

RELATIONSHIP BETWEEN DIETARY PATTERNS AND THE INCIDENCE OF MALNUTRITION (WASTING) IN CHILDREN AGED 24-59 MONTHS : LITERATURE REVIEW

Diana Saputri Pelu^{1*}

Bachelor of Nutrition, Faculty of Health Sciences, Ngudi Waluyo University¹

**Corresponding Author : dianpelu09@gmail.com*

ABSTRAK

Status gizi anak dianggap seimbang dan baik jika makanan yang dikonsumsi sesuai dengan usia anak. Kebiasaan makan yang baik menentukan keberlanjutan sumber daya manusia di masa depan. Jika anak tidak mendapatkan makanan yang baik dan bergizi, hal itu akan memengaruhi pertumbuhan dan perkembangannya. Balita harus memiliki kebiasaan makan yang disesuaikan dengan frekuensi makan, jumlah makanan, dan kandungan nutrisi yang seimbang. Hal ini agar balita dapat tumbuh dan berkembang dengan baik. Pola makan juga sangat menentukan status gizi balita. Makanan yang tidak tepat dan pola makan yang buruk akan menyebabkan efek buruk dan mengganggu status gizi balita. Efek jangka pendek meliputi perkembangan otak yang lambat, pertumbuhan yang tidak sesuai usia, dan kerentanan terhadap penyakit karena sistem kekebalan tubuh yang lemah. Efek jangka panjang meliputi keterlambatan perkembangan otak dalam menerima pembelajaran, yang mengakibatkan penurunan prestasi belajar, dan risiko mengalami penyakit tidak menular lainnya yang akan berdampak pada generasi mendatang. Artikel Tinjauan Pustaka ini bertujuan untuk menyajikan informasi tentang apakah ada korelasi antara pola makan dan kejadian WASTING atau malnutrisi pada anak usia 24-59 bulan. Penelitian ini menggunakan studi literatur atau tinjauan artikel yang memanfaatkan data dasar dari Google Scholar dan situs web Garuda yang diterbitkan dari tahun 2020 hingga 2026. Studi ini menemukan bahwa terdapat hubungan antara pola makan anak dan kejadian malnutrisi (kurus kering) pada balita, dan bahwa penerapan pola makan yang tidak tepat membuat balita tidak sehat dan mengganggu pertumbuhan dan perkembangannya. Pola makan memiliki dampak terhadap malnutrisi.

Kata kunci : malnutrisi, pola makan, status gizi

ABSTRACT

A child's nutritional status is considered balanced and good if the food is appropriate for the child's age. Good eating habits determine the sustainability of human resources in the future. If children do not get good and nutritious food, it will affect their growth and development. Toddlers must have eating habits that are adjusted to the frequency of meals, the amount of food, and the nutritional content must be balanced. This is so that toddlers can grow and develop well. Dietary patterns also greatly determine the nutritional status of toddlers. Inappropriate food and poor dietary patterns will cause adverse effects and disrupt the nutritional status of toddlers. Short-term effects include slow brain development, growth that is not appropriate for age, and susceptibility to illness due to a weak immune system. Long-term effects include delayed brain development in receiving learning, resulting in decreased learning achievement, and the risk of experiencing other non-communicable diseases that will impact future generations. This Literature Review article aims to present information on whether there is a correlation between feeding patterns and the incidence of WASTING or malnutrition in children aged 24-59 months. This research uses a literature study or article review utilizing basic data from Google Scholar and the Garuda Website published from 2020 to 2026. This study found that there is a link between children's feeding patterns and the incidence of malnutrition (wasting) in toddlers, and that the implementation of inappropriate feeding patterns makes toddlers unhealthy and disrupts their growth and development. Feeding patterns have an impact on malnutrition.

