

Identification of Potential Local Food Ingredients as a Food Source for Stunting Prevention in Langkat District

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Abstract

Stunting is a child nutrition problem that is an important concern in Indonesia because of the large number of complications it causes, such as impaired growth and development, cognitive problems, decreased immune system, risk of metabolic disease and socio-economic problems. Indonesia's stunting prevalence is high, still above 20% (21.6%). Langkat Regency has the potential for local food ingredients that can meet the nutritional needs of families so as to prevent malnutrition and stunting. The aim of this community service is to identify the potential of local food ingredients. The method used was a Focus Group Discussion with relevant stakeholders in Langkat Regency. From the results of the discussion, it was found that the potential for local food ingredients were rice, fish, vegetables and local fruit such as bananas, rambutan and papaya. Furthermore, training is needed to process the available food sources so that they are highly nutritious and affordable for the community.

Keywords: local food, focus group discussion; stunted

INTRODUCTION

Indonesia has enormous potential for local food ingredients that can be processed in such a way that they become nutritious food products or ingredients that can be used to meet the nutritional needs of families (toddlers, pregnant women, breastfeeding mothers), and can even be used to increase family income. North Sumatra Province has promising natural potential with the availability of various types of local food such as sweet potatoes, cassava, corn, bananas, taro, breadfruit, pumpkin and beans which can replace or accompany rice. According to BPS data, the production of corn, soybeans, cassava, sweet potatoes, peanuts and green beans were respectively 1,294,645, 11,426, 1,091,711, 191,104, 11,093 and 3,250 tonnes (Handayani, 2020).

Local food sources that have high productivity in North Sumatra Province are corn, cassava and sweet potato. Meanwhile, productivity for peanuts, soybeans and green beans is still low. Concrete efforts are needed to increase local food productivity which will increase production of these commodities in order to fulfill raw material needs in the context of food diversification (Setiayani, 2012). Furthermore, by identifying local food ingredients in Langkat Regency, it is hoped that we will be able to find recommendations for certain food sources that have the potential to help the nutrition of the Langkat community to avoid nutritional problems, especially stunting.

Stunting has become a national problem which is a priority to be followed up in Indonesia through Presidential Regulation Number 72 of 2021 concerning the Acceleration of Reducing Stunting. Presidential Regulation Number 72 of 2021 contains the Acceleration of Stunting Reduction in a holistic, integrative and quality manner through coordination, synergy and synchronization between stakeholders. The prevalence of stunting for Langkat Regency reaching 31.4% for 2021 has become an important concern for all stakeholders in Langkat Regency (Kemenkes RI, 2021). Stunting is a condition of chronic malnutrition during the first 1000 days of life that lasts a long time and causes delays in brain development and growth and development (appearing shorter than children of the same age) (WHO, 2006 and Leroy, 2019). The impact of this condition is very large, starting from impaired growth and development, impaired cognition, metabolic disorders, decreased immune system, risk of experiencing metabolic disease and socio-economic problems (Beal, 2018).

This community service aims to identify potential local food ingredients in Langkat district which might be used as a source of affordable and cheap food consumed by the community in order to prevent or reduce stunting rates in the district.

METHOD

This community service to identify local food ingredients was held in the form of a Focus Group Discussion (FGD) with Langkat Regency stakeholders on Thursday, October 6 2022 in Stabat. The target of this FGD was 31 people consisting of agricultural instructors, village heads, community leaders, Bappeda, Langkat Regency Population Control and Family Planning Service (PPKB).

The steps taken can be divided into 3 stages, namely: First, initial analysis, namely analysis of the situation and conditions in Langkat Regency as a basis for selecting the 10 stunting locus villages that were invited as well as FGD material. Second, preparation in the form of permits, collecting FGD targets, and socializing activities (time and technical activities). Third, the implementation is adjusted to the event schedule (opening, opening remarks, Focus Group Discussion, closing and group photo). Fourth, implementation and evaluation of activities reflected in the results of the FGD which were then submitted to the Langkat Regency government for follow-up activities.

This FGD activity was opened by the Person in Charge (PIC) of the activity, namely dr. Eka Febriyanti, M Gizi and then moderated by Dr. Leylia Khairani, SPd, MSi. There are several guiding questions such as what foods are produced or natural products in this area and are often consumed by the community (sources of carbohydrates, proteins, fats and vitamins, minerals), special foods for toddlers (from 6 months of age and above), special foods for mothers pregnant, special food for postpartum mothers and breastfeeding mothers in the area.

RESULT AND DISCUSSION

This FGD activity was attended by 4 agricultural extension workers, 10 village heads and community leaders, Bappeda and PPKB as well as the community service team. Activities are proceeding according to plan as shown in Figure 1.



Figure 1. Focus Group Discussion



Figure 2. Photo with FGD participants

The results of the FGD held for 90 minutes are as follows.

Table 1. Results of FGD Identification of local food ingredients

No	Questions	Answers
1	What foods are produced or natural products in this area and are often consumed by the public?	Langkat Regency has many natural resources
	- Source of carbohydrates	Langkat is the second largest rice producer in North Sumatra, the people's main source of carbohydrates is rice
	- Source of protein	The source of protein in Langkat for coastal areas is sea fish, while for land areas it is fresh fish such as catfish Langkat is also a large beef producer in the North Sumatra region, but this livestock product is mostly sold to support the economy rather than consumed.

