

# Opti EPA/DHA Plus SPM

bioclinic<sup>®</sup>  
naturals

Opti EPA/DHA Plus SPM is a highly concentrated fish oil supplement providing the omega-3 fatty acids EPA, DHA and DPA, as well as being standardised to provide specialised pro-resolving mediators (SPMs).

## Product Overview

- Opti EPA/DHA Plus SPM has been formulated to:
  - Provide anti-inflammatory activity.
  - Support healthy cardiovascular system function and help maintain healthy blood lipids.
  - Support brain health and cognitive function.
- Provides a clinically meaningful dose of over 1000 mg omega-3 fatty acids daily.<sup>1-3</sup>
- Each capsule is also standardised to provide 45.5 mcg of total pro-resolving mediators. Specialised pro-resolving mediators (SPMs) are bioactive lipid mediators that act endogenously to promote resolution of inflammatory processes.<sup>4-8</sup>
- Certified as sustainable, wild-caught small, cold-water fish species by Friends of the Sea<sup>®</sup>.
- Features high-quality concentrated fish omega-3 triglycerides, with extraction being conducted using patented advanced technology to achieve high levels of purity without use of chemical solvents, oxygen or excessive heat.
- Exceeds international toxin limit standards for fish oil quality, purity and oxidation.
- Independently 3rd-party batch tested for over 800 environmental chemicals and toxins.
- Features Enteripure<sup>®</sup>, an enteric softgel formula for advanced targeted delivery. The softgel casing prevents breakdown in the stomach, ensuring minimal fishy aftertaste.
- Small capsule size for easier swallowing to support compliance.

## Active Ingredient

Each enteric softgel capsule contains:

Concentrated fish omega-3 triglycerides (kd-pür™)	650 mg
equiv. eicosapentaenoic acid (EPA)	312 mg
equiv. docosahexaenoic acid (DHA)	208 mg
equiv. docosapentaenoic acid (DPA)	9.75 mg



Contains No Added Gluten



Contains No Added Dairy



Contains No Added Yeast



Contains No Added Shellfish



Contains No Added Sulfites

**Warnings:** Dietary supplements can only be of assistance if dietary intake is inadequate. If symptoms persist, talk to your health professional. Advise your doctor of any medicine you take during pregnancy, particularly in your first trimester.



**Available in** 60 and 120 enteric softgel capsules  
AUST L 370695

**Directions for use:** Adults: 2 softgels, 1-2 times daily or as directed by a health professional.

**Excipients:** Gelatin, glycerol, pectin, sorbitol.

**You may also be interested in:** Opti Pure EPA/DHA 1250, CurcuSolv<sup>®</sup> 500 mg, Leaky Brain, Ubiquinol 150 mg.



NON-GMO - MASS SPEC

Documentation ✓ Lab Tested ✓



Always read the label. Follow the directions for use.

bioclinicnaturals.com.au

## Professional Education

### Omega-3 Fatty Acids and Specialised Pro-Resolving Mediators (SPMs)

Omega-3 fatty acids such as EPA and DHA, exert a wide-range of physiological effects including anti-inflammatory, cardiovascular and cognitive actions.<sup>2</sup> EPA, DHA and DPA are also needed for the biosynthesis of naturally occurring biological lipid mediators known as specialised pro-resolving mediators (SPMs). The term SPM refers to several sub-classes of bioactive mediators, including resolvins (E-series and D-series), protectins and maresins, with each SPM class having a distinct biological function. The role of these SPMs, collectively, is to help facilitate immunoresolution, a process by which inflammation is resolved and to support a return to a homeostatic state.<sup>3-11</sup>

### Inflammation and Inflammation Stages

Inflammation is not a self-limiting response as was once believed, but rather a cascade of co-ordinated events that can be divided into two active parts, the initiation phase and the resolution phase.<sup>5</sup>

**Initiation phase:** This phase is co-ordinated by several families of pro-inflammatory mediators, chemokines and cytokines. The omega-3 fatty acids exert their effect during this phase by directly and indirectly inhibiting the production of pro-inflammatory mediators.<sup>2,12</sup>

**Resolution phase:** This phase is co-ordinated by the various cell-signalling pro-resolving mediators (SPMs), which:<sup>4-11</sup>

- Drive termination of the inflammatory response.
- Regulate recruitment of pro-inflammatory mediators.
- Help clear away debris and by-products of inflammation.
- Help promote a return to homeostasis.

