

## Training and Assistance in Making Ginger Basic Ingredients-Healthy Candy to Increase Family Income

Yuliati Indrayani

Universitas Tanjungpura, Indonesia  
[yuliati@fahatan.untan.ac.id](mailto:yuliati@fahatan.untan.ac.id)

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**Keywords:** Training; Assistance; Ginger; Healthy candy.

**Abstract** The people of Peniti Besar Village, Segedong District, Mempawah Regency, are aware of planting various spice plants, including ginger. So far, ginger is used as a spice in dishes and drinks or sold as fresh ginger with low selling value. This service activity aims to improve community knowledge and skills in processing ginger as a health candy that can be used as a business opportunity to increase family income. The method used is training in material delivery, discussion, and practice of making ginger candy. Partners as training participants were P.K.K. members, totaling 25 people. The evaluation results showed that partners welcomed the training activities. The knowledge and skills of the community-made ginger candy increased by 86.64%, from 13.36% (before attending the training) to 100% (after attending the training). People want to make ginger candy (100%) and sell it (92%) so that it can increase family income.

**Kata kunci:** Pelatihan; Pendampingan; Jahe; Permen kesehatan.

**Abstrak.** Masyarakat Desa Peniti Besar Kecamatan Segedong Kabupaten Mempawah memiliki kesadaran untuk menanam berbagai tanaman bumbu masakan, salah satunya jahe. Selama ini jahe digunakan sebagai bumbu masakan dan minuman, atau dijual dalam bentuk jahe segar yang nilai jualnya rendah. Kegiatan pengabdian kepada masyarakat ini bertujuan untuk meningkatkan pengetahuan dan ketrampilan masyarakat dalam mengolah jahe sebagai permen kesehatan yang dapat dijadikan sebagai peluang usaha untuk menambah pendapatan keluarga. Pengabdian ini berupa pelatihan dengan metoda yang digunakan berupa penyuluhan yang terdiri dari: penyampaian materi, diskusi dan praktek membuat permen jahe. Sebagai mitra dalam pengabdian ini adalah ibu-ibu PKK yang berjumlah 25 orang. Hasil pengabdian menunjukkan bahwa kegiatan pelatihan disambut baik oleh mitra. Pengetahuan dan ketrampilan masyarakat membuat permen jahe meningkat sebesar 86,64%, yaitu dari 13,36% (sebelum mengikuti pelatihan) menjadi 100% (setelah mengikuti pelatihan). Masyarakat berkeinginan membuat permen jahe (100%) dan menjualnya (92%) sehingga dapat menambah pendapatan keluarga.

## 1 Introduction

Ginger (*Zingiber officinale*) is a plant familiar to the community. During the COVID-19 pandemic, ginger plants are prevalent for consumption because they can improve the work of the immune system. Ginger rhizomes are reported to contain diariliterpenoid, phenylbutenoid, flavonoid, diterpenoid, sesquiterpenoid, gingerol, and shagaol (Nur et al., 2020), which are efficacious as antibacterial, antioxidant, anti-inflammatory, analgesic, diuretic, antifungal, anticancer, and antiviral (Kaushik et al., 2020). Secondary metabolite compounds in red ginger (*Zingiber officinale*) have been studied using GCMS (Nur et al., 2020).

Ginger plants are straightforward to cultivate. The production of ginger plants in West Borneo 2021-2022 was more than that of other rhizome plants such as galangal, aromatic ginger, turmeric, lempuyang, curcuma, and temuireng. The total production of rhizome crops in 2021-2022 in West Borneo is presented in Table 1 (BPS West Borneo, 2023).

Table 1. Total Rhizome Plant Production in 2021-2022 in West Borneo

No	Species of plant	Production (kg)	
		2021	2022
1	Ginger	2.772.531	3.805.897
2	Galangal	447.500	492.400
3	Aromatic ginger	335.730	274.863
4	Turmeric	816.783	756.263
5	Lempuyang	14.129	25.172
6	Curcuma	65.835	50.823
7	Temuireng	21.707	37.637

Because ginger plants are very easy to cultivate and have many benefits, ginger processing as a diversification of health products will play an important role in the economic sector as an effort to increase family income. In addition, it provides knowledge and skills for people to increase creativity or entrepreneurship to help meet family needs. However almost all people of Peniti Besar Village, Segedong District, Mempawah Regency do not know how to make healthy ginger candy, so the urgency of

mentoring or training in making ginger candy for these people is important.

