

# Association between Children's Eating Habits and the Level of Knowledge of Nutrition of Guardians<sup>†</sup>

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**Citation:** Association between Children's Eating Habits and the Level of Knowledge of Nutrition of Guardians. *Biol. Life Sci. Forum* **2022**, *2*, x. <https://doi.org/10.3390/xxxxx>

Published: 1 October 2022

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**Abstract:** *Introduction:* Nutrition has a major influence on health throughout life, but, the first years of life in children are vital for forging good eating habits, because their adoption at this stage will last for the rest of their lives. A child who learns to eat correctly will have the prevention of non-communicable diseases in his or her favor. One of the causes of malnutrition in children may be the ignorance of parents or guardians about good nutrition, since they are the main people who feed them. *Objective:* The present study aims to relate parents' knowledge on healthy nutritional habits with the eating habits of their kids. The target population were parents with children between three to five years from San Juan de los Lagos, Jalisco, Mexico. *Material and method:* This study is a mixed, descriptive, non-experimental cross-sectional design. A pilot test was conducted with a sample of 32 tutors, with prior informed consent. Test used: Adapted versions of "Encuesta sobre hábitos alimentarios de Durán y Cols" ("Eating Habits Survey from Duran et al."), and "Nivel del conocimiento sobre nutrición de Leiba y Rosali" ("Knowledge level about Nutrition from Laiba & Rosali"). *Results:* The analyses showed that there is no significant difference between parents' level of knowledge and children's eating habits, since 62.5% of the participants showed a high level of knowledge while 40.6% of children have good eating habits. However, further research is needed. *Conclusions:* Although most of the parents interviewed showed a high level of knowledge in nutrition, they do not apply this knowledge on a regular basis in the eating habits of their children, this could be due to the fact that they are influenced by food habits, economic factors, and others.

**Keywords:** Nutrition; feeding habits; knowledge

## 1. Introduction

Nutrition has a great influence on health throughout life, but the early years of infants are vital for forging good eating habits, as their adoption at this stage will last into their future<sup>(1)</sup>. A child who learns to eat correctly will have in favor the prevention of non-communicable diseases, in addition, a good diet has been associated with better cognitive development in their first five years.<sup>(2)</sup>

WHO has identified nutritional disorders as the epidemic of the 21st century, when they manifested themselves in the child population, will leave sequelae that could last a lifetime. It is estimated that globally 293 million children under five years of age suffer from anemia, that famine is one of the main causes of mortality, and that hunger is one of the main causes of death in Latin America; 9 million preschoolers suffer from malnu-

trition due to monotonous eating habits that are deficient in micronutrient-rich foods, resulting in underweight and undersized children <sup>(3)</sup>, as well as the prevalence of obesity and overweight in children has increased threefold in the past 30 years, about 9% of such preschoolers are obese<sup>(4)</sup> and Mexico ranks first in childhood obesity as a result of poor eating habits <sup>(5)</sup>.

However, the habits reflected in preschoolers are influenced by the food environment of the home (family) and the social environment <sup>(6)</sup> as well as customs, geographic environment, food availability, lack of resources, advertising, lack of resources, lack of time in the household for food time available at home for food preparation or lack of knowledge about healthy eating <sup>(7)</sup>.

There may be many other factors, however, the one considered to be of greatest importance and purpose of this research is to describe if there is a relationship between the eating habits of children between three and five years of age and their parents' level of nutritional knowledge, because some studies indicate that one of the causes of malnutrition in infants is precisely the parents' or guardians' lack of knowledge about proper nutrition <sup>(8)</sup> since they are the ones who supply them with their food, mainly <sup>(9)</sup>, define the size of their portions, the schedules and frequencies of their meals through different eating styles that together condition their dietary intake <sup>(10)</sup>.

## 2. Methods

This is a quantitative and qualitative study with a descriptive scope, with a cross-sectional, non-experimental design. A pilot test was conducted with a total sample of 32 parents who participated in the study after the informed consent process. The following instruments were applied: the "Durán et al." And the survey "Level of knowledge of nutrition by Leiva, f.; & rosali, T", both modified for convenience. The Statistical Analysis Software SPSS version 25 was used to obtain the database. The application of this study was in San Juan de los Lagos, Jalisco.

## 3. Results and Discussion

The participants in this study agreed to participate on a voluntary basis and consisted of a total of 32 parents or guardians of children aged 3 to 5 years, of which 50% were female and 50% male.

**Table 1.** Tutor's Schooling Level and Percentage.

Schooling	Frequency	Percentage
No study	5	15.6%
Elementary school	8	25%
High school (1)	2	6.3%
High school (2)	7	21.9%
Bachelor's degree	7	21.9%
Technical career	3	9.4%

Table 1 shows that the number of participants with a study according to the Educational Plan Mexican National have a basic level of basic level of schooling (preschool, elementary and high school) or no schooling were 15 in total, which represents 46.87%, this may represent a disadvantage in terms of the knowledge they may have in nutrition, because according to Scaglioni et al. (2018), children rely heavily on the eating behaviors based on their parents' eating behaviors, lifestyles, and so on, if they do not have solid knowledge in nutrition, they will not be able to transmit it to their children <sup>(11)</sup>.

**Table 2.** Tutor's Knowledge Level and Percentage.

Level of knowledge		
	Frequency	Percentage
High level of knowledge	20	62.5%
Medium level of knowledge	12	37.5%

In table 2, according to the parameters recorded in the survey, 62.5 % of the respondents had a high level of knowledge in nutrition, indicating that they do have a good basis in food and nutrition.

**Table 3.** Children's Eating Habits and Percentage.

Feeding habits		
	Frequency	Percentage
Good eating habits	13	40.6%
Regular eating habits	19	59.4%

In Table 3, the statistical analysis showed that only 40.6% of the infants have good eating habits despite the fact that the number of parents with a high level of nutritional knowledge was higher, this is worrisome because, as mentioned by Sanipatin et al. (2019), the manifestations of nutritional disorders most prevalent in Latino children under 5 years of age, such as chronic malnutrition, obesity, and micronutrient deficiencies, directly influence morbidity and mortality rates, as well as the prevalence of certain chronic noncommunicable diseases, all of which are related to inadequate nutrition<sup>(3)</sup>.

The counterpart of what is reflected in Mexico, according to Paéz et al. (2022), is that today's children tend to consume more energy than they require for their basic needs, this high energy consumption may be due to behavioral causes related to deficient lifestyles, particularly in terms of exercise and nutrition habits, which have led to a progressive increase in the prevalence of overweight and obesity, creating a scenario that has been referred to as an obesogenic environment which is all the more reason why these types of studies are important<sup>(12)</sup>.

#### 4. Conclusions

Although most of the parents surveyed had appropriate nutritional knowledge, there was no significant relationship between their level of knowledge and the eating habits reported by their children, which reflected regular eating habits. This may be due to the fact that parents are influenced by eating habits, economic factors and lack of knowledge about proper dietary practices<sup>(13)</sup>. For this reason, several studies mention the importance of following a healthy diet at home, in addition to the fact that it is in this infant stage when habits are being formed<sup>(14)</sup>.

However, the sample of this study was very small and further research on the subject is required.

**Funding:** No financial resources were required to carry out this research.

**Acknowledgement:** To all the participants who made this research possible.

**Conflicts of Interest:** The authors declare have none conflict of interest

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