

Analysis Challenge Packaging Label Education Food and Drink in Elementary School

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Abstract

Snacks, both food and drinks present in elementary school canteens, greatly influence children's lifestyles and habits in choosing snacks. The purpose of this article is (1) to find out the habits of elementary school students in buying snacks at school. (2) school programs that support education on food and drink packaging labels in elementary schools. (3) to find out the types of food and drinks in elementary school canteens. The research method uses a qualitative approach with an exploratory qualitative design. The subjects in this study were grade v students in the 2024/2025 academic year. The data collection technique used was the results of interviews and observations. Interactive analysis using the Miles & Huberman model data analysis technique. The findings of this study are that students' habits in choosing and buying snacks have not paid attention to food labels, only considering taste, price, and desire. In addition, the school program to support the program of bringing food and drink supplies from home has not specifically educated on packaging labels. And the types of food and drink snacks are a challenge in educating food and drink packaging labels in elementary schools. The conclusion of this study shows that the challenge of educating about packaging labels requires support from schools, the role of teachers, and parents to foster elementary school students' habits in choosing snacks and drinks at school.

Keywords: Challenges, Education, Elementary School, Food and beverages, Packaging labels.

Abstrak

Makanan ringan, baik makanan maupun minuman yang terdapat di kantin sekolah dasar, sangat mempengaruhi gaya hidup dan kebiasaan anak dalam memilih makanan ringan. Tujuan dari artikel ini adalah (1) untuk mengetahui kebiasaan siswa sekolah dasar dalam membeli makanan ringan di sekolah. (2) program sekolah yang mendukung edukasi label kemasan makanan dan minuman di sekolah dasar. (3) untuk mengetahui jenis makanan dan minuman yang ada di kantin sekolah dasar. Metode penelitian menggunakan pendekatan kualitatif dengan desain kualitatif eksploratif. Subjek dalam penelitian ini adalah siswa kelas V tahun ajaran 2024/2025. Teknik pengumpulan data yang digunakan adalah hasil wawancara dan observasi. Analisis interaktif menggunakan teknik analisis data model Miles & Huberman. Temuan penelitian ini adalah kebiasaan siswa dalam memilih dan membeli makanan ringan belum memperhatikan label makanan, hanya mempertimbangkan rasa, harga, dan keinginan. Selain itu, program sekolah untuk mendukung program membawa bekal makanan dan minuman dari rumah belum secara khusus mengedukasi label kemasan. Dan jenis makanan dan minuman jajanan menjadi tantangan dalam edukasi label kemasan makanan dan minuman di sekolah dasar. Kesimpulan penelitian ini menunjukkan bahwa tantangan edukasi label kemasan memerlukan dukungan dari sekolah, peran guru, dan orang tua untuk menumbuhkan kebiasaan siswa sekolah dasar dalam memilih jajanan dan minuman di sekolah.

Kata kunci: Tantangan, Pendidikan, Sekolah Dasar, Makanan dan minuman, Label kemasan



INTRODUCTION

Quality elementary school students are the basic capital for national development so that they can form healthy, intelligent, and productive people. School canteens or stalls have an important role in realizing health messages that can determine students' daily eating behavior through the provision of snacks at school. School children's snacks are a problem that needs to be of concern to the community, especially parents, educators, and school administrators (Fitria, 2015). IDAI (Indonesian Doctors Association) noted that there were 1,645 children with diabetes mellitus spread across 13 cities in Indonesia, namely Jakarta, Bandung, Surabaya, Malang, Semarang, Yogyakarta, Solo, Denpasar, Palembang, Padang, Medan, Makassar, and Manado (Ministry of Health, 2023). Carelessness in choosing food and drinks is evident as children often eat food based on attractive appearances such as bright colors or unique shapes, even though the nutritional content is low or contains hazardous materials such as dyes and preservatives. Food choices tend to be influenced by peers, lack of parental supervision, and the availability of pocket money and the lack of habit of bringing provisions so that they depend on snacks available around the school, which often do not meet nutritional and hygiene standards so that they can result in a lack of concentration in learning due to inadequate nutritional intake and decreased immunity and the long-term impact is the risk of developing diabetes.

Diabetes in addition to genetic factors there are environmental factors. The incidence of diabetes mellitus in Indonesia in children and adolescents has increased about sevenfold (Pulungan et al., 2021). If a child consumes too many carbohydrates or foods and drinks that are high in carbohydrates, it can have an impact on blood sugar levels that are getting higher (Nurvita, 2023). Lifestyle factors such as drinking packaged drinks that have high sugar content, foods that are high in carbohydrates.

