

Assistance in the Production of Cracker Snacks in the Cileungsi Area

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ABSTRACT

Snack food production has its characteristics in the community, in the manufacture of food, there are often obstacles, ranging from raw materials, manufacturing methods, and capital. The purpose of this community service is to increase the added value of the production of cracker snacks made from tofu and rice, to become rainbow crackers in UMKM-Cileungsi. The method of implementing community service is assistance in designing the cracker production process, testing the production process, mentoring, and training to make tofu crackers and rainbow crackers. The attention of MSMEs and the community regarding PKM is considered positive and can make a very good contribution to the surrounding community. so that they have creative ideas in creating superior products with various flavors & shapes from easily available raw materials. At the same time providing new business opportunities.

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1. Introduction.

Food and clothing are the main basic human need[1][2], derivative products from food can be of various types and varieties[3][4], depending on processing and habits in each region[5]. In culinary, in addition to the main food, side dishes are usually served[6][7], one of which is crackers. Apart from being a side dish, crackers can also be a snack that is much favored by the community. With various variants and types and characteristics according to the origin of the region. In the marketing aspect, crackers are currently usually sold conventionally in markets, stalls, and grocery stores[8][9].



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Rainbow crackers are crackers made from rice, the ingredients used can use leftover rice or freshly cooked rice. Tofu chips are chips made from tofu, the tofu here is not an ordinary tofu product, but a tofu product that is purchased from a factory in the Cileungsi area, we can use it by making simple snacks and can be marketed in local stalls or other minimarkets[10].

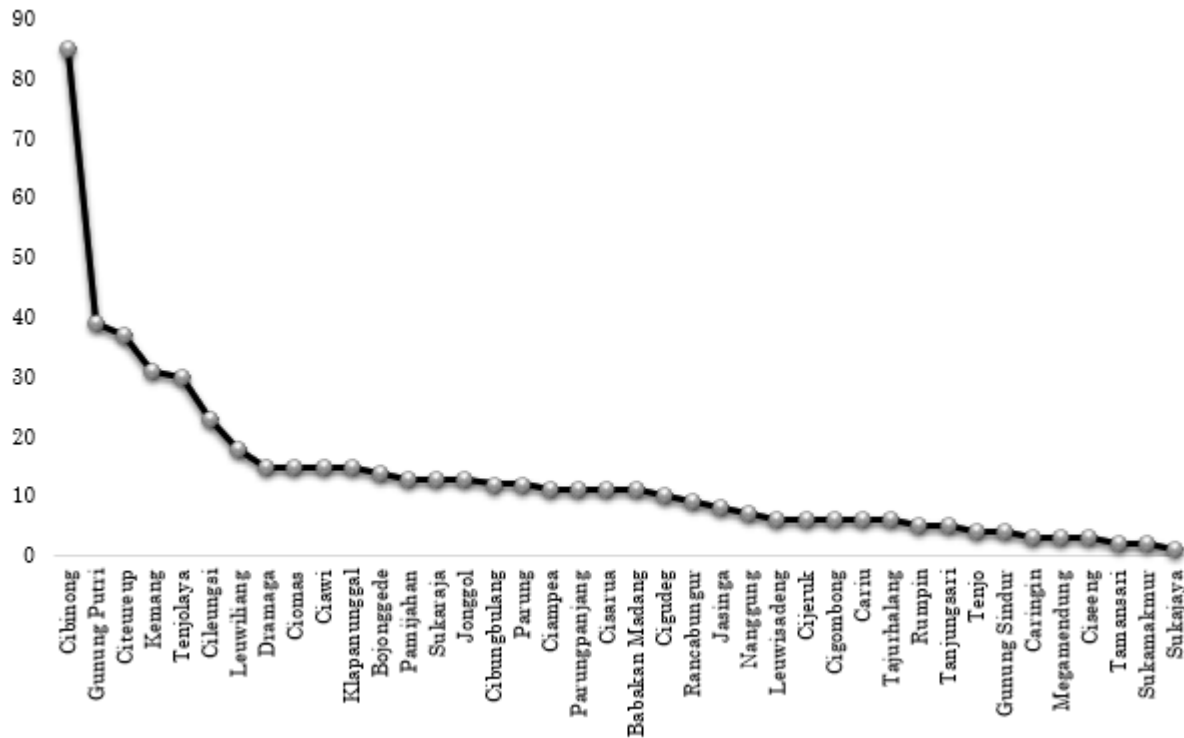


Figure 1. Data on active cooperatives in Bogor Regency [11]

