# HOW EFFECTIVE SLEEP IMPROVES YOUR PERFORMANCE By Paul Mracek

There has always been a mentality that surviving on minimal sleep is something to be admired. Those few that boast, "I only need 5 hours of sleep and I'm ready to go!" may not be the most productive. In fact it is counter productive. Whether it is at work, playing sports or training we should rethink how we all seem to undervalue sleep. A number of studies have shown that people who have under slept are less likely to take on challenges in the work place, the sporting field or during training. They end up taking on simpler tasks and avoiding those tasks that require in depth focus and attention. People with less than 7 hours of sleep are shown to have less creative solutions to problems

and generally slack off in group tasks and team activities or projects.

The challenge in this day and age is that we are working longer hours, commuting further from our homes and sleeping less. This sleep loss epidemic is affecting our overall health and wellness, and what is little known is that getting less than 7 hours a sleep at night will considerably affect your productivity, your focus, your efficiency and creativity in whatever you do?

# **Sleep Basics**

So, there are 2 principal stages of sleep, one is non-rapid eye movement sleep or non-REM sleep and the other is REM sleep which is commonly known as dream sleep.

Non REM sleep is further divided into 4 separate stages, i.e. stages 1,2, 3 & 4 and it is in the deep stages of sleep in stages 3 & 4 where a lot of the body replenishment takes place, which is great for the cardiovascular system and the metabolism. The current research is looking at not just about the quantity, its also about the quality of sleep, i.e. is it deep and refreshing sleep. Quality can be just as detrimental as a reduction in the total quantity of sleep.

# **Sleep and Performance**

The key to performance improvement in any sport whether it is at an elite level or not is repetition to build up the motor skills and brain memory (rather than muscle memory); as we often say practice, practice, practice. Sleep is an important building block in increasing performance by building up the numbers of repetition of learnt skills.

Laboratory studies have shown that the same memory sequence that was learnt while awake the brain replays while you are asleep but at a speed that is 20 times faster.

So, the better the practice of the learnt skills, the better the memories will be when you wake up and test them the next day. You actually improve on those memories and skills while asleep.

The old saying of 'practice makes perfect' should read 'practice with a good night of sleep is what makes perfect'.

The results from testing with motor skill learning athletic performance has shown that the next day you come back with 20 to 30% increase in terms of your skilled performance than you were at the end of your practice session the day before.

Sleep provides skill learning, memory improvement and also body recuperative benefits. The other side of the coin is also true, for example if you are getting 6 hours of sleep or less, your time to physical exhaustion drops by up to 30%.

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#### Cont previous page:

Consider that you are preparing for a 10 round fight and then you only get 6 hours of sleep the night before, you are going to be physically exhausted by round 7 rather than round 10.

So, if you are thinking about burning the midnight oil to meet a deadline or get ahead of the game?

Think again before driving home after a long days work in the office.

# So, if you are thinking about burning the midnight oil to meet a deadline or get ahead of the game? Think again!

Not only is your time to physical exhaustion reduce, but also the lactic acid builds up quicker, and the ability of your lungs to actually expire carbon dioxide and inhale oxygen decreases the less sleep you have.

### Sleep and Risk Of Injury

Peak muscle strength, physical vertical jump height and peak running speed are all impacted by the amount of sleep. The less you have the worse a person performs in these areas.

During the studies of these attributes one of the surprising factors was with injury risk when looking at athletes across a season and then plotting how frequently they got injured and correlated to the amount of sleep they had, i.e. 9 hours, 7 hours, 6 hours (or less) sleep and it surprisingly was an almost perfect linear relationship. In simple terms those who were getting 9 hours of sleep versus 5 hours it was almost a 60% increase in probability of injury risk during a season.

Clearly there are a number of other factors that come into play when talking about the issue of all these parameters however sleep is one major factor that we often either ignore or undervalue in the increasing demand for your attention and time.

Sleep researchers have proven that the cognitive impairment you experience when you're tired is the same as being legally drunk. You're chances of being involved in car accident will skyrocket!

The same goes for taking work home with us. Laptops and smart phones mean we can essentially do our jobs from almost any location with a WIFI connection. But just because you CAN do something, doesn't necessarily mean you should. Making sleep and relaxation time a priority does not make you lazy and unmotivated, it makes you smart and ambitious.

If diet and exercise are the pillars of good health, then effective sleep is the foundation with which they sit upon. Sleep is the greatest legal performance enhancing and skill learning drug that most people have got access to for free, and are probably neglecting in business, sport and in life.

#### References:

# Sleep Image: www.serresponsavel.com/sleepaffects-athletic-performance # Studies and results from 'Why We Sleep, Unlocking the Power of Sleep and Dreams...By

Unlocking the Power of Sleep and Dreams...By Matthew Walker, PHD' Trainer & Master Coach - Kotan Method & NLP;

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