

Fish Oil Forms

Which is Best?



Carlson[®]

Choose Quality. Choose Carlson.



How many different fish oil forms are there, and what is the difference?



Fish oils are available in three forms:

Natural Triglyceride (TG): Fish naturally contain the omega-3 fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) as triglyceride esters (TG). Natural TG fish oils provide a maximum of 300 mg of combined EPA and DHA per 1,000 mg of oil (30% potency). These are the most common fish oils on the market, and some prefer them because of their natural form and close similarity to eating fish.

Ethyl Ester (EE): Since EPA and DHA concentration and ratio can't be altered in natural TG fish oil, the EE fish oil form was created. By removing the glycerol backbone of TG fish oil, in a process called trans-esterification, the result is free fatty acids (FFAs) and a free glycerol molecule. An ethanol molecule is attached to each of the FFAs, creating EE. The resulting EE allows for molecular distillation at lower temperatures, creating EPA and DHA concentration levels greater than naturally found in fish. This form is called "fish oil concentrate."

Re-Esterified Triglyceride (rTG): Re-esterified triglycerides (rTGs) are created when ethyl esters are freed from their attached ethanol groups and are once again bound to a glycerol backbone. rTGs retain the same potency and fatty acid ratios of their EE counterparts.



Are Carlson fish oils in triglyceride (TG) form or in ethyl ester form (EE)?



While there are three forms of marine oils, Carlson fish oils currently fall into four categories:

1. Non-concentrated 100% natural triglycerides (TG)
2. Concentrated ethyl esters (EE)
3. Concentrated re-esterified triglycerides (rTG)
4. A mixture of both the natural TG form and the more potent EE

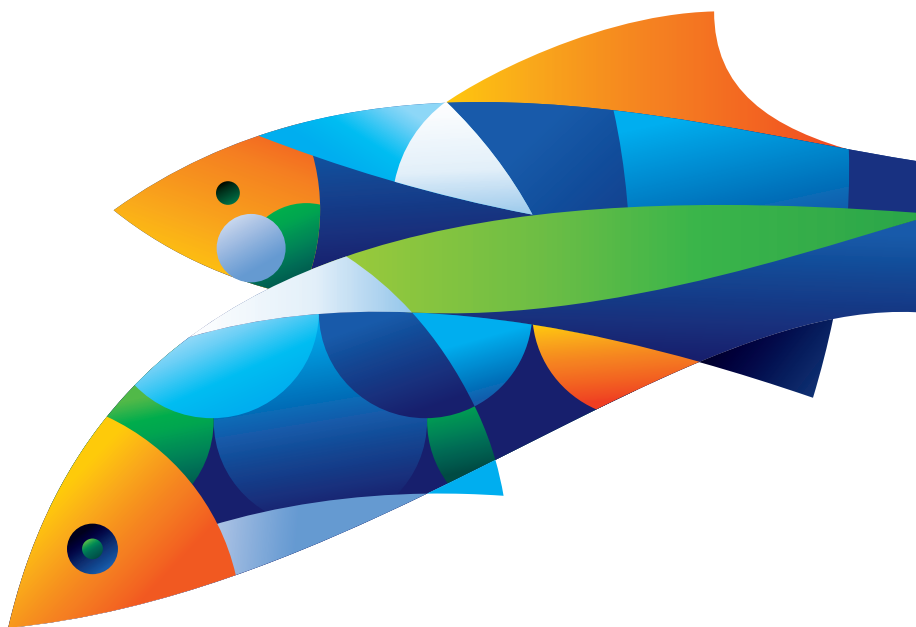


Is one form better than the other?



No.

Whether you choose TG, EE, or rTG fish oil, what's most important is the end result. Omega-3 supplements from fish oil are lifestyle supplements meant to be taken long-term for the benefits associated with an EPA and DHA red blood cell concentration above 8%. An appropriate daily dose of any form can achieve this goal and help maintain optimal blood EPA and DHA levels.



A 2011 study by J. Neubronner et al. found that although rTG fish oils are slightly better absorbed than EE fish oils short term, over time an appropriate dose of either form results in a clinically significant increase in EPA and DHA red blood cell concentrations. Total red blood cell concentrations of EPA and

DHA above 8% are considered ideal for optimal health. This measurement is called the Omega-3 Index. In the study, consumption of 1,008 mg of EPA and 672 mg of DHA daily by 129 adults for six months resulted in an Omega-3 Index in excess of 12% for both groups—well above the reporting scale for this test.

