

Time	Narration
00:00	Welcome to the <b>spoken tutorial</b> on the importance of <b>vitamin C</b> .
00:07	In this tutorial, we will learn about:
00:09	Role of <b>vitamin C</b> in the body.
00:13	Food sources of <b>vitamin C</b> .
00:16	Ways to increase <b>vitamin C</b> intake in our diet.
00:22	<b>Vitamin C</b> is a water soluble <b>vitamin</b> .
00:26	It plays a very important role in several body functions.
00:32	It is essential for the synthesis of <b>collagen</b> which acts like a cement.
00:39	It holds the bones, muscles, skin and the whole body together.
00:46	Tissues of our body like skin, hair, blood vessels and bones have <b>collagen</b> .
00:56	<b>Vitamin C</b> helps in recovery after a muscle or skeletal injury.
01:03	It helps in the healing of wounds.
01:07	It is also required for maintaining healthy skin.
01:13	Another role of <b>vitamin C</b> is that it acts as an <b>antioxidant</b> .
01:20	<b>Antioxidants</b> are substances that protect our body from damage by <b>free radicals</b> .
01:28	<b>Free radicals</b> are substances that are naturally produced in the body.
01:35	They become harmful only when they become excessive.
01:40	Pollution, smoking,
01:42	alcohol, harmful chemicals increase <b>free radicals</b> production.

01:49	This results in cancer, diabetes, heart diseases and cataract.
01:56	<b>Vitamin C</b> reduces the formation of <b>free radicals</b> in the body.
02:03	Thus, protecting our cells from damage.
02:07	<b>Vitamin C</b> also strengthens our immune system.
02:12	It helps in fighting infections and protecting against other diseases.
02:19	For example: common cold, cancer and heart diseases.
02:25	<b>Vitamin C</b> helps in bone formation.
02:28	It also helps in the synthesis of a few <b>hormones</b> .
02:33	For example: <b>dopamine, adrenaline, noradrenaline</b> .
02:39	These <b>hormones</b> help the body respond to stress or fright.
02:46	In addition, <b>vitamin C</b> enhances the absorption of <b>non-heme iron</b> in the body.
02:54	<b>Non-heme iron</b> is a form of <b>iron</b> which is mostly present in plant based foods.
03:02	For example: green leafy vegetables, seeds, nuts and beans.
03:09	Consuming too little <b>vitamin C</b> can increase the risk of <b>iron</b> deficiency.
03:17	This may result in anemia which is known as <b>iron deficiency anemia</b> .
03:24	Deficiency of <b>vitamin C</b> can result in <b>scurvy</b> .
03:30	Early signs of <b>scurvy</b> are uneasiness,
03:33	fever and fatigue.
03:37	Other symptoms are swelling and bleeding in gums and
03:41	loosening of teeth.
03:44	Poor healing of wounds and bruises and bleeding on the skin is visible.
03:51	Swelling and pain in the joints may also arise.
03:56	The hair becomes dry and coiled.
04:01	Other signs of deficiency are dry skin, mood changes and poor immunity.
04:09	<b>Iron deficiency anemia</b> can also occur due to <b>vitamin C</b> deficiency.
04:16	Let us now look at the daily <b>vitamin C</b> recommendation.
04:22	For babies upto 12 months of age, 25 milligrams per day is recommended.
04:30	For children who are 1-10 year old, 40 milligrams per day is recommended.
04:38	For adolescents, 45-75 milligrams per day is recommended.
04:46	For adult females, it is 75 milligrams.
04:52	90 milligrams is recommended for adult males.
04:58	The requirements are higher during pregnancy and lactation.
05:04	Pregnant women should have 85 milligrams of <b>vitamin C</b> per day.

05:10	Lactating mothers should have 120 milligrams per day.
05:16	Let me now tell you the food sources of <b>vitamin C</b> .
05:21	Certain fruits and vegetables are good sources of <b>vitamin C</b> .
05:27	Among fruits, gooseberry and guava are the richest sources.
05:33	1 medium-sized guava gives around 300 milligrams of <b>vitamin C</b> .
05:40	1 gooseberry has nearly 60 milligrams of <b>vitamin C</b> .
05:46	Other examples are: bengal currant, indian jujube and raw mango.
05:54	Fruits like oranges, lemons and sweet limes are also good sources.
06:01	1 tablespoon of lemon juice has approximately 8 milligrams of <b>vitamin C</b> .
06:09	1 medium orange has about 40 milligrams.
06:14	Even green leafy vegetables have an adequate amount of <b>vitamin C</b> .
06:21	For example: Leaves of drumstick ( <b>moringa -Bracketed text is only for International languages</b> ),
06:24	amaranth, radish
06:26	and mustard.
06:28	Fenugreek leaves and agathi leaves are other examples.
06:34	100 grams of raw green leafy vegetables have about 60-100 milligrams.
06:43	Coriander and mint leaves also have some amount of <b>vitamin C</b> .
06:49	Some other vegetables also have moderate amounts of <b>vitamin C</b> .
06:56	For example: capsicum, cabbage, drumsticks, bitter gourd, tomatoes and peas.
07:05	100 grams or 2 raw tomatoes have 27 milligrams of <b>vitamin C</b> .
07:13	There are certain factors which decrease the <b>vitamin C</b> content of the food.
07:20	It is sensitive to heat and water.
07:24	It is lost if cooked at high temperature
07:27	or exposed to prolonged sunlight.
07:32	Cooking in excessive water and discarding the water also results in loss.
07:39	Storing food in the refrigerator for a long time reduces the <b>vitamin C</b> content.
07:46	Thus, many of the <b>vitamin C</b> rich foods are best consumed raw.
07:54	This way you get the maximum amount of <b>vitamin C</b> from it.
08:00	If they are cooked, they should be cooked on low flame for short durations.
08:08	Steam or saute vegetables instead of boiling.
08:14	Upon steaming, the loss of <b>vitamin C</b> is the least.
08:20	Do not repetitively heat the food.
08:24	Cook with minimum or no water.
08:28	Avoid storing and refrigerating food for a long time.

08:34	Let us learn some ways to increase our daily intake of <b>vitamin C</b> .
08:40	Eat fresh fruits and vegetables.
08:44	Pick the raw fruits as they have more <b>vitamin C</b> .
08:49	Try having a food source of <b>vitamin C</b> with every meal.
08:55	With your meals you can have mint, curry leaf or coriander dips ( <b>sauce made up of spices or nuts or seeds or vegetables – Bracketed text is only for International languages</b> ).
09:02	Lemon juice can be sprinkled on your food.
09:07	Garnish your meals with coriander leaves or mint leaves after cooking.
09:13	You can also increase the <b>vitamin C</b> content of your food by <b>sprouting</b> .
09:20	As much as possible include sprouted beans in your diet.
09:26	All these methods will ensure that we get adequate <b>vitamin C</b> from our diet.
09:33	Adequate intake of <b>vitamin C</b> is necessary for our good health.
09:39	This brings us to the end of the tutorial. Thank you for watching.