



PUMPKIN JELLY CANDY GIVING "*PORORO GUMMY*" (*Pumpkins and Carrots to Growth*) TO INCREASE APPETITE IN TODDLERS

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Abstract

Eating difficulties in early childhood, especially toddlers, is a significant nutritional challenge in Indonesia. If handled properly, these problems can help the growth and development of children. There is a need for practical solutions that can increase children's appetite in a way that appeals to both children and parents. This community service activity aims to improve the appetite of toddlers by introducing a healthy snack innovation called *PORORO GUMMY* (*Pumpkins and Carrots to Growth*). This activity was carried out at PAUD Kartini in West Bandung and involved children, parents, and school stakeholders. Gummy snacks are made from natural ingredients such as yellow pumpkin, carrots, honey, jelly, and lemon juice, which are rich in nutrients to support children's health. Nutrition education and snack-making demonstrations were also given to parents. The activity results show that *PORORO GUMMY* attracts children's interest and increases their appetite. Parents gain essential insights into providing healthy and nutritious food through nutrition education sessions and snack-making demonstrations. This activity offers practical solutions for children's eating difficulties and motivates families to adopt healthier eating habits. *PORORO GUMMY* is an effective and easy-to-implement alternative to increase the appetite of toddlers, as well as support their optimal growth and development

Keywords: appetite, pumpkin jelly candy, toddler

INTRODUCTION

Eating difficulties in preschoolers, especially toddlers, are a common nutritional problem in various countries, including Indonesia. Based on research conducted in Jakarta, the prevalence of eating difficulties in children aged 4-6 years was recorded at 33.6%, with 44.5% of the children experiencing mild to moderate malnutrition, and more than 79% of cases lasted for more than three months (Luis G, 2015).

The factors that cause eating difficulties in preschoolers are very diverse and include organic and non-organic factors. Organic factors include disorders of the anatomical structure, digestive system, and metabolic systems, as well as allergies or other medical problems that prevent the child's ability to eat normally. Meanwhile, non-organic factors include psychosocial factors, such as parental ignorance about proper feeding methods and lack of information about the importance of a healthy diet.

Symptoms of eating difficulties in toddlers vary widely, ranging from refusal to eat and difficulty chewing or swallowing to minimal food choices. Children with difficulty eating tend to consume only certain foods and are reluctant to try new foods. This highly selective diet can lead to malnutrition, which impacts weight loss or failure to achieve healthy growth targets. In some cases,

eating difficulties can even affect the psychological aspect of the child, where they feel depressed or traumatized by the eating process. The attitude of parents who are too pushy or too protective when giving food to children can exacerbate this condition, causing children to become more reluctant to eat and associate mealtimes with unpleasant experiences (Halimatus, 2020).

In Indonesia, the problem of eating difficulties in toddlers is also often related to socio-economic factors and an unbalanced diet. One of the significant challenges families face is providing attractive and nutritious food. Toddlers who do not have a good appetite often find it challenging to get enough nutritional intake. Even though at this age, the need for energy and nutrients is very high to support optimal growth. Therefore, finding a solution that can stimulate the child's appetite and provide good nutritional benefits is essential. One promising approach is *administering pumpkin jelly candy*, which contains vital nutrients supporting the digestive system and increasing children's appetite.

Pumpkin jelly candy is made from yellow pumpkin, which is rich in nutrients and has a naturally sweet taste and soft texture, which can attract children's interest. The fiber content in pumpkin helps facilitate digestion, while vitamins A and C play an important role in increasing children's immunity. Yellow pumpkin is also known to have benefits for increasing appetite, which can be a natural solution for children who have difficulty eating. In addition, *pumpkin jelly candy* has a visual appeal and a pleasant taste for children, making it a healthy food alternative that can replace the less nutritious snacks often found among children.

Of the 25 students observed, six children did not experience significant weight gain in the last two months. After interviews with parents, it was found that one of the main factors affecting this condition was the children's difficulty eating. In addition, their habit of consuming a lot of unhealthy snacks also worsens their daily nutritional intake. Despite having been given vitamins in the form of syrup, the children were reluctant to take them. Due to their perception that syrup bottles are synonymous with drugs that have a bitter taste, they reject them.

