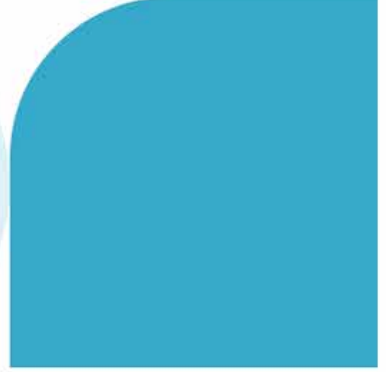
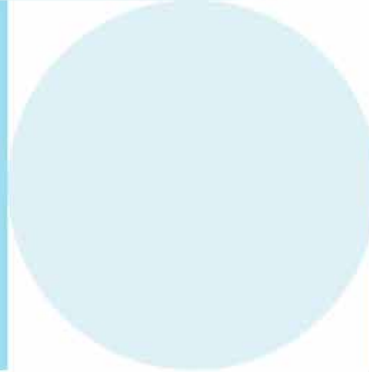
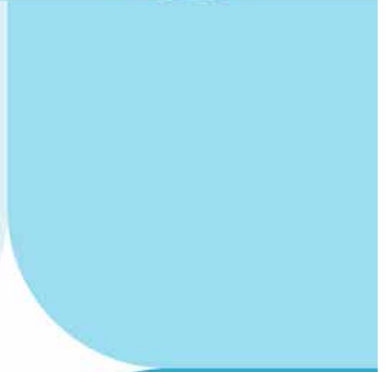
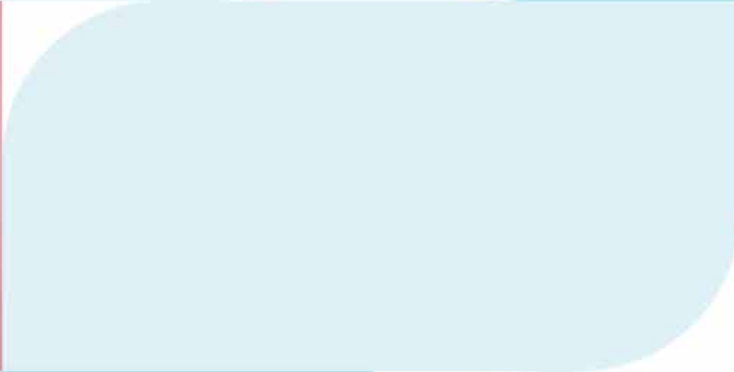




Test report



At-home test



Mineral deficiency

Lab test






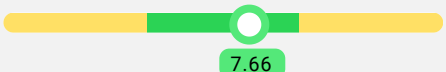
Blood

Name: **Dummy Persson** Date of test: **03/01/2021** Analysis-ID: **8ETNQUTE-MI**

Your test results

Minerals such as magnesium, selenium, and zinc play a vital role in maintaining your mental and physical health. Chronic deficiency of these minerals leads to severe complications, including muscle weakness, immune system dysfunction, and altered cognition.

Our lab has tested the concentrations of magnesium, selenium and zinc in your blood. Your results can be found below:

Mineral	Your value	Reference value	Scale
Magnesium	 2.00 mmol/l	1.3 - 1.8 mmol/l	
Selenium	 123.00 µg/l	67 - 135 µg/l	
Zinc	 7.66 mg/l	4.50 - 9.00 mg/l	

**The reference values apply to adults.*

Magnesium

Just like sodium, magnesium acts as a signaling substance in the body and is needed for several of our enzymes to function. Our skeleton acts as a depot for calcium but also for magnesium. Too much sodium blocks the uptake of magnesium. It is therefore important to be aware of your magnesium intake especially when adding sodium. Lack of magnesium can lead to high blood pressure and impaired insulin sensitivity. Magnesium deficiency can also cause osteoporosis because the body is forced to break down the skeleton to release magnesium into the bloodstream.

