# The Role of Nutrition in Children's Growth and Development at Early Age: Systematic Review

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### ABSTRACT

**Background**: Nutrition is an important part of health and development. Better nutrition is linked to improving the health of babies, children and mothers as well as improving the immune system during safer pregnancy and childbirth, without reducing the risk of non-communicable diseases. The results of the Timor Leste Demographic Health Survey show the infant mortality rate decreased by 1.2 per 1,000 live births (-2.71%) from the previous year. As a result, the infant mortality rate in Timor-Leste reached its lowest figure in 2021 with 43.1 deaths per 1,000 live births. Providing adequate nutrition food for child, they will grow up to be a strong, healthy child who will have perfect brain development so that the child will become intelligent. The function of nutrition for babies and toddlers is so important, so it is necessary to fulfill the nutritional needs of babies and toddlers according to their age

**Purpose**: The purpose of this study is to understand the role of nutrition for the growth and development of children at an early age.

**Methods**: The method used is reading various articles that are related to the title and carrying out an in-depth synthesis according to reality.

**Result**: Nutrition plays an important role in the growth and development of children because nutrition has important components needed by the body in the process of physical growth and development, systems nerves, the brain as well as the refinement of the intellectual level and intelligence. Fulfilling nutritional needs is the main factor in achieving growth and development results in accordance with genetic potential. Growth is any change in the body that is associated with increasing physical and structural body sizes. Meanwhile, development is increasing ability in the structure and function of the child's body which is more complex. Growth and development is influenced by environmental, family nutritional factors, hereditary factors, and hormonal factors.

**Conclusion**: Nutrition plays an important factor in the growth and development of children which is influenced by factors family nutrition, environment, hereditary factors, and hormonal factors.

**Keywords**: *Role; Nutrition; Growth; development; child Health* 

# BACKGROUND

Nutrition is an important part of health and development. Better nutrition is linked to improving the health of babies, children and mothers as well as improving the immune system during safer pregnancy and childbirth, without reducing the risk of non-communicable diseases (such as diabetes and cardiovascular disease) which lower, and live longer, healthy children learn better (WHO, 2023) Calcium and vitamin D are the two most important types of nutrients, because most of the body's bone mass develops during infancy until puberty. Likewise, iron and protein are also important for the growth of toddlers and teenagers, because these nutrients are needed for good and proper

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growth (WHO, 2019). Because health problems related to nutrition are predictors of poor quality of human resources which will then influence the development of the nation's potential. (Ayustaningwarno, 2018)

Likewise, the quality of today's children determines the quality of Human Resources (HR) in the future. Therefore, future human development must begin with the development of today's children. To prepare quality human resources in the future, children need to be prepared so that they can grow and develop as optimally as possible according to their abilities. (Dinda, 2018)

Providing nutrition can make your child grow into a child who is strong, healthy, and has perfect brain development so that your child becomes intelligent. The function of nutrition for babies and toddlers is so important, so it is necessary to fulfill the nutritional needs of babies and toddlers according to their age. (Astuti, 2018).

Human growth and development is influenced by two factors, namely: internal factors and external factors. Internal factors are factors that come from within the human body itself, such as genes, race and gender, while external/external factors come from the environment, stimulus, social, economic and nutritional. Nutrition or nutrition is an absolute factor needed by the body in the growth and development process. Nutritional needs for each person vary depending on age, gender and activity. The nutrition needed by young children is not the same as that of adults; children need more nutritional intake than adults. This is because preschool children are still in the growth and development phase. Early childhood is also called the preschool period, because at this time children begin to train various physical motor reflex movements and their five senses, so that children are ready to take their education to the next stage, namely basic education. Apart from that, at an early age children begin to learn about various things in their environment. Great curiosity and lots of activity must be balanced with nutritious nutrition. (Dyah, 2018).

