

## MELATONIN IN MAMMALS – A MULTIPURPOSE COMPOUND

### Summary

Melatonin is an indoloamine of widespread distribution in the plant and animal kingdoms. N-acetyl-5-methoxytryptamine is regarded as a hormone as well as paracoid and autocoid. In mammals, melatonin is mainly synthesized by the pineal gland and its biosynthesis exhibits a circadian rhythm which depends on the light conditions and is controlled by the endogenous biological clock (SCN).

This compound exerts a number of receptor mediated actions including chronobiotic effects and very likely has a property to increase the activity of anti-oxidative enzymes. Melatonin also is able to reduce the oxidative stress in a receptor independent way through free radicals' scavenging. People commonly use melatonin as a drug reducing jet lag, insomnia and in the supportive therapy of cancer.