



SLEEP

THE FAT OFF

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Sleep the Fat OFF



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INTRODUCTION

WHY IS GOOD SLEEP SO IMPORTANT?

First and foremost, I welcome you on this new journey of bettering yourself – by deciding to improve your sleep and achieve a successful long term weight-loss.

At the end of the day, your first step is a step towards a healthier you and most importantly, a happier you.

Sleep the Fat Off is going to help you do all of these things simultaneously and much more.

The quality of your general health and weight-loss can be greatly improved with better sleep. And particularly, deep, slow wave sleep. I will come back to that shortly and explain why thoroughly.

To get there, I will give you concrete tools and every information that is needed to ensure you can implement them long term.

This book is going to deepen your understanding about how your body works and how to improve certain mechanisms with ease.

To be successful in this new adventure, I highly advise you to follow this plan step by step.

Do not try applying every single advice at once.

Instead, implement one change at a time until it becomes a part of your routine.

This is how you will succeed on this journey – by making small changes and progressively improving many levels of your well-being.

Furthermore, by improving your overall health, you will see a positive impact in many different ways.

In a matter of weeks, you will see that your stress levels are far more manageable. If you suffer from anxiety and/or depression, it will be a lot easier to deal with.

Your energy levels will soar and so will your cognitive abilities.

And of course, bit by bit, your sleep will get better and the excess weight will melt.

To put it simply, your health will get a high-end upgrade – which will in turn help you achieve any goal you set your mind to!

So, how do you get started?

First, we are going to focus on how sleep can be improved and ensuring you get that deep, slow wave sleep I mentioned earlier.

This is the kind of sleep that will get YOU where you need to be.

What's that about?

Overall, we spend about a third of our lives sleeping.

Research is clear on this point, **sleep is a matter of survival** and consists in four crucial stages.

First, you nod off gently, your brain waves slow down and this is basically the process of going from consciousness to sleep.

Then, your heartbeat and breathing slow down, your body temperature decreases and your eyes cease to move – getting you ready to enter the wonderful realm of deep sleep.

This stage, the third one, **deep sleep**, is characterised by the slowest heartbeat and breathing. Your muscles are completely relaxed and it's rather hard to wake up from it.

Finally, the last stage, REM sleep, kickstarts the awakening process by making your eyes move rapidly from one side to another, making your brain waves as alert as needed, making your breathing erratic and faster, and your heart rate and blood pressure higher.

There are several cycles of REM sleep during the night (every 90 minutes actually!)

However, the last one is by far the most powerful and is usually accompanied by vivid dreams.

So, why is each one of these stages important for your health?

Basically, when we are asleep, many structures of our brain activate to ensure a peaceful night and then, to fill our dreams with sound, images and sensations.

The last REM sleep stage activates your amygdala, a part of your brain that allows you to process your emotions.

Researchers and scientists alike are clear on the fact that without sleep we can't maintain proper brain function. And of course, if the quality of sleep deteriorates, so does brain function.

With unhealthy sleep, it becomes harder to learn and create memories, to focus on tasks and to be generally alert.

A good night of sleep ensures that we are alert, comfortable, calm, collected, happier and far

more energetic!

And that's just the tip of the iceberg!

Good sleep on the regular boosts our immune system, reducing the risk of disease. Particularly, diabetes, high blood pressure, heart disease, chronic illnesses and even, the common cold.

In the long run, unhealthy sleep, can also have a significant impact on the mind.

Healthy sleeping habits ensure that your mental health is as good as can be and greatly reduce the risk of anxiety and depression.

Finally, good sleeping habits ensure a balanced hormonal health – a major factor when it comes to weight-loss and weight management.

As you can see, sleep is essential and yet, its importance is often understated.

So, how do you get that gracious sleep that babies enjoy and all of the benefits that come with it?

Let's dig in together, shall we?!

It's time to discover the secrets of a wonderful night of deep sleep and shiny health!



The Relationship Between Sleep & Weight Loss

1. Melatonin, Serotonin & Low Tryptophan

A Major Factor to Achieve Deep Blissful Sleep

Deep sleep is crucial to achieve and maintain good health.

But it all starts with a very important messenger – melatonin.

Before the existence of electricity and the wonderful light bulb, our sleeping patterns were very simple. We simply were awake during the day and started nodding off as soon as the sky got darker.

In other words, our sleep was very much linked to our exposure to light and darkness.

For instance, being exposed to light stimulates a part of our brain called the hypothalamus.

In the hypothalamus, our biological clock called the suprachiasmatic nucleus will signal to other parts of the brain that control hormones, body temperature and other vital functions, whether we should be wide awake or start to feel sleepy.

So, as soon as the day starts, the suprachiasmatic nucleus will start to raise our body temperature and stimulate certain hormones such as cortisol (which is released when stressed or when we need to be alert).

However, when darkness arrives a new hormone enters in play – melatonin.

Melatonin is made by the pineal gland, a pea sized gland found above the middle of the brain.

During daytime, the pineal gland is pretty much inactive and as soon as darkness reigns, it suddenly turns ON and begins to produce melatonin.

Melatonin is released in the blood and as a result, we progressively start feeling less alert and sleeping becomes far more enticing. (1)

However, modern living doesn't do much favours for our normal biology.

When we introduced bright lights and numerous bright gadgets in our homes, we inhibited the natural production of melatonin. Even street lightning can disrupt its production.

As such, the first step to re-establish normal sleep, is to create a dimly-lit environment at night time and switch off all gadgets a solid one hour and half or ideally, two hours before falling asleep. Also, investing in quality light blocking curtains or blinds may be a necessity.

Interesting fact about...dreams:

If you want to remember your dreams, write them down as soon as you wake up.

Within the first 5 minutes of awakening, 50% of your dream is forgotten.

Add an extra 5 minutes and you will have forgotten 90% of it.

Sleep, Serotonin and Low Tryptophan Levels

You now know how to create an environment that favours sleep. Later, I will provide additional tips with activities that favour sleep and are fun to do!

Nonetheless, let's focus on something else that also majorly affects our sleep – mental health.

And more specifically, one neurotransmitter – also known as a brain's messenger – called serotonin.

Often referred as the neurotransmitter of well-being and happiness, serotonin modulates many different functions from cognition, to learning, to memory and...sleep.

