

Vitamin C content of local Thai fresh vegetables for the immune system body and antioxidants

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Suwanaruang T. Vitamin C content of local Thai fresh vegetables for the immune system body and antioxidants . *AGBIR*. 2021;37(6):229-230.

Vitamin C or ascorbic acid is a vitamin that the body human needs. It contributes to the strengthening of immunity, anti-radicals, free and helps to nourish the skin. Vitamin C can be obtained from general vegetables and fruits. The objective of this research was to determine the amount of vitamin C in local Thai fresh vegetables. Using samples of vegetables popularly

consumed by Kalasin people in Kalasin Province, the following vegetables were selected: eggplant, kajan flowers, lettuce, butterfly pea flowers, acacia, spinach and zucchini. Fresh vegetables contain vitamin C and vegetables contain 130 mg/kg, 340 mg/kg, 350 mg/kg, 340 mg/kg, 440 mg/kg, 490 mg/kg and 140 mg/kg respectively.

Key Words: Vitamin C; Vegetables; Immune system

INTRODUCTION

Vitamin C, full name ascorbic acid, is a vitamin that the human body cannot synthesize on its own, but is very important to the body's immune system. With the ability to fight free radicals that the body receives from the body's metabolic processes and various pollutants that will cause the cells in the body to deteriorate. Slow down wrinkles and aging Resulting in a healthier skin in addition to the benefits of the skin. Vitamin C also helps to prevent colds. Due to the properties that help the body's immune system to work more efficiently and also helps in matters of Prevent other diseases such as allergies, scurvy Diseases caused by viral and bacterial infections Blood clots in the trachea, etc. Sources of vitamin C near the body that we can find in fruits and vegetables. They are easy to find and available everywhere in Thailand. Many people may not know that some fruits and vegetables contain vitamin C in the amount that the body needs to use even if our bodies do not. Can synthesize vitamin C to use But vitamin C is still important. Important for the immune system and better skin. The ingestion of vitamin C through foods such as fruits and vegetables in proper amounts also provides the body with vitamin C intake [1,2].

Vitamin C is an aid in the formation of collagen. Including repairing the deteriorated tissue to be more perfect, both helping to nourish the skin and helping to recover nourish dry skin from sunburn. To restore smooth and healthy skin again. Vitamin C is a water-soluble vitamin [3]. To the body quickly and has high anti-oxidant efficiency vitamin C helps to remove foreign matter from the body can also nourish the skin to be white and bright, reduce acne, freckles, and acne problems. Vitamin C helps increase the efficiency of iron absorption. Vitamin C is suitable for people who lack iron or the body can absorb less iron. With vitamin C causing the body of we have a better ability to absorb iron. And receive adequate daily intake of iron and vitamin C. Vitamin C is easily broken down by light, oxygen, cigarettes, heat and water if exposed to these things for a long time, will cause vitamin C to be degraded quickly and cause the body to lack vitamin C in the end. Since vitamin C is extracted in large quantities to improve mood, it is important to avoid stress and be diligent. Frequent relaxation activities for the vitamins to be consumed as slowly as possible excessive intake of vitamin C can also be detrimental to health. For example, it can cause diarrhea, frequent urination, gallstones or skin rashes. In fact, therefore, vitamin C should be consumed in moderation. And avoid taking vitamin C supplements when it comes to diagnosis of diseases such as cancer in order to get the results to be as accurate as possible. The amount of vitamin C that should be received is 60 mg. per day in normal people. In pregnant

women or the elderly. Should get more vitamin C, about 70-96 mg. per day. Taking vitamin C to get the most benefit should be taken after meals or with meals. Because vitamin C helps the body absorbs nutrients and vitamin C to use. Work easier and does not cause irritation to the stomach Vitamin C helps fight free radicals, slow down aging and reduce the appearance of wrinkles. It will help the skin to be clear, smooth, soft naturally, helping the immune system. Healthy body and more efficient helps to treat and prevent colds. Helps prevent scurvy Vitamin C benefits reduce the risk and prevent many types of cancer. Helps to counteract the production of nitrosamines. (Carcinogens) help reduce blood cholesterol levels. Lowers blood pressure help reduce the occurrence of embolism in the veins. Help the cell life by using proteins in the cells to connect better. Improves the absorption of iron It is a natural laxative. Increase the effectiveness of drugs used to treat urinary tract infections. Helps reduce symptoms resulting from allergens. Prevent virus infection and many types of bacteria Help speed up the wound after surgery to heal faster. Helps to heal fresh wounds and burns faster [4,5].

