



# Variation of Food Menus in the Diet of Children with Special Needs in a Halal Context

Rizqi Fajar Pradipta<sup>1</sup> , Frimha Purnamawati<sup>2</sup>, and Fadillah Ariani<sup>3</sup>

<sup>1</sup>Universitas Negeri Malang, Indonesia

<sup>2</sup>Universitas Jember, Indonesia

<sup>3</sup>Universitas Negeri Malang, Indonesia

rizqi.fajar.fip@um.ac.id

**Abstract.** The aims of this study were (1) to find out menu variations healthy food for children with special needs, (2) specification of the consistency of healthy food menu variations on the child with special needed, (3) knowing the ethics of eating in a halal perspective. This research uses a qualitative approach with a case study type using data collection techniques through observation, interviews, and documentation. Based on the data that has been collected, the researcher analyzes the data with descriptive analysis techniques that describe the data obtained during about the variety of healthy food menus for children with special needs in diet programs. The results of the study show that special schools have plans to meet the needs of children with special needs by implementing a sugar and flour free diet program. So, starting from school principals, teachers (cooks) know and understand the variety of food menus healthy for children with special needs. Consistency towards a healthy diet must disclose strictly and be carried out with care, because if it happens Accidental feeding that is not allowed will trigger return to the attitude of hyperactivity of children with special needs. In the context of food variations, it is included in the halal category, both ready-to-eat food and processed food ingredients.

**Keywords:** Children with special needs; Food; Die; Context Halal

## 1 Introduction

Children go through various phases of growth and development, included in pregnancy, childhood, infancy, school age, and teenager. The process of growth and development applies to each child development. All children have their characteristics, so if A problem occurs at every stage of a child's development affect the next life. Not all children go through the process grow and develop naturally, so there are some children who require special treatment [1]. Children are hoping family, the next generation of the nation. However, some babies are born with prenatal, natal and postnatal conditions. Children with special needs are special children with different types and characteristics compared to children on generally. In their development, many people have experienced interruptions, delays, or delays, which are factors that potentially dangerous. To achieve optimal development, they require special education or treatment. Meanwhile,

son with special needs also require appropriate education learning barriers and individual needs, according to the individual different and in accordance with the development of recognition of the principle humans including these children. In order to get a role, not only as an object of development but also as a subject of development. Child special needs special children who require special services such as medical services, special education services, and special training which aims to overcome the limitations or dependencies of the consequences disorders and diseases suffered, they are often distinguished from children ordinary life in society [2]. So, when school willing to accept children with special needs is considered to be beneficial both for the general public and for children with special needs. Besides Therefore, society will begin to accept the presence of children with needs special, who will have the opportunity to study with normal children and receive the same care as a normal child.

In Indonesia, there are various disorders and disorders in children with special needs, including the blind (vision limitations), deaf (can't hear), mentally retarded (below average intelligence), disabled (physically disabled), mentally retarded (children with behavioral disorders), autism (children's introverts), and ADHD (attention deficit hyperactivity disorder), also known as hyperactivity disorder. According to Central Agency data Statistics show that the number of children with special needs increases every year. In 2020–2021, the number of children with special needs will reach less over 144,621. More than one hundred thousand children in Indonesia are children with special needs who need special (special) attention. According to the Ministry of Education and culture estimates that nearly 70% of children with special needs have not received proper and appropriate needs, including in terms of necessities of life, namely food product services.

Many medical experts try to develop methods interventions to address the problems of children with special needs. the intervention can be done on children with special needs to overcome the lack of concentration on children with special needs by diet, drug therapy and play therapy. Nutritional therapy and diet are used primarily in the treatment of sufferer's attention deficit hyperactive disorder. This therapy aims to regulate food substances that can cause allergies. Food affects brain function, especially in children. Food and nutrients contained in it affect function cognition, ability to pay attention (attention), sleep patterns and moods (moods). People who eat a lot of "healthy" 2021). Many parents who have children with attention deficit hyperactivity disorder report that certain food ingredients affect children's hyperactivity. Them [3]. Food also serves to maintain the process body in growth and development and replace body tissue damaged, obtain energy to perform daily activities, functions which regulates the metabolism of substances in various mineral and water balance other body fluids, also function as a defense mechanism against various diseases foods vegetables, fruits, unprocessed grains and lean meats have better mental health and a tendency to experience mood disorders (mood disorders) lower by 25%. 35% [3]. [4] also argued that nutrition is a component of development human body, these building blocks are needed to form, maintain, and repair body tissues, regulate existing processes in the body and provide energy for the body.

