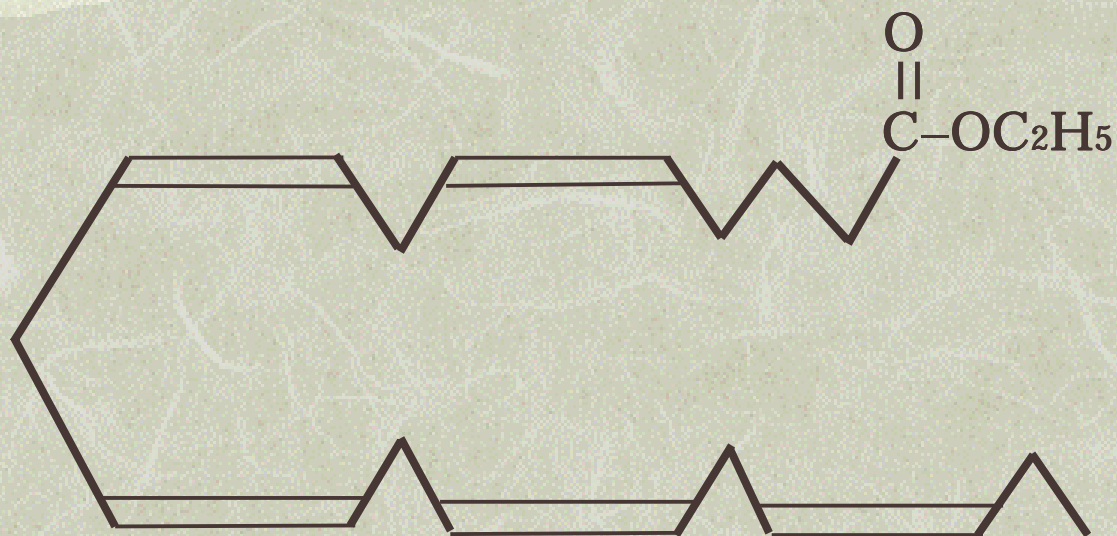


EICOSAPENTAENOIC ACID ETHYL ESTER

The structure of Eicosapentaenoic Acid Ethyl Ester (EPA ethyl ester)



5,8,11,14,17 - Eicosapentaenoic acid ethyl ester

GENERAL INFORMATION ABOUT EICOSAPENTAENOIC ACID

- Eicosapentaenoic acid (EPA) is abundantly found in marine sources such as fish oil.
- EPA (C_{20:5}) is one of ω -3 polyunsaturated fatty acids while arachidonic acid (C_{20:4}) is classified as one of ω -6 polyunsaturated fatty acids.
- Many studies on EPA have been done around the world and for the time being, the following effects have been found.
 1. Decrease VLDL- and LDL- cholesterol without decreasing HDL- cholesterol in blood.
 2. Decrease triglycerides in blood.
 3. Decrease the viscosity of blood and make the circulation of blood better.
 4. Having an important role on immune system,
and much more.
- Based on the above studies, since more than 20 years ago, lots of supplements have been sold in many countries.

EICOSAPENTAENOIC ACID ETHYL ESTER

- More than 10 years ago, the first ethical drug containing highly purified EPA ethyl ester was launched for the treatment of arteriosclerosis. And, in 1994, the additional efficacy against hyperlipidemia was approved by Japanese Health & Welfare.
- The market of this EPA ethyl ester including generic drugs has been steady and is about 250 million USD in 2000.
- The change of eating habit and the gaining of elderly people would require this kind of ethical drugs more.
- Although this ethical drug has been permitted only in Japan for the present, this will be adopted to other countries in the future.

Q.P. EICOSAPENTAENOIC ACID ETHYL ESTER

EPA-EQ

- The specifications of EPA-EQ:
 - The content of EPA ethyl ester --- NLT 96.5 %
 - Acid Value --- NMT 1
 - Peroxide Value --- NMT 2 meq/kg
 - Other fatty acids --- Each fatty acid is NMT 1.0 %
 - Total tocopherol --- 0.17 ~ 0.23 %
- Typical Analytical Results (Lot ZQ0014)
 - EPA --- 99.8 %
 - Acid Value --- 0.05
 - Peroxide Value --- 0.3 meq/kg
 - dl- α -tocopherol --- 0.21 %