

Since the research is about COX inhibitor the latter branch will be the field of interest since it's catalyzed by cyclooxygenase. Also denoted as prostaglandin H<sub>2</sub> synthase or prostaglandin endoperoxide synthase. The enzyme has two activities, the cyclooxygenase and peroxidase. Arachidonic acid is catalyzed by this enzyme in two steps. First of which is the conversion to prostaglandin G<sub>2</sub> (PGG<sub>2</sub>) by the addition of oxygen (cyclooxygenase activity), and then to prostaglandin H<sub>2</sub> (PGH<sub>2</sub>), (peroxidase activity). (thuresson et al., 2001), (Figure 1.6)

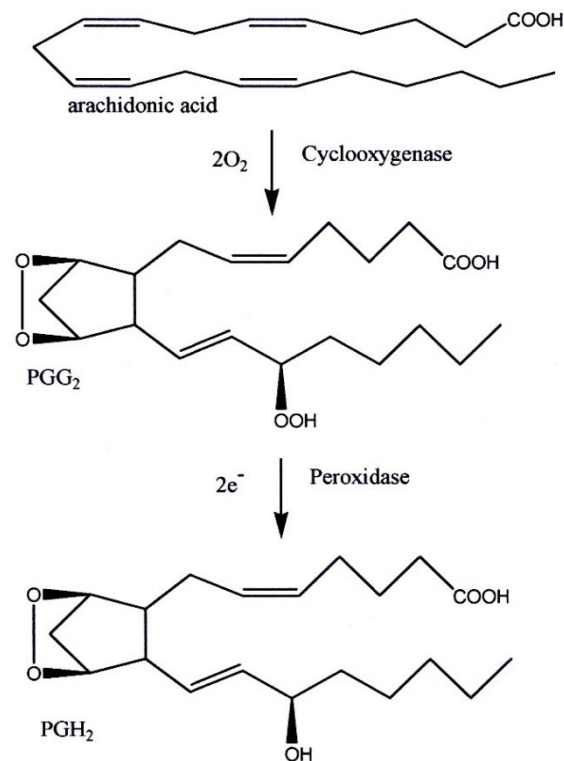


Figure 1.6 Arachidonic acid conversion to PGH<sub>2</sub>