Because the body contains a large amount of magnesium (about 20-25 grams), the daily requirement of this mineral is also greater compared to others. Risk groups for magnesium deficiency are mostly athletes and vegetarians. Acute deficiency symptoms are vomiting, loss of appetite, muscle weakness, fatigue, nerve problems and muscle cramps. Magnesium deficiency for the mineral is common because our intake of magnesium from the diet is generally low. This is because we eat a lot of processed foods that lack the magnesium content in the food. Magnesium deficiency can also manifest itself through high blood pressure, impaired insulin sensitivity and cause osteoporosis.

One of the functions of magnesium is to produce adenosine triphosphate (ATP), which is the most important energy carrier for all metabolic processes in the body. Magnesium helps to build muscles in the body by the mineral activating protein loss release which is an essential muscle growth. Magnesium also promotes the fat-burning enzymes, which has a positive effect on fat burning in the body. Athletes are a big risk group for magnesium deficiency as the body gets rid of a lot of magnesium both through sweat and in the process when the muscles are to be repaired after training. It is therefore important to keep track of your levels and balance up with supplements after training.

Magnesium as a supplement

The toxicity of magnesium is low and side supplements are considered safe. Magnesium is available in a number of different forms as supplements, some common forms are Mg citrate, Mg glycinate, Mg malate, and Mg oxide. The best choice for us has a better uptake than the best form. Magnesium can preferably be taken in the evening for its relaxing effect.

Magnesium in foods

Below you will find a table of foods that are rich in magnesium:

Foods	mg / 100 gr	% av RDI
Pumpkin seeds	540	144%
Wheat bran	480	128%
Flax seeds	392	104,5%
Brazil nuts	376	100,3%
Sunflower seeds	355	94,7%
Wheat sprouts	290	77,3%
Almonds	280	74,7%
Soybeans	265	70,7%
Cashew nuts	260	69,3%
Broad beans	192	51,2%

Magnesium - Recommended daily intake

Below you will find a table with values for the recommended daily intake of magnesium for different ages.

Gender/Group/Age	Recommended intake
Infants 6-11 months	80 mg
Children 1-2 years	85 mg
Children 2-5 years	120 mg
Children 6-9 years	200 mg
Children 10-13 years	280 mg
Women and girls over 14 years	280 mg
Men and boys over 14 years	350 mg

Zinc

Zinc is mainly valued here for its strengthening effect on the immune system. Zinc acts as a coenzyme, i.e. it is needed for the production of various enzymes which in turn help the body with important processes. One need zinc to produce testosterone and one who strongly associated with sperm production, which means that usually women men have an even greater need for the mineral. Zinc is also important for wound healing, hair growth and muscle building. Zinc deficiency can increase susceptibility to infection and weaken the immune system.

As the mineral has important structural properties, zinc deficiency is very common in the case of long-term respiratory infections and colds that are often caused by viruses. Addition of zinc at the first sign of a cold results in a shorter and milder cold. There are studies that indicate that children who have a milder course of disease when consuming zinc. The studies show that children who have ingested zinc for a longer period have suffered from fewer colds and are away from school for fewer days.

Zinc deficiency

Zinc is the mineral deficiency that we often suffer from the most. The deficiency problem is mainly due to the fact that zinc is one of the substances that the intestine has the most difficulty absorbing. It is not just the immune system and the skin that are affected by zinc deficiency. Zinc is also involved in several different bodily functions and acts as a cofactor in various enzyme reactions. Many of these enzyme reactions are linked to digestion. The mineral plays an important role in growth and is needed in abundant amounts throughout the body in the synthesis of DNA and RNA, which is necessary for cell division and cell growth. Connective tissue, cartilage and bone are also zinc dependent, which makes zinc necessary for the construction of a strong and healthy skeleton as well as for the development of teeth. For men, zinc is also important for reproductive ability and the prostate. It is therefore important for several reasons to overcome any deficiencies in the body by adding more zinc to the body.