Serotonin plays an important role in our well-being and indirectly, our well-being plays a role in how well we sleep.

If you have ever been depressed, or low you know exactly what I am talking about.

Researchers have found that serotonin levels decrease significantly when depressed, stressed or anxious. On the other hand, depression, stress and anxiety increase hormones such as cortisol. (2)

And cortisol, the hormone of stress, is particularly useful to stay...alert.

As such, it's no surprise that low serotonin levels and high levels of cortisol mess with natural sleep rhythms. Moreover, low serotonin levels make it particularly hard to reach a state of deep sleep and by now, you know how important deep sleep is in order to improve your health.

One way to naturally improve this is with tryptophan – an amino acid and a precursor of serotonin that can be found in certain foods or in a supplement form.

However, once again our body doesn't make it easy to use tryptophan, if it isn't particularly happy or healthy.

Cytokines, regulators of certain mechanisms such as infection, inflammation and immune responses, can make matters worse when it comes to tryptophan assimilation into our bodies.

So, even, if you do have enough tryptophan in your body, cytokines can quite literally deplete tryptophan levels and deregulate major neurotransmitters such as dopamine – a neurotransmitter that plays several important roles in the brain and body. (you may also know dopamine as the neurotransmitter of love and desire) (3)

Interesting fact about sleep:

Have you ever felt a sensation of falling while being half asleep and jerking yourself awake?

This phenomenon is called "hypnic jerks" and is entirely harmless.

We don't really understand why they occur but they tend to be more frequent with caffeine, anxiety and late night physical activity.

They also tend to decrease the older we get.

2. High Levels of Cytokines

Way Too Many Cytokines and Not Enough Tryptophan, What Can You Do?

Clearly, high levels of cytokines are not a good thing and don't do much to help us sleep any better.

These high levels are usually the result of disorders such as anxiety, chronic stress and/or depression and to simplify this, high levels of cytokines equals high levels of inflammation. (4)

And inflammation impacts the body and the mind. Once again, the effects of mental health are very powerful and their impact goes far beyond the mind.

Let's go back to sleep now.

If your body has particularly high levels of cytokines that means that your tryptophan reserves are probably depleted or quite low.

In other words, if you find yourself in this situation, your current mental health is making it harder for you to have normal levels of serotonin and dopamine, two key neurotransmitters for healthy mental health AND good deep sleep.

And when it comes to getting out of that vicious circle, there are many things that can be done. But as you might have guessed, it all starts by addressing everything that can be improved in your current lifestyle.

This goes from stress management, to better sleep, an increase of exercise or quite simply, an improved diet.

And the combination of positive changes will progressively lower high levels of cytokines (and inflammation), making it easier for your body to function as it should.

Furthermore, the addition of effective strategies and certain supplements will come in handy to help you in this journey.

I will come back to it VERY soon!

Interesting fact about sleep and food:

By far, sleep deprivation is more dangerous than food deprivation. The first one will kill you first.

So, make sure to get enough Zzzz.

3. Low Leptin Levels and Other Hormonal Mishaps

Unhealthy Sleep, Satiety and Hunger

Sleep and weight are largely controlled by hormones.

And lack of sleep or insufficient sleep can directly lead to weight gain.

For instance, leptin, a hormone produced by your fat cells, reduces appetite and tells your brain that you are full.

Moreover, leptin also tells your brain that there is enough fat in storage and no more is needed.

In overweight and obese people, leptin levels are incredibly high.

So, in theory when it comes to overweight people, they should eat less and lose weight, right?

Unfortunately, in this case, leptin doesn't work as it should. Not unlike insulin resistance (the premises of type 2 diabetes), the syndrome of leptin resistance appears in overweight people.

Thus, there is no more signalling to your brain that you are full and consequently, the brain doesn't realize if there is enough energy stored or not.

In essence, your brain believes you are starving.

Similarly, unhealthy sleeping habits also mess with leptin levels. When you are sleeping, leptin levels increase, telling your body there's no need to feel hunger.

However, lack of sleep depletes your leptin levels, which tells your brain that you don't have enough energy to function. So, once again, not unlike with leptin resistance, your brain tells you that you are hungry. Even if you don't actually need food. (5)

One of the best things to do to improve leptin resistance or low levels of leptin is to get enough quality sleep (deep sleep), to exercise regularly, to avoid inflammatory foods and eat anti-inflammatory ones (which will also reduce a high level of cytokines). You will find anti-inflammatory foods in the Best Foods chapter.

Another hormone that is vastly regulated by sleep and excess weight is ghrelin.

Ghrelin controls hunger.

When your stomach is empty, your body releases ghrelin.

Nonetheless, lack of quality sleep and extra pounds can deregulate ghrelin levels.

For instance, studies have shown that after eating a meal, ghrelin levels in obese people only decrease ever so slightly. As a result, the brain doesn't receive a strong "stop eating" message – which is why it is so easy to overeat and thus, continue on piling on the pounds. (6)

During sleep, ghrelin levels decrease, as you don't need to be hungry.

However, sleep deprivation leads to high levels of ghrelin – which will signal your body that you are hungry and that it needs calories. (7)

Once upon a time, these mechanisms allowed us to survive when there were food shortages. But nowadays, it's pretty much a moot point since food is readily available for most people.

In order to improve your levels of leptin and ghrelin, try to aim for your optimal night of sleep (some people may need 6 hours while others will need 9).

Try modulating your "going to bed" hour to figure it out and then, stick to it. Even on week-ends.

Finally, remember to dim lights a couple of hours prior to going to bed (and electronic gadgets), avoid caffeine or alcohol (which are both excitants) and avoid exercising three hours before bed time.

Interesting facts about sleep:

- A cat spends two thirds of its life asleep.
- A giraffe needs to sleep an average of 1.9 hours per day.
- The tennis-man Roger Federer sleeps between 11 and 12 hours a day.
- While golf player Tiger Woods only needs a modest night of 4 to 5 hours!

So, find out what works best for you, as it may not be 8 hours.

Insulin, Human Growth Hormone and Sleep

As you have just learned, sleep quality effectively affects hormonal health and it does not stop at ghrelin and leptin levels.

Let's get down to it because the two following hormones are crucial for your present and future health.

Insulin and human growth hormone (HGH) are intimately linked, as they play antagonist roles against one another.

If one is elevated, the other one is low.

