50% unsaturated acids.
2. From a nutritional point of view it is incorrect to bracket together "coconut and palm oil" in one phrase as saturated fats, first because of the difference in saturation, and second, perhaps more important, because most of the saturated acids in coconut oil are of short chain length and are absorbed and metabolized in a very different way from those of the longer chain lengths.
3. Is it possible that many of the nutritional effects (on blood cholesterol levels, for example) obtained from feeding coconut oil at high levels have been extrapolated without actual experiment to saturated fats of C16-C18 chain length? The latter, of course, would have melting points in the range of 55-60 C, are not digestible on their own, and therefore have never been tested at high levels in the diet.
4. May I suggest that there is some confusion between palm oil, the major product from the flesh of the oil palm fruit, and palm kernel oil, the minor product of

the oil palm fruit, extracted from the seed? Palm kernel oil is compositionally similar to coconut oil, though more unsaturated.

5. Modern nutritional research is focussing more on HDL and LDL bound cholesterol in the blood than on total cholesterol levels. It is interesting that to date there are very few studies published of direct feeding experiments with palm oil. The results of one recent trial on human beings in which palm oil was included showed a behavior quite similar to that of sunflower oil (1). In another study, Mattson (2) found only a moderate increase in blood cholesterol, accompanied by an increase in HDL-cholesterol, regarded as beneficial, when palm oil was compared with safflower oils. The equation proposed by Keys et al. (3) for the effect of saturated acids was not followed.

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REFERENCES

1. Baudet, M.F., C. Datchet, M. Lasserre, O. Estera and B. Jacotot, *J. Lipid Res.* 25:456 (1984).
2. Mattson, F.H., and S.M. Grundy, *J. Lipid Res.* 26:194 (1985).
3. Keys, A., J.T. Anderson and F. Grande, *Metabolism* 14:747 (1985).