α-Linolenic acid (ALA; 18:3n-3)

\[ \Delta 6 \text{-desaturase} \]

Stearidonic acid (18:4n-3)

\[ \text{Elongase} \]

Eicosatetraenoic acid (20:4n-3)

\[ \Delta 5 \text{-desaturase} \]

Eicosapentaenoic acid (EPA; 20:5n-3)

\[ \text{Elongase} \]

Docosapentaenoic acid (DPA; 22:5n-3)

\[ \Delta 6 \text{-desaturase} \]

\[ \beta \text{-oxidation} \]

Docosahexaenoic acid (DHA; 22:6n-3)
Increasing intake of EPA+DHA

Increasing intake of EPA+DHA
EPA and DHA exposure

Membrane phospholipid composition

Raft assembly ← Fluidity

Fatty acids

Substrates for eicosanoids, resolvins etc.

Signals

Cell & tissue responses

Altered (patho)physiology

Improved health/
Lowered disease risk/
Better clinical outcome