Keywords : feeding patterns, malnutrition, nutritional status

INTRODUCTION

In Indonesia today, health challenges are increasing, especially regarding nutrition, which will affect the decline in the competency standards and capacity of human resources in the future. Adequate nutrition is a fundamental basis for the maximum growth and development of children. The fulfillment of these requirements can be optimized through the utilization of local food sources available in each region (Amanda et al., 2023). The classification of nutritional status in Indonesia is determined through various parameters, one of which is the BB/TB index (Permenkes RI, 2020 in Rostanty Adhiarti et al., 2023). WHO data from 2021 states that approximately 45% of deaths among children under the age of 5 are caused by malnutrition. In Indonesia itself, based on 2018 Riskesdas data, it was also found that the prevalence of malnutrition is still high at around 13.8%, and the infant mortality rate reaches 58 per thousand live births. This figure has only decreased when compared to the previous 2013 Riskesdas data (Rostanty Adhiarti et al., 2023).

Nutritional disorders in toddlers will trigger many short-term and long-term effects. In the short term, children become inactive, fussy, physically underdeveloped for their age, and have low immunity, which can cause them to fall ill. Long-term effects include impaired memory and a high risk of developing various non-communicable diseases. (Ministry of Health of the Republic of Indonesia, 2020 in Novita Aryani & Henny Syapitri, 2021). Toddlers are in the golden age of human growth and development, a crucial stage that determines our future, often referred to as the golden age. For this reason, toddlers need a proper and balanced diet. An infant's diet must take into account several factors, such as selecting age-appropriate foods, creating varied meal plans, proper food presentation, and appropriate feeding methods. Therefore, it is essential to enhance parents' knowledge through educational sessions on nutritional health, including information on suitable food ingredients, appropriate meal plans, and recommendations to meet infants' nutritional needs. That way, mothers will have a better understanding of toddler nutrition and can apply it to their children's daily diet (Novita Aryani & Henny Syapitri, 2021).

An appropriate diet plays an important role in preventing the risk of malnutrition in toddlers (Liss Dyah Dewi Arini, 2025). Research by Sitoayu et al. (2021) found a relationship between eating frequency and malnutrition (wasting) in toddlers, with toddlers who were fed at inappropriate frequencies being up to 9 times more at risk of malnutrition (wasting). This proves that feeding frequency is closely related to the nutritional status of toddlers. Based on the various issues discussed above, the author is very interested in researching this topic using a literature study or article review approach, with the aim of further analyzing the relationship between eating patterns and malnutrition (wasting) in toddlers.

METHOD

This research used a literature study method utilizing the *Google Scholar* website and the *Garuda* website published from 2020 to 2026. The results obtained were nine articles consisting of seven accredited journal reviews and two non-accredited journal reviews (figure 1).

