

Time	Narration
00:00	Welcome to the spoken tutorial on the importance of magnesium .
00:05	In this tutorial, we will learn about:
00:09	Minerals as essential nutrients,
00:12	Importance of magnesium in our diet,
00:15	Causes and symptoms of its deficiency,
00:20	Food sources of magnesium
00:23	and Requirements for different age groups.
00:27	Let's understand why minerals are necessary in our diet.
00:32	Minerals are essential nutrients.
00:36	We require minerals in small quantities for good health.
00:42	Our body does not produce minerals by itself.
00:46	Hence they have to be taken through diet.
00:49	Minerals are required for blood clotting.
00:53	They help in maintaining blood sugar and blood pressure.
00:57	Production of hemoglobin and red blood cells require minerals.
01:03	They contribute towards muscle contraction
01:07	and brain development.
01:10	Minerals are also needed for strong immunity
01:14	and production of thyroid hormones .
01:18	Magnesium is an essential mineral needed by our body.
01:23	It is required for muscle relaxation.
01:27	It helps in sending and receiving messages by central nervous system.
01:34	This nutrient is required for healthy bones and teeth as well.
01:40	We also need magnesium for energy production
01:44	and DNA synthesis.
01:47	Let's try to understand the causes and symptoms of deficiency of this nutrient.
01:55	Certain factors cause increased risk of magnesium deficiency.
02:02	Among them are poor diet
02:04	and intake of processed food.
02:08	Other factors include excessive consumption of alcohol,
02:13	tea and/or coffee.
02:17	Inadequate absorption of magnesium is also responsible for increased deficiency.
02:25	During pregnancy, the requirement of Magnesium increases.
02:30	Failure to meet this requirement also leads to deficiency.
02:36	Signs of magnesium deficiency include
02:39	loss of appetite
02:41	and weakness.
02:43	It also includes headache,

02:46	migraine and muscle cramps.
02:50	If the deficiency progresses, people may experience abnormal heart beat.
02:56	Low levels of calcium and potassium are also a possibility.
03:03	Magnesium deficiency increases the risk of type 2 diabetes
03:08	and hypertension.
03:11	It may also increase the risk of osteoporosis
03:15	and heart diseases.
03:18	Osteoporosis is a condition where bone density is reduced.
03:24	The bones become fragile and prone to fractures.
03:30	Other signs of osteoporosis are stooped posture,
03:35	loss of height
03:38	and back pain.
03:40	To avoid deficiency, we must include magnesium rich food in our diet.
03:47	Beans,
03:49	nuts,
	seeds,
03:52	leafy vegetables
03:54	and grains are good sources of magnesium.
03:59	Let's take a quick look at this nutrient content found in these food sources.
04:06	30 grams of beans have around 64 milligrams of magnesium .
04:12	2 tablespoons of seeds have roughly 123 milligrams.
04:19	100 grams of leafy vegetables have about 194 milligrams.
04:26	20 grams of nuts have around 61 milligrams
04:31	and 30 grams of grains have nearly 81 milligrams.
04:38	Although we can get magnesium through diet, its absorption is also important.
04:44	Phytates and oxalates present in the food hinder absorption of magnesium .
04:51	Fiber also has the same effect.
04:54	Soaking beans before cooking,
04:57	improves the absorption of this nutrient.
05:01	So does fermentation,
05:03	germination,
05:05	cooking
05:06	and roasting.
05:08	Recommended intake of magnesium varies for different age groups:
05:14	75 milligrams for 7 to 12 months babies
05:19	80 to 130 milligrams for 1 to 8 years old children
05:25	360 to 400 milligrams for adolescents
05:30	400 milligrams for 18 to 19 years old pregnant women
05:36	360 milligrams is recommended for 18 to 19 years old lactating mothers

05:44	For Adults, 310 to 400 milligrams is advised
05:50	for Pregnant women, it is 350 milligrams
05:55	and, for lactating mothers, 310 milligrams is advised.
06:01	To meet these requirements, include adequate magnesium rich food in your diet.
06:07	This brings us to the end of this tutorial. Thanks for joining