# Melachron®

Melachron® is a chronobiologically based, pulsating releasing, melatonin formula to supplement the hormone melatonin, which is nutritionally deficient or increasingly needed due to certain lifestyles, to improve the time it takes to fall asleep and stay asleep, as well as to alleviate the subjective feeling of jet lag.

# **Basics:**

Melatonin is mainly produced in the pineal gland. From there it is released into the bloodstream in a specific daily rhythm and thus "informs" the entire body about the circadian (sleep-wake) phases. Since daylight inhibits melatonin production, melatonin is mainly produced during the night. In addition to the 24-hour circadian rhythm, there is also an annual rhythm based on the different light conditions during the seasons. As a result, melatonin is produced and released into the blood over a longer period of time in winter than in summer. In some animal species, this causes, among other things, the change in coat color, hibernation and readiness to mate. Certain foods also produce melatonin. It is found in foods such as milk, cherries, walnuts, bananas, eggs and dark chocolate. Certain nightshade plants such as tomatoes also contain a lot of melatonin.

Humans have hardly any melatonin day-night rhythm until the 3rd month of life. After that, the nocturnal serum levels rise and the circadian rhythm gradually develops. This is characterized by melatonin levels rising rapidly during evening twilight, then remaining at a relatively high level throughout the night, only to drop rapidly in the early morning. The highest melatonin concentrations are reached between the 1st and 3rd year of life, after which production steadily decreases. Consequently, older people no longer have as high melatonin levels at night as young people, in whom an approximately 8-10-fold increase in melatonin levels is observed during the night. Furthermore, in older people, nocturnal melatonin levels often begin to rise late at night, which can contribute to their difficulty falling asleep. At the same time, nocturnal melatonin levels drop back down to daytime levels too early, which can lead to early waking. Thus, older adults reach melatonin levels of only a maximum of 3 times the daytime levels and this only for a short time. This small difference in day-night levels in older people is often not enough to accurately communicate the change between day and night to the body and to control the internal clock.

**Sleep:** Discovered in 1958 by Dr Aaron Lerner, melatonin has been the subject of intensive research since the early 1980s. Melatonin has been shown to help individuals fall asleep, increase sleep quality and promote restful sleep throughout the night. Furthermore, it is not addictive and habituation has not been observed to date. However, some medications, including certain sleeping pills, can suppress your own production of melatonin.

**Jet lag:** Melatonin has been shown to help reset the postponement of a disrupted sleep-wake cycle that is common on international flights and among shift workers. This can help suppress the symptoms of jet lag and speed up the body's return to a normal sleep-wake cycle.

If the body does not produce enough melatonin or if the body's own production is disturbed, the hormone can be supplemented through special food supplements. A pulsatile release that ensures that melatonin is provided to the body for six to eight hours can enable restful sleep throughout the night phase without morning hangover.

# Ingredients:

#### One tablet contains:

3 mg or 5 mg (1/3 immediately releasing, 2/3 pulsatile releasing (in bursts)) melatonin (N-acetyl-5-methoxytryptamine).

#### Other ingredients:

Mannitol, Dicalcium Phosphate, Hydroxypropylmethylcellulose, SiO<sub>2</sub>.

The product is gluten-free, not genetically modified. The product contains lactose.

#### Recommended consumption:

Because of its short half-life of around 30 minutes, Melachron® should be taken immediately before bedtime but always before midnight.

## Recommended dosage for trouble falling and staying asleep:

1 tablet per day. Due to the special conditions present in very tense and/or overweight individuals (high adrenaline levels, large body volume), the dosage may have to be increased to 2-3 tablets per day to achieve the desired effect.

To stimulate the immune system, improve well-being and support a healthy cardiovascular system:

Up to 60 years: 1–2 tablets daily Over 60 years: 2–3 tablets daily

For shift workers: 1-2 tablets daily 30 min prior to desired bedtime

#### Against jet lag:

1st day: 1 tablet at 11:00 p.m. (local time at destination) 2nd day: 1 tablet at 10:30 p.m. (local time at destination) 3rd day: 1 tablet at 10:00 p.m. (local time at destination)

### Notes:

Food supplements are not intended as a substitute for a balanced and varied diet and a healthy lifestyle. Do not exceed the recommended daily intake. Keep out of the reach of children. Store protected from light and dry at room temperature.

The published information is not a cure and is not intended as a request or suggestion for selfmedication.

Although some of the above statements on individual micronutrients are derived from scientific studies, they have been categorised as "not yet sufficiently proven" by official authorities such as the European Food Safety Authority (EFSA), meaning that no positive effect can be confirmed.

The product described herein has not been conclusively evaluated by the Food and Drug Administration (FDA; USA) or the European Food Safety Authority (EFSA; Europe). This product is not intended to diagnose, treat, cure or prevent any disease.

Errors and typographical errors excepted. VBX-1-24

Manufacturer

