



# Camellia Newsletter

<Vol. 168> June, 2017

\*\*\*\*\*

## Insomnia causes obesity and aging of skin

\*\*\*\*\*

“I have a hard time getting to sleep.” “I wake up in the middle of the night.” We often hear these comments from people who suffer from insomnia. The number of people with insomnia has been increasing. Today, we will show you some tips about reducing the symptoms of insomnia by changing lifestyle habits and meal contents.

### ◆◇ Sleep is essential for the maintenance of our health

There is an old but famous Chinese proverb: In spring one sleeps a sleep that knows no dawn. As this proverb expresses, spring is a season where many people experience difficulties to wake up in the morning. The duration of sunshine is longer in spring than in winter because the sunrise occurs earlier during the spring. This makes our waking time earlier. The temperature difference in one day also becomes larger which in turn disrupts the balance of autonomic rhythmicity. Consequently, our sleeping time and the quality of sleep decrease which give us a difficult time to wake up in the morning.

There is another saying “a lack of sleep may develop into all kinds of illnesses.” As it says, sleeping is a very important factor to keep ourselves healthy. Once the hormone balance is disrupted due to a lack of sleep, our appetite increases which makes our body vulnerable to weight gain. It also causes skin aging and a reduction of immunity. We are under risk of losing a healthy and beautiful life because of the impacts of sleep deprivation.

According to the statistics, Japanese people aged between 40 to 50 years old have the least sleeping time of all their generations. Sufficient sleep can facilitate the function of immunity and reduce the risks of developing infective diseases like a cold and allergosis including atopic dermatitis. It also increases concentration and memory skills which will suppress a decline of cognitive function in the future.

### ◆◇ The lifestyle habits that cause insomnia

Physical conditions, stress and lack of exercise affect sleep, but there are also cases where lifestyle habits cause insomnia. Are you familiar with the following habits?

#### ❖ Having a bath that is too hot

It is necessary to make a difference in the center temperature of the body in order to get into a deep sleep. Normally, our body temperature drops when we fall asleep. If we take a bath before going to bed and raise

our temperature, there will be a rapid temperature drop at bedtime which makes it easier to fall asleep. However, when we have a bath that is too hot, the body gets excited and this creates a difficulty to fall asleep. Lukewarm water is recommended in order to relax the body before going to bed.

❖ **Late dinner time**

If the process of digestion is not finished at bedtime, we will have difficulties to fall asleep and the quality of sleep will be reduced. It is recommendable to finish dinner at least 3 to 4 hours before going to bed.

❖ **Watching TV or using a smartphone just before going to bed**

Receiving bright light before going to bed will disturb the balance between sleep and wakefulness. It would be good to make room lighting dark in the evening and provide a relaxing environment.

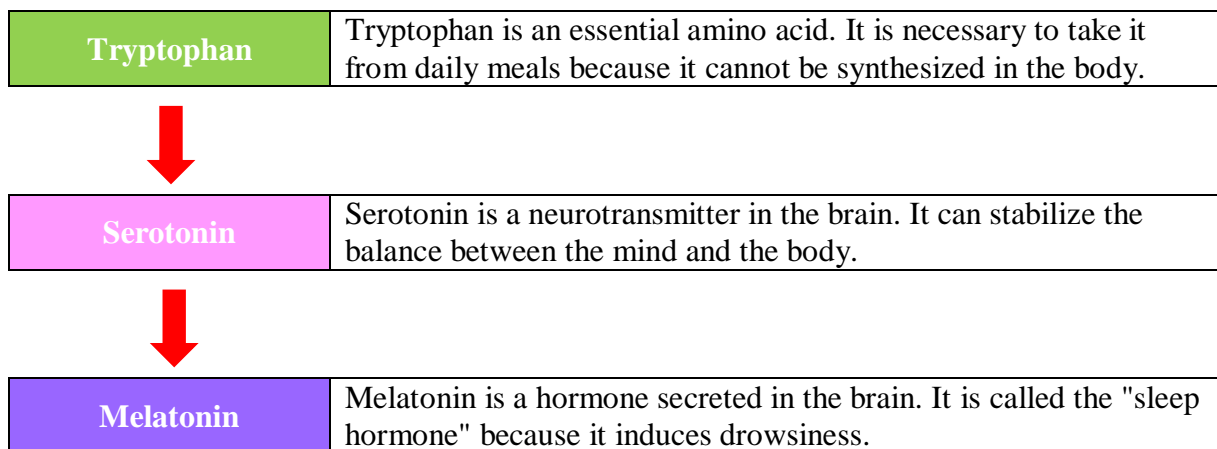
◆◇ **"Melatonin" is an essential sleep hormone**

The hormone called "melatonin" is secreted in our brain and is also called the "sleep hormone" because it switches the body from a wakefulness mode to a sleep mode and induces drowsiness. Thus, promoting the secretion of melatonin is a key to improve insomnia.

Our body secretes melatonin at night and serotonin during the day. The body switches between these sleeping and awakening modes by changing the secretion of these substances.

Melatonin is synthesized in the body through the chemical change of tryptophan which is one of the essential amino acids into serotonin. Since tryptophan cannot be synthesized in the body, we have to have it from daily meals. The synthesis of serotonin is promoted by sunbathing and moderate exercises, so activities during daytime also greatly affects our sleep.

It is important to take tryptophan which is a material of melatonin in order to stimulate the secretion of melatonin. A regular intake of tryptophan is good for sleep improvement, so we should review our intake frequency of tryptophan in daily meals.



Since vitamin B6 is essential for the synthesis of serotonin, we also need to have foods including tryptophan and vitamin B6 together. It takes time before melatonin is synthesized in the body, so it is preferable to take tryptophan at breakfast. Also, meals that are rich in carbohydrate can improve the assimilation of tryptophan. It is recommended to eat the staple food properly. Let's try to review our eating habits and lifestyle in order to get a smooth onset of sleep with natural rhythms.

**Foods abundant in tryptophan**

Food name	Amount	Tryptophan (mg)	Vitamin B6(mg)
Chicken breast	Per 100g	290	0.64
Pork fillet	Per 100g	280	0.54
Bonito	Per 70g	217	0.532
Tuna	Per 70g	210	0.595
Soba (buckwheat noodle)	Per 100g	170	0.24
Pork liver	Per 50g	145	0.285
Natto	Per 50g	120	0.12
Process cheese	Per 40g	116	0.004
Soybean (dry)	Per 20g	110	0.078
Milk	Per 200g	90	0.06
Yogurt	Per 100g	59	0.04
White rice	Per 160g	58.8	0.084
Avocado	Per 50g (1/2 piece)	17	0.16
Banana	Per 100g	10	0.38

**Recommended combination for breakfast**



**Natto + White rice**



**Banana + Yogurt**