

**3-dimethylaminophenol-induced oxidative changes in human red blood cells**

Bożena Bukowska, Wirgiliusz Duda

The effect of exposure of human erythrocytes to different concentrations of 3-dimethylaminophenol (DMAP) were studied, with particular attention to lipid peroxidation, haemolysis, catalase and glutathione peroxidase activities, glutathione (GSH) content and hemoglobin oxidation.

Human erythrocytes were incubated with DMAP at concentrations from 10 to 300 ppm = 72-363 nmol/ml erythrocytes of 5% hematocrit, for 1 to 5 hours. The results show that the 3-dimethylaminophenol increases of the level of methemoglobin, products of lipid peroxidation and decreases GSH concentration and glutathione peroxidase activity. All these results indicate that DMAP induces oxidative stress in the cell.