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THE RELATIONSHIP BETWEEN FAMILY EATING HABITS AND CHILD NUTRITIONAL STATUS IN FISHING VILLAGES ON THE NORTH COAST OF SEBERANG

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ABSTRACT

Background: Coastal fishing villages may experience unique nutritional vulnerabilities, where household food consumption practices can affect the quality of children's diets and their nutritional outcomes. Objective: To analyze the relationship between family eating habits and the nutritional status of children in coastal fishing villages. Methods: A quantitative descriptive-analytical study was conducted in Kampung Nelayan Sebrang, Paluh Kurau Village, Hamparan Perak Subdistrict, Deli Serdang Regency, on April 19, 2025. The population consisted of families with children aged 1–12 years; 30 respondents were selected using purposive sampling. Data were collected through observation of household eating conditions, structured interviews, and anthropometric measurements of children (weight, height, and age). The relationship between family eating habits and nutritional status was tested using the Chi-square test (SPSS v21) with a 95% confidence level. Results: Children's nutritional status varied according to family eating habit categories, with a pattern emerging that poor eating habits tended to be associated with higher malnutrition, while better eating habits were associated with more normal nutrition. Statistically, the Chi-square test did not show a significant relationship at α=0.05 (p=0.080), although the p-value indicated a trend. Conclusion: Family eating habits were not significantly associated with the nutritional status of children in this small coastal sample, but the observed trend supports the importance of improving the home eating environment in fishing villages.

Keywords: family eating habits, nutritional status, children, coastal communities, fishing villages.

ABSTRAK

Latar Belakang: Desa nelayan pesisir mungkin mengalami kerentanan gizi yang unik, di mana praktik konsumsi makanan rumah tangga dapat memengaruhi kualitas pola makan anak-anak dan hasil gizi mereka.

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Tujuan: Untuk menganalisis hubungan antara kebiasaan makan keluarga dan status gizi anak-anak di desa nelayan pesisir. Metode: Studi deskriptif-analitis kuantitatif dilakukan di Kampung Nelayan Sebrang, Desa Paluh Kurau, Kecamatan Hamparan Perak, Kabupaten Deli Serdang, pada tanggal 19 April 2025. Populasi terdiri dari keluarga dengan anak berusia 1–12 tahun, 30 responden dipilih menggunakan sampling purposif. Data dikumpulkan melalui pengamatan kondisi makan rumah tangga, wawancara terstruktur, dan pengukuran antropometri anak (berat badan, tinggi badan, dan usia). Hubungan antara kebiasaan makan keluarga dan status gizi diuji menggunakan uji Chi-square (SPSS v21) dengan tingkat kepercayaan 95%. Hasil: Status gizi anak-anak bervariasi sesuai dengan kategori kebiasaan makan keluarga, dengan pola yang terlihat menunjukkan bahwa kebiasaan makan yang buruk cenderung terkait dengan malnutrisi yang lebih tinggi, sementara kebiasaan makan yang lebih baik terkait dengan gizi yang lebih normal. Secara statistik, uji Chi-square tidak menunjukkan hubungan yang signifikan pada $\alpha=0,05$ ($p=0,080$), meskipun nilai p menunjukkan adanya tren. Kesimpulan: Kebiasaan makan keluarga tidak secara signifikan terkait dengan status gizi anak-anak dalam sampel pesisir kecil ini, tetapi tren yang diamati mendukung pentingnya meningkatkan lingkungan makan di rumah di desa nelayan.

Kata kunci: kebiasaan makan keluarga, status gizi, anak-anak, komunitas pesisir, desa nelayan.

1. INTRODUCTION

Nutrition problems in children remain a global public health issue because they have a direct impact on growth, cognitive development, long-term productivity, and the risk of non-communicable diseases in adulthood (Rajeev et al., 2025). The latest global estimates show that in 2022, there will be approximately 148 million children under five years of age who are stunted, 45 million who are wasted, and 37 million who are overweight, confirming the double burden of malnutrition (malnutrition and overnutrition) occurring

simultaneously (WHO et al., 2025). In Indonesia, nutritional improvement achievements show an improving trend but are still inadequate: the 2024 SSGI results report a prevalence of stunting of 19.8%, wasting of 7.4%, and overweight of 3.4% in children under five years of age, indicating that the nutritional burden is still significant and requires more targeted interventions at the family and community levels (Kemenkes RI, 2024).