Packaging as a communication medium for a product's image and product protection. Packaging is a material used to contain and/or wrap food, whether in direct contact with food or not (BPOM, 2024). The importance of packaging labels is to provide information to consumers about food products that have been marketed to marketing that the information listed on the food product packaging is the truth (Pratiwi, 2019). Knowledge of reading food labels is important to be accustomed to since elementary school. Elementary school is a strategic phase to provide information and make it a habit to read packaging labels on food and drinks. Children of elementary school age are more often in the school environment and play so that children more often find various snacks sold in the school environment and play environment. Based on the results of the study (Ismainar et al., 2022) found that more than 50% of the level of hygiene and sanitation of food vendors in elementary schools in one of the elementary schools in Pekanbaru was in the low category. Efforts to prevent diabetes since elementary school age can be started by educating elementary school students in reading food and beverage packaging labels because children often have the habit of consuming sweet foods which will later have an impact on increasing the risk of developing diabetes mellitus. In line with this, the results of the study (Kusmiyati & Sedijani, 2024).

The habit of reading packaging labels every time you buy packaged food is very important to do and must continue to be done, because in addition to seeing food safety and nutritional content, it also limits excessive consumption of sugar, salt and fat so that food consumption remains in balance. Most of us do not read packaging labels enough. One thing that needs to be considered at this time is the habit of eating or drinking at school which is learned unintentionally without going through the education process. Food label education is very important to promote healthy eating habits and prevent chronic diseases. Jung et al (2019)

The results of interviews with teachers in three elementary schools in Laweyan District, that information about literacy in reading food and beverage labels is still

lacking. One factor in the lack of literacy in reading food labels is that it is not specifically discussed in science learning and the lack of teacher initiative in developing learning. In line with that, the results of interviews with fifth grade elementary school children from 3 elementary schools only 20% of students know and some apply reading packaging labels on food and beverages. The problem of the lack of reading food and beverage packaging labels in elementary schools is one of the factors in the lack of knowledge about reading food labels which is one of the factors causing early diabetes due to the lack of knowledge about the sugar content in the food and beverages.

Research on school health from the food and beverage side is still relatively limited, although this aspect has a crucial role in supporting children's growth and development, preventing various diseases, and improving students' concentration and learning performance in line with research conducted by Kusmiyati and Prapti in 2024 regarding "Counseling on the Importance of Reading Food Packaging Labels to Maintain Balanced Nutrition" that choosing healthy foods must be a habit, especially foods that are packaged by getting used to reading packaging labels. Further research related to the description of food selection patterns in grade IV students at Bendo 1 Elementary School conducted by Mukaromah and Anggaraeni found that the level of attention to labels and snack packaging was 49 students on a scale of never (47.1%) and the level of choosing snack food hygiene was 52 students on a scale of never. The similarity of the two studies is that the habit of reading packaging labels still needs to be improved in the daily lives of elementary school children.

Based on these problems, this study is important to be conducted to find out and explain the challenges of food and beverage packaging label education in elementary schools and has the opportunity to help educate food and beverage packaging labels through learning for elementary school students. Schools are strategic places to educate food and beverage packaging labels as an effort to prevent early diabetes, so that the objectives of this study can be described: (1) to find out the habits of elementary school students in buying snacks at school. (2) school programs that support food and beverage packaging label education in elementary schools. (3) to find out the types of food and beverages in elementary school canteens. The novelty of this study is that we can find out how the school can educate health in choosing food and beverages consumed at school. By knowing this, we can answer the challenges of food and beverage packaging label education in elementary schools.

This study uses an exploratory qualitative approach. This study was conducted in several elementary schools studied in Laweyan District, Surakarta. Data collection was carried out through interviews, observations, and documents. This study was conducted by interviewing the homeroom teacher and students of grade V of elementary schools in addition to data in the form of photos and observations conducted to determine the condition of the school such as school programs, school policies. By cross-checking informants, homeroom teachers and students of grade V can find out students' habits when buying snacks, supporting school programs and the condition of the school canteen. Interactive analysis with data analysis using the Miles and Huberman model which includes data collection, data reduction, presentation, and drawing conclusions.