Children's growth and development is influenced by several factors including environmental factors, hereditary factors, and hormonal factors. Impaired growth and development of children can be influenced by postnatal environmental factors such as socio-economic factors, nutrition, health status and inadequate early stimulation. Poor food intake can affect prenatal development starting from early pregnancy and throughout the child's life. Small children who are underweight, short in stature (stunted) represent a long-lasting state of malnutrition which will take a long time to recover. Meanwhile, children who are wasting represent a condition of malnutrition that lasts for a short time, this condition will recover quickly. (Pareyowari., 2014)

Based on reports from basic health research, nutritional problems in Indonesia are quite high, namely 19.6% in 2013 and increased from the previous year. (RISKESDAS, 2013) Meanwhile, the results of the Timor Leste Demographic Health Survey the infant mortality rate in Timor-Leste decreased by 1.2 per 1,000 live births (-2.71%) from the previous year. As a result, the infant mortality rate in Timor-Leste reached its lowest figure in 2021 with 43.1 deaths per 1,000 live births. In particular, infant mortality rates have continued to decline over the past few years. The infant mortality rate is the number of newborn babies who do not survive past the first 12 months of life. This is generally expressed as a value per 1,000 live births, and also includes neonatal deaths (deaths within the first 28 days of life). Stunting: The prevalence of stunting (short for age) in children under 5 years is 46%, the prevalence of wasting (thin versus tall) is 24%, and the prevalence of overweight is 6%. Exclusive breastfeeding: 50% of children under 6 months of age. Minimum acceptable diet: 13% of children aged 6-23 months receive what is considered a minimum acceptable diet. 40% of children aged 6-59 suffer from anemia; 23% of women aged 15-49 suffer from anemia; and 13% of men aged 15-49 years suffer from anemia. Iodized salt: Most households (85%) contain iodine in salt. Nutritional status of adults: 27% of women and 25% of men aged 15-49 years are underweight. The TLDHS indicates that 46% of children under age 5 are stunted; 23% of children under age 5 are severely stunted. Twenty-four percent of children are wasted; 10% of children are severely wasted. Forty percent of children are underweight. Six percent of children are overweight (MoH, 2016)

Based on the results of literature searches that are in line with the topic above, it can be formulated in the following table:

No	Topic, author	Design methodology and Results
1	Cronh's disease and growth deficiency in children and adolescents Marco Gaspareto and graziella Guarisso, 2019 https://www.ncbi.nlm.nih.gov/ pmc/articles/PMC4188880/	The results of this study are that nutrition plays an important role in the growth and development of early childhood. Nutrition is a component that must exist and its presence is needed by the body, especially in the process of physical growth and development, the nervous system and brain, as well as the level of human intellect and intelligence. Fulfillment of nutritional needs (nutrients) is the main factor to achieve growth and development results in accordance with genetic potential. Growth is any change in the body associated with increasing body sizes physically and structurally. While development is an increase in ability in the structure and function of the child's body which is more complex. Methodology: The qualitative analysis uses Miles and Huberman model data, data analysis uses the Miles and Huberman cycle which includes data reduction, data modeling, and verification.
2	Nutrition and growth in children Matonti L, Blasetti A, Chiarelli F. two: 10.23736/S0026- 4946.20.05981-2. Epub 2020 Jul 29	The results of this study are that nutrition plays an important role in the growth and development of early childhood. Nutrition is a component that must exist and its presence is needed by the body, especially in the process of physical growth and development, the nervous system and brain, as well as the level of human intellect and intelligence. Fulfillment of nutritional needs (nutrients) is the main factor to achieve growth and development results in accordance with genetic potential. Growth is any change in the body associated with increasing body sizes physically and structurally. While development is an increase in ability in the structure and function of the child's body which is more complex.
3	The Role of Nutrition in the Growth and Development of Children Religious Farida Mayar1, Yeni Astuti <sup>2</sup> Publisher: Tambusai Education Journal SSN: 2614-6754 (print) ISSN: 2614-3097(online)	The results of this research are that nutrition plays a very important role in the growth and development of early childhood. Nutrition or nutrition is a component that must be present and its existence is very necessary for the body, especially in the process of physical growth and development, the nervous system and brain, as well as the level of human intellect and intelligence. Fulfilling nutritional needs is the main factor in achieving growth and development results in accordance with genetic potential. Growth is any change in the body that is associated with increasing physical and structural body sizes. Meanwhile, development is increasing ability in the structure and function of the child's body which is more complex. Methodology: library research, qualitative analysis using Miles and Huberman model data, data analysis using the Miles and Huberman cycle which includes data reduction, data models, and verification.
4	Description of Child Growth and Development in the Golden Period Age 0-24 Months at Integrated healthcare centerin Jatinangor District Author: Hapsari Maharani Sugeng, Rodman Tarigan , Nur Melani Sari Publisher: JSK, Volume 4 Number 3 March 2019	The research results show that the majority of toddlers have normal growth, namely 82%, 6% are over-nourished, 4% are at risk of over-nutrition, 4% are under-nourished, 2% of toddlers are very low-nourished and 2% of toddlers are obese. The development obtained using KPSP was 81.6% appropriate, 12.2% of toddlers were doubtful, 6.12% had deviations. Based on the research results, it was still found that toddlers had poor nutritional status and children with questionable developmental status and deviations were found so that further early detection was needed to minimize the incidence of greater deviations. Methodology: This research uses a cross sectional descriptive design. The research sample is toddlers aged 0-24 months who are registered at Integrated healthcare centerin Jatinangor District. The sampling technique used was stratified random sampling with a sample size of 49 respondents.
5	The Effect of Food Intake on the Quality of Growth and Development of Early Childhood <b>Loeziana Uce</b> Lecturer at the Faculty of Tarbiyah and Teacher Training	In the process of growth and development, one of the needs that must be considered in the process of children's growth and development is that the pattern and type of food intake must be good so that the growth and development process runs well. Early childhood nutritional intake must be considered, especially in the first 5 years of life because early childhood nutritional intake during this period will influence and determine the child's subsequent development. Nutrition is one of the determinants of the quality of

