

“ Life is a journey where we can choose to discover and practice the personal tools that can build a foundation from which we can live the best of life has to offer. ”

THERESE SORRENTINO, LMFT

+1 916396 46 88

ThereseSorrentinoMFT.com



Seasonal Affective Disorder (SAD)

CAUSES

1. Human life for thousands of years revolved around the cycle of light. Our biological clocks regulate our circadian rhythms and tells out bodies to sleep as the day shortens.
2. Just like mammals we hibernate during the winter. SAD is more common in Northern countries. The Alaskan government pours money into researching SAD and even sponsors support groups.

GENETICS

1. 75% of females are affected by SAD. Estradiol concentrations correlate with sleepiness and hypersomnia in females.
2. Melatonin levels are regulated by the pineal gland which secretes Melatonin in the absence of light. The highest levels of Melatonin are commonly associated with REM sleep. Light exposure suppresses Melatonin secretion.
3. Cues sent by sunlight originate in the retina at the back of the eye, creating signals which pass through the optic nerve to the mid brain, setting in motion a number of chemical changes such as increase in

Serotonin necessary for a sense of well-being and regulation and suppression of the hormone Melatonin which is the factor in normal sleep patterns.

4. Being active as opposed to dormant. When one exercises, the result is an increase in Endorphin and Serotonin levels resulting in more pleasure and enjoyment.