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**Antioxidative activity of flavonoid rich extract of  
*Oenothera odorata* Jacquin on the oxidation  
of low density lipoprotein**

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There is growing interest in understanding the role and mechanisms of flavonoid as antioxidant. The antioxidative activity of flavonoid typically present in *Oenothera odorata* Jacquin was investigated in vitro using a human LDL oxidation assay. In the present work, LDL were incubated with increasing concentrations of extracts of *Oenothera odorata* Jacquin and LDL oxidation started by adding CuSO<sub>4</sub> to the media. Substances in leaves extracts of *Oenothera odorata* Jacquin are capable of inhibiting the initiation and the propagation of LDL oxidation. They inhibit LDL oxidation, monitored by thiobarbituric acid-reactive substances(TBARS), as well as modification as shown through direct measurement of electrophoretic mobility, and fluorescence. Inhibition is a dose dependent effect that becomes already apparent at concentration of extracts as low as 40 $\mu$ g/mL. Inhibition is almost complete at 80  $\mu$ g/mL. Extracts of *Oenothera odorata* Jacquin were more potent antioxidative activity than either ascorbic acid and *dl*- $\alpha$ -tocopherol.