



## First In US To Use Orivo Fish Oil Certification

*"All Biotics' fish oil is now certified by an independent laboratory that fish oils used come from anchovies harvested off the coast of Chile."*

Have you ever heard of a fish oil bioprint? I know that sounds crazy but new technology is available for fish oil that can identify the exact species of fish and where the fish is caught. Big deal you say. Well, it is a big deal because small fish like anchovies contain EPA and DHA without the PCBs and metals that larger fish contain.

One of the world's richest sources of anchovies is off the coast of Chile and Peru. These pristine waters do not have the plastics, metals or chemicals that end up in the tissues of the other fish. Anchovies range in size up to 12-15 inches and have a 12-16 month life span. This means they reproduce rapidly and can be monitored to assure they are not overharvested.

Right now Green Peace is putting krill harvesting at the center of the sustainability controversy. Accountability and environmental



sustainability are a major plus for the millennial generation.

All Biotics' fish oil is now certified by the independent laboratory "Orivo" verifying that fish oils used in Biotics' products come from anchovies harvested off the coast of Chile.

Check it out (see label on the Biotics' bottle), the Orivo Certification number. Patients can go to Orivo's website, type in the number on the bottle they just purchased from you, and see where the fish was caught

and exactly what kind of fish is in their bottle.

I listened to a podcast by the Wall Street Journal on fish and one fish expert said "up to 1 out of 5 fish are misrepresented in the market place." I also just learned fish oil from China and Morocco is being blended with the cleaner Chilean fish in the huge Norway facilities where it is processed into a concentrate.

We talked about how the processing plant Biotics uses to concentrate its fish

oil is literally on the shores where fishermen bring in their daily catch. This allows Biotics to give you the freshest and shortest "catch to capsule time" in the industry which extends expiration time to 3 years.

This bioprinting accountability is one more example of how you provide the best product for your patients. Knowing this information gives your patients one more reason to buy from you instead of a big box store.

By the way, I met the technical consultant from the raw material supplier and he shared with us how they test for 400 different toxins in their oil and the refining process is so sophisticated that they have reduced the lower limits for allowable toxins for the 3rd time.

Although the Biotics oil is in a dark capsule to protect it from light, the oil is completely clear. Consider asking patients to bring in their current fish oil or any other oils they are taking and crack open a Biotics capsule to compare tastes. Rancid oil is slightly bitter and burns the back of your throat. In other words it tastes nasty. Oils from Biotics Research Corporation will taste oily but never rancid.

Did you know that the major pharmaceutical oils are ethyl esters (EE). According to a review of evidence reported in the journal Progress in Lipid Research, "bioavailability seems to be the lowest for ethyl ester forms." Other studies confirm that the triglyceride form is more efficiently digested and 70% more absorbable than the ethyl ester form.

So not only is Biotics' oil 1/3 the cost of pharmaceutical oil, it is more bioavailable.

And when it comes to raw material finger-printing or bioprinting, Biotics has been using sophisticated forms of technology looking for toxins, confirming validity of the agent tested and establishing biological activity for over 20 years. You can see a link to the right for more information on Biotics bioprinting.

They assess for: heavy metals, bacterial and fungal toxins, and precise identification of materials. But perhaps just as important as purity is how they can assess biological activity of raw materials in their in-house phytochemistry lab. If the plant extract is not bioavailable as a raw material, further processing and encapsulation will not magically make it biologically active for the body. And Biotics even goes a step further. Knowing that some botanicals need aggressive, even toxic solvents to concentrate and standardize a botanical compound, Biotics makes sure toxic solvents are not present in the end product. Nobody in the industry monitors raw materials to that extent. This depth of quality control is not required by any government or industry agency, it's just the right thing to do.

I encourage you to take a look at the links to the right with your staff. Some of it may seem a little technical at first but the end result is your staff will be able to answer many of the questions patients have about nutrients. These are exciting times and it feels good to offer top quality supplements for your clients knowing that they are clean, concentrated and biologically active. And it's important to tell your patients why you recommend high quality supplements like those at Biotics.

Thanks for reading this week's Tuesday Minute edition. I'll see you next Tuesday.

# Biomega-1000™

NUTRITIONAL SUPPLEMENT



**Biomega-1000™** provides a potent dose of omega-3 essential fatty acids (EFAs), sourced from a strategically-placed facility in the far South Pacific Ocean off the coast of Chile, guaranteeing the freshest raw material available, full traceability of the product and unparalleled purity.

