

Changes in Household Consumption Patterns After the Nutritious Eating Program in Kendari City

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Abstract

The Nutritious Eating Program (MBG) is a government policy that aims to improve the nutritional quality of the community, especially school-age children. In addition to having a direct impact on program recipients, MBG also has the potential to affect household consumption patterns indirectly. This study aims to analyze changes in household consumption patterns after the implementation of the Nutritious Eating Program (MBG) in Kendari City and identify the factors that influence these changes. This research uses a qualitative approach with a descriptive design. The research informants consisted of five people from households receiving the Nutritious Eating Program in Kendari City and were randomly selected. Data collection was carried out through in-depth interviews and simple observations, then analyzed using thematic analysis. The results of the study show that the implementation of the Nutritious Eating Program in Kendari City encourages an increase in the diversity and quality of household food consumption, especially in the consumption of vegetables, fruits, and protein side dishes, as well as reducing the consumption of instant food and unhealthy snacks. Changes in consumption patterns are influenced by the level of household income, the number of family members, parental nutritional knowledge, children's eating habits, and access to nutritious food in urban environments. This study concludes that the Nutritious Eating Program in Kendari City plays a role as a trigger for changes in household consumption patterns, but the sustainability of its impact requires the support of nutrition education and sustainable local food policies.

Keywords: Nutritious Eating Program, Household Consumption Patterns, Food Diversification, Community Nutrition, Kendari City.

Abstrak

Program Makan Sehat (MBG) adalah kebijakan pemerintah yang bertujuan untuk meningkatkan kualitas gizi masyarakat, khususnya anak usia sekolah. Selain berdampak langsung pada penerima program, MBG juga berpotensi mempengaruhi pola konsumsi rumah tangga secara tidak langsung. Penelitian ini bertujuan untuk menganalisis perubahan pola konsumsi rumah tangga setelah implementasi Program Makan Sehat (MBG) di Kota Kendari dan mengidentifikasi faktor-faktor yang mempengaruhi perubahan tersebut. Penelitian ini menggunakan pendekatan kualitatif dengan desain deskriptif. Informan penelitian terdiri dari lima orang dari rumah tangga penerima Program Makan Sehat di Kota Kendari yang dipilih secara acak. Pengumpulan data dilakukan melalui wawancara mendalam dan observasi sederhana, kemudian dianalisis menggunakan analisis tematik. Hasil penelitian menunjukkan bahwa implementasi Program Makan Sehat di Kota Kendari mendorong peningkatan keragaman dan kualitas konsumsi makanan rumah tangga, terutama konsumsi sayuran, buah-buahan, dan lauk pauk protein, serta mengurangi konsumsi makanan instan dan camilan tidak sehat. Perubahan pola konsumsi dipengaruhi oleh tingkat pendapatan rumah tangga, jumlah anggota keluarga, pengetahuan gizi orang tua, kebiasaan makan anak-anak, dan akses terhadap makanan bergizi di lingkungan perkotaan. Studi ini menyimpulkan bahwa Program Makan Bergizi di Kota Kendari berperan sebagai pemicu perubahan pola konsumsi rumah tangga, tetapi keberlanjutan dampaknya membutuhkan dukungan pendidikan gizi dan kebijakan pangan lokal yang berkelanjutan.

Kata Kunci: Program Makan Bergizi, Pola Konsumsi Rumah Tangga, Diversifikasi Pangan, Gizi Masyarakat, Kota Kendari.

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INTRODUCTION

Nutrition problems are still a strategic issue of development in Indonesia because they are directly related to the quality of human resources and long-term productivity (Roslan 2025). Although the

national prevalence of stunting shows a downward trend, this achievement does not fully reflect the overall improvement in people's food consumption patterns (Yusuf dan Roslan 2025). The main challenge lies not only in energy sufficiency, but also in the low quality and diversity of household food consumption, especially in vulnerable groups and lower-middle-income urban communities.

