



## Parents' Understanding of the Balanced Nutrition Guidelines by Indonesia's Ministry of Health: A Case Study at Almaarif Kindergarten

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### Abstract

The problem of malnutrition in children remains a controversial topic of discussion and an unresolved challenge, especially concerning parental knowledge. Parents must be knowledgeable about balanced nutrition before proceeding to the implementation stage. The purpose of this study was to determine the extent of parental knowledge about the 2014 Balanced Nutrition Guidelines that were developed by the Ministry of Health in Indonesia. In order to collect data, the questionnaire was distributed to 80 respondents who were parents of students at Al-Maarif Singosari Kindergarten in Malang Regency. The questionnaire focused on evaluating parents' understanding of the recommendations for a balanced diet. The research findings revealed that 64% of parents demonstrated a strong comprehension of the balanced diet recommendations, while 36% exhibited a moderate understanding. However, these results are insufficient to ensure the effective implementation of balanced nutrition in children unless the knowledge is consistently translated into practice. Further research is needed on the relationship between parents' understanding of balanced nutrition and children's nutritional levels.

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**Keywords:** Balanced Nutrition; Early Childhood; Parental Knowledge; Understanding

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## A. INTRODUCTION

Nutritional problems are still a significant concern in Indonesia, primarily related to stunting (short), wasting (thin), underweight (undernutrition), and overweight (obesity) in children. According to data from the 2022 Indonesian Nutritional Status Survey (SSGI) of the Ministry of Health, the prevalence of these problems is still high, especially for stunting and underweight, with figures of 21.6% for stunting and 17.1% for underweight (Munira, 2023). According to the UNICEF report in 2023, Indonesia is still struggling with three burdens of malnutrition, with 21.5% for stunting, 8.5% for wasting, and 4.2% for overweight (Unicef, 2023). The figures show the nutritional imbalance in children's diets. Introducing the concept of nutrition to children requires consistent effort and involvement so that they get used to and enjoy eating healthy foods (Maulani et al., 2021). Parents, especially mothers, play a crucial role because they are the closest figures to their children and are responsible for ensuring the family's food intake (Insani, 2022). In addition to knowledge, parents must also demonstrate beliefs and behaviors that support the formation of healthy eating patterns for children.

The Ministry of Health expresses the definition of balanced nutrition itself in the Balanced Nutrition Guidelines, namely the composition of daily food that contains nutrients in types and quantities that are appropriate to the body's needs by paying attention to the principles of food diversity, physical activity, clean living behavior and monitoring body weight regularly to maintain normal body weight to prevent problems (Balanced Nutrition Guidelines, 2014). A balanced diet is when the body receives nutrients regularly in the right amounts and types to meet its needs (Tadale et al., 2020). In addition to the understanding, there is also a balanced nutrition principle that has long replaced the slogan Four-healthy, Five-perfect. The balanced nutrition principle that is currently applied consists of 4 (four) pillars, including consuming a variety of foods, getting used to clean living behavior, doing physical activity, and monitoring body weight regularly to maintain normal body weight. These points were summarized by the Ministry of Health and visualized, and then the nickname Balanced Nutrition Tumpeng was given. Although it has been visualized, it is still important to read and understand the pillars of the Balanced Nutrition Guidelines. Healthy food is food that provides a balance of nutrients consisting of carbohydrates, protein, fat, vitamins (Erminawati, 2019). These components complement the content of a food so that it can be said to be nutritionally balanced.

Parental nutrition knowledge has a strong correlation with children's nutritional status. Research related to parental knowledge has been conducted by several researchers, including Salsabila et al. (2021) but only focused on stunting cases. There is also research conducted by Surya (2020) which is more directed at the implementation of parental knowledge about balanced nutrition. In addition, there is research by Maulani et al., (2021) that examines parental understanding of balanced nutrition but with a child age limit of 4-5 years only. Other research related to balanced nutrition was also conducted by Hastuti et al. (2021) but focused on increasing parental knowledge. Based on several studies above, parents play a significant role in children's health conditions, in this case, in terms of fulfilling

children's nutrition. Learning is a process that shapes behavior in early childhood (Santoso & Sugiri, 2022). Therefore, getting children used to consuming healthy foods from an early age is one of the processes of forming healthy behavior in children for everyday life.

Providing nutritional intake to children is directly related to the habit of consuming healthy foods every day. The presentation of a healthy food menu is undoubtedly influenced by the knowledge of parents with various backgrounds, occupations, ages, education, environments, experiences, interests and information, and gender (Pariati & Jumriani, 2020; Widyaningrum et al., 2021). A person's strong interest in something produces interest (Bahri, 2022). Each of these components is directly correlated with the level of parental knowledge. Given that the background and characteristics of each individual are different and influence their knowledge. These components certainly influence parental knowledge about balanced nutrition.