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	UIN Ar-Raniry Banda Aceh	human resources. The nutritional needs of children under five can become a big problem if they don't get enough attention. Methodology: literature study through the results of documentation and literature study
6	Onset and evolution of stunting in infants and children. Examples from the Human Nutrition Collaborative Research Support Program. Kenya and Egypt studies Author : Neumann CG, Harrison GG. <u>https://pubmed.ncbi.nlm.nih.go</u> <u>v/?term=Neumann+CG&amp;filter=</u> <u>simsearch1.fha</u> National Library of Medicine National Center Biotechnology information ,2014	Mothers in Kenya start lactation with relatively poor fat stores. Although their energy intake increases somewhat during lactation, preliminary estimates suggest that these increases may be insufficient to maintain their bodily integrity, to carry out their normal tasks of daily living, and to produce a sufficient amount of milk for optimal infant growth. In addition to an energy deficit, diet quality is a problem, particularly in Kenya and Mexico and less so in Egypt. Intakes of animal products and animal protein are very low. Zinc and iron intakes are not only low, but the bioavailability of these nutrients is poor because of the high phytate, fiber and tea content of the diet. Also vitamin B12 intake is extremely low, and at least mild-to-moderate iodine deficiency (IDD) is present in Kenya. The above micronutrients have been demonstrated to affect the linear growth of the Kenyan children, even after confounding factors have been controlled. The early use of supplemental feeding in Kenya is a double- edged sword. On the one hand, there is a slight increase in febrile illness and possible displacement of breast milk intake in the supplemented infants, although mothers do not decrease breast feeding frequency and duration. On the other hand, even the modest amounts of available zinc and B12 in supplemental foods appear to have a positive effect on linear growth Methodology: literature study through the results of documentation and literature study.
7	Effects of integrated child development and nutrition interventions on child development and nutritional status Integrating Nutrition and Early Childhood Development Interventions Sally M. Grantham-McGregor, 1 Lia C. H. Fernald, 2 Rose M. C. Kagawa, 3 and Susan Walker 4 Publisher : Institute of Child Health, University College London, 30 Guilford St., London WC1N IEH, United Kingdom. 2022	There was no significant loss of any effect when interventions were combined, but there was little evidence of synergistic interaction between nutrition and stimulation on child development. Only three trials followed up the children after intervention. All at-scale program evaluations were combined interventions. Five benefited child development, but one did not, and two showed deficits. There was generally little benefit of at-scale programs to nutritional status. We found no rigorous evaluations of adding stimulation to health and nutrition services at scale and there is an urgent need for them. There is also a need to establish quality-control mechanisms for existing scaled-up programs and to determine their long-term effects. There is also a need to determine if there are any sustained benefits for the children after programs finish.
8	Effects of nutrition on the growth and development of children Between 0-6 years of age in the covid-19 era Author : Dr. Princess Oguegbu Liberty University, Virginia, USA Publisher : UNIJERPS Unizik Journal of Educational Research and Policy Studies VOL.9; https://unijerps.orgJuly- December, 2021	This explains why a good balanced diet is required by the children so that they can grow normally and be competent enough not only in facing the challenges of life but also assist in the national growth and development. In view of the importance of good nutrition, this paper delves into the concept of nutrition, mental health and wellbeing of the children for a healthier tomorrow. It is suggested that nutrition education be taught in schools, exposed to parents and other care-givers to acquaint them with the dangers of poor nutrition and revert their mind on the effect of nutrition on the mental health and wellbeing of the children to reduce to the bares minimum the child mortality rate rampant in the country.

