

## **Family Medicine Clerkship Plain Language Summary Template**

**Title:** Melatonin may help you sleep better

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### **Plain Language Summary:**

#### **What is melatonin?**

Melatonin is a natural hormone produced by part of your brain. It signals to your brain that it is dark outside and time to sleep. This helps program your biologic clock and makes you drowsy. Melatonin used as a medicine is made in a laboratory. These pills are available over the counter. They can help people with problems sleeping, called insomnia.

#### **Why can't I sleep?**

You may have insomnia. Insomnia is trouble falling asleep or staying asleep. You may also feel tired when you wake up and have problems staying awake during the day. It happens to most of us at some point in our lives. There are many causes. Good sleep habits are very important. Going to bed at different times, watching TV before bed, taking long naps, and too much light or noise can all make it hard to sleep. It is helpful to avoid caffeine drinks like coffee, tea or soda in the evening. But sometimes your sleep habits are fine but other things are bothering you. Any mental health problems like depression or anxiety can cause insomnia. Stress or pain can also keep you awake. There are also medical problems like sleep apnea that can cause insomnia.

#### **Should I take melatonin?**

Melatonin helps people with primary insomnia, or people with problems sleeping that are not due to bad sleep habits, mental illness or medical issues. You should ask your doctor before trying melatonin. Your insomnia may go away if your sleep habits or medical problems are treated first. Also melatonin best helps people who have problems getting to sleep rather than people with problems staying asleep. Studies also show greatest benefit in the elderly. Melatonin decreases as we age. Elderly people often have problems sleeping. One study found that people over 60 were able to go to sleep almost 20 minutes faster than people not taking melatonin. These patients taking melatonin also had better quality of sleep and felt more awake in the morning.

## **Is it Safe?**

Although its fairly safe, some people may experience side effects. These include headache, daytime sleepiness, dizziness, depressed mood and stomach cramps. One study found no increase in side effects compared to people taking a fake pill, or placebo. This study followed patients for 6 months so melatonin is safe long-term. This study also showed no dangerous side effects of melatonin. And unlike some sleep medications that make it hard to sleep when you quit taking them, melatonin didn't have any "withdrawal" symptoms.

It is possibly unsafe in pregnant women or those who are breast-feeding. Children should also avoid it since it could effect other hormones needed for development. Melatonin can raise blood pressure in patients with hypertension. It can also increase blood sugar in diabetics so they must watch their sugars carefully. Also, melatonin should not be combined with sedatives, or other medications that cause sleepiness, including benzodiazepines, zolpidem (Ambien), and phenobarbital.

## **Types of melatonin pills**

Since melatonin is sold as an over the counter dietary supplement in America, its not regulated. The dose, ingredients and safety may vary between brands. Often the dose in these pills is larger than needed for treatment of insomnia. Smaller doses are safer and produce less side effects. A typical safe dose is 0.3-5 mg at bedtime. Melatonin is also available as a prolonged release pill with the trade name of Circadin. Prolonged –release melatonin stays in your gut longer so lasts longer. Circadin 2 mg has been approved for patients aged 55 or more for up to 13 weeks of treatment of primary insomnia in Europe.

## **Additional Resources:**

### **For more information:**

Medline Plus:

<http://www.nlm.nih.gov/medlineplus/druginfo/natural/940.html>

Sleep hygiene:

[http://www.umm.edu/sleep/sleep\\_hyg.htm](http://www.umm.edu/sleep/sleep_hyg.htm)

Up-to-Date

<http://www.uptodate.com/contents/patient-information-insomnia-treatments-beyond-the-basics>

American Academy of Sleep Medicine

<http://yoursleep.aasmnet.org/>

<http://yoursleep.aasmnet.org/Treatment.aspx?id=7>

**Key Words:**

Melatonin

Insomnia

Sleep

Sleep initiation

Sleep latency

Delayed sleep phase syndrome

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