Parents' understanding of balanced nutrition includes the behavior of consuming balanced nutrition, eating habits, and attitudes in choosing a food menu (Maulani et al., 2021). The material and immaterial conditions of parents influence this condition. Based on previous research, this study aims to describe the level of parental knowledge about the concept of balanced nutrition that has been socialized by the Ministry of Health of the Republic of Indonesia. The study was conducted at Al Maarif Singosari Kindergarten, Malang Regency, because students at the school bring a variety of supplies, both food containing beneficial nutrients and junk food, namely food that contains a lot of coloring agents and preservatives. Food that is considered healthy does not always have to be expensive or tasty, but it must be hygienic, rich in nutrients, and sufficient. In addition, it contains important nutrients that the body needs (Early Childhood Education and Community Education Development Center, 2017). As for students who do not bring supplies, they buy food that is delicious on the tongue but has no nutritional value. Children buy food from outside, which is one of the consequences of not preparing healthy food at home (Suryaalamah et al., 2019). Whether they bring food from home or buy food from outside, they still need to pay attention to its balanced nutritional value.

## **B. METHOD**

This study applies a quantitative approach through a survey method. The population of the study was all guardians of AlMaarif Singosari Islamic Kindergarten students, and sampling used a purposive sampling technique with the requirement of guardians of group B students (aged 5-6 years) at AlMaarif Islamic Kindergarten. The measuring instrument used to determine the level of parental knowledge and a data collection technique was a questionnaire. The questionnaire was given to respondents in the form of a complex file or sheet of paper. This questionnaire was compiled independently concerning the balanced nutrition guidelines without adapting instruments from previous studies. To ensure its validity and feasibility, the questionnaire has been reviewed by experts in the field of nutrition and research. The questionnaire consists of 10 multiple-choice questions with an ordinal scale, meaning that each question has several answer choices, and one of the choices is

considered the correct answer. By using a questionnaire, data was collected to determine the level of parental knowledge about the Balanced Nutrition Guidelines.

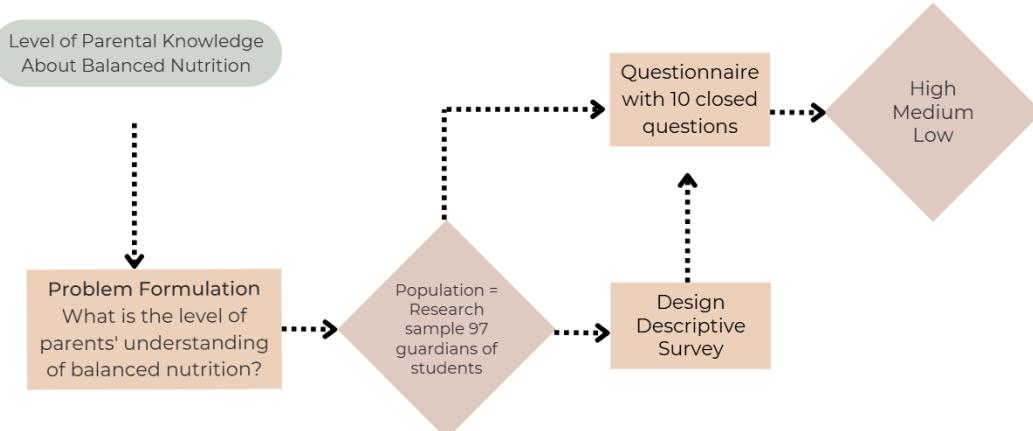


Figure 1. Research Flowchart

The questionnaire contains the respondents' identities, which are used for research and analysis purposes related to the level of parental knowledge about balanced nutrition and questions about the Balanced Nutrition Guidelines. Some of the indicators are the definition of balanced nutrition, visualization of balanced nutrition guidelines, principles of balanced nutrition, percentage of needs for each component of balanced nutrition, and balanced nutrition messages for early childhood. Before being distributed, the questionnaire was validated first by several experts. The scores from the expert assessments are then calculated, and valid results are obtained. To obtain valid and concrete results, the collected data is processed using Microsoft Excel. The numbers that appear are tabulated and percentages, then categorized starting from high, medium, and low levels of knowledge. Respondents with low knowledge are in the range of  $0 - <6.66$ , medium  $6.66 - <13.32$ , and high knowledge  $13.32 - \leq 20$ .

