

## **Press release**

## The importance of melatonin for restful sleep

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Sleep problems such as difficulty falling asleep or staying asleep can have a significant impact on quality of life. Scientific findings show that the sleep-wake rhythm and the hormone melatonin play a central role in healthy sleep.

During sleep, the human body goes through five different sleep stages, which form a cycle lasting around 90 minutes. These cycles are repeated several times a night and vary in depth and recovery value. A distinction is made between REM phases - characterized by rapid eye movements - and non-REM sleep, with deeper sleep phases usually dominating at the beginning of the night and REM phases towards the morning.

The first sleep phase is a phase of falling asleep in which sleep is still very light. This is followed by a light sleep phase, which accounts for around half of total sleep. In the deep sleep phases that follow, sleep reaches its greatest depth, which is crucial for the recovery of body and mind. The fifth phase, REM sleep, is particularly intensive for dreaming and emotional processing. Melatonin, also known as the sleep hormone, is produced in the pineal gland and plays an important role in regulating the sleep-wake cycle. The release of this hormone is stimulated by darkness and inhibited by light. A disturbed balance between melatonin and cortisol can lead to sleep disorders and daytime tiredness.

The ideal amount of sleep varies depending on age. While newborns need up to 17 hours of sleep, 7 to 9 hours is usually enough for adults.

To improve the quality of sleep, disruptive factors such as alcohol, caffeine and electronic devices should be avoided. A regular sleep rhythm, a pleasant sleeping environment and sufficient exercise can also contribute to better sleep. It is known that melatonin is a powerful antioxidant and that the body produces it from serotonin under the influence of darkness.

During the sleep phase, the body is increasingly dedicated to the generation and regeneration of body cells such as immune cells, muscle cells, bone cells, nerve

cells, germ cells and many more. The sleep hormone melatonin initiates the deep sleep phase of the human body. During this phase, the body's glymphatic system becomes increasingly active, which can support regeneration processes. With increasing age, the pineal gland of the human body produces less melatonin and the average duration of sleep generally decreases.

Our MITOcare add-on Melatonin has been specially developed for a fast-acting reduction in the time it takes to fall asleep1. The positive effect is achieved by taking 1 mg of melatonin (1 spray) shortly before going to bed. Subjective feelings of jet lag can also be alleviated by melatonin2, which can also benefit people who work shifts.

The form of microscopically small particles used significantly increases bioavailability. The spray is sprayed directly under the tongue, whereby the effect begins to unfold within 5 minutes. This means that the effect is achieved 3 times faster than with a standard melatonin product. You can find out more at www.mitocare.de.



Source: Pexels/Pixabay

## **About MITOcare**

"Everyone deserves to be healthy".

This statement embodies the credo of MITOcare, the innovation driver in the micronutrient and functional food segment. In product development, we attach great importance to using raw materials of natural origin and bioactive substances as far as possible.

We produce in the DACH region, which contributes to a sustainable economy.

Founded in 2013, MITOcare is headquartered in Munich and currently employs around 50 people. The company is also a member of the Association of Medium-Sized European Manufacturers and Distributors of Food Supplements & Health Products (NEM). Further details about us, our philosophy and products can be found at www.mitocare.de.