Health Test Basic

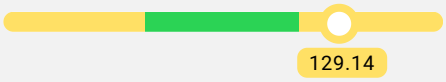
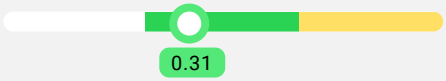
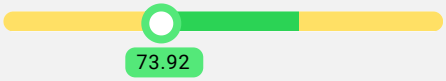
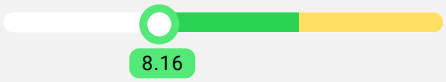
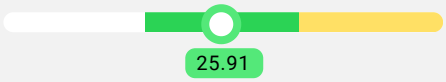
Lab test | Blood

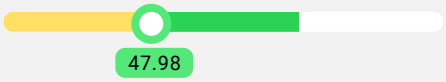
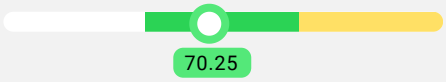
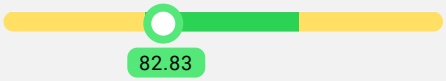
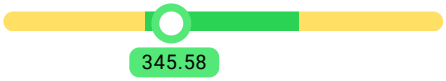
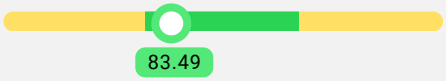
Name: **Dummy Persson** Date of test: **10/31/2022** Analysis-ID: **IY455P-E670D**

getTested

Your test results

Health Test Basic

Name	Your value	Unit	Reference value	Scale
Amylase	129.14	U/l	28 - 100	
AP/ALP	176.58	U/l	40 - 129	
Cholesterol (total)	130.68	mg/dl	< 200	
Creatinine	0.98	mg/dl	< 1,17	
hs-CRP	0.31	mg/l	< 1	
Copper	107.10	µg/dl	68 - 169	
Ferritin	73.92	µg/l	30 - 400	
Folate/Folic acid	3.24	ng/ml	4,4 - 31,0	
GGT	8.16	U/l	< 71	
GOT/AST	12.28	U/l	< 50	
GPT/ALT	25.91	U/l	< 50	

Name	Your value	Unit	Reference value	Scale
HDL-cholesterol	47.98	mg/dl	> 45	
Urea	2.53	mg/dl	3,4 - 7,0	
LDL-cholesterol	70.25	mg/dl	< 160	
Q10	0.61	mg/l	0,88 - 1,43	
Selenium	82.83	µg/l	74 - 139	
Triglycerides	125.22	mg/dl	50 -200	
TSH	3.09	µIU/ml	0,27 - 4,2	
Vitamin B12	345.58	pg/ml	193 - 982	
Vitamin D3 (25OH)	83.49	nmol/l	62,5 - 170	
Vitamin E (alpha tocopherol)	9.67	mg/l	5 - 20	

Explanation of your test results

Creatinine

Name	Your value	Unit	Reference value	Scale
Creatinine (Serum)	0.98	mg/dl	< 1,17	0.98

What is Creatinine?

[blurred]

Why is creatinine analyzed?

[blurred]

What does a high creatinine value mean?

[blurred]

- [blurred]

What does a low creatinine value mean?

[blurred]

- [blurred]

Urea

Name	Your value	Unit	Reference value	Scale
Urea	2.53	mg/dl	3,4 - 7,0	2.53

What is urea?

[blurred]

Why analyze urea?

[blurred]

What does an elevated urea value mean?

[blurred]

What does a low urea value mean?

[blurred]

What other factors can affect the urea value?

[blurred]

Amylase

Name	Your value	Unit	Reference value	Scale
Amylase	129.14	U/l	28 - 100	129.14

What is amylase?

[illegible]

What does an elevated amylase value mean?

[illegible]

What does a low amylase value mean?

[illegible]

GGT

Name	Your value	Unit	Reference value	Scale
GGT	8.16	U/l	< 71	8.16

What is GGT?

GGT is an enzyme that is mainly found in liver cells but also, to some extent, in the pancreas and kidneys and plays a key role in the detoxification of alcohol and other drugs or toxic substances in the liver.

