Essential Fatty Acids (Oils)

Linoleic Acid (Omega-6)

18:2n-6

	Cottonseed (CA)	Safflower	Corn	Sunflower	Olive	Peanut (CA)	Canola	Soy (Gen)
Omega-6:3 ratios:	258:1	234:1	85:1	39:1	12:1	no n-3!	2:1	9:1-56:1

Alpha-Linolenic Acid (Omega-3)

18:3n-3

	Flax	Hemp	Walnut
Omega-6:3 ratios	1:7	3:1	1:2

Very Poor Conversion
1% – 2.7% Adults
0% Kids
Problem for Vegans

DHGLA
(DiHomoGammaLinolenic Acid)
20:3n-6

PGE1 (GOOD)
Prostaglandin E1
Vasodilator -
Increases blood flow

COX

BAD: Antibiotics and Insulin Increase AA by increasing D5D enzyme production
-Diabetes
-HFCS
-RefinedCarb.

Delta 5 Desaturase Enzyme

Inhibits D5D enzyme

EPA
Eicosapentaenoic Acid
20:5n-3
Cold Water Fatty Fish
Anti-Inflammatory

DRUGS:

Inhibit Cox Enzymes

Cox 1 Advil, Aspirin

Cox 2 Celebrex, Vioxx,

Cox 3 Tylenol / Acetaminophen
Depletes Glutathione in liver/kidney (↑HBP)

Blocks PGE1
Constricts Blood Flow- HBP

Arachidonic Acid
AA 20:4n-6

DHA
Docosahexaenoic Acid
22:6n-3
Cold Water Fatty Fish
ESSENTIAL FOR PROPER BRAIN FUNCTION
↑ Serotonin ↑ Dopamine

Blocks PGE2

COX

LOX

COX

LOX

PGE2 (BAD)
Prostaglandin E2
INFLAMMATION

Fibrosis

Immune System Dysfunction

Vascular Disease

Arthritis

Alzheimer's

#2 Cause of Free Radicals

PAIN

S4LT (BAD)
Series 4 Leukotrienes
INFLAMMATION
Overproduction due to COX enzyme inhibition;
Leads to: Heart attack, Stroke
Certain Breast &
Pancreatic Cancers

PGE3 (GOOD)
Prostaglandin E3
ANTI-INFLAMMATORY

S5LT (GOOD)
Series 5 Leukotrienes
ANTI-INFLAMMATORY

The Average American has an omega-6 to omega-3 ratio between 20:1 and 30:1
It should be 2:1

Source: Information compiled from Dr. Dan Murphy, (www.DanMurphyDC.com)