## C. RESULT AND DISCUSSION

### 1. Result

Researchers gave a questionnaire to 80 respondents to get an overview of parents' understanding of balanced nutrition. The following table shows the results of the questionnaire filled out by respondents, along with their categories.

Table 1. Frequency of People's Understanding of Balanced Nutrition

Category	Frequency	Percentage
High ( $13.32 - \leq 20$ )	51	64%
Medium ( $6.66 - <13.32$ )	29	36%
Low ( $0 - <6.66$ )	0	0
	80	100%

Based on the results of the questionnaire calculation, it shows that the average knowledge of parents in Almaarif Islamic Kindergarten is high. The survey results from 80 respondents (parents) show that, in general, they are in the high knowledge category. Reaching 64%, 51 people scored  $13.32 - \leq 20$ , and the rest scored  $6.66 - <13.32$ , and no

parents were in the low knowledge category. It illustrates that, on average, parents are aware of the Balanced Nutrition Guidelines that have been regulated by the Indonesian Ministry of Health since 2014.

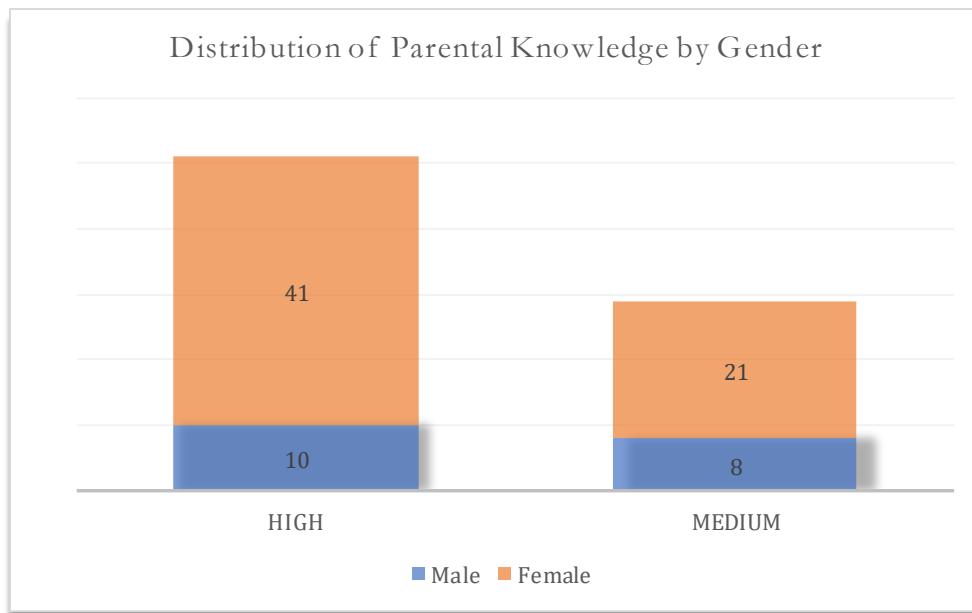


Figure 2. Distribution of Parental Knowledge by Gender

Based on the graph in Figure 1 above, 51 respondents, 41 female respondents and 10 male respondents have high scores.

The level of understanding is moderate for 21 female respondents and 8 male respondents. When viewed based on the level of education in Figure 2, parents who have elementary school education have a moderate level of knowledge of 3 people or 4% of the total number of respondents. Parents who have junior high school education are 5 people; 3 people have high scores, and 2 people have moderate scores. 35 respondents have a high school education, 20 people, or 25%, have high scores, and 15 people have moderate scores. Parents who have a D3 education level consist of 4; 2 people have high scores, and 2 people have moderate scores. At the S1 level, consisting of 29 respondents, 23 people have high scores, namely 29%, and 6 people have moderate scores. At the S2 level consisting of 3 people, 2 people have high scores, and 1 person has a medium score. Parents who have Islamic boarding school background consist of 1 person and are in the high category score. Based on this explanation, the highest scores are mostly owned by parents with an S1 background.