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9	A prospective study: Growth and nutritional status of children treated with the ketogenic diet Author : Yeou-Mei Christiana Liu MS, it all <u>https://doi.org/10.1053/jada.200</u> <u>3.50136</u>	Results Both groups had statistically significant height increases of 2 to 3 cm ( $P < .05$ ), but did not have significant increases in height/age percentiles. Weight percentiles decreased by approximately 10 percentiles for both diets; $P=.043$ for classic diet and .051 for MCT diet. Nutrient intakes from the diet and vitamin and mineral supplements met the DRIs except for phosphorus (both diets) and folate (classic diet). All biochemical indexes, including albumin, remained within the normal range. For the MCT diet, there was a 0.7 decrease in the ratio of total cholesterol to high-density lipoprotein ratios ( $P$ <.0009) at 4 months. Applications When treating children on a ketogenic diet, clinicians should recommend adequate intake of energy and protein, a higher proportion of unsaturated to saturated dietary fats, and consider vitamin and mineral supplements.
10	The Role of Balanced Nutrition in the Body Journal of the Faculty of Health, Nahdlatul Ulama University Surabaya, 27 Jan 2022	Nutritional needs in children Early childhood is very important for growth and development, especially brain development. Brain development is very dependent on the nutritional intake consumed. Each food consumed has its own benefits for the child's body; this is because the nutritional content of the food varies. Children are strongly encouraged to consume a variety of foods in amounts that suit their body's needs. This is because the nutritional intake required by children and adults is different, as well as the nutritional intake required by boys is also different from that of girls. This article discusses the role of nutritional content in food and its use for children's growth and development.
11	Factors that influence the growth and development of toddlers in the working area of the Pancur Batu Community Health Center, Deli Serdang Regency in 2019 Author: Risna Melina RumahorboCHMK Health Journal CHMK Health Journal Volume 4 Nomor 2 April 2020 Nutrition Utilization, Diet and Obesity. In H. S. Pareyowari., <i>Nutrition</i> Utilization, Diet and Obesity Pareyowari., H. S. (2014). (pp. 40-41). Jakarta: Nuha Medika.	The results of the research show that there is a relationship between nutritional status, infectious diseases, parental income, and the mother's level of knowledge and the growth of toddlers in the Pancur Batu Community Health Center Working Area, Deli Serdang Regency in 2019. From the research results, it is recommended that Integrated healthcare center cadres can hold an outreach program for mothers with toddlers regarding the importance of efforts to improve nutrition for families, especially toddlers. Mothers who have toddlers are expected to actively participate in weighing activities at the Integrated healthcare center that the growth and development of toddlers can be monitored every month Growth and development is influenced by environmental factors influencing family nutrition, hereditary factors, and hormonal factors. Impaired growth and development of children can be influenced by postnatal environmental factors such as socio-economic factors, nutrition, health status and inadequate early stimulation.

# DISCUSSION

# A. Factors That Influence Nutritional Status in Toddlers

The results of the research show that there is a relationship between nutritional status, infectious diseases, parental income, and the mother's level of knowledge with the growth of toddlers in the Pancur Batu Community Health Center Working Area, Deli Serdang Regency. It is also recommended that health cadres can hold an outreach program for mothers who have toddlers about the importance of efforts to improve nutrition for families, especially toddlers. Mothers who have toddlers are expected to actively participate in weighing activities at integrated healthcare center so that the growth and development of toddlers can be monitored every month (Risna Melina Rumahorbo, 2020). Therefore, efforts made by the government to overcome malnutrition and fulfill community nutrition are very necessary through increasing socialization, direct visits to malnourished sufferers, training field officers, briefing on the importance of exclusive breastfeeding for mothers with babies, as well as cross-sector coordination related institutions such as the Ministry of Agriculture, Ministry of Social Affairs, World Food Organization and World Health Organization (citation Pinto, 2023).