Insulin pulls out nutrients out of cells and regulates blood sugar levels – while HGH elicits muscular, skeletal, neurological and overall cellular growth.

Quite clearly both hormones are indispensable to our bodies.

So, how can they work together if they antagonize each other?

Here's where sleep enters in this story..

Healthy, deep sleep stimulates HGH while reducing blood sugar levels – which in turn reduces the need for insulin altogether. (8)

And the major part of HGH secretion occurs during sleep. As such sleep is a MAJOR actor in cellular regeneration and quite literally, good sleep keeps the years away.

Or at the very least, it keeps your body and appearance as youthful as can be!

How To Lose Weight Easily

While Also Improving Sleep

1. What Foods to Avoid

Let's focus a bit more on the weight-loss aspect of this e-book and more specifically, on the foods promoting weight gain and increasing the risk of disease, such as type 2 diabetes, high blood

pressure, cardiovascular disease and many other diseases that are best avoided.

To simplify this, here is a chart of “naughty” foods. These foods shouldn’t be a part of your everyday diet.

But if you eat them once in a blue moon, it’s fine, as long as you don’t overindulge.

Fried Foods	Chips (aka crisps), French fries, onion rings, fried chicken (etc.) are all very tasty foods. However, they are also all incredibly high in calories, pretty much devoid of any nutritional value and to top it all, frying food can create carcinogenic substances called acrylamides . Prefer baking to frying, or shallow fry your food. Ideally, gentle steaming is the best option to preserve nutrients. (9)
Sugary Drinks	If sodas and juices are part of your daily life, whether you are overweight or not, you may want to reconsider your drinks. Sugary drinks have been clearly associated with weight gain and catastrophic health effects (diabetes comes to mind). (10) Moreover, they can also quickly add a LOT of calories to your daily diet and your brain doesn’t quite register that fact. So, you just end up drinking extra calories, full of sugar without feeling satiated.
Processed Carbohydrates (carbs)	White rice, pasta and bread are not your friends, whether you want to lose weight, maintain your current weight or just be healthy. For instance, two daily slices of white bread daily have been linked to a 40% higher risk of weight gain and being overweight. (11)
Pastries, Cookies & Cakes	When it comes to sweet baked goods, I am mainly referring to the industrial kind. These are packed with sugar, refined flour and quite often, trans fats (one of the most harmful kind). Furthermore, they quickly add up calorie wise and don’t necessarily do a great job at filling you up. If you have a sweet tooth, indulge in fruits, dark chocolate and once in a while, bake yourself a nice treat with healthier ingredients (or find a decent baker).
Ice Cream	This very decadent and creamy dessert is also incredibly high in calories and loaded with sugar and fat. A small portion every now and then is fine but who really eats a small portion?! I don’t. So, instead consider making your own ice cream with a sugar substitute such as erythritol or stevia, Greek yogurt and frozen fruit. Just mix it all and ta-da, you’ve got some low-calorie delicious ice cream!
Fast-Food	Kebabs, pizzas, hot dogs, burgers and other fast-food items are all very popular choices. Particularly, after a long week of work. However, these “foods” are particularly high in calories and are usually loaded with unhealthy ingredients such as refined flour, sugar (yes, sugar can hide in strange places) and processed meats.
Pre-made Meals	Industrial pre-made meals, found at the fresh, canned or frozen section are usually one of the worst offenders in the list of terrible foods for your health. They are loaded with trans fats (cheaper than better quality fats), sugar (for the taste), quite often refined grains and to top it all off, a long list of dubious food additives for a longer shelf-life. (12)

<p>Breakfast Cereals</p>	<p>Many brands of breakfast cereals are branded as “healthy”. However, most brands can pretty much write anything they want with little to no fact checking at all. Breakfast cereals are packed with refined grains and sugar. A great combination to increase type 2 diabetes risk, heart disease and metabolic disorders. If you prefer a sweet breakfast, rolled oats (porridge) are an excellent option or for a lower carb count, opt for a chia seeds pudding.</p>
<p>Candy and Most “Healthy” Bars</p>	<p>Candy bars (even the ones branded as healthy) tend to be packed with sugar, oil and refined flour. Pretty much everything that is bad for you, all at once! Furthermore, candy bars are highly calorific and have little to no nutritional value. Instead, prefer nuts and dried fruits. Or make your own actually healthy bars with ingredients such as oats, dates, nuts, nut butters, raw chocolate, bananas, etc.</p>
<p>Sweets and Sugar Derivates</p>	<p>This one will be short as you may expect! So, basically sugar is very quickly metabolised by our bodies and anything that isn’t used as energy straight away, ends up as fat around your waist. Overindulging in sugary treats can also significantly increase the risk of type 2 diabetes and metabolic disorders. Finally, sugar is just one of the many names of sugar. So, make sure to avoid foods containing the following: glucose, sucrose, corn syrup, dextrin, diastatic malt, glucose syrup, maltodextrin, fruit juice concentrate, golden syrup, invert sugar, refiner’s syrup and dextrin (while they are many more, these are the worst offenders).</p>
<p>High-Calorie Coffee Drinks</p>	<p>Yes, you know what I am talking about here... While delicious, these expensive drinks are also quite “expensive” when it comes to our health. An average frappuccino can contain up to 50 grams of sugar, while a caramel swirl frozen coffee can literally pack up to 900 calories! Thus, if you really can’t live without your coffee, drink it black or with a little whole milk and some stevia or erythritol for sweetness. Moreover, if you fancy extravagant coffee drinks, you could add a little vanilla extract, cinnamon or a little bit of dark chocolate in your (much healthier) coffee drink!</p>
<p>Alcohol</p>	<p>This one isn’t about stopping alcohol intake. It’s about choosing your alcohol wisely and being conscious on how many calories are found in ordinary boozy drinks. One of the worst offenders is beer, particularly light beers that are usually packed with extra sugar (for taste once again). Similarly, sweet cocktails tend to pack a lot of calories. So, if you want to watch your weight, have a glass or two of white spirits, wine or quality whisky. And of course, do remember that each one of your alcoholic drinks contain empty calories. (13)</p>

What most of these foods have in common is how highly processed they all are. You will usually find insane amounts of sugar, unhealthy fats and refined grains in these foods.

When in doubt, check the label. Remember that the first ingredients in the list are the ones that are present in the highest quantity.