Why analyze GGT?

GGT is measured as part of a liver function test along with ALT, AST, ALP and bilirubin. Symptoms of liver damage include jaundice, nausea, vomiting, abdominal pain, itching, and fatigue.

GGT can also be used with other markers to predict fatty liver disease. This is a condition where fat is stored in the liver due to an unhealthy diet and lifestyle. This can eventually lead to liver cirrhosis if it remains untreated. It is also an indicator of liver damage due to overconsumption of alcohol. GGT levels usually take up to a month to normalize after alcohol consumption stops.

What do elevated GGT levels mean?

GGT levels may be increased in patients with liver disease, including acute and chronic hepatitis, cirrhosis, alcohol-related liver disease, and blocked bile ducts. GGT can also increase when you have no symptoms due to medications such as antibiotics and antidepressants.

GOT/AST

Name	Your value	Unit	Reference value	Scale
GOT/AST	12.28	U/l	< 50	12.28

What is GOT/AST?

[illegible]

Why analyze GOT/AST?

[illegible]

What does a high GOT/AST mean?

[illegible]

GPT/ALT

Name	Your value	Unit	Reference value	Scale
GPT/ALT	25.91	U/l	< 50	25.91

What is GPT/ALT?

GPT/ALT (alanine aminotransferase) is an enzyme normally found in the pancreas, heart, liver, kidneys, muscles, and red blood cells. A GPT/ALT test measures the amount of this enzyme in the blood. GPT/ALT is found mainly in liver cells and in small amounts in the blood.

Unlike GOT/ASAT, GPT/ALT is only found in the cytoplasm of liver cells, so the value can be lower in the case of liver damage than when sampling GOT/ASAT alone. Viral hepatitis causes very high GPT/ALT values. The amount of GPT/ALT in the blood is halved in about 24 hours. A GPT/ALT test is usually done at the same time as one test for GOT/ASAT. The ratio of GPT/ALT and GOT/ASAT can help determine whether the liver or any other organ has been damaged and whether alcohol consumption has been a cause of the liver damage.

Why analyze GPT/ALT?

The GPT/ALT test checks the condition of the liver and whether it has been damaged. With the help of the test, it is possible to identify liver diseases, especially hepatitis and cirrhosis caused by alcohol, drugs or viruses. Liver diseases can cause symptoms such as pain in the upper part of the abdomen, nausea, vomiting, and in more serious cases, jaundice. Other purposes may be to find out if jaundice was caused by a blood disorder or liver disease or to monitor the effects of cholesterol-lowering drugs and other drugs that can damage the liver.

What does a high GPT/ALT value mean?

High values are seen in acute and chronic hepatitis, toxic liver damage, mononucleosis, and blockage of the bile ducts. One high value can also be seen in the following situations:

- After using many supplements and medicines
- Liver damage as a result of disease
- Lead poisoning
- Rapid growth, especially in young children, can cause mildly elevated GPT/ALT levels

AP/ALP

Name	Your value	Unit	Reference value	Scale
AP/ALP	176.58	U/l	40 - 129	176.58

What is AP/ALP?

[illegible]

Why analyze AP/ALP?

[illegible]

What does an elevated AP/ALP value mean?

[illegible]

What does a low AP/ALP value mean?

[illegible]

What other factors can affect the AP/ALP value?

[illegible]

Cholesterol (total)

Name	Your value	Unit	Reference value	Scale
Cholesterol (total)	130.68	mg/dl	< 200	130.68

What is cholesterol?

[illegible]

Why analyze cholesterol?

[illegible]

What does a high cholesterol value mean?

[illegible]

What does a low cholesterol value mean?

[illegible]

Triglycerides

Name	Your value	Unit	Reference value	Scale
Triglycerides	125.22	mg/dl	50 -200	125.22

What are triglycerides?

Why analyze triglycerides?

What does a high triglyceride value mean?

What does a low triglyceride value mean?

Low triglyceride levels are not in themselves linked to ill health, but low values are considered to reduce the risk of cardiovascular disease. Taking some medications and omega-3 supplements can also lower triglycerides. Low levels of triglycerides, however, can also be seen in malnutrition or in problems absorbing nutrients in the intestine, which in some cases may require further investigation.

