

FREQUENTLY ASKED QUESTIONS

PEANUT OIL in ZINC CREAM and ZINC AND CASTOR OIL CREAM

Peanut Oil use in Skin Care products

Refined Peanut Oil used in skin care products is unlikely to cause an allergic reaction in peanut sensitive patients. It is still advisable to avoid Peanut Oil where more severe reactions have been experienced. If there is any doubt about the sensitivity of the patient a medical practitioner should be consulted.

- Reports suggest that it is the protein and not the oil (fat) in the peanut that is the cause of peanut allergy.
- Samples of peanut oil based creams were screened by enzyme immunoassay (EIA) for the presence of peanut protein and reported levels were found to be less than 2.5ppm (0.00025%).^{1,2}
- Full refining of peanut oils results in the almost complete removal from oils of the protein, which is responsible for allergic reactions.³
- It has been shown in well designed studies, that refined peanut oil can be safely consumed by the vast majority of peanut allergic individuals.³
- These results further support the safety of use of refined oils such as Peanut Oil in pharmaceutical formulations.⁶

Additional studies

Peanut Oil (also know as Arachis Oil) does not contain the protein that is the major allergen that causes anaphylactic reactions to peanuts. Studies have shown that this specific peanut protein, does not partition into Peanut Oil, Hydrogenated Peanut Oil, Peanut Acid, and Peanut Glycerides^{4, 5}. A Cosmetic Ingredient Review Expert Panel reported in 2001 in the International Journal of Toxicology, that it was satisfied that the results of sensitisation studies supported the safety of Peanut (Arachis Hypogaea) Oil, Hydrogenated Peanut Oil, Peanut Acid and Peanut Glycerides in cosmetic formulations⁴.

Pharmaceutical formulations where Peanut Oil is used are also safe to use. Peanut Oil is refined and contains no detectable protein (< 0.3ng/mL). Some studies have suggested that application of residual proteins of unrefined peanut oil might be a possible cause of allergic sensitisation and serve as a sensitisation pathway for food allergy. The concentration of peanut protein used to cause a positive challenge result was more than a million times higher than the detection limit of the protein detection equipment used to check for the concentration of peanut protein in refined peanut oils⁵. Thus the concentration of peanut protein needs to be much higher than the amount found, if any, in refined peanut oil, to cause allergic sensitization.

When refined peanut oil was applied to the skin of peanut sensitive individuals no skin reactivity or allergic response was noted. Also no untoward reactions occurred when peanut sensitive patients were challenged by ingesting doses of up to 8mL of refined peanut oil⁶. These results reinforce the support for the safety of use of refined oils such as Peanut Oil in pharmaceutical formulations in persons sensitive to peanuts⁶.

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- References:**
- 1 Rothnie N, Report on Analysis of samples received on 26 October 2006. Chemistry Centre WA.
 - 2 Enzyme immunoassay for quantitative analysis of Peanut. Ridasbreeb Fast peanut 03-05-27 Performance Tested AOAC Research Institute.
 - 3 Crevel RW, Kerkhoff MA, Koning MM. Allergenicity of refined vegetable oils. Food Chem Toxicol. 2000 Apr; 38 (4):385-93.
 - 4 Final report on the safety assessment of Peanut (Arachis hypogaea) Oil, Hydrogenated Peanut Oil, Peanut Acid, Peanut Glycerides, and Peanut (Arachis hypogaea) Flour. Int J Toxicol 2001; 20 Suppl 2: 65-77.
 - 5 Peeters KA, Knulst AC, Rynja FJ, et al. Peanut allergy: sensitization by peanut oil containing local therapeutics seems unlikely. J Allergy Clin Immunol, May 2004, 113 (5) p1000-1.
 - 6 Taylor SL, Busse WW, Sachs MI, et al. Peanut oil is not allergenic to peanut sensitive individuals. J Allergy Clin Immunol, Nov 1981, 68 (5) p372-5.

Revision Information

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