

How to Wash Rice Properly to Keep the Nutrition in Kencat Village, Bancaran, Bangkalan

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ABSTRACT

The purpose of this activity is to increase health knowledge and instill it in everyday life about how to wash rice properly and correctly. Furthermore, the community pays more attention to how to process good staple foods so that nutrient intake becomes optimal. Furthermore, the community pays more attention to how to process good staple foods so that the community's intake of nutrients is optimal. This activity consists of four stages. First, the team conducted a survey and analysis of regional problems. Second, planning includes the formation of performances and the preparation of activity programs. The third is implementation, and the fourth is assessment. This activity was held from March 14 to August 15, 2023. Respondents participated well in this activity. The respondents' health knowledge and their awareness of caring about the level of nutrients they consume rose.

INTRODUCTION

Rice is a staple food for the majority of Indonesian people. The type of rice that is usually consumed every day is white rice (*Oryza sativa* L.). Different types of rice when differentiated based on the color of the epidermis (*aleurone*). Types of rice is black rice, red rice, and white rice but in the middle (*endosperm*) is white. The color difference is caused by the content of anthocyanin pigments in different aleurone layers. The anthocyanin content is very high in black and red rice (Hanas DF, et al., 2017). Based on data from Badan Pusat Statistik (BPS), rice consumption by households in 2019 was 20,685,619 tons. From these data, the per capita rice consumption data per year is 77.5 kg. It is also known that the amount of rice production for the food consumption of the population in 2022 is 31.54 million tons (Takashi *et al.*, 2001; El-Sayed *et al.*, 2006).

Rice as a staple food does not only contain carbohydrate which gives a feeling of satiety when consumed, besides that there are several other types of nutrients contained in it. Based on Food Nutrition Composition data, white rice (*Oryza sativa* L.) contains types of nutrients including energy, protein, fat, carbohydrates, fiber, ash, various types of minerals such as calcium, phosphorus, iron, sodium, potassium, copper, zinc, and vitamin B1 (thiamin), vitamin B2 (riboflavin), vitamin B3 (niacin). Among these contents, the highest is carbohydrate and the lowest is vitamin B2. In 100 grams of raw rice contains 77.1 grams of carbohydrates and 0.08 milligrams of vitamin B2. The highest mineral content is calcium, 147 milligrams per 100 grams and the lowest is zinc, 0.5 milligrams per 100 grams. The highest vitamin content is vitamin B3 (niacin) 2.6 milligrams per 100 grams and the lowest is vitamin B2 (riboflavin) 0.08 milligrams per 100 grams. The content of vitamins in rice has benefits in the body, including a role in the process of forming energy. Thus the more energy needs in the body, the more the need for these B vitamins. The nutritional content in rice is found in different parts, such as carbohydrates and protein in the bran and endosperm layers, while fat and vitamin B1 are found in the bran layer (Patiwiri, 2006).

Before being consumed, rice goes through washing and then cooking. Rice washing aims to remove dirt and contaminants and to improve the taste and texture when consumed. The washing method by Indonesian people generally is to stir and rub the rice using a container such as a basket or a container with fine holes. Water is poured into the rice in a container stirred. This method is usually repeated 2 or 3 times.

The process of washing rice can affect its nutritional content. Research conducted by the Food Agriculture Organization (FAO) in 1993 proved that the process of washing rice before cooking causes a decrease in several nutrients including protein by 2-7%, potassium by 20-41%, thiamine by 22-59%, riboflavin by 11- 26%, niacin as much as 20-60%. Kong and Lee's research in 2010 proved that there are bioactive compounds in the aleurone layer of rice which are easily lost during the washing process.

The process of washing rice that is often carried out by Indonesian people in general is washing rice by rubbing the rice vigorously and then doing it

repeatedly until the washing water is clear. Most ordinary people think that the clearer the water for washing rice, the better it is for consumption.

IMPLEMENTATION AND METHODS

Implementation of this activity through 4 (four) stages:

1. Introduction to the situation, picture/situation

At this stage the team conducts a survey and analysis of regional problems to determine target activities.

2. Planning

This stage consists of activities :

A. Formation of counseling performance and assistance in washing rice

B. Compilation of programs of extension activities and assistance in washing rice

3. Implementation

The action in this activity is to design implementation activities. The stages of the activities carried out are first, the delivery of counseling material. second, provide assistance in washing rice properly.

4. Assessment

This stage is carried out to find out the activities are running in accordance with the objectives and planning. The team prepared activity evaluation sheets to be given to respondents at the end of the activity

This activity will be carried out in Kencet Village, Bancaran District, Bangkalan Regency on 13 Maret until 15 August 023.

RESULTS AND DISCUSSION

This community service activity is carried out with an extension and mentoring approach. Extension activities carried out in the form of socialization delivery of material followed by practical activities. Assistance activities are carried out by visiting each respondent's house. Within 1 week of counseling activities, the team carried out mentoring activities for the practice of washing rice for 1 month. The material for socialization and assistance in this activity is "Washing Good Rice to Maintain Its Nutrition".

The first activity was counseling to the community on April 7 2023 at 14.00 in one of the residents' houses, Kencet Village, Bancaran Village, Bangkalan Regency. The committee prepares tools and materials for counseling. The event began with the opening by the MC then continued by the presenter delivering counseling material. 18 respondents had attended before the event started. Respondents were quite enthusiastic about participating in counseling activities from start to finish. Respondents asked several questions related to the material. After the question and answer session was over, it was followed by rice washing practice activities. The community enthusiastically paid attention to demonstration activities on how to wash rice properly so that the nutrients in it were not wasted.

The number of respondents who attended this activity was 18 people. While the invitations have been distributed as many as 20 people. There were 2

respondents who were not present. In the question session, there were several respondents who asked about the nutrients in several types of rice and how to wash them so that the nutrients were not wasted. This shows that this activity is starting to open up a little awareness to them about the nutritional content they consume. Further expectations from this activity are that respondents begin to realize how to process various types of food properly and pay attention to intake the nutrients.

Assistance activities began on April 17 to June 10 2023. 6 responses have been selected that will provide assistance on how to wash rice properly during counseling activities. Respondents were selected randomly. Each team member provides assistance to 2 different respondents. The team visited the respondent's house 5 times during the mentoring period. The assistance activities went according to plan, the 1st assistance showed that the respondent was not washing rice properly. They are still used to stirring and rubbing the rice vigorously. In the 2nd mentoring the respondent still rubbed the rice gently. On the third visit, the respondents began to gently stir the rice. Assistance to 5 respondents have started to practice washing properly.



Picture 1. Material Explanation



Picture 2. Participant Enthusiasm

CONCLUSIONS AND RECOMMENDATIONS

This activity adds to the respondents' health knowledge and raises their awareness to care about the value of the nutrients they consume. Our further hope is that they pay attention to the nutritional intake they consume every day. Then they began to practice the correct way of processing rice.

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