

LIQUID CRYSTALLINE STRUCTURE-FORMING OMEGA-3-FATTY ACID COMPOSITION

【ABSTRACT】

The present invention relates to a liquid crystalline structure-forming omega-3-fatty
5 acid composition and, more specifically, provides an omega-3-fatty acid composition
comprising: amphoteric lipids which form liquid crystalline structures when exposed
to aqueous media such as gastrointestinal juice; omega-3 fatty acids or derivatives
thereof; and a liquid crystalline structure-forming aid. The omega-3-fatty acid
composition forms self-assembled lyotropic liquid crystals which are
10 thermodynamically stable in structure, irrespective of digestion in the gastrointestinal
tract, thereby promoting the solubilization and absorption rate of omega-3-fatty acids
as well as providing preparations 30% or more smaller in size than conventional soft
gel capsules of omega-3-fatty acid preparations. Thus, the composition can be taken
with more ease by geriatric patients and the like and allows for provision of omega-3-
15 fatty acid preparations increasing in *in-vivo* dissolution and absorption.

[Fig. 1]