Likewise the research results (Yeou-Mei, 2013), that if you consume a diet containing sufficient vitamins and minerals and supplements, it can increase growth and development. Not only that, phosphorus and folate including albumin can reduce the ratio of total bad cholesterol and increase lipoproteins in the fourth month. When treating

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children with a ketogenic diet, it is clinically recommended that they consume adequate energy and protein as well as vitamins or minerals.

Growth and development is influenced by environmental factors influencing family nutrition, hereditary factors, and hormonal factors. Impaired growth and development of children can be influenced by postnatal environmental factors such as socio-economic factors, nutrition, health status and inadequate early stimulation (Pareyowari., 2014).

Therefore, it is very important to pay attention to the nutritional status of the family starting from prenatal, postnatal and antenatal care. Fulfillment the family's nutritional needs also depends on the level of knowledge the family has to help manage and provide food, minerals, vitamins and avoid foods that can increase bad cholesterol. Not only that, but after ANC the mother maintains her baby's health through nutritious food so that she can produce enough breast milk to meet her baby's needs for up to 6 months before additional food is given (citation Pinto, 2023). Nutritional condition is a balance between consumption and absorption of nutrients and the use of these nutrients, or a physiological condition resulting from the availability of nutrients in the body's cells. There is an influence between parenting patterns, disease infections, food intake, food security, environmental health, and history of family members with the nutritional status of toddlers. It is very important to know through promotional activities, maternal counseling and regular monitoring. (Pinto, 2023). Various factors contribute to the success of giving formula milk, namely: the food equipment used must be clean, and the method of giving formula milk must be adjusted to the dosage. In addition, the time for giving milk to babies needs to be shortened. It's better to make milk several times using a sterile method. Prepare milk in the correct way, namely boil it, and then cool it to a temperature of around 70 degrees Celsius.

That nutrition plays an important role in the growth and development of early childhood. Nutrition is a component that must be present and whose existence is needed by the body, especially in the process of physical growth and development, the nervous system and brain, as well as the level of human intelligence and intelligence. Fulfilling nutritional needs is the main factor in achieving growth and development results in accordance with genetic potential. Growth is any change in the body that is related to increasing body size physically and structurally. Meanwhile, development is an increase in abilities in the structure and function of the child's body which is more complex (Guariso, 2019).

#### B. The effects of nutrition on early childhood growth and development

This explains why children need good balanced nutrition so that they can grow normally and be competent enough not only to face life's challenges but also to help the growth and development of the nation. Considering the importance of good nutrition, this paper explores the concepts of nutrition, mental health and child well-being for a healthier future. It is recommended that nutrition education be taught in schools, exposed to parents and other caregivers to introduce them to the dangers of malnutrition and divert their minds about the effects of nutrition on mental health and well-being. (Mantoti L, 2020)

Because the government needs to make various efforts to overcome malnutrition and fulfill community nutrition, including increasing socialization, direct visits to sufferers of malnutrition, training field officers, briefing on the importance of exclusive breastfeeding for mothers with babies, as well as coordination across related sectors so that can prevent bad effects for individuals, families and society. In accordance with the theory of knowledge which includes the cognitive domain, it has a very large influence on the effects in nutritional management for families. Therefore, it is necessary to motivate through various sources such as mass media, electronic media so that it can help change people's behavior regarding how to prepare food that contains nutrients so that it can be beneficial for family health. (citation Pinto, 2023)

There was no significant loss of effect when the interventions were combined, but there was little evidence of a synergistic interaction between nutrition and stimulation on child development. Only three trials followed up children after intervention. All program evaluations at scale are combined interventions. Five benefited child development, but one did not, and two showed deficiencies. In general there is little benefit from scaling programs for nutritional status. We found no rigorous evaluation of adding stimulation to health and nutrition services on a large scale and there is an urgent need for it. There is also a need to establish quality control mechanisms for scale-up programs and to determine their long-term effects. There is also a need to determine whether there are ongoing benefits for children after the program is completed. The Effect of Integrated Nutrition and Child Development Interventions (Sally, 2021)

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Kenyan mothers begin lactation with relatively little fat stores. Although their energy intake increases somewhat during breastfeeding, preliminary estimates suggest that this increase may be sufficient to maintain their body integrity, to perform normal daily tasks, and to produce sufficient amounts of milk for optimal infant growth. In addition to the energy deficit, food quality is also a problem, particularly in Kenya and Mexico and to a lesser extent in Egypt. Intake of animal products and animal protein is very low. Not only are zinc and iron intakes low, but the bioavailability of these nutrients is poor due to the high phytate, fiber, and tea content of the diet. Vitamin B12 intake is also very low, and at least mild to moderate iodine deficiency (IDD) exists in Kenya. The above micronutrients have been shown to influence linear growth in Kenyan children, even after confounding factors are controlled for. The early use of supplementary feeding in Kenya was a double-edged sword. On the one hand, there was a slight increase in febrile illness and the possibility of shifting breast milk intake in supplemented babies, even though mothers did not reduce the frequency and duration of breastfeeding. On the other hand, even moderate amounts of zinc and B12 available in supplementary foods appear to have a positive effect on linear growth. (Neuman, 2014).