Ginger is widely grown by people to meet their own needs. One of the districts in West Borneo where most people plant ginger is Mempawah Regency, precisely Peniti Besar Village. So far, people in Peniti Besar Village only use ginger as a spice for cooking or selling in fresh conditions to the market at low prices. In this regard, it does not mean that the people of Peniti Besar village in Mempawah Regency are not able to process ginger commodities properly, they only have limited knowledge and greater market access. The PKM team saw that the people of Peniti Besar village already had basic assets that needed to be processed in such a way that they could improve the family income. In Indonesia, ginger rhizomes are widely used as an ingredient in traditional medicine, spices, and herbal drinks. The PKM team sees the great potential possessed by the people of Peniti Besar who cultivate ginger.

According to the head of Peniti Besar Village, Segedong District, Mempawah Regency, the majority of people after carrying out a routine of tapping rubber in the morning have no other activities. This is due to the lack of creativity of people and the lack of knowledge to do things that can improve the family economy. However, the results of ginger cultivation planted by most people can be processed into products that have the potential to increase family income.

The use of ginger has not been carried out optimally in Peniti Besar Village, so it does not add economic benefits to the people who grow ginger. On the other hand, ginger plants have many benefits, including nourishing the digestive system, treating migraines, treating osteoarthritis, improving blood circulation, burning fat deposits, preventing colon cancer, and reducing muscle pain.

One way to increase the added value of ginger is to carry out agro-industrial activities (Fatmawati et al., 2021). One of the efforts that can be made to carry out an agro-industrial process is the post-harvest processing of ginger commodities. This aims to increase selling prices' shelf life and reach a broader market (Asriani et al., 2021). Therefore, based on the conditions in Peniti Besar Village, it is necessary to assist in processing ginger into healthy ginger candy (hard candy ginger) with higher selling value.

Ginger candy is a product given ginger extract as a flavor. Ginger candy has many variations in shape and how to make it, such as chrysanthemum, tablet, hard, and chewing candy. Hard candy processing uses sucrose as a

raw material (Maflahah et al., 2023). But of the four types of candy, chewing candy is the most suitable for small-scale industries. The sweets circulating among the public are hard candy and soft candy. Hard candy is dense in texture, while jelly candy is soft candy made from water or plant juice and gelling agents (Aji et al., 2021).

According to Sari and Nasuha (2021), the nutritional content of ginger includes carbohydrates (17.86 g/100 g), fiber (3.60/100 g), protein (3.57 g/100 g), sodium (14 mg/100 g), iron (1.15 g/100 g), potassium (33 mg/100 g), and vitamin C (7.7 mg/100 g). The results showed ginger is efficacious as an antiviral, anticancer, anti-inflammatory, antifungal, antioxidant, antibacterial, analgesic, and diuretic (Dewi and Riyandari, 2020; Zulfan et al., 2018).

The very high potential of ginger and its valuable ingredients for making healthy candy provides an excellent prospect for the people of Peniti Besar Village, Mempawah Regency, to diversify ginger into higher economic value products because most villagers grow ginger. However, people's knowledge of making ginger candy is deficient. In contrast, making ginger candy is straightforward, and simple tools are used so that the people of Peniti Besar Village can understand this simple technology. PKK members of Peniti Besar Village, Mempawah Regency, are partners in this training activity. PKK (Pemberdayaan Kesejahteraan Keluarga) is the Women's Association that empowers women and participates in developing Indonesia's welfare.

The initial orientation results showed that the Peniti Besar Village PKK members had never made ginger candy. Therefore, ginger candy-making training in Peniti Besar Village was carried out to transfer knowledge and diversify processed ginger into healthy candy. The purpose of this community service is to improve people's knowledge and skills in making ginger candy as an effort to diversify processed ginger products. Through this service activity, there is expected to be an increase in the selling price of ginger in the form of candy compared to fresh ginger conditions. Furthermore, it is hoped that PKK members can improve the family economy.