		Langkat is also the largest producer of rice, corn and soybeans in North Sumatra, most of the produce is sold and some is consumed
No	Questions	Answers
	- Source of vitamins and minerals	Langkat produces a lot of tropical fruit such as rambutan, as well as bananas and papaya, but people's preference for consuming fruit and vegetables is still low
2	Is there any special food for toddlers (from age 6 months and above)?	Toddlers in Langkat district usually come to the posyandu and are given PMT for every posyandu activity there is no special food, but there is still public belief in preferring formula milk to exclusive breastfeeding on the grounds that breast milk does not come out
3	Is there any special food for pregnant women?	In Langkat Regency there are still several foods that have been believed for generations to have certain effects on pregnant women, for example: <ul style="list-style-type: none"> - Soybean/soy milk makes babies born with pure white skin - Drinking coconut oil facilitates labor - Drinking coconut water makes babies born clean - Consume green bean porridge - You cannot drink sugar cane juice
4	Is there any special food for postpartum mothers and breastfeeding mothers?	For postpartum and breastfeeding mothers, there are also several beliefs related to food that have an effect on postpartum/breastfeeding mothers: <ul style="list-style-type: none"> - Nira water stimulates breast milk - You can't eat spicy food - Corn and banana blossoms - Salted fish is given garlic to speed up the recovery of the "peranakan" while other foods are still consumed in a balanced way (rice, side dishes and vegetables)

Based on the table above, it is found that Langkat District (especially the 10 stunting locus villages that took part in the FGD) is an area that has high potential in terms of natural resources including local food ingredients. Langkat Regency is the second largest rice/rice producer in North Sumatra, the largest cattle breeder, provider of sea and freshwater fish, as well as supplier of vegetables and fruit for other regions or districts in North Sumatra. This is supported by research by Setiavani et al in 2012, where Langkat district is the 10 largest district in terms of local food potential in North Sumatra (Setiayani, 2012). This condition should be very good for food security and security for the people in Langkat Regency. However, the phenomenon of high stunting rates in this district could be caused by economic problems so that people cannot afford these food sources. Apart from that, existing food sources are mainly produced for sale to other areas, not for own consumption.

The main source of carbohydrates in Langkat Regency is rice/rice, based on the results of the FGD there are several sources of substitute food for rice which are also produced by Langkat

Regency such as corn, sweet potatoes and sago, but the community does not use these foods as the main source of carbohydrates, they are more processed into other foods such as chips, cakes and so on. Besides, the availability of rice in Langkat Regency is abundant.

The source of protein in Langkat Regency is mainly freshwater fish or sea fish. Other proteins such as meat, poultry and eggs are consumed but are not the main thing. In theory, fish is a source of protein as well as a source of fat which is good for health. According to the Ministry of Health's direction, consuming fish at least twice a week can prevent nutritional problems in society. However, if stunting or other nutritional problems are still found in the area, it is necessary to analyze again the frequency of consumption, processing methods and types of fish consumed (Rachim, 2017). One form of follow-up to this problem is shop activities in the form of DASHAT (healthy kitchen for stunted children) which is integrated with the BKKBN program in terms of training stunting care cadres or posyandu and PKK cadres to process existing protein sources to become sources of quality nutrients and affordable to the public. In line with previous community service in the Babalan area. One of the fish that is cheap but is less attractive to the community while its availability is a lot of cencaru fish (*Megalaspis cordyla*). In this area there are women who process snacks such as nuggets, noodles, but not yet varied. For this reason, women's empowerment was carried out in producing nuggets and yellow sweet potato cakes, and cencaru fish (Siagian, 2021). Other services also provide applicable knowledge in terms of processing local food ingredients for breast milk boosters. The potential utilization of local foods such as Moringa leaves, katuk leaves, young papaya, and banana flower can be used as a breast milk booster by breastfeeding mothers. Education about utilization of local food ingredients as a breast milk booster is needed so that breastfeeding mothers and their families can apply the knowledge gained to increase breast milk production (Wulandari, 2021). Another similar community service activity is the fulfillment of complementary foods for breast milk with a demonstration of nutritious complementary feeding as an effort to prevent stunting (Afriani, 2022).

Sources of vitamins and minerals, especially from fruit and vegetables, are widely available in Langkat Regency. However, the amount consumed by the public may still be less related to preferences in consuming fruit and vegetables. Local fruit is already consumed by the public but has not yet become a routine habit. This is also a problem for society in general in Indonesia where fiber consumption is very low, namely only 10%.

Regarding special food for toddlers, pregnant women and breastfeeding mothers in Langkat Regency, nothing was found. However, there are several beliefs that influence the food intake of these at-risk groups, for example, formula milk is better and easier than breast milk (a small number of people still believe this), soy milk makes children born clean and white, drinking coconut oil makes childbirth easier, drinking sap water makes breast milk easier. , you should not eat spicy food while breastfeeding. However, from the FGD discussion, it was stated that the consumption of these at-risk groups was still complete, including rice, side dishes and vegetables, regardless of the food taboos they believed in earlier. This condition is very good if people consume balanced nutritious food, but it is necessary to analyze again the frequency of eating, the type of food consumed, the processing method so that it can meet all nutritional needs and avoid nutritional problems. Furthermore, there is also a need for analysis of the social and

economic aspects of society related to fulfilling their daily food intake. Even though local food is available, if it is not affordable for the community it will still not help in terms of fulfilling nutrition. So, with the DASHAT program, local food ingredients that are nutritious and affordable will be available to the people of Langkat.

CONCLUSIONS AND RECOMMENDATIONS

FGD activities found that Langkat has great potential for local food such as the availability of rice, fish, local fruit and vegetables. Training is needed to process the available food sources so that they are highly nutritious and affordable for the community. There is also a need to change people's mindset that getting good nutrition doesn't have to be expensive, you can use what's around you, but you have to understand the processing and selection of food sources.

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