

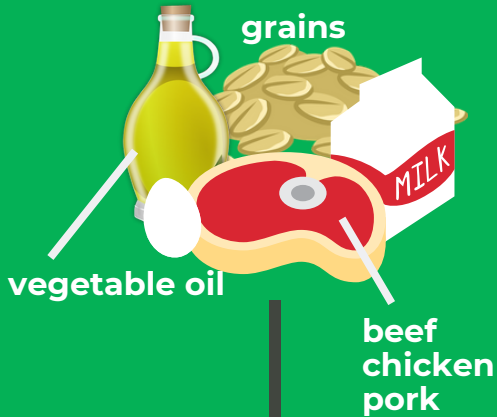
# ESSENTIAL



# omega fatty acids

Polyunsaturated fatty acids (PUFAs)

## Omega-6



linoleic acid (LA)

arachidonic acid (ARA)

RATIO TO NOT EXCEED

4:1

FOR POSITIVE EFFECTS

VS.

ACTUAL RATIO

20:1

IN STANDARD AMERICAN DIET\*

leading to

INCREASING RISK OF CHRONIC INFLAMMATION

## Omega-3



alpha-linolenic acid (ALA)

supports EPA/DHA status



eicosapentaenoic acid (EPA)

Docosapentaenoic acid (DPA)



docosahexaenoic acid (DHA)



ESSENTIAL



# omega fatty acids

EPA vs. DPA vs. DHA



## eicosapentaenoic acid (EPA)

- decreases triglycerides
- anti-depressant and anti-anxiety effects
- supports the resolution of inflammation

## docosapentaenoic acid (DPA)

- reduces platelet aggregation
- improves lipid metabolism
- supports endothelial cell migration
- supports neural health
- serves as depot for EPA and DHA
- supports the resolution of inflammation

## docosahexaenoic acid (DHA)

- decreases triglycerides, increases HDL cholesterol
- supports healthy blood pressure levels
- supports cognitive development and performance
- supports the resolution of inflammation

## THE stats

### • NHANES 2003-2008

shows majority of Americans don't meet recommended level of EPA/DHA <sup>1</sup>

• **28 MILLION** <sup>\*</sup>  
years of life lost annually worldwide to conditions related to **inadequate omega-3 intake** <sup>2</sup>

omega-3 deficiency among the **TOP 10** preventable causes of all-cause death

• For primary prevention of cardiovascular diseases, the American Heart Association recommends eating at least

**2** SERVINGS

fatty fish **per week**

which is equivalent to

**500 mg**

per day of DHA+EPA

1. Papanikolaou, 2014  
2. Byelashov, 2015  
\*approximately

# Benefits of Extended Spectrum OMEGAS

There are many different kinds of important dietary fats. It is important to balance healthy lipid intake from the entire omega family from conventional sources of food.

## omega-3

Alpha-linolenic acid (ALA)  
Eicosapentaenoic acid (EPA)  
Docosapentaenoic acid (DPA)  
Docosahexaenoic acid (DHA)



### HEALTH BENEFITS

- healthy inflammation
- cardiovascular health
- cognitive function
- precursors of endocannabinoids and specialized pro-resolving mediators

## omega-6

Linoleic acid (LA)  
Arachidonic acid (ARA)



### HEALTH BENEFITS

- healthy inflammation
- cardiovascular support

## omega-7

Palmitoleic acid (PA)



### HEALTH BENEFITS

- healthy lipid levels
- improved insulin sensitivity
- healthy inflammation

## omega-9

Oleic acid (OA)



### HEALTH BENEFITS

- cardiovascular support



# Benefits of DHA Omega 3 Fatty Acids

ACROSS  
LIFE STAGES

Omega-3 fatty acids are important starting components for the formation of special lipid mediators that help resolve inflammation.

Pregnancy



SUPPORTS A  
HEALTHY  
PREGNANCY

- improves gestation length
- may decrease risk of postpartum depression
- supports DHA levels in maternal blood and breast milk
- provides long-term cognitive and visual benefits of offspring

Infancy &  
Childhood



BRAIN & EYE  
DEVELOPMENT  
& FUNCTION

- improves visual acuity
- promotes cognitive performance
- benefits immune functions

Childhood &  
Adulthood



HEART  
HEALTH

- lowers triglycerides, blood pressure, heart rate, & platelet aggregation
- increases HDL cholesterol
- improves blood vessel function

Adulthood



BRAIN & EYE  
FUNCTION

- supports normal cognitive function
- correlated with reduced risk of dementia & Alzheimer's disease
- low levels of omega-3 associated with increased risk of age-related macular degeneration



# A Range of Options

## Available Amounts of Omega-3 Fatty Acids

### FISH OIL

Contains omega-3,  
natural metabolites,  
and other vitamins

**Prevention:**  
For dietary balance and to fill  
dietary gaps

calamari oil  
cod liver oil  
tuna oil

### REFINED FISH OIL / CONCENTRATED OMEGA-3

Key beneficial  
components are in  
higher concentrations

**Early health concerns:**  
For dietary balance and  
use in early stages of  
health issues

concentrated  
omega-3  
(EPA+DHA)

### CONCENTRATED EXTENDED SPECTRUM OMEGA-3

Biologically more active  
compounds  
Extended spectrum of  
omegas (3,6,7,9)

**Active health management**  
**with condition specific benefits:**

- Support endocannabinoid and immune systems
- Target health issues (heart disease, cognition, mood)

concentrated  
omega-3  
(EPA, DHA,  
EPA+DHA)