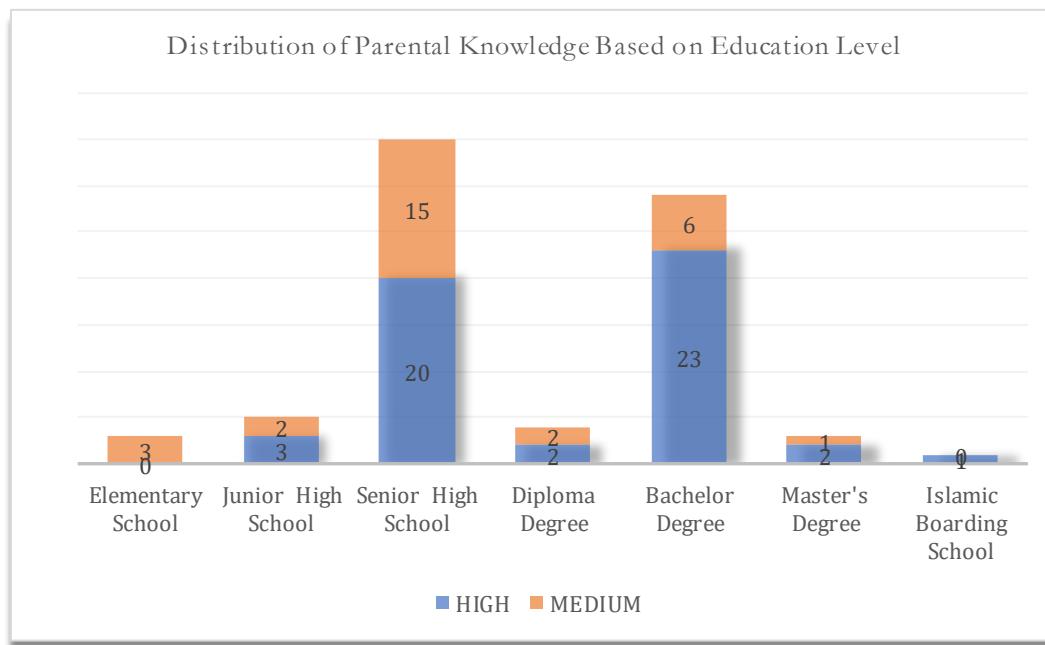


Figure 3. Distribution of Parents' Understanding Levels Based on Education Level

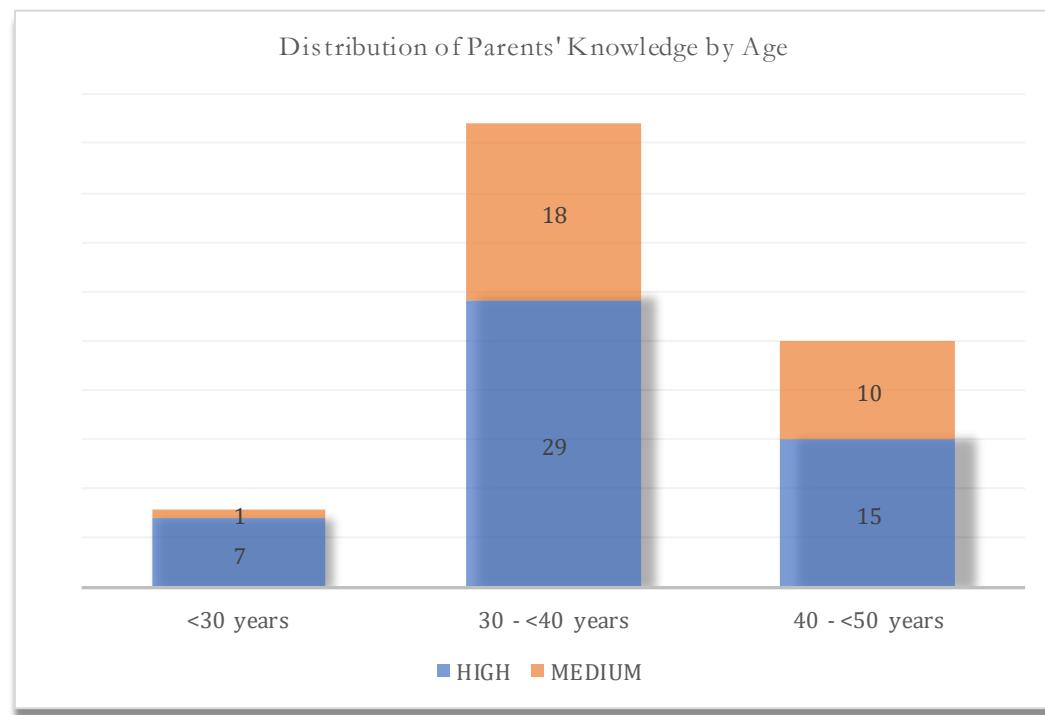


Figure 4. Distribution of Parents' Understanding Levels Based on Age

If based on age divided into three groups as in figure 3, then parents aged <30 years with a total of 8 respondents, 7 or 9% of them are at a high level of knowledge while the other 1% are at a moderate level of knowledge. Parents with an age range of 30 - <40 years, as many as 47 of the total number of respondents, 29 or 36%, are at a high level of knowledge, and 18 others, namely 23%, at a moderate level of knowledge. The group with

an age range of 40 - <50 years is 25. Parents with a high level of knowledge are 15 or 19%, and a moderate level of knowledge is 10 or 12%. Based on the data presentation, the highest score was obtained by parents with an age range of 30 - <40 years.