If you have a doubt about an ingredient, do a quick search on your smartphone.

Finally, you may think I am taking away most foods but I assure you that I am not.

You will find that there are many tasty foods out there and it's just a matter of knowing what to choose.

And that's what we are going to talk about now!



2. Best Foods

Now that you know what shouldn't be on the menu, let's discover the foods that can make you lose the weight and help you sleep better (and deeper!)

The foods you eat are definitely going to affect your sleep and weight-loss.

When it comes to weight-loss more specifically, it will be mainly about quantity (mind you quality is also important).

Nonetheless, it's basically a game of eating slightly less calories than what you need in order to force your body to dig into its own fat reserves.

Finally to go back to sleep, by improving your sleep, you will optimize your weight-loss. As you might remember, leptin (satiety hormone) and ghrelin (hunger hormone) levels will regulate themselves.

Moreover, sleep will ensure that ghrelin levels are normal, which will in turn inhibit fat storage.

Now, with this very important reminder, let's take a look at the things that will make you lose the weight AND sleep better.

Leafy and Green Vegetables

Your greens can be delicious (when cooked right) and more importantly, they will make sure your body works as it should.

For instance, leafy greens such as spinach, kale, cabbage, watercress or collard greens are packed with fibre – essential to help you feel fuller and for healthy bowel movements.

Additionally, they contain a significant amount of vitamins, minerals and antioxidants – a combination that will help your body lose the weight while providing it what it needs to function.

Finally, leafy greens are rich in iron.

Iron is essential to form red blood cells – aka the carriers of oxygen. Also, an iron deficiency (which is rather common) can disrupt sleep. (14)

PS: While I have put an emphasis on green and leafy vegetables – which should be abundant in your diet – it doesn't mean that you shouldn't eat other vegetables like: cruciferous such as Brussels sprouts, broccoli and cauliflower, root vegetables such as turnips, carrots, sweet potatoes (prefer it to a normal spud to lose weight) and of course, any other seasonal vegetable or fruit you can find in your local supermarket or market if there is one nearby.

Nevertheless, eat fruits with moderation as they contain fructose, which is a form of sugar, albeit a natural one. But to lose weight, remember not to overdo sugar.

Healthy Protein

No matter what, proteins are essential to build cells, period. So, you can't live without them.

However, should you be vegetarian or vegan, there are sources of protein that do not come from animals.

So, protein wise try to prefer quality to quantity. These days most animal products are not necessarily very safe to eat or...the animals aren't particularly well treated.

Cheap animal production will usually mean that their meat is packed full with antibiotics – which comes with various health risks and also plays a major role in our current antibiotic crisis. (15)

Instead, support local ethical producers that let their animals roam wild. Spot promotions and freeze them for later.

When it comes to fish, the ocean isn't particularly clean either. To minimise your own internal pollution, limit your fish consumption to two times a week and prefer smaller fishes.

When it comes to dairy products and eggs, organic always applies. Your health will thank you.

Finally, whether you want to limit or have stopped your consumption of animals for ethical reasons, make sure to eat plenty of legumes such as chickpeas, lentils, kidney beans, Lima beans, black beans, etc.

Additionally, quinoa is a healthy carb alternative that also happens to be rich in protein.

Alternatives To Refined Carbohydrates

White rice, bread and pasta may be off the menu but that doesn't mean that all carbohydrates are excluded.

Nonetheless, for weight-loss purposes, you shouldn't eat more than about ¼ of a (normal sized) plate of carbs per meal.

Here is a list of various complex carbohydrates (that will give your body long-lasting energy and far more nutrients):

- *Amaranth*: High in fibre and a great source of protein, this is a must to reduce animal consumption and decrease inflammation levels. (16)
- *Barley*: Barley is high in fibre and contains probiotics, which are healthy bacteria that will nourish your own healthy gut bacteria.
- *Buckwheat*: A great alternative to rice, that can also be used as flour (ideal for people intolerant or sensitive to gluten).
- *Brown rice*: Unlike white refined rice, brown rice has a high fibre content and actually contains minerals that will help you get a better quality of (deep) sleep.
- *Farro*: This delicious nutty tasting grain is easily digestible and packed with fibre. Depending on where you live, it can be referred as emmer, einkorn and spelt.
- *Millet*: This grain provides a good amount of protein and is also great to lower the risk of type 2 diabetes. (17)
- *Quinoa*: This meatless grain contains high amounts of protein, vitamin B, folate, iron and zinc. (without gluten either). Overall, quinoa is a great and incredibly nutritious addition to any diet! Finally, quinoa may be a great food to reduce cardiovascular disease and overall mortality. (18)
- *Sorghum*: This gluten free grain is extremely versatile, you can eat it as porridge, flour or even use it to do a mock-up version of popcorn with it.
- *Oats*: Oats will make delicious breakfasts with some extra fruit and cinnamon.

Tip: Avoid eating carbs during your rest, chill and quiet days. Carbs essentially provides us energy

and they can also be found in vegetables and fruits – which will be sufficient sources of carbohydrates during inactive days.

Healthy Fats, Herbs & Spices

Reducing your calorie intake to lose weight shouldn't rhyme with bland and sad meals.

Healthy fats are indispensable to nourish your cells and your brain – consequently, healthy fats are VERY important to ensure a good night of sleep and good overall health.

Specifically, omega-3's fatty acids will ensure a good secretion of melatonin, the key hormone to promote sleepiness. Lower levels of omega-3's have been associated with low levels of melatonin in the bloodstream. (19)

Omega-3's are commonly found in fatty fishes such as tuna, sardines, salmon and also, in egg yolks.

Moreover, these three foods also contain vitamin D, another nutrient that deeply affects the quality of your sleep.

For vegans and vegetarians, a daily supplementation of omega-3 will be needed.

So, where do you find more of these healthy fats?

Pretty much the following:

extra virgin olive oil, cold pressed coconut oil, organic butter, cream and cheeses, organic lard, canola oil, nut oils (such as walnut oil), MCT oil, nuts, seeds; nut butters, full fat organic yogurt, 70% or more dark chocolate, avocados

When it comes to spicing up your life, make sure to have a few of these basics:

Allspice, cinnamon, cloves, coriander seeds, nutmeg, paprika, cardamom, cayenne pepper, cumin, garlic powder, ginger powder, turmeric, basil, oregano, rosemary, bay leaves and thyme

Tips to cook like a pro:

- Start with simple dishes, don't try complicated recipes with thousands of different ingredients.
- Focus on cooking easy dishes (simple recipes can be found online) and on cooking them right.
- After that, you can start expanding your culinary horizons and gradually add a little challenge!

