

SEROTONIN TASK (HAPPY/SAD)

Serotonin is a monoamine neurotransmitter. It carries messages between the nerve cells of your brain and through all the parts of your body that tell the body how to work.

Serotonin has many functions in your body - the way you learn, your memory and your happiness. In addition, it regulates your body temperature, the amount of sleep you get and your appetite. It is true that low levels of Serotonin in the body lead to sadness, depression and anxiety.

Believe it or not, 90% of the Serotonin in your body is in your gut and intestines. It is released into your blood circulation through your platelets. Only 10% is created in your brain! Serotonin is created by the amino acid tryptophan. It gets to your body through the foods you eat such as salmon, eggs, cheese, pineapples, nuts, oats and seeds.

What does Serotonin do in your body?

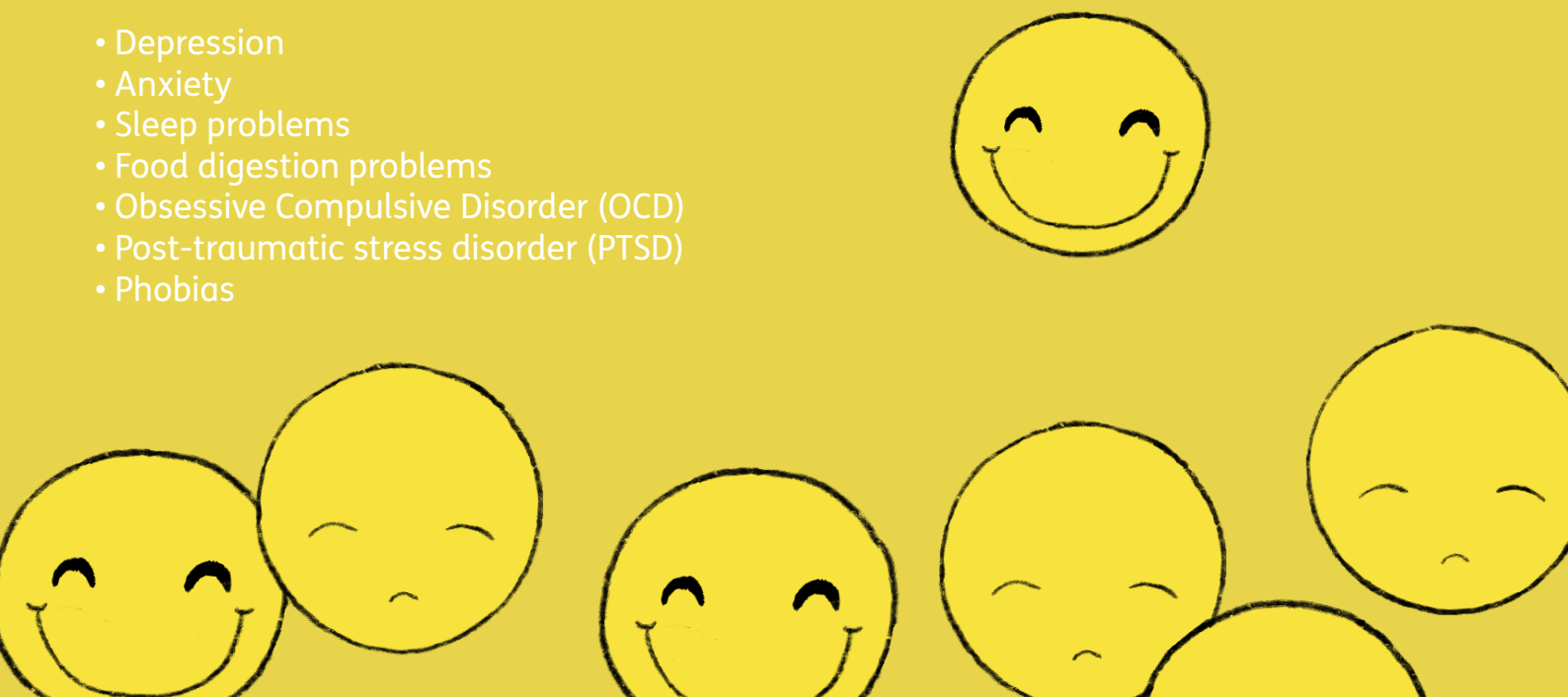
The Serotonin in your body helps regulate your mood. When the chemical is at normal levels you feel happier and satisfied. Low levels of Serotonin have been linked to depression and medication for depression targets ways of raising Serotonin levels in the body.

Most of the Serotonin in your body is produced in the intestines and gut. Your gut can vary the speed of Serotonin release, for instance speeding up digestion to get rid of foods that are toxic in the body. Serotonin also plays a role in reducing your appetite while eating.

Serotonin, along with dopamine (another neurotransmitter), plays a role in the quality of your sleep (how well and how long you sleep).

What are the effects of low Serotonin levels?

- Depression
- Anxiety
- Sleep problems
- Food digestion problems
- Obsessive Compulsive Disorder (OCD)
- Post-traumatic stress disorder (PTSD)
- Phobias



How could I raise Serotonin levels in my body?

- By eating foods high in tryptophan
- By going out in the sun regularly (10-15 minutes)
- By taking exercise and reducing some of your stress

In the classroom:

1. Why not think of something positive to say about some of your friends?
2. Calculate how many positive things have been said about you during the day.
3. Recognize how happy you were when you arrived at the classroom on a scale from 1-10.
4. Be interested in the work
5. Take a short break every 20 minutes to stimulate your brain

Who was Betty Twarog?

Why not do some research and write a biography of the first person to discover Serotonin in the mammalian brain?

SEROTONIN QUIZ

Try to find the answers to these questions:

1. Where is the majority of Serotonin found in the body?
2. What are the main functions of Serotonin in the body?
3. Which foods high in tryptophan help to create Serotonin?
4. What are the effects of low levels of Serotonin in the body?
5. How does Serotonin get into the blood circulation in the body?
6. How could teachers help raise pupils' Serotonin levels within the classroom?
7. Who first discovered Serotonin in mammalian brains?
8. In what ways can you increase Serotonin levels in your body?

