

ADVICE ON MAKING INSTAN GINGER POWDER

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Abstract - *Counseling in the production of instant ginger powder aims to improve the economy of the Seropan III villagers. On the other hand, the goal of this counseling is to improve skills. Natural resources in the vicinity of Seropan III village will be productive if used wisely, particularly in the economic field. PKK women from Seropan III Village, Munthuk Village, and Dlingo are the intended participants in this counseling. Crystallization and filtration are used in the production of instant ginger powder. Counseling and two-way communication are used, followed by a question and answer session with PKK women to ask questions if there are people who do not understand or need to be confirmed in order to increase the community's/participants' knowledge.*

Keywords: *Counseling, Creative, Economy, Muntuk Village, Instant Ginger Powder*

1. INTRODUCTION

Humans have known and discovered ways to treat disease using natural ingredients since ancient times. Nature provides medicines and foods that are beneficial to humans. Indonesian traditional medicine makes a significant contribution to public health in its role. Traditional medicine, in addition to minimizing side effects, does not require a lot of time and is cost effective. The ginger plant is one of the traditional medicines that has received a lot of attention due to its benefits during the pandemic. Ginger's vitamin C and magnesium content aids in the body's immune system strengthening. Ginger also contains gingerols, zingerones, and shogaols, which act as antioxidants in our bodies. In Indonesia, three types of ginger are commonly grown: red ginger, small white ginger, and large white ginger. Each type of ginger has unique characteristics and benefits. Indonesia is one of the world's largest producers of ginger (*Zingiber Officinale Rosc*). Ginger production in Indonesia is increasing year after year. This abundance, however, causes issues in the economic field, specifically the declining economic value of ginger. Furthermore, improper post-harvest technology is to blame for the large amount of rotting ginger that is not being used optimally.

Ginger is native to Asia Pacific, and it can be found from India to China. Ginger is one of the herbal plants that is commonly used in Indonesia to treat a variety of diseases such as hypoglycemia, osteoarthritis, gout, rheumatoid arthritis, migraine, gastrointestinal system diseases, cardiovascular and hepatoprotective. In addition to controlling vomiting by increasing special peristaltic movements, ginger is a strong aromatic stimulant. Giving warm ginger drink to pregnant women with emesis gravidarum in the first trimester had a good effect on vomiting control. Ginger is frequently used in the production of beverages as a refreshing drink and body warmer. As a functional drink, ginger drink improves blood circulation and lowers cholesterol (Hasanah & Alyamaniyah, 2014).

Oleoresin content in ginger is widely used in the pharmaceutical and food industry. Oleoresin ginger processing is one of them by making preparations or instant drinks. Instant drinks preferably the community because drinks are ready to be consumed only with the addition of warm water or hot water and can be with one or more additional ingredients, and a better taste. With the processing technology of oleoresin extract it provides an opportunity to increase the economic value of ginger (Embuscado, 2015). Ginger contains at least 10 bioactive components that benefit the body. The main component is anticoagulant gingerol. Anticoagulants are prevention of blood clots and launch blood flow so that they can prevent stroke, heart and other degenerative diseases (Stoilova, et al., 2007).

Ginger requires methods for durable. One method is in the form of drying ginger into powder. Instant products, namely food products that do not use water, but can be added cold water or hot water, easily dissolved and can directly be consumed. The benefits of instant products include improving quality, facilitate storage, preparation and consumption. The terms of the spices are used as powders,

namely granules that are easily dissolved and dispersed in water, hydrophobic material (Sukmawati, 2019).

Utilization of Herball Plants One of which is the manufacture of instant ginger practiced and taught to the public aimed at improving the ability of village communities in the development of local resources, improving health and income. Another goal is to develop independence and increase public awareness about herbal plants around, and increase the economy of Seropan III Village (Kusrini, et al., 2017). Product innovations whose material consists of ginger such as JAMER (Ginger Creamer), Jakop (Ginger Coffee), JHE (JHE Lemon) (Supriyanti et al 2019). This is a consideration for counting ginger making powder. Devotion is a thorough application in the field of scientific discipline of the theories possessed into a real form of service to the community (Instan, 2018).

Health drinks in supplement products can improve body health if consumed. Health drinks can be found at pharmacies, stalls, herbal stores in the form of tablets, powders, fluids, capsules. People need health drinks that are practical with brewed and economical. For this reason, it is necessary to process traditional materials in the form of powder to make it easier for every time at the time of the pandemic. Seeing from the neighborhood where we have KKN activities in Seropan III Hamlet, Muthuk Village, Dlingo, Bantul, there are many emprit ginger plants that are cultivated by the community to support the need for kitchen spices but are not processed as medicines or health drinks. The background has inspired a group of 26 KKN 105 KKN UIN Kalijaga Yogyakarta to provide educational in the form of counseling about processing instant powder ginger with the aim of providing ideas and images for PKK Mothers Seropan III as a home industry opportunity to be developed in large scale Entrepreneur. In addition, this program is expected to improve the skills of the PKK Mothers (Family Welfare Development) Seropan III in processing of ginger raw materials into health drink products with high selling values. Ginger processing into instant ginger makes ginger going to last long and ready to be brewed if needed.