In response to these challenges, the government launched the Free Nutritious Meal Program (MBG) as a national intervention aimed at improving the quality of nutritional intake of the community, especially school-age children. This program is not only positioned as a policy for individual nutrition fulfillment, but also as an instrument for changing food consumption behavior (Yusuf and Roslan 2025). In practice, the provision of nutritious food through educational institutions has the potential to influence consumption decisions at the household level, either through changes in eating preferences, savings in food expenditure, and increasing family nutrition awareness (Irenso & Atomsa, 2018). Therefore, the study of changes in household consumption patterns after the implementation of MBG is relevant and important to assess the effectiveness of the program more comprehensively.

The main variable in this study is household consumption patterns, which include the composition of food consumption, diversity of food groups, and the proportion of consumption of finished food and nutritious foods. This variable is important because consumption patterns are indicators of welfare, food security, and the quality of household diets. Household food consumption diversity can be used as a simple but powerful proxy for assessing diet quality and access to nutritious food. For program implementing organizations such as local governments and nutrition program managers, this indicator is a tool for evaluating whether the interventions carried out really encourage improvement in the quality of consumption, not just increase the quantity of food.

The second variable is exposure to the Nutritious Eating Program, which can be measured through the acceptance status, intensity, and duration of household involvement in the program. Recent literature suggests that school-based eating programs have a potential impact on family consumption patterns through substitution mechanisms and social learning (Levi et al., 2022). International and national studies also emphasize that the success of nutrition programs is greatly influenced by how they interact with household socioeconomic conditions and the capacity of implementing organizations (Ningrum et al., 2022). By combining MBG consumption pattern and exposure variables, organizations can gain strategic insights for program design refinement and evidence-based decision-making (Yusuf and 2024).

Empirically, research related to the nutritious eating program in Indonesia is still dominated by the evaluation of program outputs and their impact on the nutritional status of individuals, especially school children. Studies that specifically examine changes in household consumption patterns after the implementation of the program are still relatively limited, especially at the urban level and urban contexts. In fact, households are consumption decision-making units, so changes at the individual level targeted by the program are very likely to have a follow-up effect on overall family consumption (Susanti et al., 2023).

From the theoretical side, there is a gap in understanding how the free meal program as a form of in-kind transfer affects household consumption behavior (Supriaddin and Roslan 2025). Some studies explain the impact through increased direct intake, but not many have tested economic mechanisms such as substitution effects, income effects, and preference changes (Yuana et al., 2025). A common solution offered in the literature is the use of quasi-experimental approaches, pre-post analysis, and food diversity measurement as the main outcomes to capture changes in consumption quality more holistically (Irenso & Atomsa, 2018).

This study proposes a conceptual mechanism that positions MBG as a trigger for changes in household consumption decisions. When some of the children's food needs are met by the program, households have the potential to experience savings in food expenditure which is then reallocated, both for higher quality food and non-food needs. In addition, regular exposure to nutritious menus can affect children's and family's eating preferences, thus encouraging changes in consumption habits at home .

To test this mechanism, this study used indicators of changes in household consumption patterns, such as food diversity, proportion of nutritious food consumption, and portion of finished food consumption, by comparing conditions before and after the implementation of MBG. This approach allows for direct testing of the core concept that MBG not only impacts direct recipients, but is also capable of producing significant indirect effects on household consumption behavior (Roslan and Akbar 2024).

The city of Kendari was chosen as the location of the study because of its characteristics as a developing city with urban consumption patterns that are increasingly shifting to finished food and practical food. On the other hand, nutrition challenges and household food security are still important issues in this area. The implementation of the Nutritious Eating Program in Kendari City provides a relevant empirical context to examine how national nutrition interventions interact with the dynamics of urban household consumption.

