

OMEGA EDIBLE OILS

Kleinhoscheid, 05/04/2018

Georges Mouton MD

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Ω7



Hippophae rhamnoides

Sea buckthorn oil

30% POA ($\Omega 7$) – 25% OA ($\Omega 9$)

- *Hippophae rhamnoides*
- The richest of all in palmitoleic acid (16:1 $\Omega 7$)
- Excellent for skin care, both topical and as a food supplement

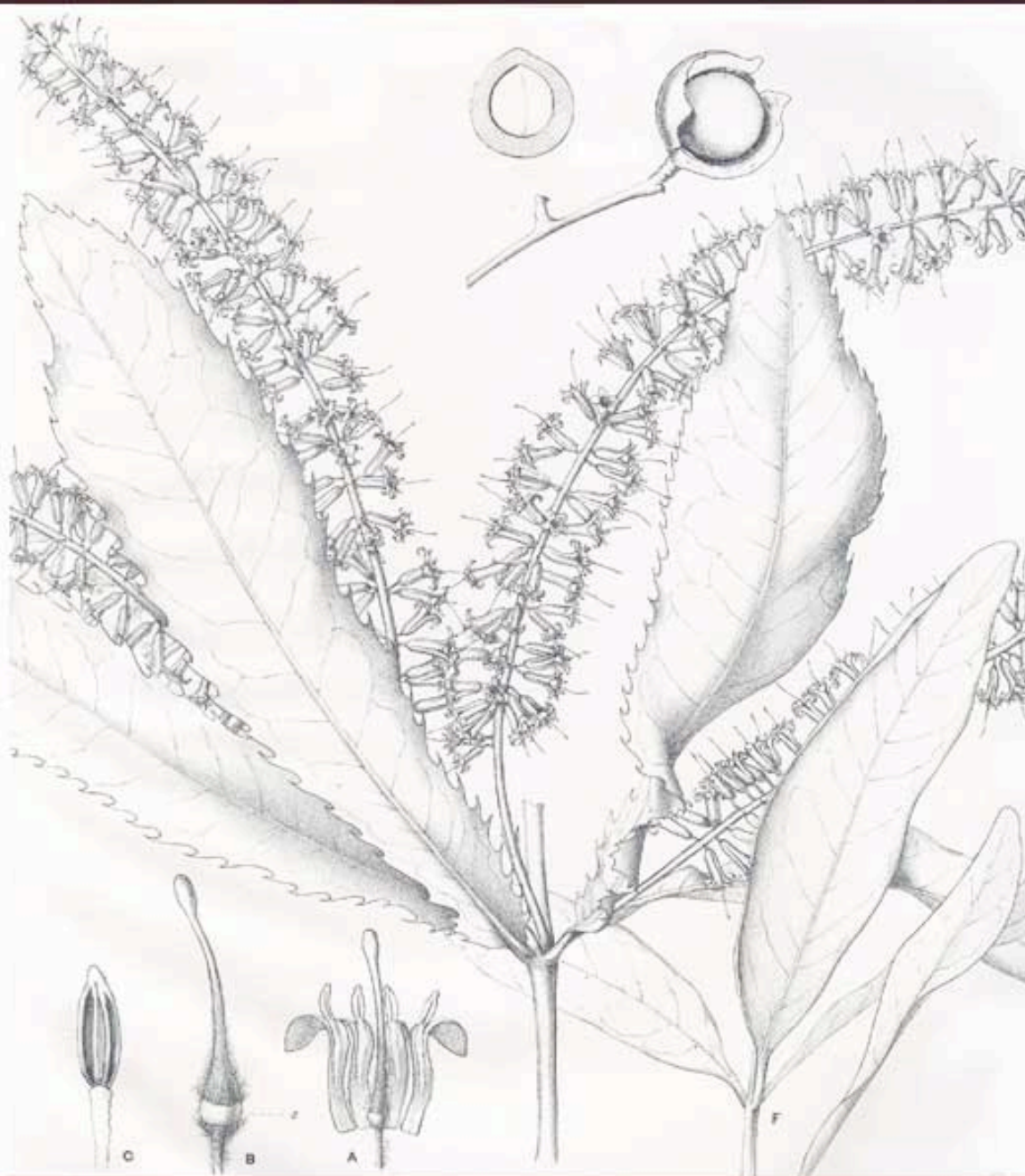


[The study on the effects of the oil from *Hippophae rhamnoides* in hematopoiesis]

[Article in Chinese]

Chen Y, Zhong X, Liu T, Ge Z.

CONCLUSION: The oil from *Hippophae rhamnoides* can improve the hematopoiesis of erythroid lineage. Like G-CSF, the oil from *Hippophae rhamnoides* can stimulate the recovery of hematopoiesis after chemotherapy.



Macadamia integrifolia

Macadamia nut oil

29% POA ($\Omega 7$) – 46% OA ($\Omega 9$)

- *Macadamia integrifolia*
- Extremely rich in palmitoleic acid (16:1 $\Omega 7$)
- Fits for cooking as high as 250°C !



Implications of Palmitoleic Acid (Palmitoleate) On Glucose Homeostasis, Insulin Resistance and Diabetes.

Nunes EA¹, Rafacho A¹.

It has been suggested that palmitoleic acid (16:1n-7) has hormone-like properties and improves some metabolic parameters that are impaired in obesity and type 2 diabetes mellitus (T2DM). Moreover, in vitro approaches reveal that cis-16:1n-7 can influence pancreatic β -cell survival, insulin secretion, and skeletal muscle insulin response and adipocyte metabolism. In vivo experiments using animal models show that the ingestion of cis-16:1n-7 or sources of it (e.g., macadamia oil) can partially prevent the metabolic alterations caused by high-fat/carbohydrate diets.



Gevuina avellana

Chilean hazelnut oil

27% POA ($\Omega 7$) – 55% OA ($\Omega 9$)

- *Gevuina avellana*
- Extremely rich in palmitoleic acid (16:1 $\Omega 7$)
- Contains up to 80% of mono-unsaturated fatty acids



Palmitoleic acid (16:1n7) increases oxygen consumption, fatty acid oxidation and ATP content in white adipocytes.

Cruz MM¹, Lopes AB², Crisma AR³, de Sá RCC¹, Kuwabara WMT³, Curi R^{3,4}, [de Andrade PBM](#)⁴, [Alonso-Vale MIC](#)⁵.

CONCLUSIONS:

Palmitoleic acid, by concerted action on lipolysis, FA esterification, mitochondrial FA oxidation, oxygen consumption and ATP content, does enhance white adipocyte energy expenditure and may act as local hormone.

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