The food needs of children with special needs at this time must be fulfilled diverse, nutritious and balanced nutrition. Provision of food snacks is recommended for two or four weeks and avoid provoking foods increased incidence of hyperactivity disorder. Meals or snacks can contribute energy about 25% of the nutritional adequacy rate. Food

for children, especially children with special needs contains sufficient nutrients, especially which provides carbohydrates, protein and high calcium for meet the needs of the body during growth and development. There is some food which can cause allergic reactions in children with special needs such as sugar, cow's milk, wheat, chocolate, eggs. Besides, kids. People with special needs should avoid consuming gluten and casein because it is generally intolerant to gluten and casein. Gluten is a protein that is characteristically found in wheat flour, and in large quantities small in flour of other cereals, gluten consists of two protein components namely gliadin and gluten. Gliadin is a special type of gluten protein formed by gluten and usually found in whole grain foods and barley. Meanwhile, casein is a complex protein found in milk which tend to have distinctive properties that can agglomerate and form a compact mass. Likewise, with children in need especially in dire need of quality food for his body and need to digest and consume food to meet needs nutrition.

Every child will have different needs and challenges. as well as people with autism and attention deficit hyperactivity disorder has a case for avoiding containing foods gluten, casein and sugar because they can affect behavioral symptoms autism and attention deficit hyperactivity disorder. By Therefore, children with special needs need attention in order to grow the flowers can grow well. Every human being wants to be healthy and have a perfect physical and psychological condition. Have a physical condition and abnormal psychic is not hindering for every individual to lead a normal life. The child with special needed cannot determine how they should maintain health, prevent from diseases that threaten his health and set the pattern eat with the diet program. Therefore, it is necessary to modify the variety of food menus for children with special needs with their diet program done. Diet therapy is therapy to train children to avoid consume types of food that do not contain salicylates, additives food (such as: coloring, preservatives, artificial flavors or flavors) and sugar. Behavior modification therapy can help overcome problems in children [5].

Some important results in daily routine functions children that can be achieved through with which behavior modification obedience to follow orders, control hyperactivity behavior, improve discipline, independence and responsibility, improve academic achievement, as well as improved relationships with family members and social relations. The popularity of diet therapy as a treatment modality has been growing existed since Feingold's work in the 1970s. Feingold states there are several different types of food that can contribute to increased behavior hyperactivity in children with special needs. This type of food is a type of food containing preservatives, dyes, flavors and silicates [6]. In fact, people with hyperactivity do not only have allergic reactions salicylates, addictive substances but also in milk, sugar, eggs and some food ingredients other. Thus, hyperactive sufferers must stay away from sources of salicylates and additives, because this diet can help people with hyperactivity to controlling allergic reactions in the digestive system as well as beneficial to control the "activity" of hyperactive sufferers.

Diet therapy can help overcome hyperactivity behavior in children with special needs. Based on the Feingold diet recipe, it describes a diet that is associated with not consuming ready-to-eat food (in ready-to-eat packaging) in children with sufferers According to [7] found a relationship between the use of synthetic food coloring and behavioral changes in hyperactive children. Because of this change in behavior can cause children to become irritable, restless, and some children have difficulty sleeping while

taking tartrazine. Influence sugar consumption in hyperactive children with non-hyperactive children consuming sugar known to influence the occurrence of aggressive-destructive behavior that disturbing and anxiety in children with hyperactivity [6]. Therefore, children must be given enough vitamins and minerals so that the body remains healthy, and preferably the provision of vitamins and minerals under supervision professional (doctor).