This study aims to analyze changes in household consumption patterns after the implementation of the Nutritious Eating Program in Kendari City, identify the factors that affect these changes, and assess their implications on the quality of household food consumption. The contribution of this research is expected not only to enrich the academic literature related to nutrition program evaluation, but also to provide practical recommendations for local governments and program managers in improving the design and implementation of the Nutritious Eating Program so that its impact is more sustainable

METHODS

This study uses a qualitative approach with a descriptive design to understand changes in household consumption patterns after the implementation of the Nutritious Eating Program (MBG). This approach was chosen because the research aims to explore the experiences, perceptions, and habits of household consumption in depth, which cannot be optimally explained through a quantitative

approach. The research was conducted in Kendari City as one of the implementing areas of the Nutritious Eating Program with characteristics of urban household consumption. The informants in this study were five people, who came from households receiving the Nutritious Meal Program. The selection of informants was carried out using a simple random sampling technique, namely a random selection from MBG recipient households at the research site. The criteria for informants include households that have family members who receive MBG, are domiciled in Kendari City, and are willing to provide information relevant to the purpose of the research. Data collection was carried out through in-depth interviews and simple observations of household consumption practices. The data obtained was analyzed using thematic analysis, through the stages of data reduction, data presentation, and conclusion drawn. To maintain the validity of the data, this study applied source triangulation, by comparing the results of interviews between informants to obtain a more accurate picture of changes in household consumption patterns after the Nutritious Eating Program.

RESULTS AND DISCUSSION

Changes in Household Consumption Patterns After the Nutritious Eating Program

Based on the results of in-depth interviews with five informants who are households receiving the Nutritious Eating Program, it was found that there were quite clear changes in consumption patterns, both in terms of the type of food consumed, family eating habits, and the allocation of household expenses for food needs. Before the existence of the Nutritious Eating Program, most of the informants stated that household consumption patterns tended to be monotonous and dominated by staple foods, especially rice, with simple side dishes. Consumption of vegetables and fruits is still not routine and highly dependent on the daily financial condition of households. One of the informants revealed that before his child received nutritious meals at school, the family's daily menu often consisted only of rice, eggs, and instant noodles, while the consumption of fruit was only occasional. This shows that before the program started, households prioritized the fulfillment of satiety over the quality and diversity of nutrition.

After the Nutritious Eating Program was running, all informants stated that there was a change in household consumption habits. The most notable change is the increased awareness of the importance of food variety. The informant mentioned that children who received MBG began to get used to eating vegetables, protein side dishes, and fruits that they rarely ate before. This habit then affects the menu served at home. Some informants said that they began to imitate the school food menu by adding more diverse vegetables and side dishes when cooking at home.

In addition to changes in the type of food, the Nutritious Eating Program also affects the frequency and portion of household food consumption. The informant said that children who have eaten nutritious food at school tend to no longer ask for excessive snacks at home. This has an impact on reducing the consumption of instant food and unhealthy snacks. Some informants even stated that

spending on children's snacks decreased after the program was running, so that the funds could be diverted to buy more nutritious foodstuffs, such as fish, chicken, and vegetables.

Changes in consumption patterns can also be seen from the increase in the consumption of fruits and vegetables at the household level. Although not all informants consume fruit every day, there is an increase in frequency compared to before MBG. Informants attribute this change to children's stories about the fruit menu they get at school, so parents are encouraged to provide fruit at home so that children get used to consuming it. Thus, MBG not only has a direct impact on the recipient child, but also creates a nutritional learning effect for all family members.

In terms of expenses, some informants said that after children receive meals at school, they feel a little lighter in managing daily shopping. Although not all informants consciously calculate savings, they acknowledge that the need to provide complete meals for children during school hours is reduced. This condition encourages households to be more flexible in determining dinner and weekend menus, including trying menus that were previously rarely served due to cost constraints. However, the changes in consumption patterns that occur are not completely uniform in every household. Some informants stated that limited income is still an inhibiting factor to implementing a consistent nutritious consumption pattern. Under certain conditions, especially when income decreases, households remain back to a simple consumption pattern. This shows that although the Nutritious Eating Program provides a positive boost, the sustainability of changes in consumption patterns is still greatly influenced by household economic conditions.

It is known that the Nutritious Eating Program contributes positively to changes in household consumption patterns in Kendari City. These changes are reflected in the increase in food diversity, reduced consumption of instant food and unhealthy snacks, and the growing awareness of parents on the importance of balanced nutrition. This program functions not only as a fulfillment of children's food needs, but also as a means of nutrition education that has an impact on family consumption behavior more broadly.