Meanwhile, if viewed from the parents' occupation in Figure 4, 35 respondents are housewives, with 30% or 24 parents at a high level of knowledge and 14% or 11 others in the moderate knowledge category. 20 respondents work as private employees, 10 of whom are at a high level of knowledge and 10 others at a medium level of knowledge. 12 respondents work as entrepreneurs, 7 or 9% of parents have a high level of knowledge, and 5 or 6% of others at a medium level of knowledge. 7 respondents are working as teachers, 8% or 6 parents at a high level of knowledge, and 1% or 1 parent at a medium level of knowledge. 2 parents work as civil servants, 1 is at a high level of knowledge, and 1 other at a medium level of knowledge. Parents with jobs as traders, tailors, and laborers each consist of 1 person and are at a high level of knowledge. Farmer jobs consist of 1 person with a medium level of knowledge.

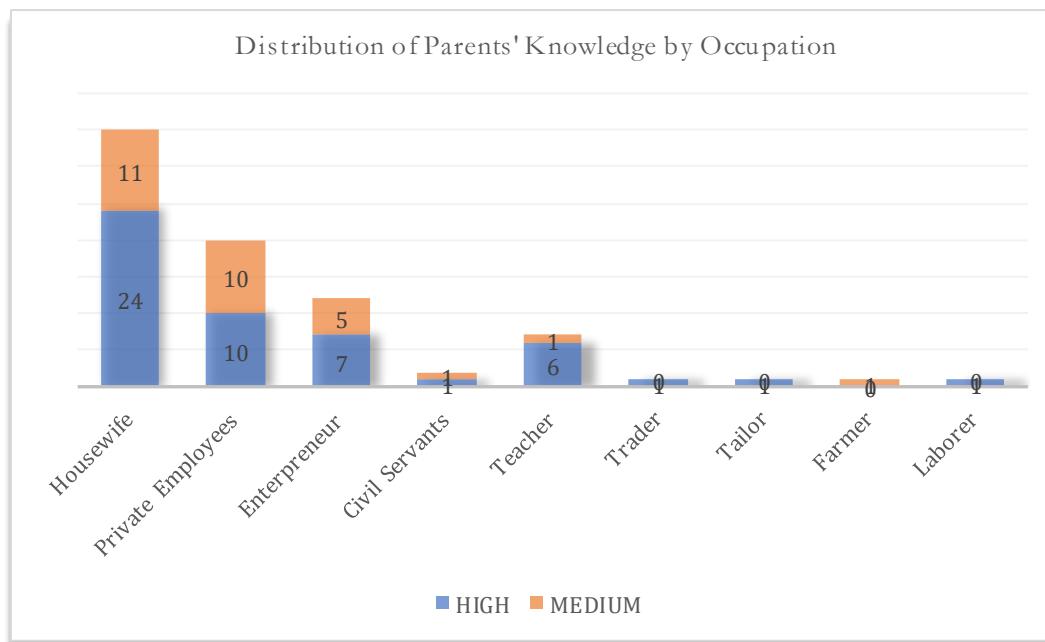


Figure 5. Distribution of Parents' Understanding Levels Based on Occupation

## 2. Discussion

Based on the results of the survey conducted, it was revealed that the number of respondents or parents who know the Balanced Nutrition Guidelines issued by the Ministry of Health of the Republic of Indonesia is much greater. They not only have a broad understanding of the basic concept of the Balanced Nutrition Guidelines but also deeply understand its principles, visual images, components of balanced nutrition, expected percentages, and important messages related to balanced nutrition. Respondents

come from various backgrounds that influence respondents' knowledge of balanced nutrition, including gender, age, education, and occupation.

Gender is one of the characteristics that influences a person's knowledge. The results of the study showed that the number of female respondents was greater than the number of male respondents. This is in line with previous studies, which stated that women tend to have a great interest in motivation in learning (Rahmawati et al., 2021). Most female respondents work as housewives which allows them to have much time to read or search for information about balanced nutrition. Women have more time to read or discuss with their environment (Wulandari et al., 2020). It is supported by the thicker brain structure of women which makes them multitask or able to do two or more jobs at one time even though the jobs are not related at all (Amin, 2018). So based on the research findings, the results of the study of parents' knowledge about balanced nutrition are high, which can be caused by gender factors.