Consistency in providing a healthy food menu in gluten consumption and casein is actually still relatively lacking in terms of the traditional Indonesian diet rarely use gluten and casein, except for traditional diets been exposed to outside influences. In addition, it is very important for children with special needs who adhere to a gluten-free, casein-free diet to read labels Packaged foods use gluten-containing ingredients casein. In providing a healthy food menu for children with special needs the consistency of the application of gluten and casein diet therapy in children cannot be separated of the role of parents and teachers. Consistency in providing food menus healthy while considering the food to be adapted to child's needs. It's important to be committed and firm in implementing this diet strategy throughout the process of changing and customizing the list healthy kids' food.

## 2 Method

In the research entitled Variation of food menus in the diet of children with special needs in a halal context. Researchers use a qualitative approach. Qualitative selection in because in this study researchers want to know and implement the theme studied According to Sugiono, qualitative research is research where the researcher is placed as a key instrument to obtain data [8]. The type of research that will be used in this researcher is an in-depth exploratory case study of a bound system. Can also activities, events, processes or individuals, based on the collection of data the extensive [9]. In accordance with the understanding of the theory above, the reason the researcher chose this approach qualitative with the type of case study research because the research will have discussed an event to get clarity in detail in-depth knowledge of an activity at an extraordinary school in the city of Malang. Data collection in this study was carried out by referring observation of real conditions in the field, as well as using reference sources primary data and secondary data. Data collection techniques in this study through the stages of observation, in-depth interviews, and documentation. The number or data of respondents can be seen in table 1.

**Table 1.** Source of respondent data.

Origin of institution	Gender		Age range	Teacher	Job status		Total
	Male	Female			Headmaster	Parents	
SLB YPTB Malang	1	2	30 – 50	2	-	2	4
SLBN Autis Kedung Kandang	-	3	30 – 50	2	-	2	4
SLB Sumber Dharma	1	1	30 – 50	2	1	2	5
SLB Putra Jaya	1	1	30 – 50	2	1	2	5
Grand Total							14

### 3 Results and Discussion

The variation of the special school food menu in Malang, on average, from 14 respondents is by making a schedule regarding a healthy menu for children with special needs, this was conveyed by one of the school principal respondents namely "A healthy menu must be every day, school too working with parents, by making their own menu, so separating children who are okay with developmental issues troubled child or a troubled child". So, they made a kind of 2 menus that are like a menu for children, not attention deficit hyperactive disorder, for example use flour, children with attention deficit hyperactive disorder make food menus that they don't use flour, so clear. In addition, they also make a list of what is allowed and what is not allowed. And must meet the nutrition to meet the needs of children in the process healthy food and in our school that regulates our schedule means. If in the house must get full support as long as it does not interfere with the schedule diet and food that is not allowed, it must be given food intake Healthy. This statement is supported by the observation that for produce a healthy food menu is done repeatedly and the school has implemented a variety of healthy food menus for children with special needs.

According to the teacher who has expertise in cooking, it is related to the consistency of the food menu healthy students who are in school regarding the process of implementing a healthy menu in children's diet program. The initial diet was a strict diet for the first 3 months without flour, no milk, then sugar, no glutinous rice flour, especially when it was not given in the first 3 months, meaning the teacher made food that was no such material. Usually more to the ingredients of cassava, cassava not often because there is alcohol so gas, there is cassava. So more often too sweet potatoes, potatoes, get used to children because early on it's all at home granted later in school, he would meet food never served at home [10].

This is also in accordance with the facts in the field which Making a healthy menu is consistent and does not provide preservatives and flour, which is supported by the teacher (cook) so start from the beginning, the Special School was when we accepted our children with special needs the menu is consistently not giving what is not allowed. Usually, he misses when a relative comes to the house, us serving to guests' children also take it served because of taste curious children. We used to discuss the effects when we had started a diet just once missed, we repeat from the beginning. So, we give it back to your parents, want to bother again, or want to be consistent soon it's over.