## 2 Method

This research is qualitative research conducted in Peniti Besar Village. Peniti Besar Village, Segedong District, Mempawah Regency has considerable potential for ginger raw materials, this is because most people cultivate ginger in their yards. However, this potential has not been

fully utilized in products with economic value. So the method used in this activity is training and assistance in making ginger candy. The training is carried out so that the community can develop themselves by utilizing and processing their assets both in the economic and social fields.

The method of implementing Community Service (PKM) is carried out in the form of mentoring and training using the Google Maps application so that the location of the village can be seen on Google Maps so it can promote its products through social media. So the PKM team chose this village as a partner in this PKM activity.

In this service activity, the subject is the people of Peniti Besar Village, Segedong District, Mempawah Regency. The training participants who participated in this PKM activity were 25 PKK members. The Community Training approach can offer partners the opportunity to increase their skills in how to make ginger candy with raw materials in their yards to have an impact on the family income. In addition, training and mentoring are generally used in carrying out community service activities because this method is considered to be able to improve the skills and knowledge of participants. The strategies needed in this activity are as follows:

First, the approach. In this case, the PKM team communicates directly with partners (the village head) regarding the problems faced by the people of the village. In this approach, the PKK team conveyed the purpose and objectives of PKM activities. Furthermore, the PKM team identified the problems faced by the people until finally finding the core problem and main problem. From the identification of these problems, a mapping of problems should be followed up. The approach used can be in the form of an analysis of needs related to ginger processing. This activity aims to foster the abilities and knowledge of people to improve skills for entrepreneurship. Furthermore, the people plan a business to improve the family income.

Second, is program planning. In this planning, an activity is prepared, and the necessary thing needs are recorded. The activity began with a mapping of the problems faced by the people of Peniti Besar Village. With the mapping of the problem, it is hoped that it will be able to overcome the ignorance of people on how to process ginger into healthy candy. In planning, it is also agreed on the time and place of the implementation of the activity and the participants who will be the object of the activity.

Third, the implementation of activities. That is to carry out programs that have been designed in the planning stage. In this activity, training and assistance in making ginger candy were carried out according to the theme

that had been agreed with the village head. The form of training is the presentation of material related to the process of making ginger candy. Furthermore, participants were allowed to practice making ginger candy together.

Fourth, Evaluation of activities. Evaluation of activities is carried out before and after the activity is completed. This is intended to see the success of the training through the level of understanding of the participants in the material presented. The level of understanding of participants in the process of making ginger candy can be known by questionnaires distributed before and after the activity. If there is an increase in participants' knowledge after the training, then the activity can be said to be successful and under the expectations and objectives of the activity. In addition, the evaluation of activities is also carried out to obtain feedback as material in the preparation of socialization programs for related agencies.

The stages of the implementation of PKM activities are presented in Figure 1.



Figure 1. Stages of community service activities

The explanation of Figure 1 is as follows:

- a. The PKM Team consists of three members, namely one lecturer from the Forestry Study Program who acts as a tutor, drafter, and facilitator, while two students of the Forestry Study Program serve as assistants to implement the activity. Lecturers determine mentoring and training materials.

- b. The PKM team determines the location of PKM activities based on a situation analysis that is in accordance with the theme of the training material.
- c. The implementation of PKM activities was carried out in Peniti Besar Village, Segedong District, Mempawah Regency in the form of assistance and training in making healthy candy from ginger.
- d. The PKM team evaluates PKM activities. The evaluation carried out is related to the examination of the success of PKM activities carried out based on the effectiveness, efficiency, and impact of the activity concerning the specified objectives.
- e. Preparation of PKM activity reports as a form of accountability for the funds provided.
- f. The results of PKM activities carried out will be published in scientific journals to publish the results of PKM activities that are original, valid, and academically verified in a certain field, namely the making of ginger candy.

### 3 Results

This service focuses on processing ginger into candy, which is considered more efficient in terms of tools, materials, and time needed, while the profit that can be achieved is quite promising. This mentoring and training activity consists of three main stages, namely conducting a location survey or orientation and meeting with stakeholders to apply for activity permits and determine the schedule for the implementation of activities. The next stage is to provide training on making ginger candy delivered by Dr. Yuliati Indrayani as a facilitator. This activity aims to find out the extent of participants' understanding of the process of making ginger candy. The last stage is to assist participants in the practice of making ginger candy.