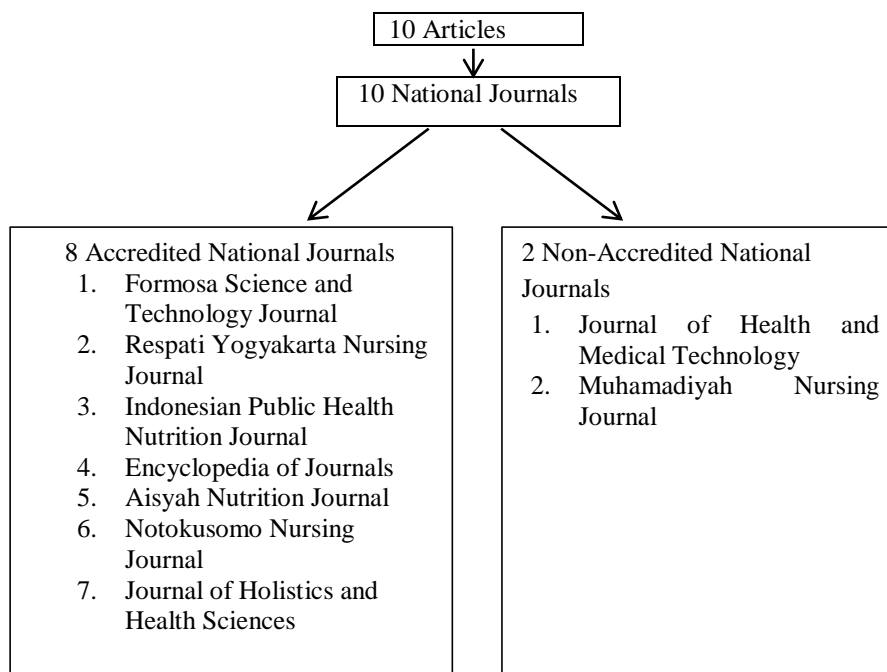


Figure 1. Journal Chart Used in the Research Method

RESULTS

Table 1. Selected Articles

No	Researcher	Year	Method	Title	Research Results
1	Salsabila Kurnianingtyas, Ratu Ayu Dewi Sartika, Winda Mulia Ningsih	2021	Cross-sectional study	Malnutrition in children aged 24-59 months in North Sumatra: A Life Course Survey	The study concluded that there is a correlation between nutrition education, feeding patterns, and nutritional status in toddlers.
2	Rosi Ani Riski Lubis and Eliska	2025	Quantitative research. Observational analysis	The relationship between dietary patterns and malnutrition in toddlers in the working area of the Latong Community Health Center, Padang Lawas Regency	The results of this study show a correlation between feeding patterns and nutritional status in children under five years of age. This study also concludes that toddlers are up to 3.95 times more likely to experience malnutrition if they have poor eating habits compared to toddlers with proper eating habits.
3	Maria Nova, Alya Misdhal Rini	2024	A descriptive-analytical study using a case-control research design.	The relationship between mothers' knowledge levels, parenting patterns, and nutritional intake on nutritional status (weight/height) in children aged 24-59 months in the working	The results of this study indicate that children who receive good parenting from their parents also have good dietary intake and nutritional status.

				area of the Anak Air Community Health Center in Padang City.	
4	Rizky Adhiarti Rostanty, Masayu Dian Khairani, Abdullah, Dera Elva Junita	2023	A quantitative study with a cross-sectional design.	The Relationship Between Eating Patterns and Malnutrition in Toddlers Aged 24-59 Months in Summersari Village, Sekampung District, in 2023	The results of this study indicate that there is a relationship between the frequency of eating habits among infants and cases of malnutrition.
5	Syarifah Nur Intani, Satriani, Jamil Anshory	2022	Using a cross-sectional study design.	The relationship between mothers' knowledge of nutrition and feeding patterns with the nutritional status of toddlers.	This study found a substantial correlation between mothers' knowledge, feeding patterns, and children's nutritional status.
6	Rian Ludong, Dina Putri Utami Lubis	2021	Using cross-sectional data analysis methods.	The correlation between feeding patterns and the prevalence of stunting in children aged 24-59 months in the Lumbi-Lumbia Health Center working area.	The results of the study found a correlation between dietary patterns and the prevalence of stunting in infants.
7	Riska Susanti, Risma Aliviani Putri	2023	Cross-sectional analytical study	The relationship between feeding patterns of children under five and nutritional status at the Karang Jati health center	The results of the study show that feeding patterns are closely related to the nutritional status of toddlers
8	Sri Kurnia Sah Puteri, Anita Kartini, Riska Nuryana, Sumarmi	2024	Using a cross-sectional approach.	The relationship between dietary patterns and the nutritional status of children aged 3 to 5 years in the working area of the Bontokkasi Community Health Center, South Galesong District	The results of this study indicate that there is a correlation between dietary patterns and weight gain in toddlers.
9	Margareta Alfina Damayanti, Christina Ririn Widianti, Deni Lusiana	2025	Using a correlational method with a <i>cross-sectional</i> approach.	The relationship between feeding patterns and nutritional status in toddlers in Sleman, Yogyakarta	The results of the study found that there was no relationship between feeding patterns and the incidence of malnutrition in toddlers, because parents applied appropriate feeding patterns.