The Structural Forms of Carlson Fish Oil

TG Non-Concentrated 100% Natural Triglycerides		
Product Name	Form	Flavor/Code
Carlson for Kids® Baby's DHA	Liquid	Natural: 1860
Carlson for Kids® Chewable DHA	Soft Gel	Orange: 1570, 1571
Carlson for Kids® Cod Liver Oil	Liquid	Lemon: 1353 Bubble Gum: 1363
Carlson for Kids® Kid's DHA	Liquid	Lemon: 1850
Carlson for Kids® Smart Catch® for Teens	Soft Gel	Lemon: 1611, 1612
Carlson for Kids® The Very Finest Fish Oil™	Liquid	Lemon: 1543 Orange: 1653
Cod Liver Oil	Liquid	Lemon: 1351, 1352 Fruit Splash: 1361 Natural: 1321, 1322
Cod Liver Oil Minis	Soft Gel	Natural: 1311, 1312
Cod Liver Oil Gems™	Soft Gel	Lemon: 1381, 1383, 1384
Cod Liver Oil Gems™ Low Vitamin A	Soft Gel	Lemon: 1391, 1393
Cod Liver Oil Gems™ Super 1000	Soft Gel	Natural: 1301, 1302
Fish Oil Multi™	Soft Gel	Natural: 1580, 1581, 1582
Olive your Heart®	Liquid	Basil: 1961 Lemon: 1971 Garlic: 1981 Natural: 1991
Super 2 Daily®	Soft Gel	Natural: 4050, 4051, 4052, 4054, 4055
Super D Omega-3™	Liquid	Lemon: 1402
The Very Finest Fish Oil™	Liquid	Lemon: 1540, 1545 Orange: 1650, 1655
The Very Finest Fish Oil™	Soft Gel	Lemon: 1631, 1632, 1634 Orange: 1641, 1642, 1644

TG & EE Non-Concentrated 100% Natural Triglycerides & Concentrated Ethyl Esters		
Product Name	Form	Flavor/Code
Salmon Oil	Soft Gel	Natural: 1501, 1502, 1504, 1505
Salmon Oil Complete™	Soft Gel	Natural: 1830, 1831, 1832, 1834
Salmon Oil and GLA	Soft Gel	Natural: 1510, 1511, 1512



EE Concentrated Ethyl Esters

Product Name	Form	Flavor/Code
EcoSmart® DHA	Soft Gel	Lemon: 1811, 1814, 1816
EcoSmart® Omega-3	Soft Gel	Lemon: 1801, 1802, 1804
Elite EPA Gems®	Soft Gel	Natural: 1681, 1686
Elite Omega-3 Gems®	Soft Gel	Lemon: 1711, 1712, 1713, 1714, 1716
Fish Oil Q™	Soft Gel	Natural: 1673, 1676
Men's Omega Multi	Soft Gel	Natural: 4031, 4032, 4033
Nutra-Support® Diabetes	Soft Gel	Natural: 4570, 4571, 4572
Super Omega-3 Gems®	Soft Gel	Natural: 1520, 1521, 1522, 1523, 1524, 1526
Super Omega-3 Gems® in Fish Gelatin	Soft Gel	Natural: 1530, 1531, 1532, 1534

rTG Concentrated Re-Esterified Triglycerides

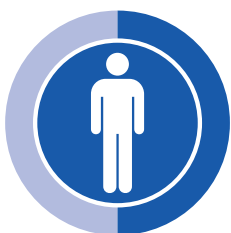
Product Name	Form	Flavor/Code
Elite DHA Gems®	Soft Gel	Natural: 1690, 1691, 1693
Maximum Omega 2000	Soft Gel	Natural: 1720, 1721, 1722, 1724
MCT & Omega-3	Soft Gel	Natural: 1760, 1761, 1764
Med Omega™	Liquid	Lemon/Lime: 1701
Mother's DHA	Soft Gel	Natural: 1560, 1561
Omega-3-6-9	Soft Gel	Lemon: 1731, 1733
Prenatal Multiple with DHA	Soft Gel	Natural: 4405, 4406
Super DHA Gems®	Soft Gel	Natural: 1550, 1552, 1553, 1554
Women's Omega Multi	Soft Gel	Natural: 4021, 4022, 4023



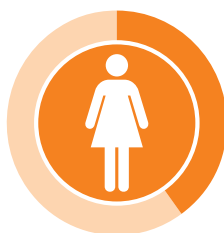


You Need More **OMEGA-3s**

Did You Know:



50%



40%

In the United States, men consume only 50% of their recommended daily intake (RDI) of omega-3s, while women consume just 40% of their RDI.



The American Heart Association (AHA) recommends we eat at least two 3.5-ounce servings of fatty fish per week to receive the EPA and DHA our bodies need for optimal health.

**EPA & DHA
are the most
important
omega-3s
in our diet**



There are more than 27,000 published studies on omega-3s, making them some of the most studied nutrients in the world.



Omega-3 Benefits:



Cardiovascular health:*

EPA and DHA help maintain:

- A healthy, stable heart
- Healthy blood vessels and circulation
- Arterial wall elasticity
- Healthy triglyceride levels



Brain and nerve health:*

DHA helps:

- Support cognitive function
- Enhance nerve transmission
- Protect neuron lifespan



Vision health:*

DHA is:

- Found in high amounts in the retina
- Important for optimal vision health



Joint health:*

EPA and DHA promote:

- Healthy joints
- Comfortable movement

Make a Change Today

Build on a healthy lifestyle and make a change today. Increasing your omega-3 levels will benefit your heart, brain, eyes, and joints, and support your overall health.



Dedicated to providing you with the highest quality nutritional supplements since 1965.



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