

## Bromocriptine and Melatonin

**Hypothesis:** FMS is a disorder consisting of multiple neurotransmitter and hormonal abnormalities (ie., a neuroendocrine disorder).

**Dopamine:** Levels of this neurotransmitter are thought to be low in the central nervous system (CNS) of FMS patients.

**Bromocriptine:** A drug that acts like dopamine (dopa agonist). This drug was postulated to have two effects:  
 (1) Reduce anxiety/ stress levels indirectly by reducing a pituitary hormone called **prolactin**. Elevated prolactin levels are thought to correlate with elevated **cortisol** levels (the body's stress hormone).  
 (2) Improve sleep by decreasing RLS-or PLMS-type disturbances.

**Serotonin:** Low in serum and CNS of patients with FMS. It's required for the production of melatonin, a hormone produced by the pineal gland at the base of the brain.

**Melatonin:** Regulates the body's internal sleep-wake clock and influences the secretion cycle of many hormones. When taken orally, it may increase availability of serotonin and work as a hypnotic to "anchor" the sleep cycle.