Factors Affecting Changes in Household Consumption Patterns

Changes in household consumption patterns after the implementation of the Nutritious Eating Program (MBG) do not occur uniformly, but are influenced by various interrelated factors. Based on the results of interviews with five informants, there are several main factors that determine the extent to which changes in consumption patterns can occur and persist in the daily lives of households that receive the program.

The first and most dominant factor is the economic condition or level of household income. Informants with relatively more stable incomes showed more consistent changes in consumption patterns, especially in the provision of protein, vegetable, and fruit side dishes. They stated that even though children have received nutritious meals at school, economic ability remains the main determinant in providing nutritious food at home. In contrast, informants with irregular incomes tend to experience fluctuating consumption patterns. When incomes decline, households return to simple

consumption patterns that focus on staple foods. These findings show that the Nutritious Eating Program plays a supporting factor, but has not been able to fully overcome the limitations of the household economy.

The second factor is the number and composition of household members. Households with more members face greater challenges in regulating food consumption, especially in providing a diverse and nutritious menu for all family members. The informant said that the great need to eat often forces families to choose cheaper and filling food. However, the existence of children receiving MBG slightly helps reduce this burden, because children's food needs during school hours have been met. This condition provides space for households to allocate part of the budget to other foodstuffs, albeit on a limited scale.

The third influential factor is parents' knowledge and perception of nutrition. The results of the study showed that MBG indirectly increased parents' understanding of the importance of nutritious food. The informant admitted that he became more aware of the need for vegetables, fruits, and protein after children often told about the food menu they received at school. Exposure to nutritional information through children's experiences encourages parents to try to serve healthier food at home, although it has not always been able to be done consistently. Thus, MBG functions as a means of nutrition education that influences household consumption attitudes and decisions.

In addition, children's eating habits and preferences are also driving factors for changes in family consumption patterns. Children who are used to eating nutritious foods at school tend to ask for similar menus at home, such as vegetables and protein side dishes. This request is an encouragement for parents to adjust the family menu. The informant stated that children began to reduce the consumption of unhealthy snacks and preferred home-cooked meals, thus gradually changing the overall family consumption pattern.

Another factor that also affects is the availability of food and access to foodstuffs in the surrounding environment. Informants who live in areas with easy market access tend to adjust consumption patterns more easily to nutritional needs. On the other hand, limited access and fluctuations in food prices are often obstacles to maintaining nutritious consumption patterns. This shows that the success of the Nutritious Eating Program in encouraging changes in household consumption is also strongly influenced by the environmental context and the local market.

Overall, the results show that changes in household consumption patterns after the Nutritious Eating Program are the result of interactions between economic factors, demographics, nutritional knowledge, children's habits, and access to food. The Nutritious Eating Program plays a role as a trigger for change, but the sustainability of its impact is highly dependent on the socio-economic conditions of households and their supporting environment. Therefore, efforts to strengthen the Nutritious Eating Program need to be accompanied by other supporting strategies, such as nutrition education for parents and increasing access to nutritious food, so that changes in household consumption patterns can take place sustainably.

Changes in Household Consumption Patterns After the Nutritious Eating Program

The Nutritious Eating Program (MBG) is designed as a public policy intervention that not only aims to meet the nutritional needs of target individuals, but is also expected to be able to encourage changes in household food consumption patterns more broadly. The results of this study show that the implementation of MBG in Kendari City has a positive impact on changes in household consumption patterns, especially in terms of food diversity and consumption quality. These findings reinforce the view that food-based interventions have a potential spillover effect on family consumption behavior.

Prior to the implementation of MBG, the consumption pattern of households receiving the program tended to be dominated by staple foods, especially rice, with a relatively low level of food diversification. This condition is in line with the findings of Susanti et al. (2023) and Ningrum et al. (2022) who stated that low-income households in Indonesia generally prioritize energy fulfillment over nutritional quality. High dependence on one type of staple food has an impact on low intake of micronutrients and proteins, thereby increasing the risk of nutritional problems in households.

