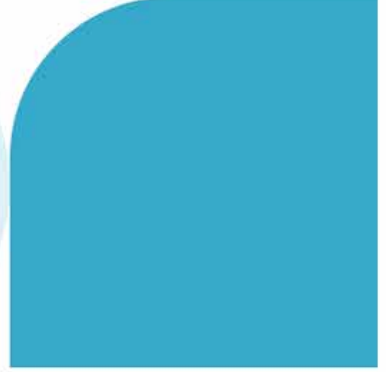
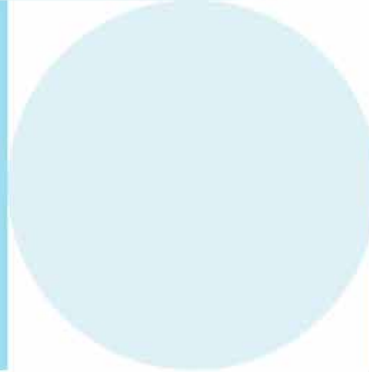
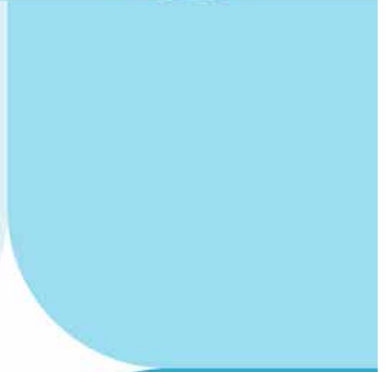
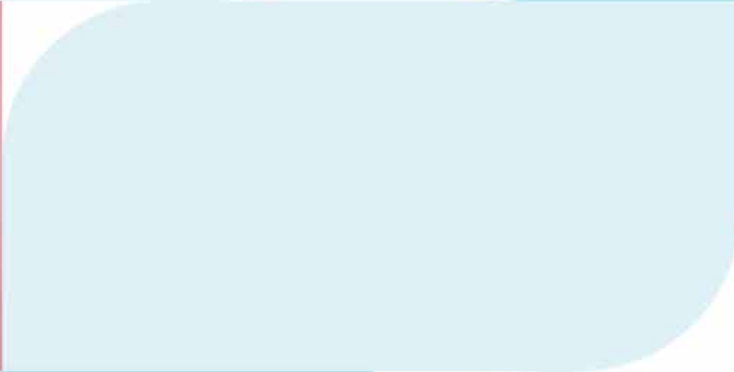




Test report



At-home test



Neurotransmitters Basic

Lab test




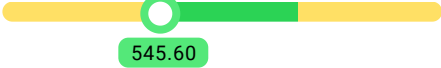





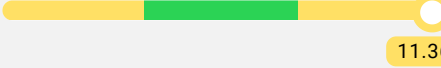


Urine

Name: **Dummy Persson** Date of test: **10/29/2021** Analysis-ID: **YGWU5-F500**

Your test results

Our lab has tested your urine sample for the levels of serotonin, dopamine, adrenaline and noradrenaline. Your results can be found below.

Neurotransmitters Basic

Name	Your value	Reference value	Scale
Adrenaline	 4.78 µg/g Crea	2,0 - 5,5	
Creatinine *	 545.60 mg/dl	290 - 2260	
Dopamine	 295.84 µg/g Crea	130 - 240	
Noradrenaline	 54.34 µg/g Crea	15 - 36	
Noradrenaline/Adrenaline Quotient	 11.36 Quotient	3 - 6	
Serotonin	 151.23 µg/g Crea	80 - 190	

* The creatinine value is used to see if you have a normal urine concentration and that it is not abnormally diluted or abnormally concentrated because in that case it can affect the measured values.

Neurotransmitters Basic

Chronic stress is challenging on the body's energy reserves and can be very taxing on health in the long term. The hormones and neurotransmitters responsible for the stress response and its regulation in the body can be a warning signal that tells us when we have pushed ourselves too hard and give us an opportunity to do something about it before it is too late, or before we eventually get burned out.

When we are exposed to chronic stress, hormones and neurotransmitters are used until the reserves are depleted, which can result in symptoms of mental or physical exhaustion. The worse we react to it, the faster we run out of reserves.

The interaction between all these substances can give a positive stress reaction in the body. If a person is under constant stress or already suffers from chronic fatigue or burnout, the balance between the neurotransmitters has become out of balance.