## Health Benefits

EFAs play an integral role in the optimal functioning of our bodies, and build the foundation for overall health. They are required for the formation of cell membranes, and are essential for cerebral and neurological development and functioning. EFAs are also necessary for the production of eicosanoids, which are collectively responsible for regulating blood pressure and viscosity, and supporting healthy immune and inflammatory responses. They have also been shown to improve the biodiversity of the gut.

### EFAs support the following:

- Neurological Health (mood, focus and memory)
- Emotional Health
- Cardiovascular Health
- Immune System Health
- Cell Membrane Health (hair, skin and nails)
- Inflammatory Response

### The Biomega Difference

For over 40 years, Biotics Research Corporation has been a leader in the nutritional supplements industry by providing the highest quality products, continually surpassing industry standards with rigorous lab testing procedures and top-notch sourcing of raw materials.



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# Biomega-1000™



## Freshest Raw Material

Unlike other fish oils that can be harvested continents away from fish oil processing plants, **Biomega-1000™** is produced in close proximity to the harvest areas, which results in the freshest fish oil available.

## Unparalleled Purity

**Biomega-1000™** is sourced from fish oils that not only pass GOED (Global Organization for EPA and DHA) standards with flying colors, but also have the lowest levels of contaminants, environmental pollutants, heavy metals and oxidation parameters according to measured TOTOX levels. All concentrates are consistently below 5 in TOTOX. In addition, the source of **Biomega-1000™** has the best sensory profile, which means their evaluations assessing fishy, metallic or pungent profiles receive the highest grades.<sup>(1)</sup> In addition to the quality testing performed by the raw material provider, Biotics Research tests each batch of fish oil in a state-of-the-art laboratory facility to ensure the promised freshness, purity and efficacy.

## Full Traceability

With more and more people concerned about the source of their supplements, **Biomega-1000™** offers full traceability to the fish from which the oil is derived. **Biomega-1000™** fish oil source is certified by ORIVO, an NMR-based (nuclear magnetic resonance) laboratory test, which verifies a marine ingredient's authenticity based on species and geographic origin. Each batch of **Biomega-1000™** has a certified origin.

## Therapeutic Potency

**Biomega-1000™** capsules deliver an impressive 1,000 mg of omega-3 oils, making it the ideal choice for therapeutic dosing of the essential fatty acids, EPA and DHA.

### VERY LOW IN CONTAMINANTS AND ENVIRONMENTAL POLLUTANTS

Max. values in GOED monograph or EU directive v/s Biomega-1000™ typical values

Benzo(a)pyrene	
EU or GOED monograph (ug/kg)	2
Biomega-1000™ (ug/kg)	0.5
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Sum of Benzo(a)pyrene, Benzo(a)anthracene, Benzo(b)fluoranthene and Chrysene	
EU or GOED monograph (ug/kg)	10
Biomega-1000™ (ug/kg)	2
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PCB 209 Congeners (28, 52, 101, 118, 138, 153 & 180 included)	
EU or GOED monograph (mg/kg)	0,09
Biomega-1000™ (mg/kg)	0,002
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Dioxins and Furans (WHO-PCDD/F-TEQ)	
EU or GOED monograph (pg/kg)	1,75
Biomega-1000™ (pg/kg)	0,35
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Dioxins, Furans and Dioxin-like PCBs	
EU or GOED monograph (pg/g)	3
Biomega-1000™ (pg/g)	0,55

# Biomega-1000™



## VERY LOW IN HEAVY METALS

Max. values in GOED monograph v/s Biomega-1000™ typical values

Lead (Pb)	
GOED monograph (mg/kg)	0,1
Biomega-1000™ (mg/kg)	0,001
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Cadmium (Cd)	
GOED monograph (mg/kg)	0,1
Biomega-1000™ (mg/kg)	0,001
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Mercury (Hg)	
GOED monograph (mg/kg)	0,1
Biomega-1000™ (mg/kg)	0,001
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Arsenic (AS)	
GOED monograph (mg/kg)	0,1
Biomega-1000™ (mg/kg)	0,01

