WO 00/15201 describes compositions comprising phytostanols, phytosterols, and tocotrienols for treating cardiovascular disease.

EP-A-1044687 relates to powders containing tocotrienols.

Certain tocotrienol products are known, such as Tocomin 50% from the company Carotech Inc. The analysis of the product from January 2008 indicates a high tocopherol content and a low sterol content.

Black *et al*, *J Nutr*, 130, 2000, 2420-2426 investigates the effect of vitamin E and beta-carotene on atheroma formation.

Chu *et al*, *Food Chemistry*, vol 79, no 1, October 2002, 55-59 describes the factors affecting pre-concentration of tocopherols and tocotrienols from PFAD by lipase-catalysed hydrolysis. The lipase used is non-selective and hydrolyses all of the glycerides present.

A process for concentrating sterols in shea oils is disclosed in US 6,399,138. Shea oil and palm oil are unrelated materials having different fatty acid profiles and containing different components. Shea sterols are chemically unrelated to tocols and have distinct physical properties as well as unrelated effects and applications.

There remains a need for a process that can produce tocols from products derived from palm oil, such as palm fatty acid distillate. In particular, there is a need for processes that can produce tocols by processes that are relatively simple and/or cost effective and do not require solvents and harsh reagents that are difficult to handle, such as strong alkalis.

According to ~~the invention in~~ a first aspect, there is provided a process for producing a composition comprising at least 3% by weight of total tocopherols and tocotrienols comprising:

providing a product obtained from palm oil comprising tocopherols and tocotrienols, together with free fatty acids and monoglycerides and diglycerides of fatty acids;

hydrolysing at least part of the monoglycerides and diglycerides with a lipase to form the corresponding free fatty acids;

removing at least part of the free fatty acids after hydrolysis; and

recovering a composition comprising a higher level of tocopherols and tocotrienols than are present in the product obtained from palm oil.

In another aspect, the disclosure~~invention~~ provides a composition which comprises from 25 to 50 % by weight of total tocopherols and tocotrienols and from 1 to 20% by weight triglycerides, wherein the weight ratio of tocopherols to tocotrienols is in the range of from 1:2 to 1:4, from 5 to 20 % (such as from 5 to 15 %) by weight squalene, from 10 to 30 % by weight sterols and less than 5 % by weight free fatty acids.

In a further aspect, the disclosure~~invention~~ provides a food supplement in the form of a soft gel or a hard capsule comprising an encapsulating material and, encapsulated within the capsule, a composition as defined above~~of the invention~~.

In yet another aspect, the disclosure~~invention~~ provides a food product comprising a composition as defined above~~of the invention~~.

~~Also provided by the invention~~In another aspect, there is provided a cosmetic formulation comprising a composition as defined above~~of the invention~~.

Another aspect of the disclosure~~invention~~ is a fat or oil comprising from 5 ppm to 500 ppm of a composition as defined above~~of the invention~~.

In another aspect, the disclosure~~invention~~ provides the use of a composition as defined above~~of the invention~~ as an antioxidant.

In another aspect, the disclosure~~invention~~ provides a composition as defined above~~of the invention~~ for improving heart health.

In a further aspect, the disclosure~~invention~~ provides a composition as defined above~~of the invention~~ for use in lowering cholesterol.

Also provided by the disclosure~~invention~~ in another embodiment~~aspect~~ is a composition comprising squalene, sterols, tocopherols and tocotrienols, wherein the composition comprises at least 25% by weight of squalene and the weight ratio of squalene to total tocopherols and tocotrienols is at least 1.5:1, preferably at least 2.5:1 and the weight ratio of squalene to sterols is greater than 3:1, preferably greater than 5:1.

The term fatty acid, as used herein, means straight chain carboxylic acids having from 10 to 24 carbon atoms, which may be saturated or may contain one or more (typically from 1 to 3) double bonds. Preferably, the fatty acids are present in palm oil and include palmitic acid and oleic acid as main components (both acids together being present in an amount of greater than 50 % by weight based on total fatty acids), together with myristic acid, stearic acid and linoleic acids as relatively minor components.

The invention involves a process for producing a product that is enriched in tocols and other components of palm oil such as squalene. The process can be carried out simply and effectively. The product of the invention is a material that has a high commercial value and can be used in a number of different applications.

The product obtained from palm oil that is used as the starting material for the process of the invention typically comprises tocopherols and tocotrienols in an amount of from 0.5 to 5 % by weight, more preferably from 0.8 to 4 % by weight, even more preferably from 1 to 3 % by weight. Alternatively, or additionally, the product obtained from palm oil preferably comprises monoglycerides and diglycerides in an amount of from 20 to 45 % by weight, more preferably from 25 to 42 % by weight, even more preferably from 30 to 40 % by weight. The product