Developments in food management directly or indirectly from a religious perspective, namely the value of the halal context in food or food ingredients. This matter in line with the application and understanding of cooks in these special schoolsgr [11], [12]. Checking food ingredients before giving healthy food to these students is appropriate or has validity against halal certification or the halal logo. Education and inculcation of knowledge related to this matter have been provided so that students with special needs at Special Schools in the city of Malang have met the criteria in the context of implementing halal in the food they eat. Although this is a learning that is not easy. In addition, it is not only about how the food is served, but also about the ethics of students with special needs in eating the food, whether it is in accordance with the rules. Classroom teacher say wash hands first, pray before eating and after eating, eating and drinking while sitting and eating by hand right. From the results of the observations

that the researchers did, the children were orderly do the ethics of eating and after eating in accordance with the rules.

Feeding children with special needs must pay attention to the content what's in the food. Because food matters brain function, especially in children. Food and nutrition contained in it affects cognitive function, the ability to pay attention (attention), sleep patterns and mood (mood). Consuming people "healthy" foods or lots of vegetables, fruits, whole grains unprocessed and low-fat meats have better mental health better as well as a tendency to experience mood disorders (mood disorders) lower by 25% to 35% in line with [3].

healthy food for children with special needs is indeed influential in the condition child's behaviour, because when eating healthy foods or those that are avoided hyper-active activity decreases, on the contrary if consuming prohibited children will be excessive activity. However, based on the findings of interviews with parents, some fruits, such as eating bananas excessive, not good for children with special needs. Because basically the goal of the diet is to reduce starchy foods, gluten, and cheese so that the body becomes weaker and the child gets more focus.

According to [13], children with special needs must limit their consumption of this type foods with artificial sweeteners, cheese, chocolate, milk, flour, sugar, and others contain sugars such as white rice and various processed wheat flour. Because this substance is said to increase glucose and affect mood child. This is also in accordance with the interviews conducted with parents' children with special needs, which shows that parents are very careful with feeding. Parents of children with special needs do not provide food that is sold outside to avoid food ingredients that are not allowed for consumption by children with special needs [2].

According to [14] treatment of children with special needs generally done in various ways including behavior modification, therapy through drugs but also through controversial approaches namely with special diets. In line with the theory carried out by [14], the school also applies diet programs to children with special needs. This must be done before the child enters school for 3 months. After then, he was only able to enter the school for observation and continue the program diet for at least 2 years. During these 2 years the diet program must carried out strictly and carefully so that later after 2 years have passed or maybe the first 1 year, by seeing that the child's development is good, he will be allowed to be tested with foods that were previously banned little by little. Meanwhile, if the child does not cause a reaction those who are heavy may continue but if there is a reaction that arises from food eaten, then it must be stopped until it develops really good and significant for the whole. One thing that researchers get from observations and interviews at school already implementing a strict diet with food, snacks, or drinks with variety without reducing protein and nutrition for children with special needs, this is also done at home, parents provide healthy and varied food. There is a belief that food Halal is the best food that is good for consumption. In addition, halal food can also have a positive impact on those who are consuming it, both medically and physically [15].

## 4 Conclusion

Based on the results of research that has been conducted by related researchers Variation of food menus in the diet of children with special needs in a halal context, concluded as following; 1) Regarding a variety of healthy food menus for children with special needs, this institution has planning the concept of a variety of healthy food menus for children with special needs, starting from school principals, teachers and cooks to understand and understand the food menu healthy children with special needs to run the program diet; 2) The consistency of implementing a healthy food diet for children with attention deficit hyperactive disorder must be supervised strictly and carried out carefully, because if it happens unintentional provision of food that is not allowed will triggers the child's hyperactivity again and is likely to be worse than before. The consistency of giving this healthy food not only done at home, but in schools also apply Providing healthy food for children with special needs; 3) The use of food ingredients and ready-to-consume food is labelled halal and all cooks have a good understanding of the use of processed ingredients labelled halal. In addition, the application of ethics that has been developed is contained ethics shown quite strong in feeding activities including: praying together when entering the bathroom to wash hands, before eating and drinking read basmallah, guard halal eating and drinking, eating and drinking while sitting, use the right hand, eat and drink don't talk, no denounce food and drink, end the meal with hamdallah.