What affects triglycerides?

The body's triglyceride levels increase sharply after a meal, especially if the meal contains a lot of fat. False elevated values can therefore be measured in the event of insufficient fasting prior to testing. To get a fair assessment of blood fats, the test should be taken after 10-12 hours of fasting (water and coffee/tea without milk or sugar is allowed).

Some drugs, such as cortisone and estrogen preparations, increase triglyceride levels. Triglycerides also become elevated in the hypofunction of the thyroid gland and certain kidney diseases.

LDL-cholesterol

Name	Your value	Unit	Reference value	Scale
LDL-cholesterol	70.25	mg/dl	< 160	70.25

What is LDL-cholesterol?

The abbreviation LDL stands for "low-density lipoprotein", that is lipoprotein with low density (thickness). LDL-cholesterol transports fat and a small amount of protein from the liver to other parts of the body.

Why analyze LDL-cholesterol?

A normal level of LDL cholesterol in the blood is useful because cholesterol is then transported out to body parts that need it. But LDL cholesterol is often called "bad cholesterol" because an elevated level in the blood can lead to an increased risk of developing cardiovascular disease.

What does a high LDL-cholesterol value mean?

High LDL levels are seen in primary and secondary hypercholesterolemia. Primary hypercholesterolemia is due to genetic factors, of which the most common form is familial hypercholesterolemia (FH). Secondary hypercholesterolemia is seen in cases of an underactive thyroid gland (hypothyroidism), nephrotic syndrome, obstructive liver disease, and diabetes.

What does a low LDL-cholesterol value mean?

Low cholesterol levels are often seen in people with an overactive thyroid (hyperthyroidism), malabsorption and congenital beta-lipoprotein deficiency (abetalipoproteinemia).

HDL-cholesterol

Name	Your value	Unit	Reference value	Scale
HDL-cholesterol	47.98	mg/dl	> 45	47.98

What is HDL-cholesterol?

Why analyze HDL-cholesterol?

What does a high HDL-cholesterol value mean?

What does a low HDL-cholesterol value mean?

Low values can be due to inflammatory processes, especially viral hepatitis. It can also be due to genetic factors or testosterone therapy, which tends to reduce HDL cholesterol in the long term. HDL cholesterol >1.0 mmol/L (40 mg/mL) for men or >1.2 mmol/L (50 mg/mL) for women is recommended.

hs-CRP

Name	Your value	Unit	Reference value	Scale
hs-CRP	0.31	mg/l	< 1	0.31

What is hs-CRP?

Common CRP is best known as a test for infection, but also plays a role in the risk assessment for suffering from cardiovascular disease. CRP is short for C-reactive protein, which is a protein that is formed in and released from the liver in case of an infection (primarily bacterial infections), inflammation, or after various types of trauma such as a surgical procedure or other tissue damage. Common CRP measures the levels that occur in connection with infectious disease or tissue damage, while a high-sensitivity CRP (hs-CRP) measures the chronic low-grade inflammation that may be present in the body in otherwise healthy individuals.

Why analyze hs-CRP?

Research has shown that a chronic low-grade inflammation in the body can be a risk factor for cardiovascular disease such as heart attack and stroke. Cardiovascular disease usually arises due to plaque formation in the body's large blood vessels, so-called atherosclerosis. Despite the name, atherosclerosis is not related to the deposition of calcium in our blood vessels, but to the deposition of cholesterol and the accumulation of activated immune cells. This process is both caused and accelerated by chronic low-grade inflammation in the body, which can be measured through high-sensitivity CRP in the blood.

What does an elevated high-sensitivity CRP value mean?

hs-CRP levels above 3 mg/L indicate an increased risk of cardiovascular disease. However, levels >10 mg/L are usually indicative of an ongoing or recent infection, such as a cold. You should therefore avoid drawing conclusions about the risk of cardiovascular disease on a high-sensitivity CRP value >10 mg/L. High-sensitivity CRP can also be elevated in rheumatic diseases or inflammatory bowel diseases, as well as in diabetes, obesity and smoking.