2. METHOD

The KKN Community Service Activities of Counseling for Counseling was held on August 25, 2021 at 3:00 p.m. WIB Seropan III Hamlet, Munthuk Village, Dlingo. The target of this community service is the PKK Mothers representative from each RT in Seropan III Hamlet. The method used for providing information about the counseling of instant ginger powder "to the PKK mothers by lectures and two-way discussions to deliver the material about the benefits of ginger rhizome, then demonstrations related to processing and making instant ginger powder. When the process of making instant ginger powder Used the principle of work in the form of filtration and crystallization. Crystallization is the process of refining a substance of air substances to solids through heating. The principle of crystallization is that solid compounds will be easily dissolved in hot solvents when compared to coolers. Then the filtration method is a separation operation Mixed between solids and fluid by

passing feedback (solids + liquid) through the filter media (Oxtoby, 2016). Here are the steps for the manufacturing process, namely the first stage of ginger peeled and cleaned, then cut into small pieces and then blended until smooth. Then filtered it Thin cloth Until separate between pulp and the juice. Thus for 1 hour until Pati settles, after that Jahe's juice is poured into the pan and heated. 2 lemongrass and 4 cenkeh seeds. After boiling, lemongrass and cloves are drained. Then the sugar is added and stirred until thickened and hardened. Ginger powder is mashed with a blender.

3. RESULT AND DISCUSSION

The Community Service Team 105 Group 26 gave material on how to process ginger into powdered health drink in the form of a power point show that explained a video of making ginger powder and also materials related to ginger. We started the counseling with the extension method with two presenters delivering in front while the extension participants paid attention and asked questions during the discussion process. In providing material we are based on the Journal of Community Service by Wati Sukmawati (2019). The provision of materials for making instant ginger powder is arranged in stages, starting with basic knowledge about “emprit ginger” such as the content in ginger, the benefits of ginger for the body, and the factors that affect the quality of ginger. Then the material about the tools, materials, processes and steps for making instant ginger powder which is explained in simpler language so that it is more conveyed to PKK mothers.

Factors that affect the content in ginger are the type of ginger, soil elements, harvest age, and processing of ginger rhizomes. Ginger contains volatile and non-volatile oils, and starch. The tools used in the manufacture of powdered ginger are a frying pan, sieve, blender, basin, and knife. The ingredients used in making ginger powder are ginger, granulated sugar, cloves, lemongrass, and water. The benefits of emprit ginger are to lower blood pressure, relieve pain, and maintain nerve function. Basically, in making ginger in Dusun Seropan III, the community grows and uses ginger only for additional cooking spices. Not processed into a business that has high selling value. When delivering the material, we from the KKN 105 Team Group 26 also explained about the draft budget related to ginger powder processing with the following details:

- **Production Cost**

Ginger (1/2 kg)	= Rp. 21.000
Sugar (1/2 kg)	= Rp. 6.000
Cloves and lemongrass	= Rp. 500
the amount of costs	= Rp. 27.500

- **Selling Price**

The resulting product	= 25 pcs
Selling price of each product	= Rp. 2.000
Total price	= Rp. 2.000 x 25 pcs = Rp. 50.000

- **Profit** = Rp. 50.000 - Rp 27.500 = Rp 22.500

Looking at the profits obtained from this business, it is hoped that this can be used as an illustration for PKK mothers when they are going to make it at home.



Figure 1. Giving Materials for Advice on Making Instant Ginger Powder



Figure 2. Participation of PKK Women Representatives From Each RT



Figure 3. Documentation of Activities Advice on Making Instant Ginger Powder

In the implementation of this counseling activity there are supporting factors and obstacles. The supporting factor during this outreach activity was the enthusiastic presence and cooperation of PKK mothers representatives from each RT, the head of the Seropan hamlet III and also the Yogyakarta Regional Police who had allowed and urged us to hold outreach, which of course took into account health protocols. . While there are some obstacles such as timeliness that still needs to be improved. With this service activity, they succeeded in increasing the knowledge of PKK mothers in utilizing and processing traditional plants in the form of ginger, on the other hand, they also provided great ideas and opportunities for home industry businesses that were economical and accessible with simple equipment and materials to PKK mothers.

4. CONCLUSION

The conclusion of this training activity is that instant ginger is one of the health drinks made from the main ingredient of ginger rhizome which has been further processed to form a liquid or powder that is easily soluble in cold or hot water, which can be efficacious in refreshing the body. Instant ginger is a food product in powder form, made from ginger extract added with sugar and/or other spices. In the process of making instant ginger using the principle of crystallization which is based on the utilization of the properties of granulated sugar (sucrose) which can return to form crystals after being melted. Ginger contains an active ingredient, namely oleoresin. Oleoresin is oil and resin which is a mixture of essential oils as a carrier of aroma and a kind of resin as a carrier of taste. Traditionally, ginger extract is used, among others, as a headache medicine, cough medicine, colds, to treat disorders of the digestive tract, stimulant, diuretic, rheumatism, pain relief, anti-nausea and motion sickness medicine, carminative (removing gas from the stomach). Instant ginger herbal drink can be accepted by the community with the distinctive taste of ginger and has the potential to be used as a business opportunity for the community so as to improve the community's economy

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