## C. The Role of Nutrition for Early Age Growth and Development

Nutrition and health, the word nutrition comes from the word "nutrition" which in Indonesia is better known as "gizi" which means healthy food. Nutrients or nutrients are found in the food consumed. However, not all food consumed contains the nutrients needed by the body to support the growth and development process. Lots of food circulating in the environment around children contains substances that are not needed by the body and are even considered dangerous, such as foods that contain preservatives, artificial colorings, artificial sweeteners, which can cause negative on the child's body until it can hinder the process of child growth and development. (Rahmi, 2018)

In general in developing country, mothers have a very important role in selecting and preparing food for their family's consumption. So the mother's knowledge will influence the type of food and nutritional quality of the food consumed by her family. The state of children's nutritional health is very poor depending on consumption level. Consumption rate is determined by the quality and quantity of the food. The quality of a food dish is indicated by its presence or absence of nutrients needed by the body in the composition of the meal. Meanwhile, quantity shows the amount of each nutrient to meet the body's needs. If the arrangement of food dishes can meet the body's needs, both in terms of quality nor quantity, then the body is in good health. General Guidelines for Balanced Nutrition (GGBN) recommend that they need energy (carbohydrates) on average around 60-70%, protein 10-15%, and fat 10-25%. Meanwhile, vitamins and minerals that must be met include vitamins A, B, C, D, E, iron, zinc, copper, manganese, etc. (Citation Pinto, 2023)

In the process of growth and development, one of the needs that must be considered in the process of children's growth and development is that the pattern and type of food intake must be good so that the growth and development process runs well. Early childhood nutritional intake must be considered, especially in the first 5 years of life because early childhood nutritional intake during this period will influence and determine the child's subsequent development. Nutrition is one of the determinants of the quality of human resources. The nutritional needs of children under five can become a big problem if they don't get enough attention. (Uce, 2022)

#### D. Types of nutritional needs for early childhood growth and development

The need for nutrition in early childhood is very important for their growth and development, especially brain development. Brain development is very dependent on the nutritional intake consumed. Each food consumed has its own benefits for the child's body; this is because the nutritional content of the food varies. Children are strongly encouraged to consume a variety of foods in amounts that suit their body's needs. This is because the nutritional intake required by children and adults is different, as well as the nutritional intake required by boys is also different from that of girls. This article discusses the role of nutritional content in food and its use for children's growth and development. (Uce, 2022)

No.	Nutrients	Food Sources
2	Carbohydrate	Monosaccharides: glucose, fructose and galactose. Disaccharides: sucrose, maltose, and lactose Trisaccharides and polysaccharides: starch and cellulose.
3	Protein	Animal: meat, eggs, milk, fish Vegetables: nuts,tofu tempe.
4	Fat	Oil, meat, cheese, butter, margarine and nuts.
5	Mineral	Calcium: milk, cheese.

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Iron: liver, meat, eggs and green vegetables	
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Source: WHO, 2018

# CONCLUSION

Based on the results of the literature review and the background above, you can withdraw conclusion that:

- 1. Children's growth and development is influenced by factors such as nutrition family environment, hereditary factors, and hormonal factors. Impaired growth and development of children can be influenced by postnatal environmental factors such as socio-economic factors, nutrition, health status and inadequate early stimulation.
- 2. The effect of a lack of nutrition, namely the intake of animal products and animal protein, vitamins and minerals, will have a bad impact on children's growth and development.
- 3. Mother's knowledge will influence food management and the nutritional quality of food consumed by her family and consumption levels. Therefore, food dishes can meet the body's needs, both in terms of quality and quantity.
- 4. To support the child's growth and development process, nutritional sources and correct management methods are needed. Sources of necessary nutrients are carbohydrate, protein, fat, vitamins and minerals.

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