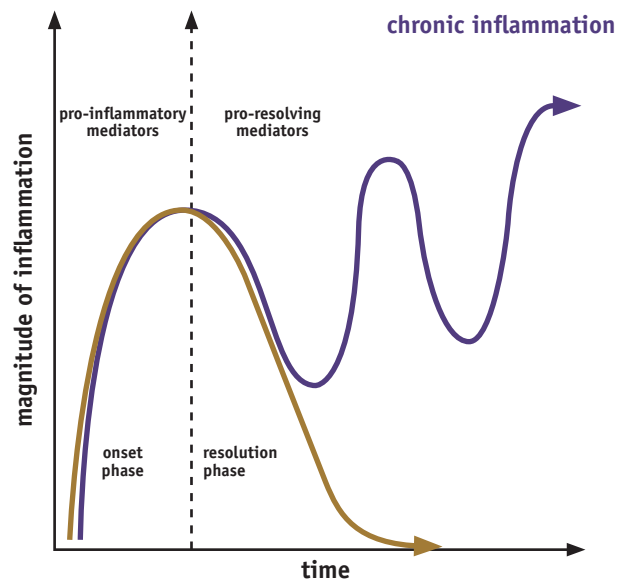
Chronic inflammation can be attributed, in part, to an imbalance between the activity of the pro-inflammatory and the pro-resolving mediators.<sup>4-7</sup> Failed, or incomplete, timely SPM-mediated resolution of an inflammatory response can result in persistent, low-grade chronic inflammation.<sup>4-8</sup>

### Inflammation and Health

Almost 50% of Australians are reported to have at least one chronic health issue,<sup>12</sup> with chronic inflammation recognised as a contributing factor for many chronic diseases.<sup>8,13</sup> Conventional management of inflammation has focused on inhibition of pro-inflammatory mediators and the inflammatory response.<sup>8</sup> Interest has now emerged in the use of novel strategies that target the resolution phase of the inflammatory response.<sup>5-9</sup> As of July 20, 2020, PubMed.gov reports > 1,150 publications for resolvins, which is one class of SPMs.<sup>8</sup>

### SPM Biosynthesis

Although SPMs are derived from omega-3 fatty acids (EPA, DHA and DPA), research suggests supplementation at normal recommended doses may not result in increased SPM activity in the body.<sup>14</sup> Omega-3 fatty acids first undergo a complex multi-step enzymatic conversion to produce SPM precursors, known as pro-resolving mediators (PRMs), such as 18-HEPE, 17-HDHA and 14-HDHA.<sup>8-10</sup> The rate and extent of formation of the PRMs appears to be influenced by an individual's health status, age, genetics, as well as other factors, with our knowledge of these influencing factors still expanding.<sup>9,10,15</sup> Conversion may also be compromised in the presence of pre-existing chronic disease, sub-optimal health or chronic inflammation.<sup>9,10</sup> The final step is a simple enzymatic conversion from PRMs to form SPMs (resolvins, protectins and maresins), facilitated by endogenous enzymes such as lipoxygenases and hydrolases.<sup>9,15,16</sup> As the in vivo half-life of SPMs is very short, direct therapeutic application is ruled out.<sup>15</sup> Supplementation with SPM precursors (PRMs) has, however, been shown to increase blood SPM concentration and SPM-mediated activity.<sup>9,15</sup> It should be noted, that while most references refer to the molecules 18-HEPE, 17-HDHA and 14-HDHA as PRMs, some interchangeably refer to these compounds as either PRMs or SPMs.<sup>8</sup>



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\*References available on request.

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