

Dr.Zsuzsanna Fajcsak

PhD, MA, MA, MSc, CNS

One of the best remedies to recover your body is sleep. Isn't it interesting how much you can sleep while you are sick, have the flue or a cold? Interestingly the only thing the body allows you during those times, is to sleep.

The body is very smart. It will let you fill the "bowl" – to load your immune system to the max, then it will bring you symptoms as warning signs. After the symptoms if you still don't listen the body will knock you out, so you don't move and interfere with the recovery. Due to busy schedule, most people "has no time to sleep", or sleep in the wrong hours. Some people ignore the sign of fatigue for way too long until the immune system cant handle anymore and put you to bed. When the body is under heavy stress, the immunity can't fight illness-causing bacteria and we get sick.

When and how much do we need to sleep?

Normally the body needs 8-hours of sleep a day, which need to be timed to the night – dark hours. There are some people who need 9 hours, but there are people who are just fine with 7 hours of sleep.

The awake-sleep cycle is regulated by hormones. Cortisol is the hormone keeps us active during the day while the sun is up and melatonin produces at night and keeps us sleep. Melatonin is also a signal for other hormones, which recover the damaged tissues and activate the immune system to fight illness-causing invaders. Melatonin starts to produce about 3 hours after the sunset. The first four hours – 10.00 pm to 2.00 am the body's physical recovery is in process. During the second four hours the body concentrates on the immune psychological (brain) recovery.

If you go to bed too late, e.g. 1.00am, your body had only 1 hour of physical recovery. Due to the short physical recovery the muscle are still tired, and when you wake up in the morning you feel like "truck ran over" your body.

If you go to bed on time, but need to get up too early, the lack of rest will affect your thinking. E.g. waking up sat 3.00-4.00 am, your body had only 1-2 hour of psychological recovery and the brain is still tired. This is when your body feels OK physically; but it is very hard to think.

What happens when you don't sleep enough?

Sleeping too little over-time slows down tissue regeneration and your will get sick and later to develop degenerative disease. Lack of sleep contribute to gaining weight and unable to lose it.

The good news is, if you pay attention to just how much loaded are you and start deloading—by giving the body the certain amount of rest recovery time you can avoid being knocked out and will get healthy body weight.

Making up for missed sleep

In Mediterranean countries people tend to go to bed late, after midnight, however mostly and seemed still have the lowest rate of degenerative disease. Their secret is not only in their diet of high plant origin fat (olive oil, avocado, nut and seeds), low glycemic index carbohydrate (parboiled-pasta, spaghetti) and fiber from legumes (beans, peas, lentil) but their afternoon siesta. During the afternoon nap both melatonin and growth hormone produce and provide substantial recovery, making up for the missed sleep the night before.

Let me explain the art of afternoon nap. Cortisol is produced on the 12 hours cycle, from morning till night every day. Melatonin, however runs on a 12 hour cycle – the middle of your sleeping hour and 12 hours later in the afternoon. The 12-hour cycle was found when scientist evaluated what happens physiologically and hormonally during afternoon naps or siesta.

I am pretty sure all of you experienced being tired generally in mid afternoon to the point of needing coffee or eat extra sweets to stay awake. Roughly this is the time when you need that nap or rest time. We can calculate this time, and you can precisely schedule it to your daily routine. The calculation as follows:



- 1. Calculate the mid-cycle of your previous night sleep. Bed time midnight awake 6.00 am; the mid-cycle is at 3.00 am
- 2. Add 12 hours to the mid-cycle of your sleep
 - 3.00 am = 12hrs = 3.00 pm
- 3. Take away one hour and add one hour to this number to get a 2-hour window
 - (will give you a time sometime in the afternoon).
 - $3.00\ pm-1\ hour$ = 2.00 pm ; 3.00 pm + 1 hour = 4 pm; the 2-hour window is between 2.00 pm 4.00 pm.

During this two-hour-window you have an opportunity to take a nap, take it easy and meditate or at least get away and stay quiet for 20 min. Your body will feel refreshed because the produced melatonin and growth hormone made some tissue repair. The body needs only 20 min of this rest. If you sleep longer it may affect your night sleep.

It is way worth to ask your boss to allow you this time to rest and you stay 20 min longer. Some highly efficient corporate offices actually allow employees to rest. It is worth to nap since you will be more efficient, more productive making fewer mistakes.

What if your line of work does not allow for this naptime? Sleeping 12 hours every four days will help you too. The least you can do is to make sure you get your 12-hour sleep on the weekend.

Benefits of taking a nap

Besides feeling better having more energy being more productive and efficient there are physical sign you will experience. Your skin will be smoother, and have less brake out. Dark circles will be gone under your eyes. Your eyes shine and radiate vitality.

It is more economical to take short nap then buying coffee and some sugar snacks to pick you up and drop you off again. It will not only keep your valet in shape but your body too. Taking a nap breaks the constant raving anxiety by cortisol during our stressful day and promote tissue recovery. The recovered tissue will keep your metabolic rate up providing a simple way to keep our body energy expenditure high especially when it is a concern for those wanting to loose weight. The more tissue you can preserve the higher your metabolic rate. Normally 30% of the lost weight is muscle.

Besides the regular resistance training adequate sleep is the best way to preserve your muscle – the only active tissue, which consumes energy while you are at rest.

Cancer – lack of recovery

Your body produces cancer cells everyday. However when you allow for appropriate rest and sleep the body's immune system will repair these cells. The decision is yours. Now you know the consequences of not giving your body enough recovery time and eventually braking down by degenerative disease. Second choice is paying attention and investing a little time into your self now and take some time to rest. I believe it has deep truth that in order work and play hard you need to rest hard.

Do you dare to rest? The psychology of rest

What is holding you back form taking that first step and take a nap?

I like to bring you a first-hand experience to show the possible root cause. As an athlete it was the hardest thing to accept psychologically that I am injured and I need to take time off to recover. I used to disregard little pain and work through it until I could not train anymore. The signs were there, but I did not listen until my body talked to me loud enough to listen. Was it worth it to wait so long? Of course not. Being off for 6-8 months – while my reoccurring stress fractures or tendonitis healed thought me the lesson. It would only take a few days of time off to recover if I listened. I did not listen because I though the only way to get ahead is to keep working hard. And if I take off a few days I will lose what I have gained and I will fall behind.

The fear of "Falling behind" is a big issue and now this representing most of the performance driven and type A people. I say "dare yourself" and rest. It is not going to be easy in the beginning because you don't know how to rest. Meditation and breathing exercises will help your mind occupied in restoration work (will discuss this in a later issue).

Your days are filled up with appointments and meetings and the more things you accomplish the more you schedule in your days. It is difficult to slow down from the busy schedule, because you "feel" you are falling behind.

Rest – Regeneration - Sleep Recovery from stress and relief for Type A



Lets wait a minute and answer the question: what exactly do you "fall behind"? Keeping up with the "Jones"? I think you can get ahead of the "Jones" by actually cutting back on how much things you do a day, which is sometimes spending time on straighten out our mistakes caused by your rushed lifestyle. You can get a head by resting because your body will be stronger; your body will be more efficient and needs to take less time on accomplishing task.

We all learn from our mistakes. However,

we don't live long enough to make all the mistakes, so it is better to pay attention to other peoples' mistakes now and learn from it.

Nap is also considered as work. When you nap you are still working on your health so you can make more money or play hard as well as do that for a long time in good health. It also helps to slow down to think about people who got sick from over work. Your decision is yours right now. Which way do you chose, to go get sick and old or preserving your youth.