The next factor that influences a person's knowledge is age. Things that influence a person's cognitive abilities go hand in hand with increasing age. Increasing age goes hand in hand with the development of comprehension and mindset so that the knowledge gained is better (Agina Widyaswara Suwaryo et al., 2017). The more mature a person is, the more their mindset will develop, which means they will gain more knowledge. A study produced research findings that there was a relationship between a person's age and the level of knowledge and awareness related to health (Nengah et al., 2020). The average respondent was in the age range of 30 - <40 years (59%) and 40 - <50 years (31%). While respondents with an age range of <30 years were only 10%. At that age, awareness of the importance of health is followed by expanding knowledge about balanced nutrition. So, the age of the respondents affects the research findings.

Education is one of the factors that influences a person's knowledge. A person's knowledge increases with the level of education attainment (Dhirisma & Moerdhanti, 2022). The intelligence of each individual depends on the amount of knowledge they receive (Prabowo, 2021). The highest percentage of respondents' education was at the high school/equivalent level, namely 44% and S1 36%. There were also respondents with a final education of S2. So, the high educational attainment of the respondents affects their knowledge of balanced nutrition and affects the research findings. The same is true for the last factor, namely work. A person's knowledge will be influenced by their work (Suwaryo & Yuwono, 2020). Housewives, reaching 44%, dominate the respondents' jobs. Every nutritional need in the food consumed by children is given by their mothers (Insani, 2022). Because mothers are responsible for preparing their children's daily nutritional intake, knowledge of balanced nutrition plays an important role in implementation. School-age children often choose their favorite foods without paying attention to the nutritional value contained in them (Muhimah & Farapti, 2023). Therefore, the role of mothers is very much needed in guiding children with knowledge. Research dominated by mothers with housewife jobs influences the results of research on parental knowledge about balanced nutrition in the high category. However, the roles of both parents, namely

Mother and Father, are equal. The role of the father is a source of support and is responsible for maintaining the mental condition of the mother, who has a larger portion of the care (Elvira & Santoso, 2022). With cooperation from both parties, consistency and strong commitment will be created for the implementation of knowledge.

The results of the study showed that parents' high knowledge of balanced nutrition, researchers hope that parents will be better able to implement this knowledge in their daily lives by the principles of balanced nutrition. As children get older and when they start to enter school, they will have a wider social environment (Santoso & Wayan Sutama, 2019). Thus, it is hoped that parents will build a commitment with their children to continue to maintain consumption, and the person responsible for the daily food menu at home will provide a healthy and balanced food menu for all family members, especially children who are growing and developing. Children's ability to sort and choose food and be selective in choosing what to consume is a benefit that can be applied through nutrition education (Syahroni et al., 2021). In addition, it also promotes good and nutritious eating patterns in their family environment.

## **D. CONCLUSION**

Although the level of knowledge possessed by parents in Almaarif Islamic Kindergarten has reached a satisfactory level, it is important to ensure that this knowledge is not just passive knowledge but is actually implemented in everyday life. Although they have a strong understanding of balanced nutrition, there is still a gap because there are quite a few parents who are in the moderate category. Therefore, greater efforts are needed to encourage collaboration between parents and teachers in creating an environment that supports the application of balanced nutrition knowledge in everyday practice. It can include providing better resources and support for parents, such as workshops or training on compiling a healthy balanced food menu, as well as providing information related to balanced nutrition consistently. In addition, it can also involve various related parties, such as nutritionists, doctors, and counselors, to provide support in ensuring that a healthy diet becomes an inseparable part of children's daily lives. The importance of a comprehensive and integrated nutrition education program in the school curriculum should also not be ignored, as this can provide a strong foundation for children to understand the importance of balanced nutrition from an early age. Thus, these steps can help ensure that knowledge about balanced nutrition is not only knowledge that is possessed, but also becomes a lifestyle that is consistently applied for the optimal health and development of children.

## E. REFERENCES

Amin, M. S. (2018). Perbedaan struktur otak dan perilaku belajar antara pria dan wanita; Eksplanasi dalam sudut pandang neuro sains dan filsafat. *Jurnal Filsafat Indonesia*, 1(1), 38-43. <https://doi.org/10.23887/jfi.v1i1.13973>

Bahri, M. (2022, Juli 27). RSUD dr. H. Moch. Ansari Saleh. Diambil kembali dari <http://rsas.kalselprov.go.id/berita-363-pengaruh-minat-terhadap-bakat-pada-remaja.html>

Balai Pengembangan PAUD dan Dikmas. (2017). Keterlibatan Orang Tua dalam Pemberian Makanan Sehat Bagi Anak Sekolah.