Conceptually, a child's nutritional status is determined not only by food availability, but also by consumption patterns, diet quality, feeding practices, and parenting dynamics at the household level (Asamoah et al., 2022). In this context, family eating habits, such as regular mealtimes, variety of home-cooked meals, eating together, selection of main meals and snacks, and portion sharing among family members, have the potential to consistently shape a child's daily nutritional exposure (Chen et al., 2025). Therefore, the family is a strategic unit of intervention because it is the first eating environment that determines the quality of intake and the formation of eating behaviors (Bellows et al., 2022).

Coastal areas have unique socio-ecological characteristics (Andres & Munoz, 2022). On the one hand, coastal areas are often associated with proximity to animal food sources (fish and seafood) (Love et al., 2020). However, on the other hand, many coastal households face seasonal economic vulnerability, limited access to diverse foods, and consumption patterns that do not always result in a quality diet (Solihati & Dayanti, 2025). A number of studies in coastal areas in Indonesia show that eating/feeding practices and consumption quality are related to nutritional status and stunting in children, including toddlers and children under two years of age (Niken et al., 2024).

However, some studies tend to focus on individual factors of children (e.g., intake or complementary feeding practices) or sociodemographic factors, while “family eating habits” as a household construct (regular meals together, eating rules, household food selection, shopping and processing patterns, and eating culture) are still relatively under-explored in measurable terms—especially in coastal communities. This gap is important because effective nutrition interventions often require an understanding of mechanisms at the family level, not just at the individual level.

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Based on this description, this study aims to analyze the relationship between family eating habits and nutritional status in coastal populations. These findings are expected to strengthen the evidence base for designing more contextual nutrition education programs and family-based interventions for coastal communities, including strategies to improve diet quality, food diversity, and eating habits that support optimal child growth.

2. RESEARCH METHODE

This study used a quantitative approach with a descriptive analytical design, which aimed to determine the relationship between family eating habits and children's nutritional status. The research location was in Kampung Nelayan Sebrang, Paluh Kurau Village, Hamparan Perak District, Deli Serdang Regency, which is a coastal area with complex socioeconomic challenges. This study was conducted on April 19, 2025.

The location was chosen based on the characteristics of a coastal community with limited access to information and nutritious food sources. The study population consisted of all families with children aged 1–12 years in Kampung Nelayan Sebrang. The sample size was 30 respondents, determined using purposive sampling, which is the selection of samples based on specific criteria relevant to the research objectives.

Data collection techniques included direct observation of family eating conditions, interviews using structured questionnaires, and recording of children's anthropometric data (height, weight, and age). Data collection tools included observation sheets, interview guidelines, and simple anthropometric measurement tools.

Data analysis was performed quantitatively using the Chi-Square (χ^2) statistical test through SPSS software version 21. This test was used to determine whether there was a relationship between two categorical variables, namely family eating habits and child nutritional status. The significance criterion was set at a 95% confidence level ($p < 0.05$).

3. RESULT AND ANALYSIS

Result

Table 1. Relationship between Family Eating Habits and Children's Nutritional Status

Family Eating Habits	Child Nutrition Status						Total		*p-value*
	Malnutrition		Normal Nutrition		Over Nutrition				
	n	%	n	%	n	%	n	%	
Good	1	7.7	7	53.8	5	38.5	13	43.3	0.080
Fair	2	22.2	3	33.3	4	44.4	9	30	
Poor	5	62.5	2	25	1	12.5	8	26.7	
Total	**8**	**26.7**	**12**	**40**	**10**	**33.3**	**30**	**100**	

Table 1 shows the variation in children's nutritional status based on family eating habits. In families with good eating habits, most children were in a normal nutritional status (53.8%), followed by overweight (38.5%), and only 7.7% were underweight. In families with adequate eating habits, the proportion of children who are overweight is the highest (44.4%), followed by those with normal nutritional status (33.3%) and those who are underweight (22.2%). Meanwhile, in families with poor eating habits, the proportion of children with malnutrition was the highest (62.5%), while those with normal nutritional status (25.0%) and overweight (12.5%) were relatively lower.

Statistically, the Chi-square test shows that the relationship between family eating habits and children's nutritional status is not significant at $\alpha = 0.05$ ($p = 0.080$). However, this p-value indicates a trend of association: the worse the family's eating habits, the higher the proportion of children experiencing malnutrition, while better eating habits tend to be associated with a higher proportion of normal nutrition.

Discussion

The findings of this study show a consistent pattern that the quality of family eating habits is related to the nutritional status of children. In families with better eating habits, children tend to have more optimal nutritional status, while in families with poor eating habits, there is a tendency for increased malnutrition. The group with “adequate” eating habits showed a more heterogeneous picture, indicating that family eating practices in this category did not fully support a balanced nutritional intake—in terms of regularity of meals, food selection, and daily menu composition. Overall, these

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findings reinforce that the home eating environment and family eating practices play a role as behavioral factors that shape the quality of children's intake and potentially explain variations in nutritional status in coastal communities, although the statistical evidence in this study is not yet strong enough to establish a definitive relationship.