What does a low high-sensitivity CRP value mean?

Low levels of high-sensitivity CRP <1 mg/L indicate a low risk of cardiovascular disease, while levels between 1-3 mg/L indicate an average risk. However, note that there are several other different risk factors for cardiovascular disease, such as heredity, high cholesterol, high blood pressure, diabetes, and smoking, which means that risk analysis is complicated and it is not possible to draw significant conclusions from a single value.

Other factors that can affect the analysis value

[blurred]

Folate/Folic acid

Name	Your value	Unit	Reference value	Scale
Folate/Folic acid	3.24	ng/ml	4,4 - 31,0	3.24

What is folate/folic acid?

[blurred]

Why analyze folate/folic acid?

[blurred]

- [blurred]
- [blurred]
- [blurred]
- [blurred]

What does an elevated folate value mean?

[blurred]

What does a low folate value mean?

[blurred]

Vitamin B12

Name	Your value	Unit	Reference value	Scale
Vitamin B12	345.58	pg/ml	193 - 982	345.58

What is Vitamin B12?

[illegible]

Why do we need Vitamin B12?

[illegible]

The link between Vitamin B12 and folate

[illegible]

[illegible]

What symptoms can vitamin B12 deficiency cause?

[illegible]

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Which risk groups exist for vitamin B12 deficiency?

Folate/folic acid can mask vitamin B12 deficiency

What does a high vitamin B12 value mean?

What does a low vitamin B12 value mean?

Vitamin D

Name	Your value	Unit	Reference value	Scale
Vitamin D	83.49	nmol/l	62,5 - 170	83.49

What is vitamin D?

Contrary to what the name suggests, vitamin D is actually a steroid hormone. Vitamin D have a big impact on our health because it affects hundreds of genes in most of the body's cells. Vitamin D affects the body's ability to absorb calcium and phosphorus, which are necessary substances for normal bone structure and normal teeth development. Vitamin D also plays an important role in the normal functioning of the immune system.

When we are outdoors in the summer, we build up our stores of vitamin D, which the body then uses during the winter months. The body stores vitamin D for about three months (personal variation occurs), so it is not until three months after the sunny months of summer that we feel the effects of low vitamin D levels (depending on how much was stored during the summer months).

Why analyze vitamin D?

Vitamin D is an important component of the body's metabolism, and a lack of vitamin D plays a role in many diseases. The risk of infectious diseases, as well as winter and spring depression, multiple sclerosis, cancer, diabetes, cardiovascular disease, osteoporosis, general aches, and obesity can increase with vitamin D deficiency.

How is vitamin D formed?

When we are out in the sun and exposed to UV radiation, the body produces vitamin D via cholesterol in the skin, which is then sent to the liver and kidneys, where it is converted into its active form.

In the summer, you don't need to be outside for long periods of time for your body to form enough vitamin D. A light-skinned person needs about 10-20 minutes of sun exposure in t-shirt, while dark-skinned and elderly people have a poorer ability to form vitamin D via the sun, which means that they may need to stay in the sun for longer.

In winter, the sun in northern hemisphere is too weak for the production of vitamin D to be stimulated. For this reason, most people need supplements during this period.

How do you get vitamin D deficiency?

Vitamin D deficiency mainly occurs due to a reduced conversion of vitamin D in the skin, and it is common for the values to be below or on the bottom of the reference range during the winter months as the sun's rays are not strong enough. Vitamin D deficiency can also be caused by a reduced parathyroid gland function (hypoparathyroidism), although this is an unusual disease.

What level of vitamin D should one have?

The body's level of vitamin D naturally varies throughout the year. During the winter months, the UV radiation is too weak for the body to produce vitamin D. Vitamin D is stored in the body during the summer months and then used during the winter. If you have less stored from summer, the risk of vitamin D levels dropping to a deficient level increases.