Symptoms of zinc deficiency

Some of the most common symptoms of zinc deficiency are poor immune system, skin problems and impaired sense of taste. Marginal mineral deficiencies are common and can also cause diffuse symptoms such as increased susceptibility to infection and impaired recovery. Severe deficiencies can lead to growth retardation, disorders of brain development and impaired physical performance. It is therefore a good idea to find out if you are in a risk zone and if there may be a need for extra zinc supplements.

Zinc in foods

Zinc in many vegetables is more difficult to absorb than zinc in animal foods. Food sources rich in zinc are mainly animal products, but are also found in foods such as wheat sprouts, meat, liver, sesame seeds and mycelium. You can also find zinc in a lot of vegetables, but the absorption from these foods is poor and you need to get in large amounts if you are vegan compared to if you eat meat products.

Below you will find a table with food rich in zinc. The information is taken from the National Food Administration's Food Database.

Foods	mg / 100 gr	% av RDI
Oyster	50	500%
Wheat sprouts	17,8	178%
Dried reindeer meat	12,4	124%
Boiled beef and sirloin	8,94	89,4%
Quorn and mushroom protein	8	80%
Pumpkin seeds	7,5	75%
Wheat bran	7,3	73%
Moose meat	6,87	68,7%
Roasted peanuts	6,6	66%
Cashew nuts	5,6	56%

Zinc - Recommended daily intake

Below you will find a table with values for the recommended intake of zinc for different ages.

Gender/Group/Age	Recommended intake
Infants and children under 2 years	5 mg
Children 2-5 years	6 mg
Children 6-9 years	7 mg
Girls 10-13 years	8 mg
Boys 10-13 years	11 mg
Girls 14-17 years	9 mg
Boys 14-17 years	12 mg
Women	7 mg
Men	9 mg
Pregnant	9 mg
Breastfeeding	11 mg

Selenium

Selenium is a trace element / mineral that has a central role in the antioxidant repository and promotes our immune system. It has a major impact on thyroid function and without selenium, the liver and pancreas can not fully fulfil their tasks regarding regulation of blood sugar. With the help of selenium, thyroid hormone is also formed, which promotes sperm production and male fertility. Selenium is important for a variety of functions and is therefore a less very popular supplement.

Symptoms of selenium deficiency

The symptoms are diffuse and difficult to distinguish. Fatigue and impaired memory are examples of such. These symptoms are due to the fact that the body's antioxidant system works less effectively, which gives us decreased protection against harmful free radicals that break down the body and also make us more susceptible to infections and viruses.

Selenium in foods

The main sources of selenium are Brazil nuts and seafood. The selenium supply in the body is small and deficiency with marginal symptoms is common. The reason is often selenium-poor soils for the crops that are grown.

Below you will find a table with foods that are rich in selenium. The information is taken from the National Food Administration's Food Database.

Foods	mg / 100 gr	% av RDI
Brazil nuts	1090	1981,8%
Mackerel (canned)	130	236,4%
Lobster (canned or cooked)	100	181,8%
Tuna (preserved in oil, drained)	86,6	157,5%
Tuna (preserved in water, drained)	77	140%
Oyster	70	127,3%
Mussels (cooked with team, drained)	68,1	123,8%
Eel (smoked)	66,7	121,3%
Yolk	58,6	106,5%
Perch (cooked)	56,1	102%

Selenium - Recommended daily intake

Below you will find a table with values for the recommended intake of selenium for different ages.

Gender/Group/Age	Recommended intake
Infants 6-11 months	15 µg
Infants 12-23 months	20 µg
Children 2-5 years	25 µg
Children 6-9 years	30 µg
Children 10-13 years	40 µg
Women and girls from 14 years	50 µg
Men and boys from 14 years	60 µg
Pregnant and breastfeeding	60 µg

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

