

Dietary Essential Fatty Acids

n-6

n-3

Corn Oil →

Linoleic acid (LA; 18:2)

α -Linolenic acid (ALA; 18:3)



FADS2 ($\Delta 6$ Desaturase)



Borage →

Gamma-linolenic acid (GLA; 18:3)

Stearidonic acid (SDA; 18:4)



ELOVL5 (Elongase 5)



Dihomo- γ -linolenic acid (DGLA; 20:3)

Eicosatetraenoic acid (ETA; 20:4)



FADS1 ($\Delta 5$ Desaturase)



Arachidonic acid (ARA; 20:4)

Eicosapentanoic acid (EPA; 20:5)



ELOVL2 or 5



22:4

Docosapentaenoic acid (DPA; 22:5)



← **Fish Oil**



ELOVL2



24:4

24:5



FADS2



24:5

24:6



β oxidation



22:5

Docosahexanoic acid (DHA; 22:6)

← **Fish Oil**