DISCUSSION

A good and appropriate feeding pattern can be seen from the amount consumed by each person (Intani et al., 2022). The recommended frequency is three meals a day, at breakfast, lunch, and dinner, to meet the body's nutritional needs. According to the General Guidelines for Balanced Nutrition (PUSG), a balanced diet must include various types of food, each of

which contributes to a healthy diet (Ririn Widiyanti et al., 2025). The consequences of poor eating habits can cause toddlers to experience nutritional deficiencies and stunted growth (Rostanty Adhiarti et al., 2023). Many studies show that being underweight has a negative impact on children. The long-term effects of being underweight include an increased risk of cardiovascular disease and decreased cognition in children. (Kurnianingtyas et al., 2021).

Research conducted by Rosi & Eriska (2025) found a significant relationship between feeding patterns and cases of malnutrition in toddlers. This study also found that incorrect feeding patterns increase the likelihood of malnutrition by up to 3.951 times. These findings are in line with a study by Ludong et al. (2021) involving 95 parents with children aged 24 to 59 months. The findings of this study highlight that 71.6% of parents still make mistakes in feeding patterns, which means that most of the study subjects do not meet the criteria for proper nutrition. Therefore, education and guidance on children's eating patterns are needed. In line with the research by Aben B.Y.H. Romana et al. (2025) entitled "Guidance on Feeding Methods for Stunted and Malnourished Children in Raknamo Village," there has been a behavioral transformation in mothers of toddlers who previously depended on instant foods and have now switched to fulfilling balanced nutrition. Through education on local food processing demonstrated by the team, the mothers showed an increase in their competence in preparing nutritious meals such as fish and vegetables. This activity proved effective in improving mothers' technical skills to provide healthy food for their children. This was indicated by the participants' competence in replicating the demonstration steps and their initiative to practice them independently within their families. The findings of this study are in line with the results of data analysis showing a significant correlation between parenting patterns and nutritional status (Maria & Nova 2024).

Inadequate food consumption habits increase the probability of nutritional deficiencies, indicating that the quality of daily intake is a major determinant in determining children's nutritional status (Puteri et al., 2024). Based on the findings of a study published by Susanti et al. (2023), there is a correlation between parenting patterns and children's nutritional status. From the above results, feeding strategies need to be optimized through creative menu diversification to stimulate toddlers' interest in eating and ensure adequate nutritional fulfillment. Another study by Ririn Widiyanti et al. (2025) did not agree with this finding, as the results showed that the majority of mothers had implemented appropriate feeding patterns (97.6%) and the nutritional status of toddlers was categorized as good. The Spearman statistical test showed insignificant results, namely $p=0.872$. Thus, this study did not find a significant relationship between the two variables. The above studies emphasize to mothers that feeding practices must be re-examined, including meal frequency, portion sizes, and the nutritional content and benefits of the food, all of which should be based on sound knowledge to ensure positive impacts on infant growth and development.

CONCLUSION

This study concludes that there is an influence of eating routines on malnutrition. Therefore, it is hoped that future researchers will also consider other factors to reduce the incidence of malnutrition. Additionally, the participation of various health workers in educating the community to improve knowledge about the proper application of healthy eating patterns is essential.

ACKNOWLEDGMENTS

Academic Advisor at Ngudi Waluyo University, colleagues at the Bula Community Health Center, classmates from the RPL class at Ngudi Waluyo University, Sri Yuniar and Ramlia

Siwa Siwan as friends and classmates, and other friends for their involvement during the research process.