Dhirisma, F., & Aura, I. M. (2022). Relationship Between Education Level and Public Knowledge About Hipertension in Posbindu Desa Srigading, Sanden, Bantul, Yogyakarta. *Jurnal Kefarmasian Akfarindo*, 7(1), 40-44. <https://doi.org/10.37089/jofar.vi.0.116>

Elvira, M., & Santoso, S. T. P. (2022). Edukasi pengasuhan anak melalui keterlibatan ayah di TK Islam Al Maarif Singosari. *Jurnal Abdimas Indonesia*, 2(3), 455-461. <https://doi.org/10.53769/jai.v2i3.334>

Erminawati. (2019). Makanan Sehat. Bandung: PT Sarana Pancakarya Nusa.

Fitriana, A. A. (2020). Pemahaman orang tua mengenai gizi anak. *Jurnal Pendidikan Modern*, 5(3), 96-101. <https://doi.org/10.37471/jpm.v5i3.92>

Hastuti, E. P., Setiasari, R., & Oktariani, L. (2021). Meningkatkan Pengetahuan Gizi Seimbang untuk Anak 1-6 Tahun Melalui Penyuluhan pada Orang Tua. *Syntax Idea*, 3(3), 505-512. <https://doi.org/10.46799/syntax-idea.v3i3.1098>

Insani, A. (2022). Pemenuhan Asupan Gizi Anak Melalui Bekal Makanan Sehat Bagi Kesehatan Anak Usia Dini. *Journal of Innovation Research and Knowledge*, 2(3), 843-848. DOI: <https://doi.org/10.53625/jirk.v2i3.3270>

Kementerian Kesehatan Republik Indonesia. (2014). Pedoman Gizi Seimbang. Kementerian Kesehatan RI.

Maulani, S., Rizkiyani, F., & Sari, D. Y. (2021). Pemahaman Orang Tua Mengenai Gizi Seimbang pada Anak Usia 4-5 Tahun. Kiddo: Jurnal Pendidikan Islam Anak Usia Dini, 2(2), 154–168. <https://doi.org/10.19105/kiddo.v2i2.4186>

Muhimah, H., & Farapti. (2023). Ketersediaan dan Perilaku Konsumsi Makanan Jajanan dengan Status Gizi pada Anak Sekolah Dasar. *Media Gizi Kesmas*, 12(1), 575–582. <https://doi.org/10.20473/mgk.v12i1.2023.575-582>

Munira, S. L. (2023). Hasil Survei Status Gizi Indonesia (SSGI) 2022. *Jakarta: Badan Kebijakan Pembangunan Kesehatan Kementerian Kesehatan RI*.

Nengah, I., Ahmad, F. A., Chrysella, R., Devi Ayu, S., Farah, K., Fitria, H. N., ... & Rahem, A. (2020). Hubungan usia dengan pengetahuan dan perilaku penggunaan suplemen pada mahasiswa institut teknologi sepuluh nopember. *Jurnal Farmasi Komunitas*, 7(1), 1-7. <https://e-journal.unair.ac.id/JFK/article/download/21657/11846>

Pariati, P., & Jumriani, J. (2021). Gambaran pengetahuan kesehatan gigi dengan penyuluhan

metode storytelling pada siswa kelas III dan IV SD Inpres Mangasa Gowa. *Media Kesehatan Gigi: Politeknik Kesehatan Makassar*, 19(2). <https://doi.org/10.32382/mkg.v19i2.1933>

Rahmawati, W. D., Sukmaningtyas, W., & Muti, R. T. (2021). Hubungan antara jenis kelamin dan program studi dalam mempengaruhi pengetahuan bantuan hidup dasar pada mahasiswa. *Borneo Nursing Journal*, 4(1), 18-24. <https://akperyarsismd.e-journal.id/BNJ>

Riski, G. (2021). Pengaruh Minat Baca Pemuda terhadap Tingkat Perkembangan Intelektual Masyarakat. *Lifelong Education Journal*, 1(2), 118-126. [10.59935/lej.v1i2.26](https://doi.org/10.59935/lej.v1i2.26)

Salsabila, S. G., Damailia, R., & Putri, M. (2021). Hubungan Kejadian Stunting dengan Pengetahuan Ibu tentang Gizi di Kecamatan Cikulur Lebak Banten Tahun 2020. *Jurnal Integrasi Kesehatan & Sains*, 3(1), Article 1. <https://doi.org/10.29313/jiks.v3i1.7336>

Santoso, S. T. P., & Sugiri, W. A. (2022). Proses Adaptasi Perilaku Personal hygiene Pada Anak Usia Dini. *PAUDIA*, 11(2), 562–572. <https://doi.org/10.26877/paudia.v9i1.11519>

