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# Increasing Public Awareness of the Importance of "Gemari" (Love to Eat Fish) Through Mentoring Catfish Cultivation and Processing

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#### **ABSTRACT**

Catfish is one type of freshwater fish that is much loved by the people of Indonesia. In addition to its delicious taste and easy to process, this type of fish also has a lot of nutrients in it that are good for body health. Catfish farming is a maintenance activity for catfish enlargement from small in size (fry) to consumption size. Catfish farming is one of the efforts to provide food needs as a source of protein. Protein sources from fish are increasing day by day, along with increasing public awareness about the importance of catfish's nutritional content. The method used in this community service activity is by providing counseling, handing over catfish seeds, and assisting catfish processing as a health promotion medium. The results of Community Service activities regarding catfish farming, processing methods, and understanding of the high nutritional content in catfish can increase family interest in catfish consumption through fondness for eating fish.

**Keywords:** Accompaniment, catfish, fond of eating fish

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#### INTRODUCTION

Community empowerment is the active participation of the community in an effort to provide empowerment or enhancement through activities in the form of activities carried out jointly between the service team and the community. Community Empowerment aims to make the community independent by realizing the capacity of the community owned (Yulistyari et al., 2024). The challenges of society are seen in ecological, economic, political, social and cultural instability most evident in current conditions are nutritional and health problems (Santi et al., 2019). One form of activity in an effort to empower the community in this activity is to provide briefing related to catfish management through catfish counseling and processing. Counseling is an educational activity carried out with individuals or groups by providing knowledge, information and various abilities to shape attitudes and behaviors in life (Ayuningtyas et al., 2022).

Nutrition problems in Indonesia are still a fairly large and increasingly complex problem. One of the efforts that can be done is to apply a healthy lifestyle, including a balanced diet which is one of the main factors causing complex nutritional problems in Indonesia.

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Therefore, people must have complete and clear information about the implementation of a balanced diet, including eating a varied diet (vegetables, fruits and fish), a healthy lifestyle, exercise, and weighing regularly. Nutritional disorders will have an impact on decreasing the quality of human resources on physical development and cognitive development, thus affecting work productivity (Khasanah et al., 2022).

The need for consultation activities to improve public understanding and attitudes about a balanced diet, in this case nutrition in fish. Fish is also rich in vitamins and minerals. If in the daily menu we have fish, then we have contributed high nutrients in the body. Increasing public awareness of the importance of fish consumption for nutritional improvement will increase fish consumption (Ciptawati et al., 2021). The influence of nutritional disorders will have an impact on the decreasing quality of human resources (HR) on physical development and also cognitive development which affects work productivity. Therefore, it is necessary to conduct counseling to increase public knowledge and attitudes regarding balanced nutrition, in this case the nutrients contained in fish. Fish is also rich in vitamins and minerals. Fish diversity in Indonesia includes freshwater fish, some of the most common types of freshwater fish are catfish, pomfret and tilapia included in the group of freshwater fish. Tuna, whitefish and snapper belong to the class of saltwater fish (Kusumaningrum & Oktawati, 2023).

If in the daily menu we serve fish, then we provide a high nutritional contribution to our body tissues. Public awareness about the importance of eating fish for nutritional improvement will increase fish consumption. Fish is a good food choice because fish meat contains shorter protein fiber compared to beef or chicken protein fiber. Fish also contains omega 3 fatty acids that have their own advantages over other foods of animal origin, because the composition of essential fatty acids is not polysaturated. Fat intake is a concern for all age types ranging from From preconception to elderly that is, by providing essential fatty acids such as linolenic acid and linoleic acid. These essential fatty acids are necessary for the normal growth and functioning of all tissues, including the optimal development of brain cells (Ciptawati et al., 2021).

Age is one of the main factors that affect fish consumption, so that children like to eat fish, it is necessary to increase parents' understanding and knowledge about the positive benefits of fish consumption for health, especially for children's growth and intelligence (Khasanah et al., 2022). One of the efforts that can be done is to increase people's love for fish, by cultivating fish at home and processing fish into various preparations that can be consumed by all types of ages (Kusumaningrum & Oktawati, 2023). The goal to be achieved from this community service activity is to improve community knowledge and skills regarding catfish farming procedures, several processing methods and nutritional content contained in catfish so that it can increase the love of eating fish. Through these counseling and mentoring interventions, it is hoped that people's passion for fish consumption can increase.

#### **METHOD**

The method of implementing this activity starts from coordinating with the target village by involving cadres and other health workers in the village to discuss joint activity plans, including the timing of catfish farming activities and catfish processing assistance. The targets of this activity include adolescents, pregnant women, postpartum mothers, mothers under five, and the elderly in the target village area. The activity began by providing counseling on nutrition in catfish, handing over fish seeds to assisted villages, simple ways of catfish farming at home and assistance in processing catfish into various menus such as catfish nugets, catfish crackers, shredded catfish, catfish porridge and several creative preparations made from catfish.

