

Penghambatan Oksidasi LDL oleh Ekstrak Air Jahe (Zingiber officinale Roscoe) Secara In Vitro

Title	Penghambatan Oksidasi LDL oleh Ekstrak Air Jahe (Zingiber officinale Roscoe) Secara In Vitro
Author Order	of
Accreditation	
Abstract	<p>Oxidative modification of LDL is believed to play an important role in atherogenesis. Water extract of ginger rhizomes exhibited antioxidative activity is higher than α-tocopherol using linoleic acid as substrate. In addition, these extract is kind of ginger extract that daily consumed so may be can be used as functional food. We investigated the effect of in vitro these extract enrichment of LDL on the prevention of oxidative LDL by CuSO_4. Plasma was supplemented with 430 or 4300 $\mu\text{g/ml}$ water extract in dimethylsulfoxide (DMSO) (10 μDMSO per ml plasma), incubated, and the LDL was isolated. Ginger extract also was supplemented on LDL was isolate, and incubated. Lag phase and malonaldehyde content was analyzed after the isolated LDL was oxidized using CuSO_4. The result showed that water extract of ginger rhizomes supplementation reduced malonaldehyde formation depended on its supplementation. Supplementation these extract on plasma (4300 $\mu\text{g/ml}$ plasma) only reduced 19,04 % malonaldehyde content, whereas α-tocopherol supplementation can reduced 26,29 % malonaldehyde formation. These extract supplementation on LDL isolate can reduced 43,91 % malonaldehyde formation. This research has shown that ginger extract is capable of protecting LDL from oxidation.</p>
Publisher Name	Faculty of Agricultural Technology, Universitas Gadjah Mada, Yogyakarta, Indonesia
Publish Date	2016-10-11
Publish Year	2002
Doi	DOI: 10.22146/agritech.13575
Citation	
Source	Agritech
Source Issue	Vol 22, No 1 (2002)
Source Page	17-21
Url	http://journal.ugm.ac.id/agritech/article/view/13575
Author	Dr Ir AISYAH TRI SEPTIANA, M.P