The Cileungsi area is a sub-district which includes UMKM in 6th place out of a total of 40 total UMKM in Bogor Regency according to Figure 1, but currently, many UMKM is driven by entrepreneurs forgetting the characteristics of the materials produced in the Cileungsi area, but in fact, they can develop the results of these materials. the food with a processing process that is quite useful for economic income and also for the people around it, as well as reducing the number of unemployed[12][13][14]. Moreover, with the current condition of the COVID-19 virus pandemic, it is required to increase creativity. Therefore, we must start with ideas that can be developed by obtaining benefits for the community, especially our area. began to develop with the image of each distinctive taste[15]. In our opinion, this is a very interesting development and becomes an opportunity in submitting PKM activities on the Cileungsi Muhammadiyah College of Technology, namely mentoring MSMEs that have been around for a long time in the Cileungsi area. There are several objectives in this UMKM assistance PKM, because::

- a. Making products that have added value more than the basic ingredients used are easy to find anywhere[16].

- b. As a pioneer in developing business opportunities in the surrounding environment[17].
- c. To motivate young people who want to participate in developing their creativity by issuing creative ideas to be able to further develop food products for tofu chips and rainbow crackers[18],
- d. It is a means of small-scale business application to be used as personal income and income for people in need[19],
- e. Creating unique products to develop and produce[20].

2. Methods.

The methodology used in assisting UMKM is by proposing the process of making crackers from the raw materials of Tofu and Rice and transferring knowledge of the successful process to UMKM. Primary data were collected in two stages, namely mapping of raw materials around the UMKM area and testing the production process as well as quality control factors and recipes[21].

3. Results and Discussion.

a) Mapping of raw material.

One variant of processed crackers is from tofu raw materials, in this case, tofu has a lot of nutritional content that can be obtained from white tofu, including Tofu contains phytoestrogens (phytoestrogens) namely isoflavones[22], besides tofu, also contains other minerals such as magnesium, selenium, or manganese, not only that, tofu also includes foods low in calories, saturated fat, and cholesterol, and high in polyunsaturated fats[23]. Crackers can also be made from rice, which is the staple food of Indonesian[24]. White rice contains many nutrients, ranging from minerals (iron, manganese, and magnesium), B vitamins, to key nutrients such as carbohydrates and protein [25][26]. Based on the mapping analysis, in the Cileungsi area, there are at least 6 SMEs producing Tofu products, such as in Lebak Cileungsi, Cibereum, and Cikuda. This is one of the supporting factors in the development of tofu crackers[27].

b) Tofu cracker production process.

Figure 2 The flow of the process of making tofu crackers carried out in the Cileungsi area, from starting to making, conveying to packaging.

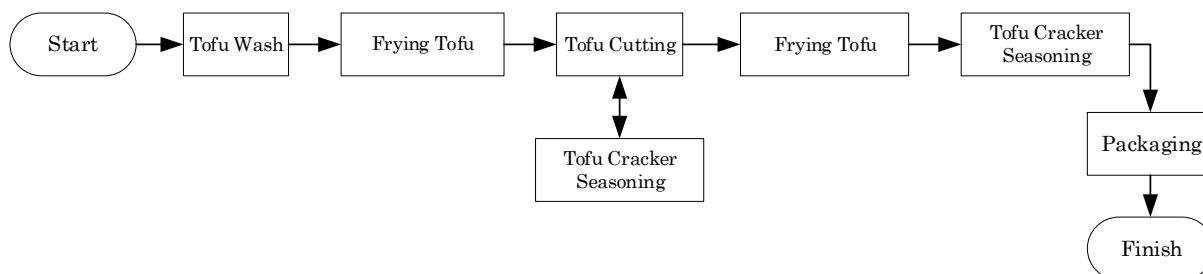


Figure 2. Design of the process of making tofu chips.

In Figure 3, the basic ingredients for making tofu chips are using fresh white tofu. The white tofu is cut into several parts and washed thoroughly.



Figure 3. Raw materials for making tofu chips.



Figure 4. Frying process.

Figure 4, is the second stage, namely the cooking process by frying on a hot fire over medium heat so that the tofu is cooked perfectly.



Figure 5. Tofu cutting process.

In Figure 5, is the third stage, namely the process of dividing the tofu that has been cooked until it is cooked and crispy. The cleavage and separation between the contents of the tofu and the outside of the tofu is intended to ensure that the tofu which will be given flour has a texture that is not wet and does not get stale.



Figure 6. The process of mixing tofu with wheat flour.

In Figure 6, the fourth stage is the mixing process between the outside of the tofu with rice flour and other seasonings.