The initial orientation activity was conducted to meet with the head and village officials to inform the implementation of Community Service (PKM) activities. On this occasion, the PKM Team also asked about the potential in Peniti Besar village and the problems faced. After coordinating with village officials, we agreed that the activities to be carried out were making ginger candy to diversify processed ginger. The survey results show that the ginger that is widely grown and sold by partners is categorized as small white ginger or known as *emprit* ginger. Partners sell it in a wet condition to the nearest market, but as a whole, people only use ginger for daily

needs. People also never process their ginger into food or drinks, they only know how to sell it raw.

Coordination also agrees on the place, implementation time, and training participants. The interviews with the community show that ginger harvested by the people of Peniti Besar Village is only used as a spice for cooking, drinks for consumption by families, or sold in fresh conditions. There has been no processing of ginger in other forms than previously mentioned, such as processing ginger into candy. This is due to the absence of public knowledge about making candy with ginger raw materials.

The PKM team and partners have also prepared tools and materials in advance that focus on making candies. A description of the tools, ingredients, and processes required to make ginger candy is presented in Table 2.

Table 2. Tools and materials for making candy

Tools	Materials
Stove	Jahe
LPG Gas	Sugar
Digital scale	Water
Blender	lemon
Knife	Cornstarch
Plastic packaging	Rice flour
Frying pan	

This community service activity has targets and outputs as presented in Table 3.

Table 3. Targets and outputs of community service activities

No	Target	Output
1	Participants' understanding of ginger candy-making technology.	Increasing the understanding and knowledge of



		participants about ginger candy-making technology.
2	Participants' understanding of ginger candy-making technology for entrepreneurs in improving the family economy.	Increasing participants' understanding of ginger candy-making technology to improve the family economy.
3	Participants' ability to package ginger candy in attractive packaging.	Improving participants' ability to make good and attractive candy packaging.
4	Participants' knowledge of what media can be used for product sales promotion media.	Increasing the knowledge and ability of participants in promoting ginger candy products.
5	The ability of participants to operate social media as a means of digital marketing.	Improving participants' ability to operate social media as a means of digital marketing to increase product sales.
6	Publish the results of PKM activities in scientific journals.	Publication of the results of PKM activities in scientific journals.

To achieve the targets and outputs of this PKM activity, several stages are carried out as follows:

- a. Forming a PKM activity team consisting of three members, namely one lecturer and two students of the Forestry Study Program. The lecturer acts as a tutor and facilitator, while students play the role of companions or assistants according to their respective skills.
- b. The PKM team determines the training materials as well as the location of PKM activities which has a lot of ginger raw materials.
- c. Prepare training materials according to the theme. Each member has duties as previously agreed.
- d. The implementation of PKM activities in Peniti Besar Village, Segedong District, Mempawah Regency by conducting training in making ginger candy. The participants were taught the process of making candies from ginger raw materials.

- e. Evaluate PKM activities. The PKM team evaluated the success of the activity by analyzing the level of understanding of participants about how to make ginger candy. Evaluation is carried out for activity reporting and for the preparation of scientific articles to be published in scientific journals.
- f. Preparation of activity reports. Community service is an obligation that must be carried out by every lecturer because it is a form of the Tri Dharma of Higher Education. PKM activities can be carried out in the form of the application of science and technology to improve the welfare of the community. In addition, the preparation of the report is also proof of accountability for the funds that have been given for the implementation of this activity and as reference material.
- g. Publication of the results of PKM activities. The results of PKM activities are published in the *Guyub* scientific journal as a form of dissemination of the results of the activity and as scientific reference material for the implementation of community service.

The implementation of the training carried out by the PKM team in community service activities resulted in solutions to partner problems. Before conducting the training, participants were given a questionnaire to fill out. The purpose of filling out the questionnaire before the training is to find out the participants' knowledge before participating in the training. The questions in the questionnaire consisted of: do you know the species of ginger, do you know that ginger can be made into candy, do you know how to make ginger candy, do you have a desire to make ginger candy, do you want to sell ginger candy. The initial evaluation in the form of participants' knowledge before attending the training on the use of ginger for making ginger candy can be seen in Figure 2.