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1. Stages of counseling. Methods used in lectures and discussions with video media, booklets, digital posters. The material presented in this counseling includes the type of catfish, the nutritional content of catfish, the benefits of consuming catfish for health, especially the health of mothers and children, the importance of consuming catfish which has added value besides being relatively cheap but has good nutritional value, and how to cultivate catfish at home. After the presentation of the material, a discussion was held with all participants and continued to provide leaflets for cadres and all extension participants.

- 2. Catfish farming assistance stage at home. Starting with the handover of catfish seeds to the assisted village team which was then carried out catfish farming assistance at home using buckets. Tools and materials needed in this cultivation by preparing large buckets and placing them in empty areas around residents' homes. At the top of the bucket can be used to plant plants such as kangkong or other plants. Making the media starts from preparing water, buckets, cup glasses, wire, charcoal and kale plants. After the media is prepared, the next step is to put water in a bucket that uses water that has been allowed to stand for 2-3 days. The bottom of the plastic glass is given a hole to later be made a place to plant vegetables, while the hole on the top edge of the glass to hook the wire to the bucket, then put a few charcoal fruits into the glass cut the kale root and put 4-5 pieces of kangkug root into a plastic cup, after that tie the plastic cup in the bucket until the glass touches the water then put the catfish into the bucket slowly, Let stand for one day before feeding (Kurniawan et al., 2020).
- 3. Assistance stage for making preparations from catfish. This activity is manifested in the form of counseling and practice, how to process catfish into various menus that can be consumed starting from children and adults. The media used in this stage is by using booklets, leaflets and posters and using the "zero waste" method, which is a way of processing materials without providing residue or called clean results (Munawaroh & Jacoeb, 2020). This method of processing catfish utilizes all parts of catfish without residue, starting from the meat and bones. Preparations made from catfish ingredients such as catfish nugets, shredded catfish, catfish porridge, catfish crackers and several other menus.

### **RESULT**

This counseling and mentoring activity by providing materials and practices that include nutritional material contained in catfish, how to cultivate catfish at home, the quality of water used in raising catfish, feeding, and catfish processing. The media used were videos, leaflets, posters and booklets which were distributed to counseling participants and then held a live discussion session. Most of the people present were very enthusiastic when discussing, especially about the nutritional content of catfish and various ways of processing, so that it can be expected to improve public health in meeting nutritional needs, especially nutritional adequacy for special families who have children, pregnant women and nursing mothers. Through the love of consuming fish, especially catfish which is economically cheaper but has a good protein content, it is hoped that partner communities will be motivated to consume and continue to cultivate it.

Evaluation Stages This community service activity does not end with counseling activities, catfish farming in buckets, and the practice of processing catfish menus but this activity continues and continuous evaluation is carried out. Evaluation is carried out on the success of this community service by means of direct interviews and through whatsApp groups with cadres and residents involved. The purpose of this evaluation is to ensure that public awareness related to catfish farming and consumption continues Overall, the results of the evaluation of activities have been successfully carried out which are shown by partners or local residents who apply catfish farming in buckets in their respective homes in addition to what is carried out.

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#### **DISCUSSION**

In counseling activities, the service lecturer team provides information using teaching aids that function to help and demonstrate something in the health promotion process. These props are arranged based on the principle that the knowledge that exists in every human being is received or captured through the five senses. The more senses used to receive something, the more and clearer the knowledge gained (Hijriani et al., 2023). In addition, these activities are carried out by practicing the process of processing catfish into various menus.

The catfish farming system in buckets is designed with a water-saving farming system design that uses an 80-liter bucket filled with about 60 liters of water. On top of the bucket hangs a plastic cup filled with charcoal for kale growing medium. In order for kale to grow well, plastic cups are hollowed out with small holes as a place to put water in the kale planting media, each bucket can accommodate 50 catfish. The bucket is easy to use, saves water and does not take up large areas of land, it can be placed in front or on the balcony of the house (Kurniawan et al., 2020).

Assistive devices are tools used by agents to disseminate materials, materials or health messages. These tools are often referred to as props because their function is to help and show something in the health promotion process. This educational material is arranged according to the principle that the knowledge that exists in every human being is received or captured by the five senses. The more senses used to perceive something, the clearer the knowledge gained. Tools or media are very important in counseling activities that are useful for clarifying the messages to be conveyed. The media used by the lecturer team in this community service activity in addition to facilities and infrastructure is also in the booklet section about providing additional catfish food, leaflets about catfish farming in buckets and the benefits of catfish on health. Booklet and leaflet media are widely used in the community as a means for education (Lestari et al., 2021).