Santoso, S. T. P., & Wayan Sutama, I. (2019). Profil Kemampuan Asertif pada Usia Pra Sekolah. *Jurnal Perkembangan Dan Pendidikan Anak Usia Dini*, 1(1), 29–42. E-ISSN: 2714-6286. 1 (1). pp. 29-42. ISSN 2715-3622

Srivastava, D., Zheng, L. R., & Dev, D. A. (2022). Examining correlates of feeding practices among parents of preschoolers. *Nutrition and health*, 28(4), 555-562. <https://doi.org/10.1177/02601060211032886>

Surya, D. (2020). To form children health behaviour during the Covid-19 Pandemic: Teacher's strategy and obstacle. *Atfaluna: Journal of Islamic Early Childhood Education*, 3(2), Article 2. <https://doi.org/10.32505/atfaluna.v3i2.2209>

Suryaalam, I. I., Kushargina, R., & Stefani, M. (2019, December). "GEREBEK SEKOLAH"(GERAKAN MEMBAWA BEKAL MAKAN DAN MINUM KE SEKOLAH) SEBAGAI UPAYA PEMENUHAN GIZI MURID SDN PESANGGRAHAN 02 JAKARTA SELATAN. In *Prosiding Seminar Nasional Pengabdian Masyarakat LPPM UMJ*. <http://jurnal.umj.ac.id/index.php/semnaskat>

Suwaryo, P. A. W., & Yuwono, P. (2017). Faktor-faktor yang mempengaruhi tingkat pengetahuan masyarakat dalam mitigasi bencana alam tanah longsor. *URECOL*, 305-314. ISSN 2407-9189. 6th University Research Colloquium 2017 dalam bidang 'Humaniora, Sosial, dan Agama. <https://journal.unimma.ac.id/index.php/urecol/article/view/1549>

Suwaryo, P. A. W., & Yuwono, P. (2017). Faktor-Faktor Yang Mempengaruhi Tingkat Pengetahuan Masyarakat dalam Mitigasi Bencana Alam Tanah Longsor. *University Research Colloquium*, 305–314. ISSN 2407-9189. <https://journal.unimma.ac.id/index.php/urecol/article/view/1549>

Syahroni, M. H. A., Astuti, N., Indrawati, V., & Ismawati, R. (2021). Faktor-faktor yang mempengaruhi kebiasaan makan anak usia prasekolah (4–6 Tahun) ditinjau dari capaian gizi seimbang. *Jurnal Tata Boga*, Vol. 10 No. 1. 12-22 ISSN: 2301-5012. <https://ejurnal.unesa.ac.id/index.php/jurnal-tata-boga/article/view/37802>

Tadale, D. L., Ramadhan, K., & Nurfatimah, N. (2021). Peningkatan pengetahuan ibu balita terkait gizi seimbang balita untuk mencegah stunting melalui penyuluhan. *Community Empowerment*, 6(1), 48-53. <https://doi.org/10.31603/ce.4379>

Unicef. (2023). Mengatasi Tiga Beban Malnutrisi di Indonesia. [https://www.unicef.org/indonesia/id/gizi#gad\\_source=1&gclid=Cj0KCQiAvP-6BhDyARIsAJ3uv7YsFLXqjK033GxjqjswiCFACLK9vZoRXPm981XSMkD9NpbQfLcgAAnB\\_EALw\\_wcB](https://www.unicef.org/indonesia/id/gizi#gad_source=1&gclid=Cj0KCQiAvP-6BhDyARIsAJ3uv7YsFLXqjK033GxjqjswiCFACLK9vZoRXPm981XSMkD9NpbQfLcgAAnB_EALw_wcB) retrieved in 16 Desember 2024.

Widyaningrum, E. A., Admaja, W., Astuti, L. W., & Masyriqoh, B. (2021). Pengaruh Usia dan Jenis Kelamin Terhadap Pengetahuan Serta Perilaku Penggunaan Suplemen di Masa Pandemi pada Mahasiswa Ilk Bhakti Wiyata. *Majalah Farmasetika*, 6(1), 54. <https://doi.org/https://doi.org/10.24198/mfarmasetika.v6i0>

Wulandari, A., Rahman, F., Pujianti, N., Sari, A. R., Laily, N., Anggraini, L., ... & Prasetio, D. B. (2020). Hubungan karakteristik individu dengan pengetahuan tentang pencegahan coronavirus disease 2019 pada masyarakat di Kalimantan Selatan. *Jurnal Kesehatan Masyarakat Indonesia*, 15(1), 42-46. <https://doi.org/10.26714/jkmi.15.1.2020.42-46>