In this study, family eating habits were not significantly associated with the nutritional status of coastal children (p=0.080), but the trend (higher proportion of malnutrition in families with poor eating habits) remained consistent with the household determinants theory. This lack of significance is consistent with international evidence showing heterogeneous results: a systematic review of adolescents reported that the frequency of family meals in some studies was associated with BMI/overweight (e.g., a negative relationship between family lunch/dinner and BMI), but in other studies this was insignificant or highly dependent on the context of parental control and population characteristics (Rhaisa et al., 2020). On the other hand, several studies in Indonesia on preschool and school-age children report a significant relationship between dietary patterns/eating habits and nutritional status (p=0.000–0.007), indicating that at a younger age, indicators of family eating habits better reflect adequate intake and appropriate feeding practices (Anggari & Yunita, 2020; Nova Gerungan & Katuuk, 2023; Permatasari et al., 2023).

Conversely, in adolescents, the relationship between eating habits and nutritional status may weaken (p=1.000) due to increased dietary autonomy and exposure to environments outside the home, making the variable “family eating habits” less sensitive (Nova Gerungan & Katuuk, 2023). Mechanically, the Nutrients review emphasizes the role of parents in shaping the food environment at home through behavioral examples, eating rules, and eating together, especially in early childhood (Mahmood et al., 2021). In addition, cross-country evidence shows a relationship between the nutritional status of caregivers and the nutritional status of children (p<0.01) as well as a correlation between the Body Mass Index (BMI) of mothers and the BMI of children, which reinforces the transmission of risk through the household (Bettocchi et al., 2025). Therefore, the insignificant results in your coastal study were most likely influenced by limited testing power/exposure variability, as well as the dominance of

structural factors (food insecurity, income, caregiver education, sanitation, morbidity) which, in the review of children under five, are often the main determinants of nutritional status and can "mask" the effects of family eating habits (Mkhize & Sibanda, 2020).

Implicitly, these findings confirm that nutritional improvement interventions in coastal areas need to target families as units of change, rather than just children as individuals. Although the statistical relationship is not yet strong enough to establish a definite link, the pattern that emerges consistently shows that the quality of the home eating environment, regularity of meals, food selection, and daily menu composition, has the potential to influence nutritional status. This means that nutrition programs in coastal areas can be more effective if they integrate education on relevant family eating practices (e.g., planning balanced menus based on local foods, strengthening main meal routines, limiting ultra-processed foods, and reinforcing parental role modeling), combined with strategies that target coastal context barriers such as access to diverse foods and income fluctuations. Furthermore, these "marginal" results can be considered an early epidemiological signal that improving family eating habits remains a relevant target for health promotion, especially among families with poor eating habits who appear to be more vulnerable.

The main limitations of this study are the small sample size and uneven distribution of cell categories, resulting in limited statistical power and potentially unstable chi-square tests due to some small *expected numbers*. The likely use of a cross-sectional design also limits causal conclusions; findings only suggest a tendency for an association, not causality. In addition, the categorized measurement of "family eating habits" (good/adequate/poor) risks oversimplifying the complex variation in eating practices and potentially leads to *misclassification*, especially if based on self-reports. The study also does not fully control for strong structural confounders in coastal communities, such as food insecurity, income, caregiver education, sanitation, and child morbidity, which could theoretically "mask" the influence of family eating habits. Therefore, it is recommended to conduct further studies with larger samples, more standardized measurement tools (e.g., dietary diversity/food intake recall), and multivariate analysis and/or longitudinal/intervention designs to test

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causal pathways and clarify the mechanisms of the influence of the home eating environment on children's nutritional status.

4. CONCLUSION

This study in Kampung Nelayan Sebrang, Paluh Kurau Village, Hamparan Perak Subdistrict, Deli Serdang Regency, found that family eating habits were not significantly related to the nutritional status of children at a *5%* significance level, although the distribution pattern showed a tendency for poorer eating habits to coincide with higher incidents of malnutrition and better eating habits to coincide with normal nutritional status. These findings suggest that the home food environment remains a relevant behavioral target for nutrition promotion in coastal communities, but stronger evidence requires studies with larger samples, more detailed dietary measurements, and analytical approaches that account for structural factors commonly found in fishing villages.