3. Stress Management

Stress can significantly disrupt numerous hormones (particularly, leptin, ghrelin, cortisol and insulin levels).

In the world of health, high levels cortisol are far, far from ideal for good deep sleep and weight-loss alike!

Cortisol is produced by your adrenal glands (located above your kidneys). While cortisol is essential for various bodily functions such as energy production (e.g. when waking up), muscle strength, thyroid activation, etc. – cortisol also plays a major role in sleep and weight-loss.

As I mentioned it earlier, cortisol is released during the last stage of sleep to wake us up.

However, chronic stress can affect cortisol levels during sleep – which will in turn affect the quality of sleep.

Similarly, high cortisol levels also happen to be nefarious for weight-loss. ([20](#))

Basically, high levels of cortisol signal to your body that something bad is happening.

Upon receiving that signal your body goes into full survival mode. First, it releases adrenaline, a hormone that will make you extremely alert and eliminate the desire to eat.

Then, when adrenaline wears off, cortisol kicks in to suppress non-vital functions.

So, while this is particularly useful in the event that you need to survive, it's an absolute disaster if it happens repeatedly (with chronic stress and/or anxiety).

High levels of repeated stress will make your body think that you need all the energy you can possibly get. And as a result, you will end up craving high calorie foods such as carbs, sugar and fat.

So, here are a few effective strategies to get your stress under control and limit cortisol release:

- *Improving Sleep:* I know, I had to start with the obvious. By improving sleep, you will naturally be able to manage your stress and other emotions much easily. So, once again, good deep and regular sleep is the key to excellent health!
- *Eat Relaxing Foods:* Brazil nuts are high in selenium, a mineral that reduces inflammation levels (goodbye high levels of cytokines). Reducing inflammation has been linked with lower levels of stress, anxiety, fatigue and depression. 3 to 4 nuts are enough to get your daily fix of selenium! [\(21\)](#)
- *Chill Supplements:* As mentioned earlier in the healthy fats chapter, omega-3's are key to improve brain function and they also have an impact on stress levels. Consequently, make sure to eat plenty of fatty fishes or invest in a quality supplement. Also, vitamin D can have a major impact on mood as well as sleep. The best way to get your vitamin D is to expose yourself to sunshine at least 20 minutes without protection during the warmer months and then, supplement with vitamin D3 the rest of the year (5000 to 10 000 UI per day). [\(22\)](#)

Furthermore, tryptophan, a precursor of serotonin is going to be your partner to regulate mood and reduce anxiety levels. But, tryptophan can do much more for you. Check the chapter Natural Remedies to discover all the fascinating properties of tryptophan!

- *Exercise:* Physical activity is one of the best tools there is to manage stress. Research has found that any form of physical activity will have a stress relieving effect. And that also includes hoovering, taking the stairs and walking! [\(23\)](#)

- *Connecting the Mind & Body*: Breathing exercises, mindful meditation, yoga, tai chi and qi gong are great practices to calm your mind and to find solutions to whatever is bugging you. Similarly, certain artistic hobbies such as painting, playing an instrument, drawing and writing can also have a calming effect and can help you deal with your stress.

4. Intermittent Fasting

The latest weight-loss/ health craze is intermittent fasting and frankly, for once, this one deserves it!

To put it simply, intermittent fasting restricts your eating window during the day and makes you "fast" for what's left of it.

For example, you could have an eating window of 8 hours and fast for the 16 hours reminding.

This type of approach allows you to have a better control over food quantities and snacking.

Furthermore, this practice also allows you to lose weight more easily.

By reducing your eating window, you will tend to consume less food and as such, less calories.

So, in practice, there are different methods to fast, let's discover them:

<p>The 16/8 Method</p>	<p>This is the example I just mentioned but it can be tweaked depending on your own preferences and lifestyle. You can start eating at 10 am and finish your dinner by 18 pm. Or you can start later on. In other words, you do you. Additionally, the 16/8 method can also turn into 18/6 method or the 20/4 method. If you want to venture there, decrease your eating window progressively.</p>
<p>The 5/2 Diet</p>	<p>Intermittent fasting takes many different shapes and this one may be more practical for those who only want to fast for two days. So, basically you eat healthily for 5 days and then, reduce your calorie intake to 500 calories for two days.</p>

	Tip: Use online calorie calculators to figure out your calories.
OMAD	OMAD – or One Meal A Day – is a pretty self-explanatory way of fasting. In other words, you eat one meal a day and that’s that. This fasting method is more advanced and it’s preferable to ease yourself into it by doing the 18/6 method and decrease your eating window gently.
Alternate Fasting	When it comes to alternate fasting, you can go full on fast for a day or two per week and then, eat healthily every other day of the week. This method is also interesting to boost your metabolism, decrease inflammation and deal with emotional eating. (24)
Spontaneous Fasting	If your lifestyle doesn’t fit the traditional structure, this type of intermittent fasting may be for you. So, quite simply, you eat when you are hungry and you don’t when you aren’t. You don’t fancy dinner today then, don’t eat. Not hungry waking up? It’s fine too. We have finally debunked the myth that breakfast is the most important meal of the day. (25)

Fasting also offers a break for your body. Our bodies weren’t made to continually eat. If anything, they do enjoy a little bit of fasting to focus on improving other functions.

So, don’t hesitate to give your digestive tract a rest every now and then.



5. Natural Remedies

When it comes to the world of supplements, it's easy to get lost. They are abundant and everywhere.

However, not every supplement or natural remedy does what is advertised.

So, instead of chasing windmills, let's have a look at supplements that will REALLY improve your sleep and your weight-loss.

Natural Remedies and Supplements to Improve Your Nights

Tryptophan & 5-HTP (aka oxitriptan)

The best and safest way to boost your serotonin levels is with the amino acid tryptophan.

Increasing tryptophan intake can improve stress levels, anxiety, depression, ADHD, memory, concentration, learning, issues with binge eating, weight-loss and...of course, sleep. (26)

Tryptophan is an essential building block for serotonin, a neurotransmitter that plays the wonderful

role of elevating our mood!