Based on these findings, innovation is needed to increase the attractiveness of vitamin consumption for children. Therefore, vitamin innovations in the form of candies are expected to attract children's interest in consuming them. These candies serve as an additional source of nutrients and offer a more pleasant taste, so they are expected to increase nutritional intake and support optimal weight gain in these children.

Giving *pumpkin jelly candy* to toddlers can be a fun alternative to help increase their appetite without relying on processed foods or chemical supplements. Natural ingredients such as yellow pumpkin and *pumpkin jelly candy* attract children and provide nutritional intake that benefits their growth and development. The high fiber content of pumpkins also helps smooth the digestive process, which is very important for children who have difficulty eating while increasing satiety for longer to reduce the desire to snack on unhealthy foods.

Therefore, it is important to conduct further research on the effectiveness of giving *pumpkin jelly candy to toddlers in increasing their appetite. This study aims to test the impact of pumpkin jelly candy* on increasing toddlers' appetite and evaluate whether this product can be one of the alternative solutions to overcome eating difficulties in children.

As a form of community service, this pumpkin jelly candy-giving activity will also involve PAUD children as targets, especially at the Kartini PAUD school located in West Bandung. Through this activity, it is hoped that solid scientific evidence can be found regarding the benefits of *pumpkin jelly candy* in increasing appetite in toddlers and can contribute to the development of alternative nutritional interventions that are practical and effective, which parents and caregivers can apply to help meet the dietary needs of toddlers, without having to rely on supplements or snacks that contain chemicals.

Thus, these community service activities are essential for nutrition and provide practical solutions that can be applied at the community level, especially in areas with a high prevalence of eating difficulties.

METHOD

This community service was held at the Kartini Early Childhood School in West Bandung on Friday, November 1, 2024. This activity aims to educate about the importance of balanced nutrition for early childhood and introduce healthy snack alternatives to increase toddlers' appetites.

Implementing the activity begins with official licensing to the school, initial data collection regarding children's nutritional needs, and data analysis to ensure appropriate intervention. Before the intervention, a focus group discussion (*FGD*) was held involving several stakeholders to determine priority issues that required special attention. On the implementation day, the Chairman of the PAUD Foundation, the Principal, PAUD teachers, and students involved in this community service program attended this activity.

The activity began with a counseling session that provided an in-depth understanding to children and accompanying parents or guardians about the importance of balanced nutritional intake for optimal growth and development of children. The counseling material covers the dangers of overnutrition and malnutrition and their impact on children's physical and mental development. Students and the service team showed the steps of making candy made from yellow pumpkins rich in vitamins and fiber.

After the demonstration, the children were allowed to try *pumpkin jelly candy* as an example of an attractive, delicious, and nutritious healthy snack. This snack is expected to help increase the appetite of children who may have difficulty eating. At the end of the activity, an evaluation session was conducted through discussion and question-and-answer with the participants, both children and

parents or guardians, to assess the extent of their understanding of the importance of nutrition and healthy snacks.

RESULTS AND DISCUSSION

The implementation of community service activities at PAUD Kartini, West Bandung, on November 1, 2024, has succeeded in achieving the goals that have been set, namely increasing understanding of the importance of balanced nutrition for early childhood and introducing healthy snack alternatives that can improve toddlers' appetites. The following are the activity results and a discussion of the impact and benefits of giving *pumpkin jelly candy*.

The first activity was counseling about the dangers of eating difficulties to children's health and future, as well as providing stimulation of healthy menus for PAUD children. Children, parents, and PAUD teachers enthusiastically attended this counseling session. The material presented, which covered the dangers of eating difficulties in children and their impact on children's physical and mental development, succeeded in increasing participants' understanding of the importance of a healthy diet. Most of the participants expressed a new awareness of how unbalanced nutrition can affect children's growth and development in the long term.

After the counseling session, the activity continued with a demonstration of making *pumpkin jelly candy* made from yellow pumpkins. Children and parents are very enthusiastic about following the steps of making the candy. This snack, rich in fiber, vitamin A, and vitamin C, has received a positive reception, mainly because of its soft texture and natural sweetness that children love. Most children feel interested in trying the snack after seeing the manufacturing process.