5. REFERENCES

Andres, M. de, & Munoz, J. M. B. (2022). The limits of coastal and marine areas in Andalusia (Spain). A socio-ecological approach for ecosystem-based management. *Land Use Policy*, *120*(September), 1–13. https://doi.org/https://doi.org/10.1016/j.landusepol.2022.106250

Anggari, R. S., & Yunita, R. D. Y. (2020). Pola Asuh Pemberian Makan Terhadap Status Gizi Pada Anak Usia Pra Sekolah (3-5 Tahun) Di Desa Tegalharjo. *Jurnal Ilmiah Kesehatan Rustida*, *07*(01), 59–67.

Asamoah, C. N., Adjei, G., Agblorti, S., & Doku, D. T. (2022). Association of maternal characteristics with child feeding indicators and nutritional status of children under - two years in Rural Ghana. *BMC Pediatrics*, 1–16. https://doi.org/10.1186/s12887-022-03651-1

Bellows, L. L., Lou, Y., Nelson, R., Reyes, L. I., Brown, R. C., Mena, N. Z., & Boles, R. E. (2022). A Narrative Review of Dietary Assessment Tools for Preschool-Aged Children in the Home Environment. *Nutrients*, *14*(22), 1–22.

Bettocchi, S., Oria, V. D., Cosmi, V. De, Scaglioni, S., Agostoni, C., Paglia, L., Paglia, M., Colombo, S., Braiotta, F., Beretta, M., & Berti, C. (2025). Preschool Children ' s Eating Habits and Parental Nutritional Status. *Nutricion Clinica y Dietetica Hospitalaria*, *17*, 1–13. https://doi.org/https://doi.org/10.3390/nu17030575

Chen, Y., Lee, C., Chiang, M., Tsui, P., Lan, B., & Chen, Y. (2025). Nourishing Holistic Well-Being : The Role of Family Dynamics and Family Cooking. *Healthcare*, *13*(414), 1–18. https://doi.org/https://doi.org/10.3390/healthcare13040414

Kesehatan, B. K. P. (2024). *Survei Status Gizi Indonesia (SSGI) 2024*.

Love, D. C., Asche, F., Conrad, Z., Young, R., & Harding, J. (2020). Food Sources and Expenditures for Seafood in the United States. *Nutrients*, *12*(6), 1–11. https://doi.org/https://doi.org/10.3390/nu12061810

Mahmood, L., Flores-barrantes, P., Moreno, L. A., Manios, Y., & Gonzalez-gil, E. M. (2021). *The Influence of Parental Dietary Behaviors and Practices on Children ' s Eating Habits*. 1–13.

Mkhize, M., & Sibanda, M. (2020). A Review of Selected Studies on the Factors Associated with the Nutrition Status of Children Under the Age of Five Years in South Africa. *International Journal of Environmental Research and Public Health*, *17*, 1–26. https://doi.org/http://dx.doi.org/10.3390/ijerph17217973

Niken, V., Nur, D., Nugroho, D., & Anjani, G. (2024). Socio-demographics , dietary diversity score , and nutritional status of children aged 2 – 5 years : A cross-sectional study of Indonesian coastal areas. *Clinical Epidemiology and Global Health*, *27*, 1–7. https://doi.org/https://doi.org/10.1016/j.cegh.2024.101599

Nova Gerungan, M., & Katuuk, C. T. (2023). Hubungan Pola Makan Dengan Status Gizi Pada Anak Usia Sekolah Di Sd Don Bosco Bitung. *Klabat Journal of Nursing*, *5*(2), 63–71.

Organization, W. H., UNICEF, & Group, W. B. (2025). *Levels and trends in child malnutrition*.

Permatasari, I., Ritanti, & Tatiana. (2023). Hubungan Pola Makan Anak dan Status Gizi Anak Usia Sekolah. *Jurnal Kesehatan*, *12*(1), 209–213.

Rajeev, A. M., Malisetty, H., Baidya, O. P., J, K. V., Siddhanta, S., & Dharan, B. G. (2025). Pediatric Nutrition and Its Role in Preventing Non-communicable Diseases : A Review. *Cureus*, *17*(7), 1–10. https://doi.org/10.7759/cureus.87431

Rhaisa, G., Silva, P. O., Nakabayashi, J., Bandeira, V., Toral, N., & Monteiro, R. (2020). Family meal frequency and its association with food consumption and nutritional status in adolescents : A systematic review. *PLoS ONE 15*, *7*(1), 1–29. https://doi.org/https://doi.org/10.1371/journal.pone.0239274

Solihati, Y., & Dayanti, W. T. (2025). Food Security of Fisher Households in Coastal Areas in Indonesia : a Review. *Journal of Health Science and Pharmacy*, *2*(2), 224–234. https://doi.org/https://doi.org/10.36685/jhsp.v2i2.1226