Adrenaline, noradrenaline and dopamine

Adrenaline, noradrenaline and dopamine belong to the group of catecholamines formed by the amino acids phenylethanolamine and tyrosine. Adrenaline increases heart rate, cardiac output, blood pressure, mental activity and inhibits the immune system in the body. Noradrenaline also increases blood pressure and together with dopamine promotes motivation, concentration and motor skills. Noradrenaline and dopamine also inhibit the immune system in the body and thus increase the susceptibility to infections.

If adrenaline, noradrenaline or dopamine are below normal, an increased intake of tyrosine or phenylethanolamine should be taken together with the necessary vitamins and minerals that support the production of neurotransmitters to counteract further depletion of reserves. These are manganese, B-vitamins, calcium, copper, iron and vitamin C. Tyrosine can be absorbed from the diet or synthesized from the amino acid phenylethanolamine. The tyrosine is then converted to L-DOPA, which is further converted to dopamine. This results in noradrenaline and finally in adrenaline.

Co-factors for methylation should be used to meet demand. Adrenaline production in combination with high levels of the dopamine and noradrenaline precursors. The recommendation is then B-vitamins, magnesium and/or 5-methyltetrahydrofolate (5-MTHF).

Common symptoms of too high levels of noradrenaline are high blood pressure, racing or irregular heartbeat and anxiety. Elevated noradrenaline levels can occur during situations of acute stress and are often the result of a lifestyle overload. People with post-traumatic stress disorder often have a hyperactive noradrenaline system. If you are too high on noradrenaline, you should avoid coffee. Therapeutic measures include moderate exercise, relaxation techniques (such as autogenic training) and/or psychotherapy. Elevated catecholamine levels may also be due to therapeutic intervention. If this is the case, a dose reduction is recommended. The goal is to keep the levels within the normal range in the long term. Co-factors for degrading enzymes, which mainly play an important role in methylation, adenosine and SAMe, can be added to reduce increased neurotransmitter levels. Supplements of magnesium, niacinamide (vitamin B3) and 5-MTHF (5-methyltetrahydrofolate) may be useful.

Serotonin

Serotonin works to relieve stress, regulate blood pressure and maintain mood, promote relaxation, boost mood, regulate sleep, reduce anxiety and has an antidepressant and positive effect on brain activities. Serotonin also regulates the perception of pain, appetite and body temperature. Serotonin can be converted to melatonin, which plays an important role in controlling sleep and the circadian rhythm.

Serotonin is formed by the amino acid tryptophan. The amount of tryptophan available through food and absorbed through the gut affects serotonin levels. At low levels of serotonin, extra intake of tryptophan is therefore recommended, preferably in combination with a multi-vitamin and mineral supplement, or specifically vitamin B3, vitamin B6 and folic acid (vitamin B9). Serotonin is especially important when tryptophan is diminished, as it prevents tryptophan from being used for neuro-synthesis. Serotonin also inhibits tryptophan-2,3-deoxygenase, an enzyme that breaks down tryptophan into kynurenine.

Dietary sources

Below you will find sources of tryptophan and phenylalanine in your diet.

Tryptophan: beef, fish, goose, turkey, tuna, wheat bran, soy beans, pumpkin seeds, sesame seeds, peanuts, sweet almonds, cottage cheese, ricotta cheese, powdered milk.

Phenylalanine: chicken, pork, soy protein, green tea, cottage cheese, fish, beef, liver, lamb, peanuts, pumpkin, sesame seeds and lentils.

Phenylalanine: Pork, orange, turkey, chicken, wheat bran, cottage cheese, milk, yogurt, eggs and almonds.

When taking tryptophan: When tryptophan is used to increase serotonin levels, it should be taken between meals. A suitable diet is a diet rich in carbohydrates and low in protein if this is possible. This results in the release of insulin, which increases the uptake into the muscles of amino acids that compete with tryptophan for transport in the blood-brain barrier, so that more tryptophan can enter the brain via the blood-brain barrier.

Warning

If you are being treated with serotonin-reuptake inhibitors (SSRIs, such as citalopram or fluoxetine), you should not take tryptophan or 5-HTP. Therapy with tryptophan or 5-HTP is also not recommended when taking MAOI inhibitors, as the use of antidepressants with tryptophan or ergotamine derivatives as unpredictable interactions are possible in such cases. Caution is also advised when treating with neuroleptanalgesics. Tryptophan or 5-HTP should only be used with extreme caution.

This test does not replace medical consultation. Always seek medical attention if you experience severe symptoms.