The objective of this research was to determine the amount of vitamin C in fresh vegetables. Using samples of vegetables that are popular in Isan people in Kalasin province. The following vegetables were selected as follows: eggplant, kaffir flower, lettuce, butterfly pea flower, acacia, spinach and zucchini.

LITERATURE REVIEW

The results showed that The content of vitamin C in fresh vegetables in vegetables, aubergine, crocus flower, lettuce, butterfly pea flower, acacia, spinach and zucchini are 130 mg/kg, 340 mg/kg, 350 mg/kg, 340 mg/kg, 440 mg/kg, 490 mg. /kg and 140 mg/kg, respectively. From the research results, it was concluded that in fresh and boiled vegetables, Spinach has the highest vitamin C content. Even the human body cannot synthesize vitamin C to use. However, vitamin C is still important for the immune system of the body and antioxidants. The intake of vitamin C can be obtained from fruits and vegetables in the right amount can make the body get vitamin C.

Vitamin C is a vitamin that the body needs. Vitamin C helps to boost immunity as well as being an anti-oxidant it also helps Skin care and digestive system we humans need enough vitamin C to meet the needs Most of which humans can get vitamin C from vegetables. And fruits, especially citrus fruits or vitamin C in the form of a supplement if getting too much vitamin C It can also have a negative impact on health, which affects the absorption of too much minerals that lead to malnutrition. This causes the diagnosis of some

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Received: 16 November, 2021; **Accepted:** 30 November, 2021; **Published:** 7 December, 2021



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diseases to be wrong, such as diabetes, cancer or the detection of sugar in the urine, etc., resulting in excess iron intake.

DISCUSSION

This is because vitamin C contributes to the absorption of iron, resulting in excess iron intake, etc. In addition, the consumption of vitamin C in excess of what is necessary for a long period of time has an effect on this can increase your risk of developing kidney stones and gout. Because the body absorbs a limited amount of vitamin C, the body will excrete excess vitamin C through the urine. This vitamin C or ascorbic acid is converted to acidic. Salicylic acid, or acids that are very acidic and less soluble in urine, increase the risk of developing kidney stones if doses of vitamin C are exceeded. This will inhibit the body's ability to eliminate uric acid, causing uric acid to accumulate in the joint area. Vitamin C can cause inflammation, thereby increasing the risk of developing gout [6].

Caused by a lack of vitamin C, because without vitamin C the synthesized collagen is unstable to function, causing scurvy, causing brown spots on the skin, sagging gums, and bleeding from the mucous membranes throughout the body. Such spots are most common on the thighs and legs. People with scurvy will see Pale and partially immobile when the disease intensifies there may be open pus wounds, tooth loss, and even death. Human body only a certain amount of vitamin C can be stored. Can't store vitamin C for a long time and vitamin C stored in the body will deplete without new intake of vitamin C. Timeframe for the onset of scurvy syndrome in adults who are not stressed. In a diet completely devoid of vitamin C, this may last from one month to more than six months. Based on previously accumulated vitamin C intake [7].

In addition, other researchers have done In the study of vitamin C, studied the effects of Vitamin C in preventing colds Consistently taking vitamin C, for example, for prevention by taking at least 200 milligrams a day or more, found that in normal people, taking vitamin C does not reduce the incidence of colds. It was found to reduce colds by up to 50%.

The amount of vitamin C in selected fruits and vegetables from local markets. From the research results, it was found that the highest vitamin C content was mango, which contained 54.78 ± 2.19 mg/100 g of vitamin C, and the lowest vitamin C content was banana, which had 20.13 ± 1.54 mg/100 g. In vegetables, the highest vitamin C content was Coriander had the lowest vitamin C content of 123.526 mg/100 g, and it was found that the lowest vitamin C vegetable was carrot, which had the lowest vitamin C content of 2.6 ± 0.72 mg/100 g [8]. This makes them aware of the differences in the amount of vitamin C in different fruits and vegetables and will be of great benefit to consumers [9].

CONCLUSION

From the research results, it was concluded that in fresh vegetables, Coriander has the highest vitamin C content. The results also found that Vitamin C is also important for the body's immune system and antioxidants. Getting vitamin C can be obtained from fruits and vegetables in the right amount, so the body can get vitamin C.

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