## VERY LOW IN OXIDATION PARAMETERS

Max. values in GOED monograph vs. Biomega-1000™ typical values

Peroxide value (POV)	
GOED monograph (Meq/Kg)	5
Biomega-1000™ (Meq/Kg)	0,5
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Anisidine value (p-AV)	
GOED monograph	20
Biomega-1000™	5
<hr/>	
Total oxidation (2POV + p-AV)	
GOED monograph	26
Biomega-1000™	5

believe the form of fish oil should be delivered in its most natural state, the triglyceride form. The human body is accustomed to digesting and absorbing EPA and DHA in the natural triglyceride form, and it appears this natural form allows for greater absorption and bioavailability. Studies show the triglyceride form of fish oil was hydrolyzed by pancreatic lipase 12 to 15 times faster than the EE form.<sup>(2)</sup> Some companies, however, choose the ethyl ester form to save on cost. But according to a review of evidence reported in the journal, Progress in Lipid Research, apparent bioavailability seems to be lowest for the ethyl ester form.<sup>(3)</sup> Other studies confirm that the triglyceride form of fish oil is more efficiently digested and 70% more absorbable than the ethyl ester form.<sup>(4)</sup> When given identical doses of EPA and DHA, a higher increase in the omega-3 index was reported when consumed as triglycerides versus ethyl esters.<sup>(5)</sup>

## OmniPureTG Guarantee

**Biomega-1000™** comes with the OmniPureTG Guarantee, which means "purity is our priority from catch to capsule".

While many fish oils require rigorous processing to attain industry standards of purity, **Biomega-1000™** contains oil that is naturally pure due to a constant freshness from the time the fish is caught until the oil is packaged, and beyond. **Biomega-1000™** is processed a short distance from harvest, eliminating travel time and vulnerability to rancidity. Unique and gentle patented processes are used to purify

## Triglyceride Form

**Biomega-1000™** uses only the triglyceride form of fish oil versus ethyl ester. The potency of fish oil is important, but at Biotics Research Corporation, we

# Biomega-1000™



the fish oil from contaminants, yielding a colorless oil with record-setting low TOTOX levels. Testing continues every step of the way, even after the oil is encapsulated, to ensure freshness and purity.

**Biomega-1000™** fish oil is delivered in the triglyceride (TG) form that is found in nature and shown to be the most bioavailable.

## Freshest Raw Material Full Traceability Purest Quality Guaranteed

### References

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3. (*Prog Lipid Res.* 2014 Oct;56:92-108. doi: 10.1016/j.plipres.2014.09.001. Epub 2014 Sep 16.)
4. (Dyerberg J, Madsen P, Møller JM, Aardestrup I, Schmidt EB. Bioavailability of marine n-3 fatty acid formulations. *Prostaglandins Leukot Essent Fatty Acids.* 2010 Sep;83(3):137-41).
5. Neubronner J, Schuchardt JP, Kressel G, Merkel M, von Schacky C, Hahn A. Enhanced increase of omega-3 index in response to longterm n-3 fatty acid supplementation from triacylglycerides versus ethyl esters. *Eur J Clin Nutr.* 2011;65(2):247-54.

**Biomega-1000™** marine lipid concentrate conforms with the following certifications:



**(800) 373-1373 | [www.metabolicmanagement.com](http://www.metabolicmanagement.com)**

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

## Supplement Facts

Serving Size: 1 Softgel Capsule

	Amount Per Serving	% Daily Value
Calories	15	
Calories from Fat	15	
Total Fat	1.5 g	2%*
Saturated Fat	<1 g	<3%*
Vitamin E (as mixed tocopherols)	4 mg	27%
Omega-3 fatty acids	1.14 g	†

\* Percent Daily Values based on a 2,000 calorie diet

† Daily Value not established

Other Ingredients: Capsule shell (gelatin, glycerin, water and carob).

Contains ingredients derived from Anchovy.

This product is gluten and dairy free.

Each softgel capsule of **Biomega-1000™** contains 1,000 mg of EPA and DHA, providing a natural source of the following total Omega-3 fatty acids:

EPA (Eicosapentaenoic acid) .....	570 mg
DHA (Docoshexaenoic acid).....	430 mg
Additional Omega-3 Fatty Acids .....	140 mg

**RECOMMENDATION:** One (1) softgel capsule with each meal as a dietary supplement or as otherwise directed by a healthcare professional.

### KEEP OUT OF REACH OF CHILDREN

Store in a cool, dry area.

Sealed with an imprinted safety seal for your protection.

Product # 1417 Rev. 01/18

# Why Biotics?

## 7 POWERFUL REASONS



"I have worked with Biotics Research for almost 40 years and have seen them evolve into one of the leaders in supplement manufacturing. No other supplement company goes farther than Biotics in quality control testing, nobody! The amount of testing they do to make sure your patient's get products work is amazing. I thought it would be fun to hear from some of our technical support staff and why they were attracted to Biotics." -

*Joe Buishas*

### 1. Active Component Testing

Biotics tests every raw material as it comes into the building, and then again, every finished batch before it goes out to ensure everything is biologically active. Some raw beet powder from a supplier was tested and all the different flavonoids and polyphenols that were supposed to be there, were there. But after processing and tabletting the entire batch, the testing showed that just one of the flavonoids was now missing. Maybe they compressed the tablet too tight, maybe it got too warm? Whatever the cause, they just threw out the entire tableted batch. That's how fanatical Biotics is about making sure that all the active phytochemicals are in every tablet or capsule.

