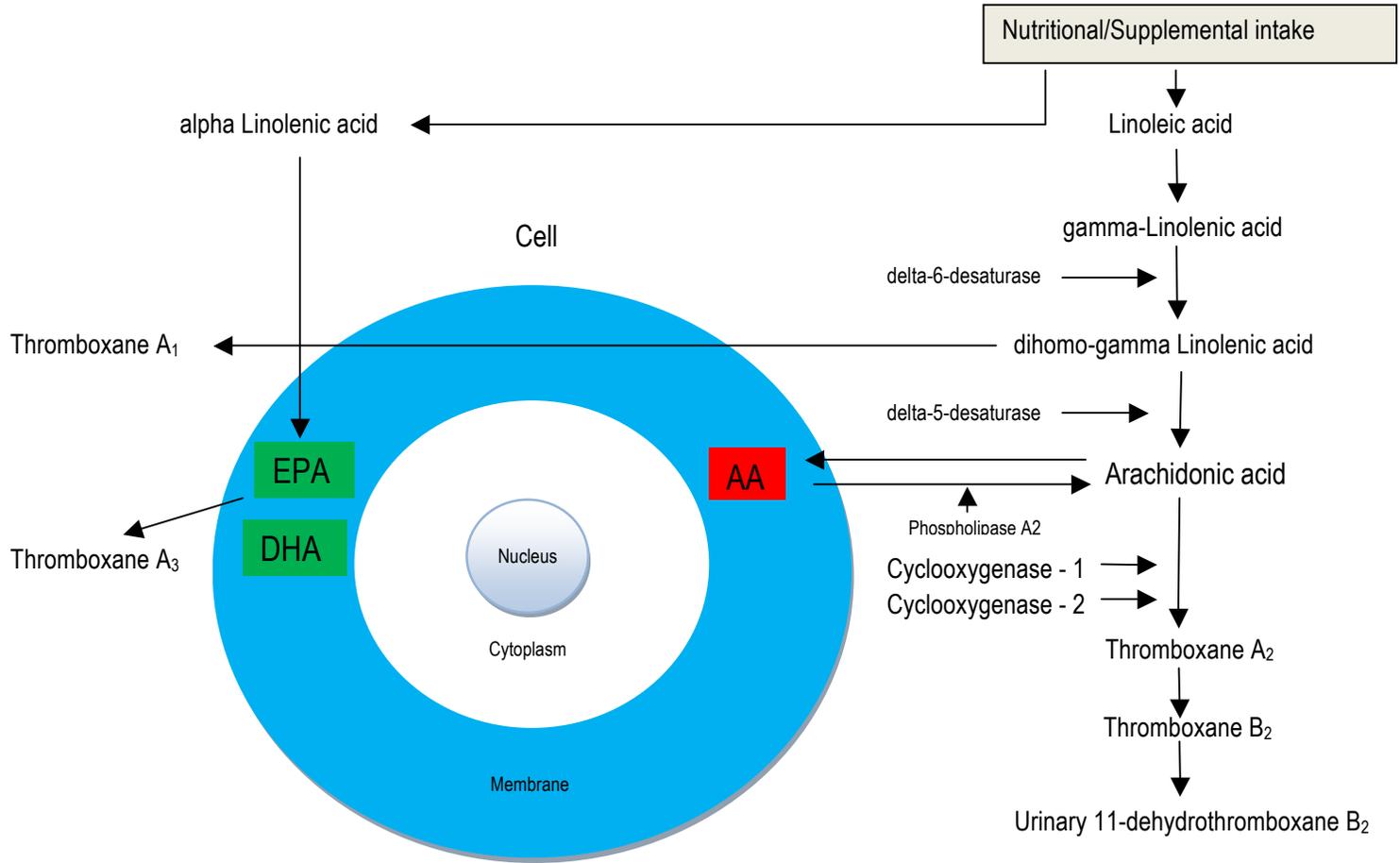


Effect of Nutrition on Chronic Inflammation

Role of Arachidonic acid



Anti-Inflammatory Pathway

Pro-Inflammatory Pathway

- Arachidonic Acid (AA) is metabolized via cyclooxygenase-1 & cyclooxygenase-2 (COX -1 & COX-2) pathways producing the pro-inflammatory prostaglandin, thromboxane A₂.
- Eicosapentaenoic acid (EPA) competes for space in the cell membrane with AA and is converted into the anti-inflammatory docosahexaenoic acid (DHA) and thromboxane A₃.
- COX 1 & COX-2 activity generates pro-inflammatory thromboxane A₂.
- The urinary 11-dehydrothromboxane B₂ test:
 - Measures systemic thromboxane A₂ production.
 - Reflects the AA/EPA (Omega-6/Omega-3) ratio.
 - Reflects the effectiveness of therapeutic measures on the thromboxane A₂ pathway.