

The Six (6) Pillars of Good Mental Health (Part 1)

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There are some basic supports that need to be in place for all of us to achieve maximum brain health (good mental health) regardless of age, gender, health or mental illness. These are the six (6) pillars of brain health: sleep, water, exercise, nutrition, humor and laughter, and social connections.

We begin this journey towards good brain health by discussing the first pillar – Sleep.

Sleep is a combination of mental states and stages which can vary according to our brain wave activity and dreaming. Sleep has four stages plus rapid eye movement (REM) sleep – that time when we dream most vividly. Stage one – begins as we fall asleep and our brain waves become regular; our breathing and pulse rate slow and our skeletal muscles relax. Stage two – our brain waves become slower resulting in a light sleep. Stages three and four – we are in deep sleep and our brain waves continue to slow with regular spikes and spindles which are bursts of brain wave activity. About ninety minutes after falling asleep we enter REM – rapid eye movement – and begin to dream. Throughout our sleep we rise and fall through the stages of sleep with most of the REM sleep taking place at the very end of our sleep.

Sleep is vital to our brain. During sleep our brains are busy regulating our hormones and our neuro-chemical production. Melatonin is one of the chemicals most affected by sleep and is produced by the pineal gland which is wired directly to our eyes. Melatonin regulates our circadian rhythms, the

body's 24 hour cycle which regulates biological and biochemical processes. When Melatonin is circulating through our blood-stream, our bodies are signaled that it is time to sleep.

Sleep helps us to conserve energy and is essential to our physical health. Our immune system becomes more active, helping our body to resist disease. The time we spend sleeping is also critical to our brain, to our mental development – especially memory, learning, decision-making and problem-solving processes. Sleep, especially REM sleep, is also critical for the absorption of new information into long-term memory. REM sleep is particularly important for perceptual learning – knowing how to act when given a particular visual cue. Problem-solving appears to be improved by dream sleep – intense dreaming during REM generates activity in those parts of the brain that process reasoning and solve problems.

Human beings are programmed toward a 24-hour cycle of sleep and wakefulness, with accompanying changes in body temperature, hormone production and other physiological processes. When we alter this clock we throw our body into disarray, undermining our memory, learning, reasoning, math figuring, understanding of complicated verbal information and ability to make good decisions.

Sleep deprivation can be costly. We tend to make more mistakes; our judgment is compromised; our emotions become raw, causing relational conflict and violence; we become more aggressive, less tolerant; we are more likely to skip regular physical activity; we are less likely to eat balanced meals; and we generally lose sharpness, awareness,

focus and our ability to live in the moment and savor it.

Not sleeping can be fatal – our core body temperature would drop to dangerously low levels and inexplicably, our body's weight would drop. If we were deprived of sleep for a week or more, we would die.

Sleep is essential to maintaining good mental health as well as your physical well-being.

The information provided here comes from the series of 6 brochures developed by Janet Frick and the MHA last year. References for this information and actions tips for good sleeping habits are included in the brochures which are available at the MHA office.

The Mental Health Association is presenting the comedy "Don't Dress for Dinner" at the Lebanon Community Theater Tuesday, March 23, 2010. A dessert social will be held at 6:45 p.m. and the play will start at 7:30 p.m. Tickets are \$20.00 and will be available at the door. This is a fund raising event and your ticket purchase may be tax deductible. Laughter is good for your mental health.

Have a healthy day – exercise your mind, body and spirit.

By Shem H. Heller, Executive Director of the Mental Health Association of Lebanon County