Children are given the opportunity to try *pumpkin jelly candy* that has been prepared. The results showed that most children initially reluctant to eat showed greater interest in tasting this snack than other foods they usually consumed. Some parents also report that their children are excited about the experience of trying this new healthy snack.

The evaluation session at the end of the activity provided insight into the impact of *pumpkin jelly candy* on children's appetites. Most parents report that after trying this snack, their children are more interested in eating it. In addition, some parents express their desire to continue to provide these snacks as part of their children's diets at home.

This activity successfully showed that education about the importance of balanced nutrition, coupled with the introduction of healthy snack alternatives such as *pumpkins and jelly candy*, can have a positive impact on increasing children's appetite. One factor that makes *pumpkin jelly candy* effective in attracting children's interest is the natural ingredient, yellow pumpkin, which contains vitamin A, vitamin C, and high fiber, which is very beneficial for supporting the digestive system and improving appetite.

Children who previously had trouble eating or had a very selective diet showed more interest in this snack, which has a natural sweetness and soft texture readily accepted by children under five.

This snack is not only visually appealing but also rich in nutrients that are needed during the child's growth period. In addition, the counseling sessions also strengthened the parents' and teachers' understanding of the importance of a balanced healthy diet, which includes adequate nutritional intake and good eating habits. With this education, parents can better understand how to provide nutritious food that is attractive to their children without relying on snacks or non-nutritious foods.

However, further monitoring of children who have tried *pumpkin jelly candy* is necessary to ensure a broader impact. Additional research can measure the effectiveness of this snack in the long term and evaluate its effect on children's weight gain and nutritional status. In addition, it is also essential to conduct continuous education for parents about the importance of providing nutritious food so that this solution can be consistently adopted in children's daily lives.

In this service activity, our group prepared a *jelly candy* called *PORORO GUMMY (Pumpkins and Carrots to Growth)*. This candy is made from natural ingredients such as yellow pumpkin, carrots, honey, jelly, and lemon juice. Each recipe produced 30 pieces of yupi measuring 10 ml. To ensure that every child benefits from this healthy snack, our group decided to make two recipes, so the total result is 60 pieces of *PORORO GUMMY*.

The innovation carried out by the Bandung 1 Group aims to increase children's appetite and motivate mothers to be more aware of the importance of providing healthy and nutritious food for their children. By providing attractive, healthy snack alternatives, mothers are expected to feel encouraged to make similar snacks at home without relying on unhealthy snacks.

For the ingredients, we chose to use Nutrijell instead of regular gelatin because commonly used gelatin is often made from ingredients that are not halal. If halal gelatin is found, it can be used as an alternative. It is essential to ensure that the snacks given to children meet their nutritional needs and the principles held by the local community. For the dosage given, the recommended dose is 1x1 slice (10 ml) of *PORORO GUMMY* every morning. Here are the details of the mold dosage by size: Large is one pcs Yupi = 10 ml, Medium is 2 pcs Yupi @ 5 ml, and Small is three pcs Yupi @ 3 ml. The manufacture and measurement of *PORORO GUMMY* uses a measuring cup or syringe to ensure consistency and accuracy in the dosage given to children.



Figure 1. Before the Activity Counseling



Figure 2. Providing Education to Students & Parents



Figure 3. Demonstration of the Making of "Pororo Gummy"



Figure 4. Doorprize Giving



Figure 5. Provision of *Pre Test and Post Test*



Figure 6. Post Activity

CONCLUSION

This community service activity has successfully shown that *PORORO GUMMY (Pumpkins and Carrots to Growth)*, a healthy snack made from yellow pumpkin, carrots, honey, jelly, and lemon juice, has the potential to help increase children's appetites.

With an attractive appearance and good taste, this snack is liked by the children of PAUD Kartini, who are the target of the activity. This innovation provides a nutritious snack alternative and successfully motivates parents to make it at home, encouraging the provision of healthier and more nutritious intake for children.

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