Research has found that tryptophan supplementation is as effective as antidepressant drugs to treat depression. (27)

Moreover, increasing tryptophan intake also has a great positive impact on cognitive abilities. Your brain will be more alert, your memory and concentration will both steady.

When it comes to sleep, tryptophan also happens to be a building block of melatonin. So, more tryptophan equals falling asleep faster, deeper and longer sleep, and less chances of awakening during night time.

So, where do you get your tryptophan fix?

Most sources of tryptophan are found in animal products: meat, seafood, eggs, poultry and dairy products.

Other vegetal sources also contain decent amounts of tryptophan: leafy vegetables, seaweeds, soybeans, cauliflower, asparagus, sunflower and sesame seeds.

However, there's an issue: by eating them alone you paradoxically drop both your levels of serotonin and tryptophan. This is caused by protein synthesis inhibiting the production of tryptophan and serotonin. (28)

But no problem comes without a solution. To increase your serotonin levels and make sure tryptophan stays in your body, eating small portions of carbohydrates (without any protein) allows tryptophan to pass the brain barrier and boost serotonin levels. So, a breakfast with carbs and no protein, and later a small carb snack does the trick.

If you are vegetarian, vegan or would prefer to supplement, take your supplement at night time with a small carb snack to make sure tryptophan gets where it needs to be!

Similarly, 5-HTP – aka oxitriptan – is another precursor of serotonin. This amino acid can also help

you increase serotonin levels, improve your sleep and reduce your appetite at once!

However, some people do report some side effects with 5-HTP, such as nausea, diarrhoea, vomiting and stomach pain. So, if you haven't tried it before, start with a small dose to see if your body tolerates 5-HTP well.

IMPORTANT:

Tryptophan and 5-HTP (oxitriptan) supplements are both compounds that will increase serotonin levels. If you take antidepressants, sleeping pills or any other medication, consult your doctor beforehand.

In the case of antidepressants, the combination of tryptophan or 5-HTP and antidepressants can cause a very grave disorder called serotonin syndrome – which is potentially life-threatening. (29)

So, if you take ANY medication, make sure to get the approval of your doctor before starting with these two supplements.

Herbal Remedies to Relax the Body & the Mind

Chamomile tea, valerian root, ginkgo biloba, lavender and passion flower are great plants to ease you into a wonderful night of sleep.

Make sure to choose quality sources for your herbal remedies and follow the instructions provided.

Valerian root can help you fall asleep faster and will improve sleep quality.

Lavender has a calming effect that can be ideal to improve sleep.

Ginkgo biloba may aid sleep, relaxation and reduce stress.

Special mentions for:

- *Glycine*: This amino acid is helpful to improve sleep quality (3 grams are recommended before going to bed).
- *Magnesium*: This essential mineral also plays a very important role in relaxation and sleep quality. A simple deficiency could affect your sleep quality.

- *L-Theanine*: Another amino acid that increases relaxation and improves sleep (100 to 200 mg are recommended before bed time).

Nonetheless, make sure to only try supplements ONE at a time. That way you won't have any surprise side-effects and you will be able to figure out what works best for you.

This doesn't apply to minerals and vitamins. You can safely consume several of them at once.

Natural Remedies and Supplements to Accelerate Weight-Loss

The previous supplements will indirectly help you with weight-loss, now that you know how intimately linked sleep and weight are.

But in the very large and wondrous world of supplements, many things can also directly target and accelerate weight-loss.

So, let's have a look at our best contenders:

- **Caffeine**: I am probably not teaching you anything new, caffeine is pretty much found in most weight-loss pills. And for good reason, caffeine boosts metabolism by 3 to 11% and increases fat burning up to 29%! However, avoid caffeine supplements, these can be dangerous. It's recommended to get your caffeine fix with coffee (4 cups maximum daily) and/or tea. (30)
- **Green Tea Extract**: I just mentioned that tea contained caffeine. So, that fact in itself will boost weight-loss but green tea extract also contains a very interesting compound called EGCG. EGCG increases the activity of norepinephrine, a hormone that promotes fat burning. Additionally, green tea consumption (as a tea or the extract) can decrease depressive symptoms. (31,32)
- **Cayenne Pepper (& Other Chillies)**: Cayenne pepper is a commonly found spice in most kitchen cabinets. However, did you know that the active compound of this chilli pepper, capsaicin, has very interesting fat burning properties? Research shows that capsaicin slightly boosts metabolism and has a direct on ghrelin, our hunger hormone. Capsaicin effectively reduces ghrelin levels, which in turn reduces appetite. (33)

- Turmeric: Another common spice, especially in a deliciously vibrant curry, also possesses interesting weight-loss properties. Studies have found that curcumin, the main active compound found in the spice, can enhance fat loss, belly fat and increase weight-loss by up to 5%. Finally, it has been shown that the association of black pepper, fat and turmeric makes curcumin even more effective! So, get ready for curry night or make turmeric milk if you aren't a fan of curry. (34)
- Cumin: Last but not least, another rather common spice, can effectively decrease body weight and body fat. An eight-week study reported that adults who consumed a cumin supplement three times a day lost an extra 2.2 pounds (1 kg) compared to the placebo group. (35)

So, if that doesn't make you want to spice up your life, I don't know what will! ;-)

[6. A Very Special Zzzz Drink](#)

This chapter will help you get a handle on boosting your diet with "superfoods" and supplements.

In other words, superfoods are simply foods that are very rich in nutrients (minerals, vitamins, fatty acids, antioxidants, protein, etc.). Nutrients that are going to be essential to replenish and improve your health.

So, I thought...why not create a recipe that quite literally packs a bunch of superfoods together?

...While also making it delicious!

Here it is!

"Super" Hot Cocoa

A recipe packed with superfoods to boost your day and ensure a peaceful night of sleep

Ingredients (for two cups):

.2 cups | vegetal milk (coconut, almond or hazelnut are great for this recipe)

.2 tablespoons | raw cacao powder (without added sugar)

.1 teaspoon | ground dried reishi mushroom (or alternatively maca powder)

.¼ teaspoon | organic turmeric

.¼ teaspoon | freshly ground black pepper

.½ teaspoon | ground Ceylon cinnamon

.1 tablespoon | organic coconut oil

Optional: 1 tablespoon | raw honey (unpasteurized) or for a lower carb option: add 1 teaspoon of erythritol or xylitol* (both are alcohol sugars that aren't entirely absorbed by our bodies and are safe to use)

* Xylitol can have laxative effects, use it sparingly.

