

# The Mpemba Effect and Melanospin

Why are physicians clueless about medicine? They have no idea how hydrogen bonding works in the hydrated proteins coded for in DNA/RNA. If they learned how to make ice cream they would learn very quickly how hydrogen bonds also explain the Mpemba effect. Might this be the key to understanding how to make DDW and measuring it in humans?

## **MELANOPSIN IS A BLUE LIGHT DETECTOR BOUND TO VITAMIN A VIA A WEAK COVALENT BOND**

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### Scavenging or Quenching Effect of Melanin on Superoxide Anion and Singlet Oxygen

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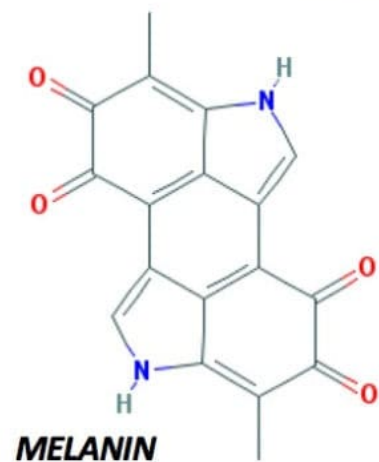
This article has been corrected. See J Clin Biochem Nutr. 2010 November; 47(3): 267.

This article has been cited by other articles in PMC.

#### Abstract

Although photoprotective properties of skin melanin have been well documented, the scavenging or quenching effect of melanin on reactive oxygen species (ROS) generated by ultraviolet (UV) radiation has not been fully elucidated. To study the interaction of melanin with ROS, scavenging or quenching efficiency of melanin was evaluated using electron spin trapping methods and fluorescence spectroscopy. Melanin efficiently scavenged superoxide anion ( $O_2^{\cdot-}$ ) and singlet oxygen ( $^1O_2$ ) generated in a hypoxanthine phosphoroxidase,  $H_2O_2$ , and halothane system. Melanin also scavenged hydrogen peroxide ( $H_2O_2$ ) and interfered with the enzyme reaction. The scavenging activity of melanin against ROS such as  $O_2^{\cdot-}$  and  $^1O_2$  is likely to be related to the photoprotective effect of melanin against skin damage.

**SUPEROXIDE IS THE ROS  
SIGNAL OF CYTOCHROME 1  
MADE OF NAD+ = TRYPTOPHAN  
PROTEIN**



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