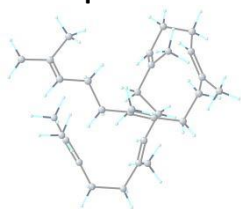




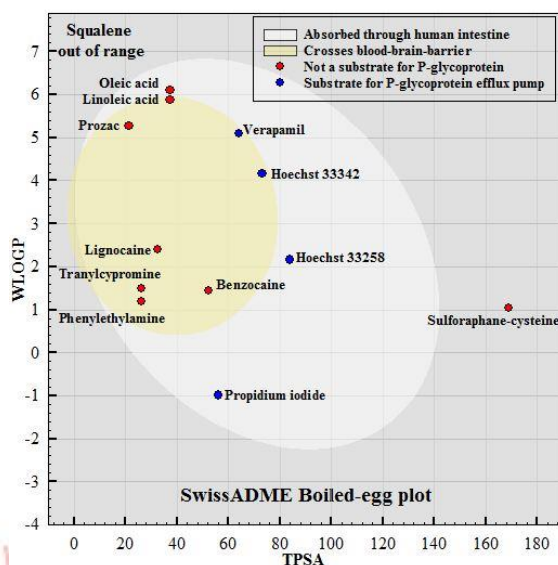
OliveNet™ Newsletter

Molecule of the month

Squalene



Squalene, a 30-carbon organic compound (triterpene), is a component of human sebum involved in lubricating and protecting the skin. Apart from important applications in skincare, numerous medical benefits have been purported for squalene, including use as a vaccine adjuvant. Commercially, squalene has historically been obtained from shark liver oil, and more recently from more renewable sources, including olives where it is most abundant in the seed.



We analysed squalene using SwissADME and the results indicate that squalene is poorly absorbed through human intestines, and not predicted to cross the blood-brain-barrier. As indicated using labelled squalene there is some capacity for absorption of dietary squalene through mammalian intestines (Tilvis and Miettinen, Absorption and metabolic fate of dietary ^3H -squalene in the rat. *Lipids* (1983), 18: 233-8). Importantly the analysis indicates that it does inhibit liver enzymes and is not a substrate for the P-glycoprotein pump.

Julia Liang's recipe of the month

Greek Easter Biscuits - Koulourakia

Apart from being a talented McCord Research molecular modelling scholar, Julia Liang is an avid "foodie". This month we have a double treat from Julia. Julia has prepared Greek Easter Biscuits (Koulourakia) – a classic Hellenic Easter staple!



[Approximate calculations: Total EVVO = 118 mL (110 g); Serves 14 (total 28 biscuits). Per serve = 3 calories (or 6% of 2,000 calorie diet), 7.9 g EVVO (or 15% of typical daily recommendation), ~2 mg olive polyphenols (assuming 250 mg/kg in average EVOO)].

Spaghetti Puttanesca – "Lady of the night"

Julia has also prepare a traditional Italian Spaghetti Puttanesca – another classic!

[Approximate calculations: Total EVVO = 90 mL (83 g); Serves 2. Per serve = 326 calories (or 16% of 2,000 calorie diet), 40 g EVVO (or 80% of typical daily recommendation), ~10 mg olive polyphenols (assuming 250 mg/kg in average EVOO)].

For further details please see our [OliveNet Library Facebook page](#) and visit [Julia's Cooking Revista](#).

*** All of Julia's recipes are tried and tested.**

Global Research highlight

Non-alcoholic fatty liver disease: An important consensus document, predominantly from high profile Spanish researchers has been published last month. The recommendations for the management of non-alcoholic fatty liver disease includes, lifestyle changes aimed at weight loss, with a Mediterranean diet and moderate exercise, prior to pharmacological approaches. [Aller R et al. Consensus document. Management of non-alcoholic fatty liver disease (NAFLD). Clinical practice guideline. *Gastroenterol Hepatol*. 2018 Apr 6. pii: S0210-5705(18)30003-7. doi: 10.1016/j.gastrohep.2017.12.003].