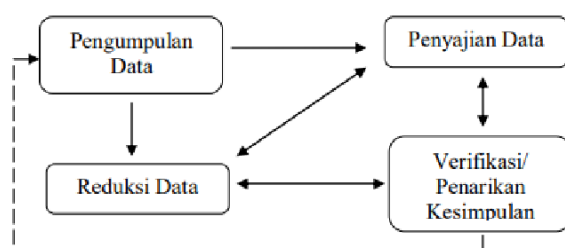


Figure 1. Miles and Huberman Data Analysis Scheme

Based on the image above, the stages of data analysis are: (1) data reduction (data collection) by conducting observations, interviews, and documentation at several schools. According to Sugiyono (2017), reducing data means summarizing, choosing the main points, focusing on important things, looking for themes and patterns; (2) data presentation (data display). Miles and Huberman (Sugiyono, 2017) said that the most frequently used to present data in qualitative research is with narrative text. Data presentation is done to make it easier to understand the data obtained; (3) verification/drawing conclusions.

RESULTS AND DISCUSSION

School is a place where students spend a lot of time every day, therefore the provision of food and drinks in the canteen is important to consider. To create quality human resources is to provide nutritious snacks to meet the body's needs while attending lessons at school. Healthy food and drinks are those that contain substances needed by the body. At school age, children need good nutritional intake. However, limited fulfillment of good nutrition will result in malnutrition and obesity experienced by 700 million children in the world (Indrayana et al., 2021). The results of a study in the USA stated that children are more exposed to unhealthy foods and drinks, such as snacks and soft drinks from school canteens (Anderson et al., 2003).



Figure 2. Snacks in the canteen

Based on the picture above, researchers found school snacks that are high in sugar, high in calories and fat, and have bright food coloring. The results of a study in the Philippines stated that most of the food and drinks sold in school canteens are unhealthy snacks (Cartagena, 2014). Factors that cause obesity in children are genetics, diet, family socioeconomic status, and physical activity. Changes in the lifestyle of elementary school children who are less active are often found in elementary schools. According to WHO, 2014 if children who experience obesity continue into adulthood, they will be at risk of developing type II diabetes mellitus, cardiovascular disease, hypertension and cancer (Suryenti & Marina, 2018).

Snacks are food or drinks that are processed by the seller and then served in

packaging that attracts buyers. Consuming snack foods is one that is very attached to children. School children like snacks because the price is relatively cheap, easy to reach, and easily accepted by children's tongues. Diversity of snacks. Usually have attractive shapes and various flavors such as sweet, savory, delicious. Children consume snacks without paying attention to the cleanliness and composition of the snacks. Research conducted by (Wuri Utami, 2018) states that school children's snacks currently tend to be difficult to control, the influence of mass media in advertising is also one of the factors that triggers school children to always want to try new snacks, and it should be noted that snacks that are widely circulated today tend to have poor nutritional quality, for example sweet snacks that contain synthetic sugar and salty snacks that contain high sodium and MSG.



Figure 3. Interview with class v

Based on the interview results, in line with what was stated by (Nofriadi et al., 2020) that many students' behavior in choosing healthy snacks is still low and there are many children who buy unhealthy snacks. Many school children still buy snacks only according to their preferences without paying attention to the contents of the snacks such as the ingredients contained. Choosing healthy food must be a habit, especially for packaged foods, by getting used to reading the packaging labels (Kusmiyati & Sedijani, 2024). Elementary schools in Laweyan District, Surakarta, based on observation results, show that the types of food and drinks available at school are far from "healthy" such as fried foods, sachet drinks, sweet iced tea, and other instant snacks. In addition, students do not pay attention to the condition of the snacks, such as not looking at the packaging labels on snacks, both food and drinks. The types of snacks provided by the school canteen are mostly unhealthy, such as containing high sugar, so that the snacks purchased by elementary school students are like ice with sugar or foods that are high in calories and fat provided in the school canteen. Student behavior does not show attention to the food consumed such as the safety of snacks and looking at the packaging labels when students buy snacks, both food and drinks, students only pay attention to the price, taste of the food, and the color of the food. There are posters that show "healthy canteen" "healthy life" but in reality it is not like that there are still flies and garbage scattered around the canteen.

Most school children do not have enough knowledge in choosing snacks which will affect their attitudes and behavior in choosing snacks (Priawantiputri et al., 2019). Research conducted by Sumarwan (2017) shows that the frequency of reading labels on packaged products tends to be in the low category. One effort to educate students so that they have an understanding in choosing snacks, both food and drinks, is to educate them in learning. Science learning is a strategic step to elaborate knowledge about labels on food and drink snack packaging. However, the reality is that this knowledge is not facilitated in science learning, in fact teachers do not provide

information about packaging label education even though the activity of buying and choosing a snack is very close to children. Each of the three elementary schools has a supporting program such as bringing food supplies, bringing drinking water from home, and exercising together. By bringing food supplies and bringing drinking water from home, it is hoped that they can avoid buying unhealthy snacks. Despite this, there is no effort by schools to provide knowledge about the importance of reading packaging labels, either included in learning or as a reminder during learning in the three schools in Laweyan District.

