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(54) **BIOEFFECTIVE KRILL OIL COMPOSITIONS**

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(57) **ABSTRACT**

(21) Appl. No.: **12/057,775**

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This invention discloses new krill oil compositions characterized by having high amounts of phospholipids, astaxanthin esters and/or omega-3 contents. The krill oils are obtained from krill meal using supercritical fluid extraction in a two stage process. Stage 1 removes the neutral lipid by extracting with neat supercritical CO<sub>2</sub> or CO<sub>2</sub> plus approximately 5% of a co-solvent. Stage 2 extracts the actual krill oils by using supercritical CO<sub>2</sub> in combination with approximately 20% ethanol. The krill oil materials obtained are compared with commercially available krill oil and found to be more bioeffective in a number of areas such as anti-inflammation, antioxidant effects, improving insulin resistances and improving blood lipid profile.

**Related U.S. Application Data**

(60) Provisional application No. 60/920,483, filed on Mar. 28, 2007, provisional application No. 60/975,058, filed on Sep. 25, 2007, provisional application No. 60/983,446, filed on Oct. 29, 2007, provisional application No. 61/024,072, filed on Jan. 28, 2008.

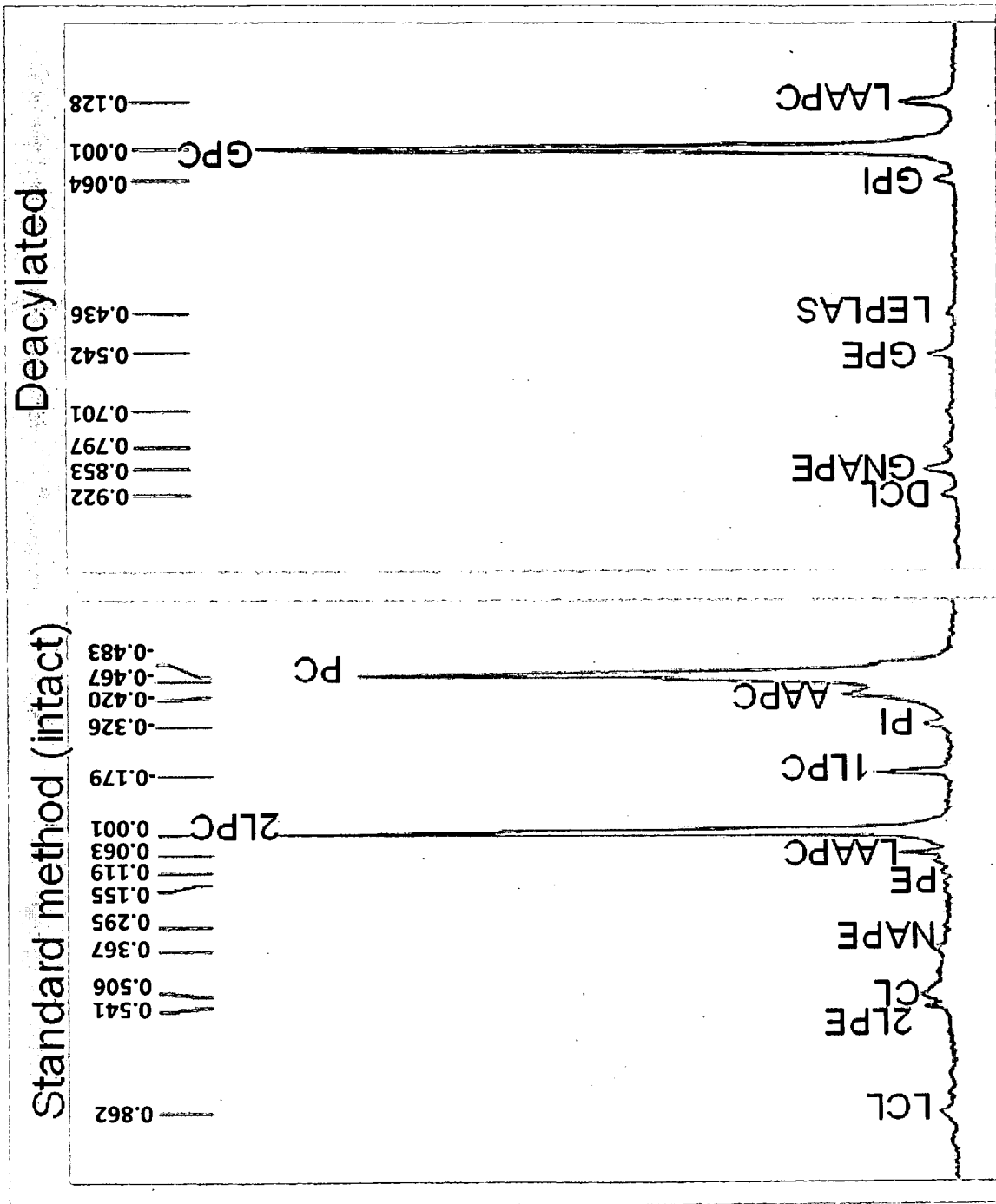


FIGURE 1

FIGURE 2

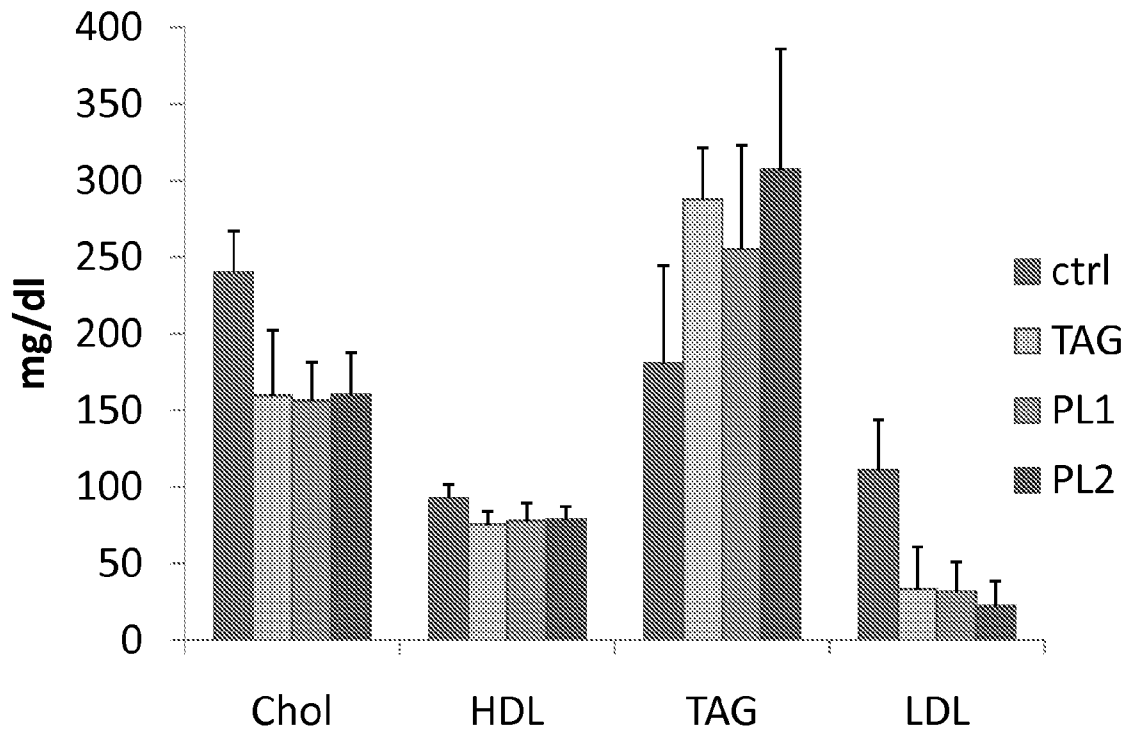


FIGURE 3

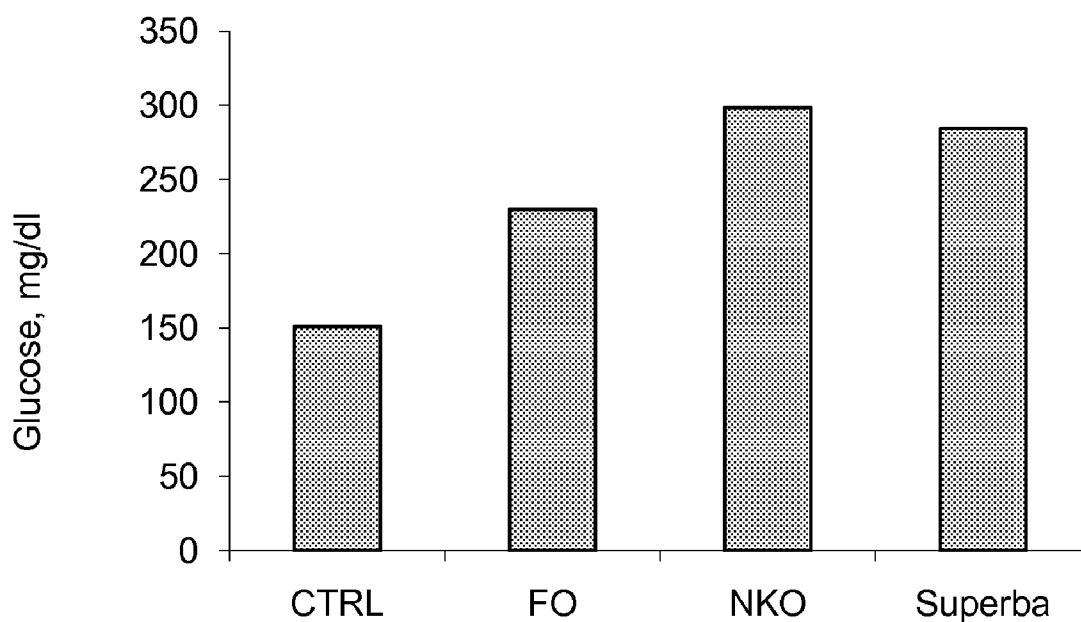
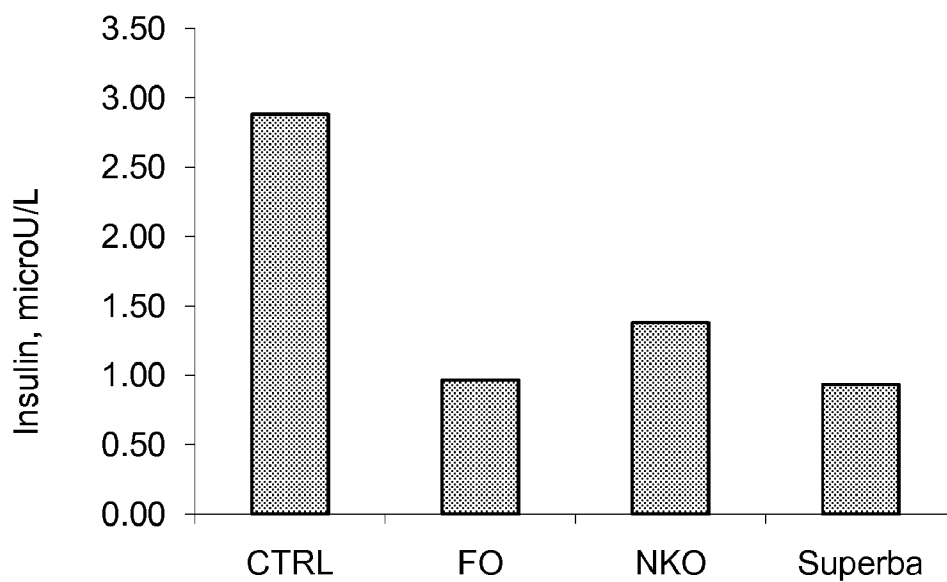


FIGURE 4



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