REFERENCES

- Aben B.Y.H. Romana, Fransiskus Salesius Onggang, Florentianus Tat, Yoany Maria V.B.Aty, & Trivonia Sri Nurwela. (2025). *Guidance on Feeding Methods for Children with Stunting and Malnutrition in Baumata Timur Village. J-ABDI: Journal of Community Service*, 5(7), 2357–2372. <https://doi.org/10.53625/jabdi.v5i7.11923>
- Amanda, Nuari Andolina, Aminah Aatina Adhyatma (2023). *The Relationship Between Feeding Patterns and Stunting Incidence in Toddlers Aged 24-59 Months at the Botania Health Center JURNAL*. 6(3), 486–493
- Intani, S. N., & Anshory, J. (2022). *The Relationship Between Mothers' Nutritional Knowledge and Feeding Patterns with the Nutritional Status of Toddlers in the Working Area of the Sidomulyo Community Health Center in Samarinda City using questionnaires and 24-hour food recall. Weight and height of toddlers. Eating habits and nutritional status of toddlers. From the results*. 1069–1080.
- Kurnianingtyas, S., Sartika, R. A. D., & Ningsih, W. M. (2021). *Underweight in Children Aged 24–59 Months in North Sumatra: the 2014 Indonesia Family Life Survey Data. Indonesian Journal of Public Health Nutrition*, 1(2). <https://doi.org/10.7454/ijphn.v1i2.4808>
- Liss Dyah Dewi Arini. (2025). *Medic nutricia. Journal of Health Sciences*, 12(4), 0–6. <https://doi.org/10.5455/mnj.v1i2.644>
- Ludong, R., Putri, D., & Lubis, U. (2021). *Machine Translated by Google Correlation Between Dietary Patterns and the Prevalence of Stunting in Children Aged 24-59 Months in the Lumbi-Lumbia Health Center Working Area Machine Translated by Google*. 8(September), 167–172.
- Maria Nova & Alya Misdhal Rini (2024). *The Relationship Between Mothers' Knowledge Level, Parenting Patterns, and Nutritional Intake on Nutritional Status (Weight/Height) in Children Aged 24-59 Months in the Working Area of the Anak Air Community Health Center, Padang City, University of Perintis Indonesia, West Sumatra*. 6(2), 312–319.
- Nasution, D. E., Nurlaili, & Hamdani. (2025). *The Relationship Between Breastfeeding and the Prevention of Wasting in Pidie District, Aceh, in 2025. Galenical is licensed under a Creative Commons Attribution-ShareAlike license regarding the nutritional status of toddlers, such as stunting, wasting, underweight, and overweight. GALENICAL: Journal of Medicine and Health for Malikussaleh Students*, 4(2), 12–18.
- Novita Aryani, & Henny Syapitri. (2021). *The Relationship Between Feeding Patterns and the Nutritional Status of Toddlers in Bagan Percut. Priority Nursing Journal*, 4(1), 135–145. <https://jurnal.unprimdn.ac.id/index.php/jukep/article/view/1402/861>
- Puteri, S. K. S., Kartini, A., Nuryana, R., & Sumarmi. (2024). *The Relationship Between Eating Patterns and the Nutritional Status of Children Aged 3-5 Years in the Working Area of the Bontokassi Community Health Center, South Galesong District. Muhammadiyah Nursing Journal*, 9(2), 11–15.
- Ririn Widiyanti, C., Lusiana, D., & Alfina Damayanti, M. (2025). *The Relationship Between Feeding Patterns and Nutritional Status of Toddlers in Sleman, Yogyakarta. Notokusumo Nursing Journal*, 13, 36–44.
- Rosi A. R. Lubis & Eliska. (2025). *The Relationship Between Dietary Patterns and Malnutrition. Journal of Health and Medical Technology (JKTM)*. 07(04), 79–92.

- Rostanty Adhiarti, R., Khairani Dian, M., Abdullah, & Junita Elva, D. (2023). *The Relationship Between Eating Patterns and Malnutrition in Toddlers Aged 24-59 Months in Sumbersari Village, Sekampung District. Aisyah Nutrition Journal, 6, No(2)*
- Sitoayu, L., Imelda, H., Dewanti, L. P., & Wahyuni, Y. (2021). *The Relationship Between Infant Feeding History (PMBA) and Infectious Diseases with Malnutrition (Wasting) in Children Aged 6–24 Months at the Poris Plawad Community Health Center. The Correlation of Infants' Feeding (PMBA) History and Infectious Diseases with Ma. 28(2), 1–11.*
- Susanti, R., & Putri, R. A. (2023). *The Relationship of Toddler Feeding Pattern with Nutritional Status in Karang Jati Posyandu Bergas District. Journal of Holistics and Health Sciences, 5(2), 296-305. Risma Aliviani Putri Journal of Holistics and Health Sciences, 5(2), 296–305.*