Directions:

Add your milk into a medium-sized pot and bring to a boil. Gather all the ingredients and start by adding the cocoa powder into your milk. Reduce the heat and add the powdered reishi mushroom (or maca powder), organic turmeric, freshly ground black pepper, cinnamon, coconut oil and if needed, the sweetener of your choice.

Whisk thoroughly, until all ingredients are incorporated in your milk of choice.

For best results, drink it in the evening (an hour or two before bed time).

Discover the Amazing Benefits of...

Raw Cocoa

First used by the Mayan civilization of Central America, cocoa has since travelled the world.

And besides the fact that it is delicious when turned into silky smooth chocolate, cocoa also packs a big healthy punch!

Cocoa – particularly raw cocoa – is rich in polyphenols, a type of antioxidant that reduces inflammation levels and blood pressure, and also improves blood flow and blood sugar levels.

Regular consumption of cocoa can improve brain function and specifically, mental performance. A must if your job requires a lot of mental power.

Finally, cocoa can have a positive effect on the mood thanks to its content in flavanols, a precursor of tryptophan (an essential compound to produce serotonin, the neurotransmitter of happiness).

As such, raw cocoa will help you deal with stress better, improve your overall health, reduce your risk of type 2 diabetes and boost your brain power!

Reishi Mushroom

This powerful mushroom is very well known in Japan and it's starting to make its way towards the Western world.

Reishi mushrooms are commonly used to boost the immune system. It is suspected that they reduce inflammation levels and also positively alter genes in white blood cells (key actors of your immune system).

These Asian mushrooms are a great tool to reduce fatigue, anxiety and depression. Thus, improving your chances of a better night of sleep.

Additionally, reishi mushrooms decrease blood sugar levels, reducing the risk of type 2 diabetes and seem to increase "good" HDL cholesterol while decreasing triglycerides. Thus, improving overall cardiovascular health too.

Turmeric (& *Black Pepper*)

Turmeric is so much more than an essential for lovely curry! It's also an absolute unit when it comes to the properties it contains.

In south-east Asia, turmeric has been used for thousands of years as a spice and, as a medicinal plant.

Recently, research has confirmed what south-east Asians already knew, turmeric is loaded with beneficial medicinal properties.

Turmeric contains active compounds called curcuminoids, one of the most important ones being curcumin.

Curcumin is the main active ingredient of turmeric and possesses very strong anti-inflammatory properties.

Moreover, curcumin boosts brain function, significantly reduces the risk of depression and neurodegenerative diseases (such as Alzheimer's), and improves concentration and memory.

However, eaten by itself, curcumin isn't that well absorbed by the bloodstream. But where there's a will, there's a solution...

Piperine, a compound found in black pepper improves the absorption of curcumin by a whopping 2000%!

As such, the combination of turmeric and black pepper is a must to enjoy a maximum of positive benefits!

Ceylon Cinnamon

Cinnamon is a delicious spice that is used for both, sweet and savoury dishes. A must in any kitchen!

However, cinnamon is more than a culinary enhancer, it's also been used for its medicinal properties for thousands of years.

And when it comes to its beneficial properties, cinnamon is loaded with antioxidants. It contains numerous polyphenols, which are a great tool to keep inflammation levels stable.

You will easily find Cassia cinnamon, the most commonly available and used variety of cinnamon.

However, if you want to get the best benefits out of cinnamon and can afford it, go for Ceylon cinnamon instead.

In a study from 2015, both Ceylon and Cassia varieties were tested. **Ceylon cinnamon showed the most interesting results to fight chronic inflammation.** Nonetheless, Cassia cinnamon also packs a healthy anti-inflammatory punch! (36)

Also, cinnamon has interesting heart protective properties, it can improve insulin sensitivity, lower blood sugar level and consequently, significantly reduce the risks of type 2 diabetes.

A Guide to Great Deep Sleep (& Weight-Loss)

Things You SHOULDN'T Do

1. Drinking coffee: Even an afternoon cuppa of dark coffee can remain in your system for several hours. And this could easily impact the quality of your sleep. Prefer tea in the afternoon and herbal teas in the evening, especially camomile, valerian root, passion flower and lavender!

Tip for men: Don't drink too much liquid before going to bed, as it may increase your chances of waking up to go to the bathroom at night. This is particularly true if you are an elder gentleman suffering from prostate issues.

2. Drinking alcohol: I know this is a controversial one and I am definitely not advising to drink in the morning. However, it's been proven that alcohol before bed time can be very disruptive to your sleep cycle and negatively impact your last REM stages. So, while alcohol may not be great for a good night's rest, an occasional drink (with moderation) won't hurt (much)! ([37](#))
3. Eating Cruciferous Vegetables: Broccoli, cauliflower and Brussels sprouts are great for your health and actually your sleep BUT as long as you don't eat them for dinner. Cruciferous vegetables contain high quantities of insoluble fibre, which is incredibly hard to digest. Consequently, a troublesome digestion could significantly impact the quality of your sleep.
4. Eating Cured Meats and Cheese: While absolutely delicious and highly practical for an easy dinner night plater, cured meats and cheese both contain tyramine. Tyramine is an amino acid that is particularly known for making you more...alert. So, not a great idea before bed time. However, if you eat dinner early enough (with intermittent fasting for example), you could quite possibly limit the effects of tyramine.
5. Late Night Exercising: It is advised not to exercise (or be too physically active) 2 to 3 hours prior sleeping. For obvious reasons, exercise makes you more alert. However, anecdotal evidence tells us that while this may be true for some, others sleep like babies after

exercising.

6. **Indulging in Late Screen Time:** While gadgets are now pretty much completely a part of our daily lives, they can be very disruptive to our sleep. As I mentioned it much earlier in this book, these electronic devices disrupt our natural biological clock – which is also called the circadian rhythm. Most of the disruption comes from the light and more specifically, the blue light emitted by smartphones, television, laptops (etc.) To ensure a good night of sleep and a decent amount of melatonin in your system, switch off everything 1 hour and a half or two hours before bed time.
7. **Bright lightning:** Electricity, led lights and light bulbs are great. However, in the evening, dim the lights to simulate night time or light some lovely candles. Your body finds bright lights very confusing from 8 pm.
8. **Overheating your Bedroom:** Our bodies enjoy cool environments to sleep since they will naturally get warmer during the first stages of sleep. Make sure that your room temperature doesn't go above 24°C / 75°F before going to bed. Additionally, sleeping naked may aid in improving your night of sleep.