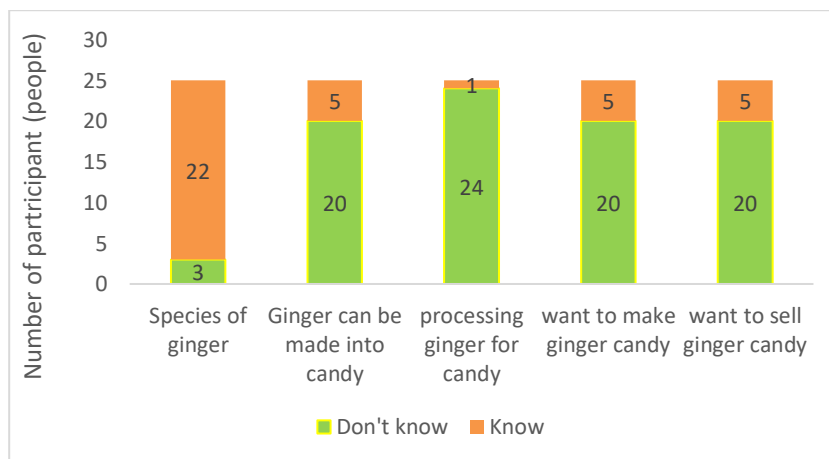


Figure 2. Participants' knowledge about ginger before training

Figure 2 above comprehensively explains that before the training, more than 90% of participants did not know the ingredients used for making ginger candy or the process of making ginger candy. As many as 80% of participants answered that they did not know whether they wanted to make and sell ginger candy. This is because they do not know how to make ginger candy and there is no idea where ginger candy will be sold.

Participants' answers were recorded and compared with answers after training. After participating in the training, participants were given another questionnaire with the same questions. The purpose of giving questionnaires before and after the training was to see the improvement in participants' understanding of making ginger candy.

After filling out the questionnaire, participants were given training on how to make ginger candy. The material is delivered using laptop media and infocus in the form of a PowerPoint presentation (PPT). Information is conveyed in the form of species of ginger plants, the benefits of ginger for health, the process of making ginger, and commercialization opportunities. During the material delivery, participants seemed enthusiastic to listen to every detail (Figure 3). The participants' enthusiasm was seen from their many questions about making ginger candy (Figure 4). The questions asked by the trainees were: how long is the shelf life of these ginger candies if they are sold? can all species of ginger be made into candies? What species of ginger is recommended for making ginger candies? The material presented by the PKM Team is shown in Figures 5 and 6.



Figure 3. Participants enthusiastically listened to the speaker



Figure 4. Participants asked questions about the material presented



Figure 5. Delivery of material in the process of making ginger candy



Figure 6. Participants in training and assistance in making ginger candy

Before attending the training, people only used ginger as a spice for dishes and drinks or sold it as fresh ginger at the nearest market. Therefore, ginger has not provided many opportunities for the community

to improve the family economy. If, after training, people want to make ginger candy and commercialize it, then people's income and welfare will increase.

After the training, a second evaluation was conducted to determine the increase in participants' understanding. Participants were distributed questionnaires with questions similar to the initial questionnaire to fill out. The activeness and knowledge of the assisted participants increased from the initial to the last meeting. The results of the evaluation of participants after attending the training are presented in Figure 4.

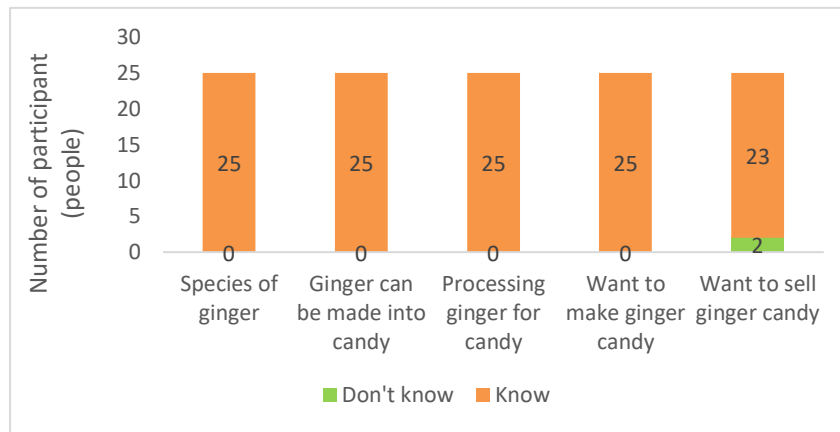


Figure 4. Participants' knowledge about ginger after training

Figure 4 shows an increase in participants' understanding after attending the training. The evaluation showed that 96% of participants could make ginger candy after the training, compared to 4% before. The increase in participants' understanding by 96% shows the success of this ginger-based health candy-making training activity. With the increase in participants' knowledge about making ginger candy, it is hoped that the people of Peniti Besar Village, Segedong District, and Mempawah Regency will process ginger into healthy candy to increase family finances.