### 2. Micro-Emulsions

I love that Biotics pre-emulsifies all their fat-soluble nutrients like CoQ, vitamins A, D, E, K and botanicals like oregano oil for better absorption. About 25% of people have compromised livers (especially sick people). Pre-emulsified oils bypass the liver and go right into the lymph system and blood. Blood studies have shown increases as much as 300% by pre-emulsifying nutrients like this. I have seen case after case of patients testing low in vitamin D, then taking several different competitor vitamin D products for months and not raising blood levels. Then finally switching to Biotics' vitamin D and when retested they were in optimal levels. That's how huge pre-emulsifying the oils can be, and they pre-emulsify

Vitamin A, D, E, K, CoQ and oregano oil.

### 3. Antioxidant Rich Tabletting Base

Even Biotics' tabletting base is amazing. Most companies use inert compressible sugars, starches or even chemicals as their tabletting base, that add nothing to the product. Biotics wanted to have a living food tabletting base that would dissolve just in hot water and contain antioxidants and trace elements that are deficient in the standard American diet. It's amazing, this living food tabletting base, gram for gram, is one of the strongest antioxidants on the market and comes free as part of the product. One of the best benefits of the natural antioxidants in the tabletting base is extended shelf life. Kind of on a lark, not knowing what to expect, Biotics tested their iron & vitamin C product, FE Zyme that was over 20 years old.... Even Biotics was shocked that even after 20 years, the vitamin C in the bottle almost met label claims.

### 4. Plant-Bound Trace Elements

I like that all of Biotics trace element minerals are infused directly into live plants then harvested like food. Let's take selenium as an example. Peas & lentils are grown in a liquid plant growth medium, then selenium is added to the growth medium and the vegetables absorb the selenium right into the plant. The plants are then harvested and dried at low

temperatures to preserve the enzymes, and then tableted. The trace minerals are phytochemically bound right into the plant, just like in nature, a form your body can recognize and absorb.

### 5. In-House Heavy Metal Testing

Sadly, our entire world is awash with toxins. Raw materials that come from 3<sup>rd</sup> world countries often contain heavy metals. Many supplement companies trust the raw material suppliers' certificate of assays, and just encapsulate or tablet the raw materials they receive. But Biotics does their own in-house testing on all raw material as they come in the door and they often detect heavy metals. They just ship it back! I asked the president of Biotics what raw material suppliers do with those tainted materials; and he said, "they just sell it to someone else". I asked how he knew, and he said, "that they try to sell it back to Biotics 6 months later". I asked him how he knew it was the same batch and he told me "that upon retesting, the markers for rejection are exactly the same". You might think all supplement manufacturers are testing like this, but many are not.

### 6. Testing For Solvent Residues

In order to concentrate botanicals to reach standardized amounts raw material suppliers often use solvents to extract the active ingredient. Sometimes these solvents are alcohol,

hot water or acetone. But sometimes the solvents are harsh chemicals that are on the cancer watch list and are banned by the EPA at even modest levels. These harsh chemicals should be removed during processing, but sometimes they are still present when they're shipped to Biotics. The industry does not require companies to test for solvent residues, but Biotics tests for these solvent residues and won't accept raw materials that have them. This level of purity goes way beyond what most companies are doing.

## 7. Neonatal Glands

Glandular therapy has been used for as long as medicine has been recorded. From its beginning, Biotics wanted to use glands that were as pure as possible and had the factors present to stimulate anabolic growth. So, Biotics uses neonatal glands from animals that are just a few days old instead of from older animals. For example if you were going to supplement kidney tissue to feed and repair a patient's kidney, would you rather use kidney tissue that has filtered hundreds of thousands of gallons of urine or one that is 1-3 days old and has all the nucleoproteins needed for growth. Personally, whether it is kidney, lung, liver or thymus tissue I want my patient to have the cleanest, purest, most anabolic material I can find.

## Summary

When clinicians ask me about Biotics, I like to sum it up this way. There are a LOT of supplement companies out there, many of which you would be surprised to learn, do not even manufacture their own products. But of those that do, there is a handful of very good companies, but I consider Biotics to be a great supplement company, the best! Why not make Biotics YOUR supplement company?

