

How Does my Diet Impact my Sleep?

There are three substances that are key to understanding how nutrition can affect the brain chemistry that promotes good sleep:

- Tryptophan
- Serotonin
- Melatonin

What is Tryptophan?

All protein foods are composed of amino acids and tryptophan is one of them. It is the rarest of the amino acids, and is found in foods like turkey, steak, chicken and pumpkin seeds, and to a lesser extent in peanuts, sunflower seeds, beans and milk. Tryptophan is important because when it reaches the brain, it converts to an important chemical called serotonin.

What is Serotonin?

You may have heard of serotonin because of its connection to drugs such as Prozac, which are known as selective serotonin reuptake inhibitors (SSRIs). Serotonin is actually a chemical that carries messages between brain cells (neurones) and other cells. Decreased serotonin levels can lead to anxiety, depression, and increased cravings for carbohydrate foods. At night-time, serotonin undergoes two metabolic changes to become melatonin, the chemical that induces sleep.

What is Melatonin?

Melatonin is a hormone that helps to regulate the body's circadian rhythm and promotes restful sleep. It is produced from serotonin in the evening to help us sleep.

The best way of ensuring optimal melatonin production is to sleep in as dark an environment as possible. Even low amounts of ambient light will suppress the production of melatonin which will affect not only sleep but have other health consequences as well.

- Always combine a protein food with a low to medium glycaemic index carbohydrate food to optimise tryptophan levels.
- Avoid stimulants such as caffeine and cigarettes.

Sleepstation

- Avoid sedatives such as sleeping pills and alcohol to help you sleep. The effects are usually short-term, they can have counter effects, and sustained use can lead to dependency.
- Avoid buying melatonin supplements from the Internet (they are only available on prescription in the UK). Taking them may disrupt your own natural melatonin production and potentially suppress your ability to produce this important hormone, ultimately making sleep problems worse.
- Do not stop taking sleep medications suddenly. The best approach is to speak to your doctor and develop a strategy to slowly wean yourself off them.
- Changes in diet can help you sleep but it takes a little longer than the quick fix pill. Fill in a sleep diary and note what you've done on days when you've slept well or badly.