After the Nutritious Eating Program was running, this study found an increase in food diversity in recipient households. Children who receive nutritious food at school are accustomed to eating vegetables, protein side dishes, and fruits, which then affect the food menu at home. This change shows that MBG functions as a means of learning indirect nutrition for families. These findings are consistent with research by Renita et al. (2024) which shows that eating programs can increase vegetable and fruit consumption, as well as support the improvement of people's consumption patterns. In addition, Sihite et al. (2021) emphasized that food diversification is an important prerequisite for achieving optimal food security and household nutrition.

This discussion also shows that changes in consumption patterns do not occur automatically and uniformly, but are influenced by various socioeconomic factors (Nasrul et al., 2023). The level of household income is a key factor in determining the sustainability of changes in consumption. Households with relatively more stable incomes tend to be able to maintain nutritious food consumption even though the program does not cover all family food needs. These findings are in line with Machfud and Martianto (2023) who stated that increased income is closely related to access to more diverse and nutritious food, thus contributing to improved nutritional status.

In addition to income, the number of family members also affects post-program consumption patterns. Households with more family members face greater spending pressures, so consumption choices are often directed toward filling and affordable foods. However, the results of the study show that the existence of MBG slightly eases the burden of consumption, because children's eating needs during school hours have been met. This is in line with the findings of Aryatika et al. (2023) who stated that household structure plays a role in determining food consumption strategies, including increasing the consumption of vegetables and fruits to meet the nutritional needs of all family members.

The nutritional knowledge factor is also an important aspect in the discussion of changes in consumption patterns. The results of this study show that children's experience of receiving nutritious

food at school increases parents' awareness of the importance of balanced nutrition. These findings support the results of the research of Fatimah and Siregar (2020) which stated that increasing nutritional knowledge contributes to increasing the consumption of nutritious foods. Thus, MBG not only functions as a food fulfillment intervention, but also as a nutrition education medium that affects household consumption attitudes and behaviors.

From a broader perspective, the results of this study are in line with international findings on the impact of food intervention programs. Irenso and Atomsa (2018) show that food security programs in Ethiopia have a positive impact on household dietary diversity and nutritional status indicators. Similarly, Rotella et al. (2025) found that interventions that integrate access to food and health services are able to improve maternal and child nutritional status. The findings reinforce the argument that dietary programs, including MBG, have the potential to influence consumption patterns and household nutritional well-being in a sustainable manner.

In terms of food quality, the increased diversification of consumption after MBG shows an improvement in the quality of household diets. However, this study also shows that limited purchasing power is still an obstacle to increasing the consumption of animal protein sources consistently, as revealed by Daba et al. (2021). This emphasizes that the intervention of the feeding program needs to be accompanied by other supporting policies that strengthen the purchasing power and access to food for households.

Overall, this discussion emphasizes that the Nutritious Eating Program makes a real contribution in encouraging changes in household consumption patterns in a more diverse and quality direction . However, the sustainability of the program's impact is highly dependent on economic conditions, demographics, and the level of household nutrition knowledge. Therefore, to maximize the impact of MBG, a more holistic approach is needed, including strengthening nutrition education for parents, increasing access to nutritious food, and integrating programs with food security and other social protection policies. With this approach, MBG not only functions as a short-term meal fulfillment program, but also as a strategic instrument in building healthy and sustainable household consumption patterns

Factors Affecting Changes in Household Consumption Patterns

Changes in household consumption patterns after the implementation of the Nutritious Eating Program (MBG) do not stand alone as a direct impact of the program, but are influenced by various social, economic, and behavioral factors that interact with each other. The results of this study show that although MBG plays a role as a trigger for change, the sustainability and intensity of changes in household consumption patterns are highly dependent on the internal conditions of households and the surrounding environment (Moonti et al., 2023). These findings are in line with a household economics approach that views consumption as the result of a combination of income, preferences, knowledge, and structural constraints.

The first factor that is most dominant in influencing changes in household consumption patterns is the level of income or the economic condition of the household. Households with relatively stable incomes show greater ability to maintain nutritious food consumption after children receive the Nutritious Eating Program. These findings corroborate the results of research by Machfud and Martianto (2023) who stated that income has a positive relationship with the diversity of food consumption and the quality of household diets. In the context of this study, MBG helps reduce some of the burden of food spending, but does not completely replace the role of income in determining consumption choices. When incomes decline, households tend to revert to simple consumption patterns that emphasize staple foods, so the changes produced by the program are not permanent (Poltak et al., 2021).

