

Other Hormones: Melatonin and Pheromones

Melatonin

Melatonin is produced by the pineal gland which is unique in that it is found in the brain but lies outside of the blood-brain barrier. This anatomical location allows the pineal gland to release melatonin into the bloodstream. For years, melatonin was postulated to regulate the sleep-wake cycle because the secretion of melatonin is highly dependent upon the light dark cycles. However, it has now been shown that the suprachiasmatic nuclei of the hypothalamus controls drowsiness and body temperature as well as other circadian processes and that melatonin may play a minimal role. Melatonin plays a crucial role in mammals, other than humans, in terms of timing for reproductive and hair growth seasonal cycles. The role that melatonin plays in humans is controversial at best. In fact, it may be best said that we don't really understand what melatonin does in humans.

Pheromones

By definition, a pheromone is a hormone that is secreted and becomes airborne to trigger social responses in other members of the same species. Throughout the animal kingdom, there are many known types of pheromones, including: alarm pheromones, food trail pheromones, sex pheromones and many others that affect the behavior of the species. Their use in plants, insects, bacteria and some mammals is well documented; their use in humans...not so much. Still, there are some interesting findings that have been observed recently. Human pheromones are difficult to study because most humans are clean and try to remain odorless, or at least cover up their natural odors. Still, female sweat (which contains pheromones) has been shown to be perceived as pleasant to men when the sweat is collected close to a woman's time of ovulation. Some women have noted more calm and pleasant feelings when sniffing sweaty jerseys of certain men. Anyway, as interesting as this subject may be, we really don't know much about pheromone activity in humans.



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