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PII: S0976-2884(18)30037-7
DOI: https://doi.org/10.1016/j.injms.2018.04.007
Reference: INJMS 179

To appear in:

Received date: 22-2-2018
Revised date: 13-4-2018
Accepted date: 13-4-2018

Please cite this article as: Putri Saudia BE, Murti Kisid K, Andarini S, Mustofa E, The effects of yoga exercise on lipid peroxidation and antioxidant status in pregnant women, *Indian Journal of Medical Specialities* (2010), https://doi.org/10.1016/j.injms.2018.04.007

The effects of yoga exercise on lipid peroxidation and antioxidant status in pregnant women

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ABSTRACT

Background: Yoga is an ancient form of exercise and derives from Indian culture. Numerous studies showed that yoga could control oxidative stress in the body, but the effect on pregnancy is unknown.
Objective: The purpose of the present study was to evaluate the effects of yoga exercise on lipid peroxidation and antioxidant status in pregnant women.
Material and methods: A total of sixty two pregnant women was divided into two study groups: the control group (without any treatment) and the group of pregnant women who received regular yoga exercises. Analysis of F2-isoprostane and 4-hydroxynonenal (4-HNE) was performed by using the enzyme-linked immunosorbent assay technique. Glutathione peroxidase and total antioxidant capacity were analyzed using a spectrophotometer.
Results: F2-isoprostane and 4-hydroxynonenal (4-HNE) levels were significantly lower for the group given regular yoga exercises than that of controls ($p < 0.05$). Glutathione