# P3: MELATONIN (1 IR + 4 CR)

# PEAK PERFORMANCE & PREVENTION

# **Clinical Applications**

- Support Synchronization of the Body's Daily Biorhythms\*
- Support Restful Sleep\*
- Direct and Indirect Antioxidant Support\*
- Support Healthy Immune Response\*
- Support Brain Health\*

**P3: Melatonin** (1 **IR** + 4 **CR**) is a vegetarian formula with a biphasic delivery system that releases melatonin quickly and then steadily. Melatonin is naturally produced in the pineal gland in response to changes in light exposure; it helps promote healthy sleep patterns as well as antioxidant and immune activities. P3: Melatonin (1 IR + 4 CR) can support these functions by helping to maintain normal levels of melatonin in the body.\*

All Peak Performance & Prevention Formulas Meet or Exceed cGMP Quality Standards

### **Discussion**

Melatonin is a neurohormone produced from tryptophan by the pineal gland when it is stimulated by darkness. While melatonin regulates many other hormones; its primary function appears to be regulation of the body's daily and annual biological rhythms.\*

Oral supplementation has been shown to have some benefit with regard to time to sleep onset, total sleep time, and sleep efficiency.<sup>[1]</sup> Noteworthy advantages over pharmaceutical sleep aids are improved performance upon wakening and the absence of memory impairment.<sup>[2,3]</sup> According to studies, daytime melatonin supplementation by travelers crossing time zones and/or shift workers also promotes sleep.\*<sup>[4]</sup>

Research has shown that melatonin not only fights free radicals during sleep, but also stimulates the body's own antioxidant systems. For example, it reduced harmful oxidized cholesterol (LDL) in post-menopausal women. 
[5] Melatonin's antioxidant capacity also accounts for its role as a neuroprotectant. By delivering antioxidant benefits and correcting the circadian rhythm, melatonin could support cognitive function.\*[6,7]

A decrease in plasma melatonin correlates with a decline in immune function in some individuals beginning around the age of sixty. Interestingly, lymphoid cells are an important physiological source of melatonin in humans. The hormone appears to stimulate production of T helper (TH) cells and their release of interleukin-2, gamma interferon and opiod peptides. Considering the decline in melatonin synthesis with age, exogenous supplementation with the hormone has long been of interest in anti-aging protocols. [9,10]

The addition of pyridoxine in this formula supports the biosynthesis of melatonin and may also enhance dream recall.\*

The melatonin in the tablet core is released over a 6-hour period. The tablet core contains a tableting agent, hydroxypropyl methylcellulose that works by forming a gel layer when hydrated. This gel layer acts as a diffusion barrier to control the rate of release of the melatonin in the tablet core. As the tablet travels through the intestine, the gel layer slowly erodes to release the melatonin, which then is available for absorption in the intestine.\*

<sup>\*</sup>These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Fa	cts
r Serving %[	Daily Value
10 mg	588%
35 mg	3%
5 mg	**
	35 mg

Other Ingredients: Microcrystalline cellulose, hydroxypropyl methylcellulose, hydroxypropyl cellulose, ascorbyl palmitate, silica, and coating (tapioca maltodextrin, sunflower lecithin, palm oil, and guar gum).

#### **Directions**

Take one tablet with water 20 minutes before bedtime, or as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

## References

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- 13. Voordouw BC, et.al. Melatonin and melatonin-progestin combinations alter pituitary-ovarian function in women and can inhibit ovulation. *J Clin Endocrinol Metab.* 1992 Jan:74(1):108-17. [PMID: 1727807]
- 14. Abd-Allah AR, et al. Effect of melatonin on estrogen and progesterone receptors in relation to uterine contraction in rats. *Pharmacol Res.* 2003 Apr;47(4):349-54 [PMID: 12644393]

#### Formulated To Exclude

Wheat, gluten, corn, yeast, soy, animal and dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, and artificial preservatives.

#### **Cautions**

Not for use by children under 12 years of age. Do not take when operating machinery or driving a vehicle.

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