Besides conducting evaluations using questionnaires, we also conducted direct interviews with participants related to the implementation of this community service activity. The results of this interview aimed to find out whether the material presented helped solve the problems faced. The results of the PKM team's interviews with the participants were recorded as follows:

- a. The ginger candy-making training carried out provided new things and new learning for the people of Peniti Besar Village, Segedong District, Mempawah Regency. The training is carried out face-to-face and more easily understood because it immediately practices what has been

conveyed. Training in making ginger candy is one of the things needed by people of the village in processing ginger which has not been maximized so far. This training provides a lot of new knowledge that has not been known by the people so far. According to the people of the village, this training is fun because it provides material that is according to their problems. The training is not boring because it is accompanied by direct practice of making ginger candy. Furthermore, there is two-way communication between presenters and participants during the training.

- b. The training material provided is clear and easy to understand, delivered in a relaxed atmosphere so that the trainees can easily understand. In addition, the delivery of the material was accompanied by discussions (questions and answers) so that the training atmosphere became effective. During the training, no participants left the room. On the sidelines of the training, participants took advantage of the time to discuss with the presenters. At the end of the training, participants and presenters can build a good synergy to realize this ginger candy entrepreneurship. The learning obtained is important and must be applied as an entrepreneur to improve the family economy. This training provides enlightenment to people who cultivate ginger to process their ginger into candy products that can be sold and have economic value.

In the implementation of assistance, supporting and inhibiting factors were found in implementing ginger candy production in Peniti Besar Village. The village head and village officials strongly support their residents in carrying out entrepreneurship in making ginger candy. With this support, residents are enthusiastic about opening a ginger candy sales business and are expected to increase family income. Meanwhile, the inhibiting factor is that sales strategies still need to be intensified. People of Peniti Besar village have many limitations in terms of marketing, especially in the promotion, socialization, and mobilization stages which require considerable costs. Another inhibiting factor is most residents do not understand how to use devices to promote products through digital marketing.

#### **4 Discussion**

This PKM activity was held on 14 September 2023 and was attended by 25 PKK members. In addition, the Village Head, Village Secretary, and Hamlet Head were also present at this training. The training was held at

Peniti Besar Village Hall, Segedong District, Mempawah Regency, West Borneo. The implementation of this service activity uses a training method consisting of material delivery (socialization) and the practice of making ginger candy by participants. At the time of the initial orientation, it was agreed that the community would provide raw ginger materials for making sweets while the PKM prepared the equipment. Ginger, sugar, glutinous rice flour, cornstarch, and clean water make ginger candy. At the same time, the equipment used is a blender, basin, filter, pot/pan, stove, aluminum baking pan, plastic wrap candy, and tissue.

This community service is carried out with training techniques. According to Hyseni et al (2022), training is one way to increase new knowledge and have a positive impact on improving skills in participants. In the material delivery activity, training participants were introduced to ginger candy products as health candy. Afterward, the delivery of the ginger candy material continued. The material is delivered as presentations using a laptop and LCD media. In addition, the material was also given in the form of leaflets equipped with photos of the stages of making ginger candy so that participants could more easily understand. After completing the material delivery stage, a discussion session was opened between the participants and the PKM team.

The next stage is the practice of making ginger candy by participants and the PKM team. All participants participated in making ginger candy according to the manufacturing process that had been delivered. The stages of the ginger candy manufacturing process are as follows:

- a. Prepare the necessary ingredients: 250 g ginger, 500 g sugar, six tablespoons glutinous rice flour, one tablespoon of cornstarch, one cup of water, and one lemon.
- b. Ginger is blended with one cup of water and then filtered (only ginger juice is used).
- c. Put the ginger juice in a pan, then add sticky rice flour, cornstarch, sugar, and lemon juice.
- d. Cook the mixture until thickened, then mold.
- e. After cooling, cut into pieces and then wrap using plastic.
- f. The candy is ready to serve.