Figure 7. The process of frying that has been wrapped in flour.

In Figure 7, is the fifth stage, namely the process of cooking (frying) tofu that has been coated with rice flour.



Figure 8. The process of adding spices

In Figure 8, is the sixth stage, namely the process of adding flavor variants to tofu that has been cooked until crispy.



Figure 9. Packaging process.

Figure 9 is the final stage in the production process, namely the product packaging process.

c) Rice Cracker Production Process.

Figure 10, the flow of making rice crackers to the packaging of the crackers that have been made.

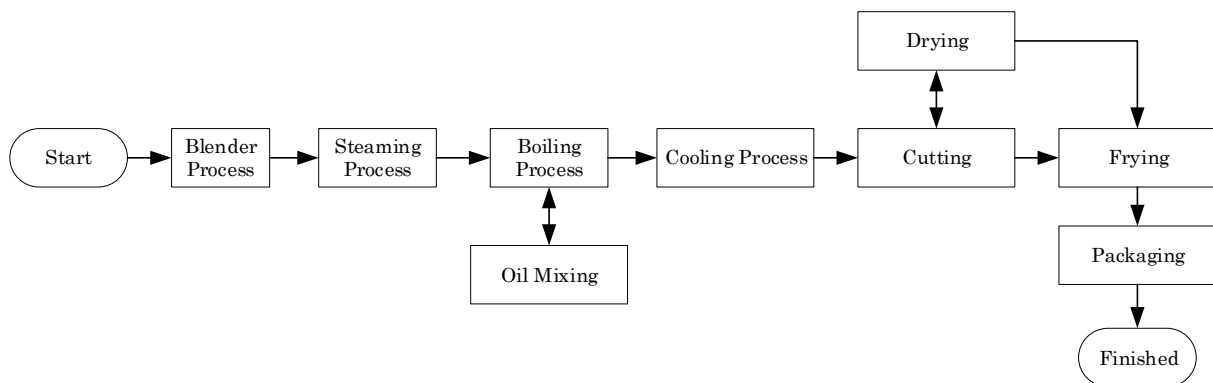


Figure 10. Design of the process of making tofu chips.

The following is the process of making rainbow crackers:



Figure 11. The process of smoothing rice using a blender.

In Figure 11, the first stage is the refining process (blender) by including all the basic ingredients: white rice and seasonings.



Figure 12. Material steaming process.

In Figure 12, is the second stage, namely the process of forming crackers from ingredients that have been pureed, then cooked (boiled) until boiling with a little cooking oil mixed, so that the crackers are not sticky when removed.



Figure 13. The results of steaming rainbow crackers.

In Figure 13, is the third stage, namely the cooling process of cooked (boiled) crackers. This cooling process is carried out for one day and night (in the refrigerator).



Figure 14. Cracker cutting process.

In Figure 14, is the fourth stage, namely the process of cutting crackers with an even thickness. So, after being left out of the refrigerator, the crackers are cut, after that, they are dried in the sun. This drying process takes one to two days, depending on weather conditions. Must be completely dry.



Figure 15. Packaging process.

In Figure 15, it is a form of dry crackers in the drying process.



Figure 16. Frying process.

In Figure 16, the fifth stage is the process of cooking (frying) crackers that have been dried in the sun before. The process of cooking these crackers is recommended using a fair amount of oil and small fire size because to make it easier for the crackers to expand perfectly when cooked.



Figure 17. Packaging process.

In Figure 17, the sixth stage is the final stage of the production process. This final stage is the process of packaging crackers.

d) Assistance Process & Transfer of UMKM knowledge.

Seeing the attention of UMKM and the community regarding assistance & knowledge transfer in managing the production process of rainbow crackers and tofu chips[28]. So this processing training can be considered to make a very good contribution to the surrounding community[29], especially to arouse the enthusiasm of the youth around in improving these simple UMKM. The feedback obtained is that there is a need for an increase in the variety of shapes and flavors/seasonings so that customers are more interested in the product[30].

4. Conclusion.

Based on the results above, it can be concluded that both raw materials are easily available in the Cileungsi area. From the results of process design trials and production testing, the two raw materials are considered to cause additional product value-added. And see the attention of UMKM and the community regarding assistance & knowledge

transfer in managing the production process of rainbow crackers and tofu chips. then this processing training can be considered to make a very good contribution to the surrounding community, especially to arouse the enthusiasm of the youth around in improving these simple UMKM. The feedback obtained is that there needs to be an increase in the variety of shapes and flavors/spices so that customers are more interested in the product.

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