Things You SHOULD Definitely Do

1. **Increase Bright Light Exposure During Day Time:** Our natural internal clock, the circadian rhythm affects our brains, bodies and hormones – which in turn helps us to stay awake or help us fall asleep. Natural sunlight and bright lights during the day help us to keep our internal clock healthy. Increased natural light exposure improves daytime energy levels and night time quality of sleep. However, do keep in mind that sunlight is the best bright light there is.
2. **Practice Napping Right:** If you enjoy a daytime rest or don't get enough time to sleep as long as you need, naps may be an ideal solution. Nonetheless, not all naps are good for you. The best naps are rather short (30 minutes or less) and are done at regular times. Long and irregular day time naps can confuse your circadian rhythm and lead to sleep struggles later

on.

3. Sleep and Wake at Consistent Times: Your circadian rhythm is pretty much set on a loop, naturally aligning itself with sunrise and sunset. Or in our world, bright light bulbs in the morning and dimmer lights in the evening. By having constant waking and sleeping times, your body knows when to wake up and when to fall asleep – which in turn, improves long-term sleep quality. Moreover, studies have pointed out that irregular sleeping patterns not only alter your body's natural clock but also melatonin production, making it a lot harder to fall asleep and...stay asleep. (38)

Furthermore, you can use smartphone apps to help you set sleep hours and track your sleeping patterns better.

4. Eat a Light Meal for Dinner: Eating a light supper (it doesn't have to be just a salad mind you) facilitates sleep by ensuring an easy digestion process. On a similar level, eating too late can also lead to bothersome sleeping.

Tip: Eating a small portion of complex carbohydrates four hours prior sleeping could help you fall asleep faster and will help tryptophan cross the rain barrier to boost serotonin levels.

5. Try a Melatonin Supplement: If your sleeping patterns have been way to irregular for years or you suffer from insomnia, directly taking some melatonin may be the way to go. A study showed that 2 mg of melatonin improved sleep quality and energy levels, while also making its participants fall asleep faster. However, melatonin supplements may alter the natural brain chemistry, so, start with a low dose and don't overdo it. (39)

6. Transform Your Bedroom Into a Dedicated Sleep Temple: Earlier, I mentioned that the temperature of your bedroom was an important factor to fall asleep and sleep well. A few other things can improve sleep when it comes to your bedroom (such as dim lights). Or a less obvious and yet, quite obvious thing such as noise. If you live in a noisy area, invest in good quality earplugs or better windows, if you can afford it. Finally, your bedroom should be a bedroom. So, if you have a desk setup, try setting it up elsewhere if possible. Also, keep your furniture to a minimum and make sure your bedroom is a relaxing and clean place at all

times.

7. Create a Bed Time Ritual: Night time rituals can also work to signal your body's natural clock that the time to nod off is getting close. For some, it could be playing some very smooth music, reading a book, having a self-made facial massage, writing tomorrow's to-do list (which also prevents thinking about it in bed) or any other activity that relaxes you.
8. Take a Relaxing Shower or Bath: A warm bath or shower before going to bed can improve overall sleep quality and help you fall asleep faster. A study showed that taking a bath 90 minutes prior going to bed, improved sleep quality and increased the amount of deep sleep. [\(40\)](#)
9. Breathe, Relax and Clear Your Mind: If your mind tends to go on overdrive as soon as you hit the pillow, you may want to try a few techniques to make sure you don't start thinking about a thousand of different things. First, if you are planning the following day ahead of time, just do it before going to bed (write it down on a piece of paper). Other people will go through what actually has happened during the day. Well, if that's your case, breathing exercises and/or mindful meditation may be useful tools to keep the thoughts at bay. Also, certain apps have dedicated meditative exercises to help you focus, try them out!

Just do remember this: it takes practice to work. So, don't expect miracles overnight. Keep it simple, slow down your breathing, focus on it, try not to focus on your thoughts and just, let them be. You are thinking about something...So, observe the thought without taking the bait. Keep on breathing.

10. Invest in Better Bedding: Good quality and comfortable pillows and mattress are an underrated part of a good night's sleep. For instance, a good mattress can reduce back and shoulder pain, and improve sleep quality by up to 60%! However, mattresses tend to be based on personal preference. So, find the one that works best for you and stick with it. Also, do remember to change your mattress every 5 to 8 years. [\(41\)](#)

CONCLUSION

A FEW PARTING WORDS & THE BEGINNING OF YOUR WONDERFUL JOURNEY

Sleep plays a MAJOR role in your health, from weight-loss to mental health, sleep is a foundation that should never be overlooked.

Studies have clearly linked insufficient sleep with an increased risk of obesity – a whopping 89% in children and 55% in adults. (42)

While other studies have shown that not sleeping enough increases your risk of heart disease and type 2 diabetes. (43)

By now, it should be clear that sleep is as important as regular exercise or a healthy diet in your lifestyle.

Here's a quick recap' on how damaging unhealthy sleep can be:

- A lack of sleep compromises the immune system. Thus, increasing the risk of developing diseases and chronic illnesses.
- Sleep plays a major role in memory, concentration, reaction speed, decision making and various other cognitive abilities.
- Only 48 hours of sleep deprivation can lead to DNA damage (via poor reproduction of DNA).
- Deep and long sleep ensures the reparation of the neural network (aka your brain cells).
- Similarly, deep sleep and healthy REM stages improve our body's own repair work (such as muscle repairing).
- Sleep is crucial to learn motor skills and to learn anything, period.

Good, deep slow wave sleep can help you lose weight, exercise better, be happier and overall, healthier!

In other words, to optimize your health, it all starts with how well you sleep.

And that depends on you. Just you.

So, start implementing progressively our tips into your lifestyle and soon you will be able to reap the benefits!

You will quickly see how a good night's sleep is quite literally one the most important things you can do for yourself.

I am now wishing you many good nights of deep, peaceful and healthy sleep in the foreseeable future.

Cheers to sleep!

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