- <25 nmol/L (<10 ng/mL) deficiency
- 25-50 nmol/L (10-20 ng/mL) insufficiency
- >50-75 nmol/L (20-30 ng/mL) sufficiency
- >100-125 nmol/L (40-50 ng/mL) optimal level
- >150 nmol/L (>60 ng/mL) increased risk of kidney stones
- >250 nmol/L (>100 ng/mL) potentially toxic

Can you overdose on vitamin D?

Large amounts (over 250 nmol/L, corresponding to 100 ng/mL) of vitamin D over a period can lead to high levels of calcium in the blood. Calcium can then deposit in the kidneys and other soft tissues and cause kidney failure. It is not possible to overdose on vitamin D solely through diet or direct sunlight, but if you take supplements that contain large amounts of vitamin D you can overdose – especially in the long term.

What does a high vitamin D value mean?

High vitamin D levels are seen in hyperparathyroidism (uncommon), with high intake of vitamin D (mainly via dietary supplements), sarcoidosis, other granulomatous diseases with increased calcium concentration, and, in some cases, during pregnancy. This can lead to hypercalcemia and metastatic soft tissue calcification. The half-life of vitamin D is considered to be 2–4 weeks (with individual variations), while the active form has a considerably longer

Vitamin E

Name	Your value	Unit	Reference value	Scale
Vitamin E	9.67	mg/l	5 - 20	9.67

What is vitamin E?

Vitamin E is a fat-soluble vitamin that occurs in several different forms, of which alpha-tocopherol is the most common form. The primary role of vitamin E in the body is to act as an antioxidant to protect the body's cells from free radicals that cause oxidative stress. Vitamin E also plays a role in the immune system and can prevent blood clots.

Why analyze vitamin E?

Vitamin E plays an important role as an antioxidant in the body and is also contributes to normal immune function and can reduce the risk of blood clots.

Can you overdose on vitamin E?

There are no known toxic effects of vitamin E from food, but high doses over 1,000 mg a day (equal to 1493 IU) can increase the risk of bleeding - especially for individuals who take blood-thinning medications such as Warfarin.

What does a high vitamin E value mean?

A high vitamin E value is usually only seen when vitamin E is supplemented.

What does a low vitamin E value mean?

A low vitamin E value indicates a vitamin E deficiency. Symptoms of vitamin E deficiency are retinopathy (damage to the retina causing visual impairment), peripheral neuropathy (damage to peripheral nerves, usually in the hands and feet), ataxia (impaired movement control), and impaired immune function.

Good sources of vitamin E are as follows:

- Wheat germ oil
- Pumpkin seeds and pumpkin seed oil
- Sunflower seeds and sunflower seed oil
- Avocado and avocado oil
- Olives and olive oil

Q10

Name	Your value	Unit	Reference value	Scale
Q10	0.61	mg/l	0,88 - 1,43	0.61

What is Q10?

[blurred]

Why analyze Q10?

[blurred]

Can you overdose on Q10?

[blurred]

What does a high Q10 value mean?

[blurred]

What does a low Q10 value mean?

[blurred]

Ferritin

Name	Your value	Unit	Reference value	Scale
Ferritin	73.92	µg/l	30 - 400	73.92

What is ferritin?

[illegible]

Why analyze ferritin?

[illegible]

Symptoms of high or low ferritin levels

[illegible]

What does it mean if you have an elevated ferritin value?

[illegible]

What does it mean if you have a low ferritin value

Selenium

Name	Your value	Unit	Reference value	Scale
Selenium	82.83	µg/l	74 - 139	82.83

Symptoms of selenium deficiency

Symptoms of high selenium levels

Copper

Name	Your value	Unit	Reference value	Scale
Copper	107.10	µg/dl	68 - 169	107.10

Copper is needed, among other things, for the cardiovascular system, bones, brain, nerves, connective tissue and thyroid gland. Copper is also needed to form one of the body's own antioxidants, superoxide dismutase (SOD). Copper and zinc work together and need to be in balance with each other. Elevated levels of copper are often linked with elevated levels of estrogen.

Symptoms of copper deficiency

- Anemia
- Impaired immune function
- Impaired brain function
- Degeneration of the nervous system

Symptoms of high copper levels

- Depression, moodiness and learning difficulties
- Mood swings and PMS
- Impaired immune function

getTested