Healthy body healthy mind – Part 1 Sleep

The Latin saying “mens sana in corpore sano,” which translates to “a healthy mind in a healthy body,” is more relevant now than ever.

I’ve tried to make the distinction in previous articles between “Mental Toughness” and “Physical Toughness”; Mental Toughness is not about having bulging biceps & triceps and being able to do one-handed push-ups.

However, there is an expression which says, “healthy mind, healthy body” and, personally, I think we can also say “healthy body, healthy mind”. Our physical state and our mental state are intrinsically linked; if I am tired and hungry, I will probably have difficulties staying focused, I will become irritable and maybe not have the energy to take risks.

This and my next few articles will concentrate on some physiological and physical things that we can do that will help our Mental Toughness.

In this article I am going to take a look at sleep and its contribution to our Mental Toughness.

Sleep has been around as long as us; virtually all animals sleep, from tigers & lions who sleep around 14 hours per day through to horses & giraffes who sleep for around 2 hours per day.

I've heard people say that, "sleep is for wimps" and that, "we can do without it". The truth of the matter appears to be that we can't do without it; sleep patterns and the associated physiological and biological processes have been "programmed" into us since the dawn of time. Up to about 150 years ago, most human beings daily cycle was closely associated to heat & light – bright and warm during the day and dark and cold at night. It was only towards the end of the 19th Century that we started to have access to warmth and light at night – our internal physiological and biological processes haven't evolved as fast as our external environment.

We spend about one-third of our lives asleep, in what many see as a passive and dormant state. However, far from being wasted time, from the moment we slide into unconsciousness, a whole raft of functions takes place to make sure that we get optimal benefit from our nightly rest. Even though activity in the surface of the brain (the cortex) reduces by around 40 per cent while we are in the first phases of sleep, the brain remains highly active during later stages of the night.

Our sleep "cycle" is in fact part of the larger "Circadian cycle"; a natural, internal system designed to regulate our feelings of sleepiness and wakefulness over a 24-hour period. This cycle is controlled by an area of the brain that responds to light, which is why humans are most alert while the sun is shining and are ready to sleep when it's dark outside.

Following your body's natural cues regarding when to go to sleep and wake up helps you to keep your circadian rhythm balanced; a change in your schedule (like if you stay up late putting in long hours at work one day or sleep in on a Saturday), can disrupt your body clock.

So, what actually goes on while we are sleeping?

A typical night's sleep follows a pattern of alternating REM (rapid eye movement) and NREM (non-rapid eye movement) sleep

throughout a typical night in a cycle that repeats itself about every 90 minutes

- During the first stage of sleep, we are in a kind of “in-between state” between being awake and falling asleep – this is light sleep

- Stage two is the onset of real sleep, we start to becoming disengaged from our surroundings, our breathing and heart rates are regular and body temperature drops (so sleeping in a cool room is helpful)

- Stage three is the deepest and most restorative sleep, our blood pressure drops, our breathing becomes slower and our muscles are relaxed. Blood supply to our muscles increases and human growth hormone (HGH) is released such that tissue growth and repairs can take place

- Stage four, also known as the REM stage, first occurs about 90 minutes after falling asleep and recurs about every 90 minutes, getting longer later in the night. It is during this stage of sleep that we dream; signals are sent to turn off motor neurons in the spinal cord, causing temporary paralysis and so preventing us from acting upon our dreams. During this stage energy is diverted to the brain and body in preparation for the next day.

Sleep plays an important role in managing our hormones

During our waking hours, the body burns oxygen and food to provide energy. This is known as a catabolic state, in which

more energy is spent than conserved, using up the body's resources.

This state is dominated by the work of stimulating hormones such as adrenaline and corticosteroids. However, when we sleep we move into an anabolic state – in which energy conservation, repair and growth take over. Levels of adrenaline and corticosteroids drop and the body starts to produce human growth hormone (HGH) which enables maintenance and repair of muscles and bones – body tissues are renewed faster during sleep than at any time when awake.

Some hints and tips for a good night's sleep

Stick to a Consistent Sleep Schedule

- Try to go to bed at the same time every evening and get up at the same time every morning. This will help your body to work out a healthy sleep routine. It may be tempting to grab some extra shut-eye on weekends, but doing so can throw off your body clock during the week.

Spend the right amount of time in bed

- Most adults need about 8 hours sleep every night. Some of us require more and some of us less. Many poor sleepers spend much more than 8 hours in bed and this makes fragmented sleep a habit. Except if you have lengthy sleep requirements, limit your time in bed to no more than 8.5 hours. If you often take hours to fall asleep, go to bed later.

Wind down and relax before going to bed

- Have a buffer zone before bedtime. Sort out any problems well before going to bed. This may mean setting aside a

"worry time" during the day. Use this time to go over the day's activities and work out a plan of action for the next day. Find a relaxation technique that works for you and allows you to calm yourself down.

Bed is for sleeping

- Television, computers and other distractions can interfere with your sleep. It is better not to sleep with your TV or computer on; light can throw off your body clock by confusing your brain into thinking it's still daytime. Artificial blue light (the type that laptops, tablets and cell phones emit) is the worst culprit.

Eating & drinking

As tempting as it may be to wash down a duck cassoulet with a bottle of Caramany wine just before going to bed, it's not going to be conducive to a good night's sleep. The alcohol does allow healthy people to fall asleep quicker and sleep more deeply for a while, however, it reduces REM sleep; which means less dreams and, maybe more importantly, less energy going to the brain and body in preparation for the next day.

When you wake up

Expose yourself to bright sunlight in the morning; the closer to the time you get up, the better. Have your coffee outside, for example, or eat breakfast by a sunny window. The light on your face will help you wake up. A quick outdoor stroll in the morning will give you enough sun exposure to signal to your brain that it's time to start the day.