

Palm Oil – The Healthy Alternative to Coconut Oil in Ice Cream

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The type of fats consumed in our diet is coming under increasing scrutiny. Over the past five to ten years both the oils and fats industry and the food industry in general have made great progress in replacing hydrogenated oils, and hence *trans* fatty acids, with non-hydrogenated alternatives. In some instances, this has resulted in an increase in saturated fatty acids in order to maintain product functionality. There is, however, also a question mark over saturates, particularly in relation to increased risk of cardiovascular disease.

Ice cream is a product with a fat phase which has traditionally been high in saturates, either from dairy sources (60-75% saturates) or from vegetable oils such as coconut oil (90-95% saturates). This has been because these fats meet many of the functional requirements imposed on ice cream both in terms of processing and sensory qualities:

- A solid fat content at 0-5°C of at least 50% to promote acceptable crystallization of the fat in the ice cream
- A melting point below 34-35°C to avoid waxiness during consumption

The use of palm oil in ice cream will give a reduction in saturates compared with traditional ice cream fats and gives a good crystallization but its melting point is such that there can be a residual waxiness in the ice cream.

There are two ways of overcoming this. The first is to blend palm oil with, for example, sunflower oil to both meet these requirements. A blend of 85% palm oil and 15% sunflower oil produces a good ice cream and has a saturates level of about 45%, less than half of that of coconut oil. The second way is to use palm fractions blended with sunflower oil. In this way it is possible to reduce the total saturates level to as low as 37% by blending 50% sunflower oil with 50% Creamelt™ 900.