The final stage is the evaluation of the training results. This evaluation is necessary because according to El and Alkhanaizi (2018) the purpose of the evaluation is to find out the extent to which training participants learn new things from the training they have participated in. This evaluation

method is for trainees to fill out questionnaires containing questions related to ginger plants. The questions in the questionnaire are about the species of ginger plants, the benefits of ginger in cooking spices and drinks, and the process of making ginger candy. Questionnaires were given before and after participants received training, this was intended to assess the increase in participants' understanding of ginger candy making. Direct evaluation of the enthusiasm of training participants was also carried out, which can be seen from the seriousness of the participants in listening to the material presented and the questions given after listening to the material presentation.

Ginger candy is a product given ginger extract as a flavor. Ginger candy has a lot of variations in shape and how to make, such as crystal, tablet, hard, and chewing candies. However, chewing candies (chewy candies) are suitable for small industries.

The benefit of transferring knowledge of the process of making ginger candy is to open people's insight that the ginger they plant can be of higher economic value if processed into healthy candy. Several studies on the benefits of ginger for health have been carried out such as Bahrah and Wigunarti (2022) stating that ginger affects the frequency of nausea and vomiting in first-trimester pregnant women, Nursakinah and Verawati (2021) state that red ginger extract is a source of antioxidants for people with diabetes mellitus. The effect of red ginger extract (*Zingiber officinale*) on fasting and postprandial blood glucose levels in diabetic rats has also been studied by Wicaksomo (2015).

The ginger candy made in PKM activities has complex characteristics due to the crystallization of granulated sugar. Liquid sugar can be used to create softer ginger candy, such as gel, to reduce the crystallization of granulated sugar (Akib et al., 2016). The manufacture of ginger candy in gel form has been carried out by Bactiar & Rossi (2017) and Ridawati & Alsuhendra (2022). Another ginger candy variant has been developed by Daniela et al. (2015), who make ginger candy with the addition of pineapple and melon juice. Meanwhile, Ngatirah et al. (2023) utilize red ginger starch waste as filler in making ginger candy.

Ratnasasi et al. (2022) reported that ginger candy is beneficial for overcoming Hyperemesis Gravidarum in pregnant women, which is a state of lack of energy and nutrients in pregnant women due to nausea and vomiting. Ginger candy can overcome nausea in pregnant women so that Hyperemesis Gravidarum can be overcome.



After the ginger candy-making training is done, the next step is product marketing. One way that can be done to market ginger candy in Peniti Besar Village is through UMKM. Yananto et al. (2020) stated that UMKM (Usaha Mikro, Kecil, dan Menengah) has proven to have encouraged and stimulated national economic growth sustainably.

UMKM's business development in Indonesia is one of the priorities for national economic growth (Yazfinedi, 2018). This is in addition to the fact that these efforts are the backbone of the famous economic system, which is not only aimed at reducing the problem of inequality between groups, incomes, and business actors or poverty alleviation and employment. Moreover, its development can expand the economic base and significantly contribute to accelerating structural changes, increasing the regional economy and national economic resilience (Martini et al., 2019).

Based on the results obtained, the PKM team assesses that this community service has succeeded in providing innovation and knowledge to partners in terms of differentiation of processed ginger products. In the future, partners will be able to process and package their ginger into candies, even other foods or drinks that have more economic value, so that their quality of life will be better.

## 5 Conclusion

The training activity for making health candy to diversify the use of ginger received a good response from the Village Head, officials, and the community of Peniti Besar Village, Segedong District, Mempawah Regency, represented by P.K.K. members as training participants. This can be seen from the enthusiasm of participants following the training from beginning to end, and during the training, participants actively asked about the process of making ginger candy. The evaluation results showed an increase in the understanding of calm participants in making ginger candy by 96%, from 4% before training to 100% after training.

The follow-up of this service activity is to hold training on promoting and marketing ginger candy products through social media and digital marketing. In addition, cooperation with related agencies such as the Department of Industry and Trade is also needed to hold exhibitions of village products marketing through village cooperatives or UMKM.

## 6 Acknowledgment

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