In addition to income, the number and composition of household members are also important factors in influencing consumption patterns. Households with more members face greater spending pressures, so the consumption strategy taken often focuses on efficiency and meeting energy needs (Vikaliana et al., 2021). These results are in line with the research of Aryatika et al. (2023) which shows that family size affects the allocation of food consumption, especially in the selection of the type of food consumed. However, the existence of the Nutritious Eating Program provides space for households to adjust consumption, because some of the children's food needs have been met at school. This condition shows that MBG functions as a buffer factor for households with a relatively large consumption burden.

The next factor is parents' knowledge and perception of nutrition. The results of the study showed that parents became more aware of the importance of nutritious food after children received nutritious meals at school. Exposure to diverse and nutritious menus through MBG indirectly increases family nutrition literacy. These findings are in line with Fatimah and Siregar (2020) who stated that increasing nutritional knowledge contributes to improving household food consumption patterns. In this context, MBG plays a role not only as a food fulfillment program, but also as a nutrition education medium that influences parents' consumption attitudes and behaviors.

Children's preferences and eating habits have also been proven to be a driving factor for changes in family consumption patterns. Children who are used to eating nutritious foods at school are starting to show a preference for similar menus at home, thus encouraging parents to adjust the family menu. This phenomenon supports the view that children can be agents of behavior change in the household. These results are in line with the findings of Yim et al. (2021) which show that children's consumption patterns are strongly influenced by the environment and nutrition education, and can have an impact on overall family eating habits.

In addition to internal household factors, access and availability of food in the surrounding environment also affect changes in consumption patterns. Households that have easier access to markets and fresh food tend to be better able to maintain their consumption of vegetables and fruits. On the contrary, limited access and fluctuations in food prices are obstacles in implementing nutritious

consumption patterns consistently. This is in line with the view of Herforth (2015) who emphasized that the food environment plays an important role in determining the quality of household diets, especially in urban areas that experience rapid changes in consumption patterns.

Overall, this discussion shows that changes in household consumption patterns after the Nutritious Eating Program are the result of complex interactions between economic factors, demographics, nutritional knowledge, children's preferences, and food access. The Nutritious Eating Program acts as a catalyst for change, but its impact is not singular and absolute. Therefore, to strengthen the sustainability of changes in household consumption patterns, the implementation of MBG needs to be integrated with efforts to increase household income, nutrition education for parents, and supporting policies that improve access to nutritious food. With a more comprehensive approach, the Nutritious Eating Program can function not only as a short-term intervention, but also as a strategic instrument in shaping healthy and sustainable household consumption patterns.

CONCLUSION

This study concludes that the Nutritious Eating Program (MBG) in Kendari City contributes positively to changes in the consumption patterns of household recipients of the program. These changes can be seen in the increase in the diversity and quality of household food consumption, especially in increasing the consumption of vegetables, fruits, and protein side dishes, as well as reducing the consumption of instant food and unhealthy snacks. In addition to meeting the nutritional needs of school-age children in Kendari City, the implementation of MBG also encourages changes in family consumption behavior through increasing parental nutrition awareness and adjusting household food menus. However, the sustainability of these changes in consumption patterns is still influenced by the economic conditions of households, the number of family members, and limited access to nutritious food in the urban environment of Kendari City.

The implications of this study show that MBG in Kendari City has the potential to become a strategic instrument in improving consumption patterns and household food security if supported by strengthening nutrition education for parents and supporting policies at the local level. Therefore, the implementation of MBG in Kendari City needs to be integrated with programs to increase family nutrition literacy, strengthen access to nutritious food, and synergize with regional food security policies. Further research is suggested to involve a larger number of informants in Kendari City, combining qualitative and quantitative approaches, and explore the long-term impact of the Nutritious Eating Program on the nutritional status and welfare of urban households more comprehensively.

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