## References

1. R. F. Pradipta and S. J. Andajani, "Motion Development Program for Parents of Child with Cerebral Palsy," *J. Penelit. dan Pengemb. Pendidik. Luar Biasa*, vol. 4, no. 2, pp. 160–164, 2017.
2. R. F. Pradipta and D. A. Dewantoro, "Origami and fine motoric ability of intellectual disabiliy students," *Int. J. Innov.*, vol. 5, no. 5, pp. 531–545, 2019.
3. M. W. Sugeng, R. D. Wulandari, and E. D. Setijowati, "Penyuluhan Tentang Makanan yang Dianjurkan untuk Anak Berkebutuhan Khusus (ABK) Hiperaktif," *J. Abdidas*, vol. 2, no. 5, pp. 1120–1126, 2021.
4. S. Widiawati, M. Maulani, and W. D. Juniaty, "Desiminasi Ilmu Perawatan Anak Autis Di Slbn Kota Jambi," *Martabe J. Pengabd. Kpd. Masy.*, vol. 5, no. 9, pp. 3361–3366, 2022.
5. F. Faizah, "Mengurangi perilaku impulsif pada anak attention-deficit hyperactivity disorder dengan teknik reprimand dan token economy," *Procedia Stud. Kasus dan Interv. Psikol.*, vol. 10, no. 1, pp. 8–13, 2022.
6. N. Nanik and E. Ekowarni, "Terapi Modifikasi Perilaku, Diet dan Obat untuk Penanganan Perilaku Hiperaktivitas pacta Anak'Dengan Gangguan Pemusatan Perhatian dan Hiperaktivitas," *ANIMA Indones. Psychol. J.*, vol. 18, no. 2, pp. 137–156, 2003.
7. D. C. Rowe, *The limits of family influence: Genes, experience, and behavior*. Guilford Press, 1994.
8. D. Sugiyono, "Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D," 2013.
9. T. Cresswell, *Place: an introduction*. John Wiley & Sons, 2014.

10. S. M. E. Tumbage, F. C. M. Tasik, and S. M. Tumengkol, "Peran ganda ibu rumah tangga dalam meningkatkan kesejahteraan keluarga di desa allude kecamatan kolongan kabupaten talaud," *Acta Diurna Komun.*, vol. 6, no. 2, 2017.
11. L. C. Mechling, K. M. Ayres, A. L. Foster, and K. J. Bryant, "Comparing the effects of commercially available and custom-made video prompting for teaching cooking skills to high school students with autism," *Remedial Spec. Educ.*, vol. 34, no. 6, pp. 371–383, 2013.
12. A. Granberg, V. Olsson, and Y. Mattsson Sydner, "Teaching and learning cooking skills in Home Economics: What do teachers for students with mild intellectual disabilities consider important to learn?," *Br. Food J.*, vol. 119, no. 5, pp. 1067–1078, 2017.
13. J. Kulzer et al., "A vocational rehabilitation partnership to provide transition services to young adults with neurodevelopmental disabilities: The cognitive skills enhancement program," *J. Vocat. Rehabil.*, no. Preprint, pp. 1–10, 2023.
14. B. Delphie, "Pendidikan anak berkebutuhan khusus," Jakarta: Rineka Cipta, 2006.
15. T. R. Pramintasari and I. Fatmawati, "Pengaruh Keyakinan Religius, Peran Sertifikasi Halal, Paparan Informasi, dan Alasan Kesehatan Terhadap Kesadaran Masyarakat Pada Produk Makanan Halal," *J. Manaj. Bisnis*, vol. 8, no. 1, pp. 1–33, 2017. Author, F.: Article title. *Journal* 2(5), 99–110 (2016)

(Open Access Text)

Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting.

Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting. Springer Nature will add OpenAccess standard text here during typesetting.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