Assistance in processing catfish into various preparations provides very satisfying results as seen from the anticipation of residents involved in making menus such as catfish nugets which provide many benefits, besides that an attractive appearance will make children not bored with the usual menu and manipulate so that children want to eat catfish (Kresnasari et al., 2019). Other processed products such as shredded catfish also make more diverse menus that can be displayed by mothers who have children suli eating fish. Shredded catfish also has many advantages such as a practical way of serving, can last a long time and can also be a complementary food for other preparations (Setiawati & Ningsih, 2018). In addition to catfish nugets and shredded, other types of menus that can be made from catfish are as snacks, can be in the form of crackers from baby catfish, catfish meat crackers crackers from catfish skin can even be made from catfish spines which certainly have nutritional value and good benefits for nutritional needs. With this Zero waste processing method, it allows all catfish ingredients to be utilized and minimizes the residual waste from catfish production (Munawaroh & Jacoeb, 2020).

### **CONCLUSION**

This community service and mentoring activity is carried out in several stages which include preparation, making catfish farming media, counseling and assistance in the application of making catfish menus and continuous evaluation. In general, the assisted villages of community service participants felt the benefits and added knowledge by holding these activities shown by the enthusiasm of residents in these activities. Increasing knowledge and practice of how to farm catfish in buckets and making menus from catfish can be practiced again in their respective homes.

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#### **REFERENCE**

- Ayuningtyas, H., Nadhiroh, S. R., Milati, Z. S., &; Fadilah, A. L. (2022). Family Economic Status and Nutritional Adequacy with the Incidence of Stunting in Children Aged 6-24 Months in Surabaya City. Indonesian Nutrition Media, 17(1sp), 145–152. Hatps://doi.org/10.20473/mugi.v17i1sp.145-152.
- Ciptawati, E., Budi Rachman, I., Oktiyani Rusdi, H., &; Alvionita, M. (2021). Comparative Analysis of Catfish Processing Process to Nutrient Levels. IJCA (Indonesian Journal of Chemical Analysis), 4(1), 40–46. https://doi.org/10.20885/ijca.vol4.iss1.art5.
- Hijriani, I., Yulidar, &; Luciana, L. (2023). Journal of Community Care. Journal of Community Service (JPKM) Aphelion, 5(JUNE), 207–212. http://jurnal.globalhealthsciencegroup.com/index.php/JPM.
- Khasanah, N., Luthfa, I., &; Hasna, M. Y. (2022). The Nutrition Aware Family Strengthening Program (KADARZI) as an Effort to Optimize 1000 HPK during the Covid-19 Pandemic. Wikrama Parahita: Journal of Community Service, 6(1), 89–97. https://doi.org/10.30656/jpmwp.v6i1.3854.
- Kresnasari, D., Mustikasari, D., &; Kurniawati, A. (2019). Making fish nuggets as one of the fish processing differentiation efforts at the Banyu Belik Natural School. Scholar: Journal of Community Service, 1(2), 42. https://doi.org/10.32503/cendekia.v1i2.589.
- Kurniawan, H., Nursandi, J., &; Widyawati, D. K. (2020). Efforts to improve community education through budikdamber with aquaponics on narrow land. Sarwahita, 17(02), 112–126. https://doi.org/10.21009/sarwahita.172.3.
- Kusumaningrum, I., &; Oktawati, N. O. (2023). Community empowerment through training on diversification of catfish-based processed products (fish sticks and fish bone sticks). LOGISTA Scientific Journal of Community Service, 7(1), 72. https://doi.org/10.25077/logista.7.1.72-78.2023.
- Lestari, K. P., Nisa, I. N., &; Wagiyo. (2021). Differences between Booklet and Leaflet Education Media on the Level of Knowledge of Health Management for Pregnant Women during the New Normal Era at the Sarwodadi Health Center, Pemalang Regency. National Seminar on Nursing at the University of Muhammadiyah Surakarta (SEMNASKEP), 18–26. https://publikasiilmiah.ums.ac.id/handle/11617/12665.
- Munawaroh, S. F., &; Jacoeb, A. M. (2020). Processing of Catfish Diversification with Concept of Zero Waste (Nuggets and Chips). Journal of the Center for Community Innovation, 2020(3), 417–421. file:///C:/Users/ASUS/Downloads/31304-Article Text-105052-1-10-20200622 (1).pdf.
- Santi, M., Danial, A., Hamdan, A., &; Karwati, L. (2019). Community Empowerment Through Catfish Farming. PLS Journal of Scientific Scholars, 4(1), 17–22.
- Setiawati, I. T., &; Ningsih, S. (2018). Management of Catfish Shredded Processing Business (Clarias gariepinus) at P2MKP. Journal of Fisheries and Marine Extension, 12(2), 95–110
- Yulistyari, E. I., Umam, C., &; Santi, E. T. (2024). Home-scale Entrepreneurship Assistance Made from Melinjo Leaves in Cikedung Mancak Serang Village. Indonesian Journal of Community Empowerment, 5(2), 117–122.