

MELON PEEL, ITS CHEMICAL COMPOSITION AND MEDICINAL PROPERTIES

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Annotation:

The article gives the chemical composition, the use of dried melon in the treatment of certain diseases and an opinion on the medicinal properties.

Keywords: dried melon, C, PP vitamin, folic acid, sugar substances, mineral salts, pectin, medicinal properties.

Introduction

Polish products occupy a special place in the global food industry. According to the data, 6.2 mln. planted per hectare, 142.4 million per year on average. tons of crops are being grown [8]. It is known that consistent economic reforms in the field of agriculture and food industry are aimed at satisfying the population's demand for quality food products. In this place, fruit crops, especially melons, are of particular importance [5].

The field of melon growing is an integral part of the agriculture of our Republic. Especially the large-scale reforms carried out in recent years pave the way for more rapid development of this sector. Melons of Uzbekistan have their place in the world market due to their taste and nutrition [3].

It should be emphasized that melon can be widely used not only fresh, but also dried. This allows to provide the population with high-value melon products throughout the year.

Dried melon rind serves as an important food product. In addition to having an aromatic core, it contains easily digestible carbohydrates, starch, protein, a number of vitamins, binders, pectin, organic acids, and various mineral elements [6]. Vitamin C in melon core has a positive effect on intestinal microflora, helps to remove cholesterol from the body, improves digestion [2].

Vitamins and minerals are sufficiently preserved in the core of the melon. It strengthens immunity and strengthens the body. Melon peel is also a very useful product for anemia. Its regular consumption improves the functioning of the cardiovascular system, breaks down stones in the digestive organs, and strengthens bones [1]. Folic acid in melon rind is very necessary and useful for pregnant women. In addition, it relieves depression, insomnia and mental tension, helps calm nerves, can be used effectively to strengthen hair and nails, and rejuvenate the body [4].

Making melon rind in our country has a history of several centuries. Because of this, the ease of natural conditions in the region allows for ventilation and drying of melons. The purpose of drying the melon is to remove the moisture from it, thereby making the product unable to develop

microorganisms and various biological processes. Most importantly, a valuable product that can be used for a long time is obtained in this way [1, 3].

It is known that a number of products grown in our country, including winter melon varieties, can be stored well until January-February. However, at the end of winter and early spring, various biochemical changes occur in most fruits, vegetables and dairy products, their nutritional value and content of useful substances decrease. As a result, during this period, there are many cases where the demand for minerals and vitamins is not sufficiently met. At the same time, the use of melon core is very important in eliminating the above negative conditions [2].

Another useful aspect of melon rind, as mentioned above, is related to the fact that its composition is rich in useful and necessary nutrients. Melon pulp can be widely used as a healing nutrient for various diseases. Recently, the population of our republic is getting used to consuming a lot of various semi-finished and artificially synthesized products. In such conditions, it is advisable to include more useful and cheap products such as melon peel in the daily diet.

Based on the above, it should be noted that the study of melon rind and its composition, medicinal properties, and its effective use in the diet of the population remains one of the most important problems today.

Purpose of Work

Studying the chemical composition of melon rind, including the amount of carbohydrates, vitamins, macro- and microelements in it, and promoting its wide consumption among the population as a natural product.

Material and Method

Observations were carried out on home-dried melon cores of "Aq urug" and "Gulobi" melon varieties (dried for 6-12 days in June). Determining the chemical composition of prepared melon rind was carried out in the special laboratory of the Faculty of Food Industry of the Karshi Institute of Engineering Economics. The methods of polarimetry and refractometry were used. Measurements were carried out on a modern Universal sugar meter - polarimeter P1000-LED (DIICHTe GmbH Siemensring 9147877 Willich, District Court Krefeld HRB 12256 Germany/ date of manufacture 18.08.2019) and Refracto METTLER TOLEDO devices.

In order to increase the level of accuracy and reliability of the results, the studies were conducted twice and both results were compared. In the studies, the main attention was paid to the amount of carbohydrates, vitamins and minerals in the sample.

The obtained results and their analysis. The results obtained from the determination of the chemical composition of melon pulp are presented in the table below.

Table. Chemical composition of melon pulp

Macronutrients, g		
1.	Proteins	0,8
2.	Oils	0,6
3.	Carbohydrates	28,5
4.	Dietary fiber	3,7
Vitamins, mg		
5.	Vitamin A (retinol)	67
6.	Vitamin B1 (thiamine)	0,05
7.	Vitamin B2 (riboflavin)	0,07
8.	Vitamin B6 (pyridoxine)	0,09
9.	Vitamin B9 (folic acid)	0,23
10.	Vitamin C (ascorbic acid)	22,5
11.	Vitamin K (phylloquinone)	3,4
12.	RR Vitamin (nicotinic acid)	0,6
Mineral substances, mg		
13.	Calcium (Ca)	109
14.	Magnesium (Mg)	15
15.	Sodium (Na)	32
16.	Potassium (K)	121
17.	Phosphorus (P)	12
18.	Iron (Fe)	1.9

The obtained results showed that the amount of carbohydrates in 100 g of melon peel tested as a sample was 28.15 grams on average (28.5 g in sample 1 and 27.8 g in sample 2). Also, 100 g of melon core contains 0.8 g of protein, 0.6 g of fat, and 3.7 g of dietary fiber.

It can be seen that the amount of carbohydrates in the melon peel is significant. This makes it possible to use melon pulp as an important source of carbohydrates. Especially for young children who spend a lot of energy and are active, patients who are recovering from an illness and whose digestive system is weakened, and people who are busy with continuous mental work, the importance of melon core is incomparable. This is due to the fact that the product contains a sufficient amount of easily digestible and fast energy-releasing carbohydrates.

According to our results, melon core contains a large amount of vitamin A (67 mg per 100 g of product), vitamin C (22.5 mg), vitamin K (12.6 mg). Accordingly, melon pulp can be used effectively during avitaminosis. In particular, it can be recognized as a factor that ensures normal growth and development in children (due to the high content of vitamin A), strengthens immunity and regulates metabolism (due to the presence of vitamin C) and improves blood clotting (due to the presence of sufficient vitamin K).

The amount of vitamin C contained in the melon peel is superior to apples, cucumbers, peppers, and even close to products such as radishes and tomatoes. This makes it possible to use it effectively in early spring (especially in the difficult season called "ilikuzildi" in the language of our people), when the diet lacks many vitamins.

It is known that anemia is observed among the population, especially among women of different ages, pregnant women, nursing mothers, teenagers and children. This condition is often associated with a lack of iron in the diet and its poor absorption into the blood. In this regard, the importance of the melon is incomparable. It ranks first among products rich in iron element. According to our results, 100 g of melon peel contains 1.9 mg of iron. According to this indicator, melon core is almost equal to the amount in products such as wheat bread, buckwheat, and even the iron element in melon core can be compared with the amount of products such as apples and apricots [6]. Based on this, melon peel is recognized as an effective tool for treating and preventing anemia.

As can be seen from the above, the composition of melon rind is rich in carbohydrates and dietary fibers, a number of vitamins such as retinol, ascorbic acid, phyloquinone, and minerals such as calcium, potassium, and iron. Based on these properties, melon core can be effectively used as a remedy for many diseases, as a means of increasing the body's endurance and resistance, increasing immunity, and restoring health. Determining the amount of various biologically active substances and vitamin-like substances in the melon rind, and studying its healing properties medically in depth is one of the urgent tasks that should be performed in the future.

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