The role of parents in students' health behavior is very influential. The results of a study conducted by Mustika & Wahini (2015) stated that the employment status of parents influences the good or bad eating patterns given to their children. In line with the results of the study, it states that the background of parents influences students' understanding of reading labels on packaging, parents who are busy working do not have time to simply remind or provide knowledge about reading food labels. Giving pocket money influences the choice of types of snacks for elementary school children. Increasing family members may lead to poor food choices because they cannot afford healthy foods (S et al., 2022). The role of parents in educating children in providing direction and information about choosing healthy and safe snacks.

Elementary school students' habits in buying snacks at school

Triangulation of student techniques, based on the results of interviews and observations of elementary school students' habits in buying snacks at school as follows.

Table 1. Source Triangulation

	Aspect	SDN A	SDN B	SDN C	Valid Data	Information
indicator	Students' daily life	v	v	v	v	Not yet showing conditions that support reading food labels
	Student knowledge	v	v	v	v	Lack of student knowledge
	Environmental Conditions	v	v	v	v	Environmental conditions are not yet supportive

The three homeroom teachers explained that in terms of students' knowledge of reading packaging labels, students' habits at school when buying snacks have not yet implemented reading packaging labels

"it seems that students do not know and understand food labels"

"Most students do not know how to read food labels, but they understand that food or drinks that contain a lot of sugar will cause diabetes"

In terms of knowledge, students read packaging labels regarding aspects of students' backgrounds.

"The background of the students here is middle to lower, so the children have not been given such an understanding. Parents are busy working, some of them don't even bring food supplies, let alone remind them of things like that."

"The background of the students here is mostly from lower middle class parents"

In line with the interview statement with the class V teacher, when interviewing class v students

"I like buying snacks that are cheap and taste good, when I buy snacks the ones I choose are what I want"

"I usually buy snacks even though I bring rice and I still buy juice tea, Sisri tea, Marimas even though I bring drinking water from home"

The safety of these snacks is still low and sometimes becomes a problem, so attention is needed from schools and parents to ensure the safety of snacks (Leonita, 2022).

School programs that support education on food and beverage packaging labels in elementary schools

School programs that support students to read packaging labels and maintain healthy living patterns. The interview results are as follows.

"The school program that supports healthy living is by bringing provisions from home every Thursday and bringing a drinking bottle to avoid buying ice in the canteen."

"School programs that support labeling snacks with a program to read provisions and drinks to minimize buying snacks, but students still buy snacks such as ice sachets and cup noodles"

Types of food and drinks in elementary school canteens

The types of food and drinks in elementary schools are one of the supporting and inhibiting factors according to what is provided in the school canteen.

"Most of the kids here like to buy things like cup noodles, ciki-cikian, and usually jumbo iced tea."

From the interview results above, it can be concluded that there are school programs that support students' healthy living but have not specifically referred to food label education. The background of students' families influences students' behavior in choosing snacks, there are many factors such as pocket money, parental advice to students so that it influences the food and drinks they like such as cup noodles, juice tea, ciki-cikian and jumbo iced tea. Most of the food and drink are unhealthy. School children's understanding is still lacking regarding snack foods such as nutritional value, safety, cleanliness of presentation and processing, causing children not to know whether the snack foods they consume are healthy or not (Fitriyah.S, 2019).

The results of the observations that have been carried out, found types of food and drinks that are less healthy in supporting a healthy lifestyle and literacy in reading cable packaging such as the many sachet drinks that contain high sugar and foods that are high in carbohydrates. In addition, striking colors and snacks without clear food composition and expiration dates are often found. The environment can have a strong influence on a person's decision in choosing food. To make it easier for students to make healthier food choices and develop healthy eating habits, it is important for the school environment to provide healthy food (Mesink, 2012)

In the three schools, most of the fifth grade students have not received knowledge about how to read food labels from the teacher because it has not been elaborated in the natural and social science subjects. The background of students from the three elementary schools is homogeneous with parents not informing them about food labels because parents are busy working. Foods that are popular with students mostly contain artificial sweeteners and instant foods that are unhealthy for the body because the focus of elementary school students when buying snacks only pays attention to taste, color, price, and desire without paying attention to the composition of a snack or drink. Students know the impact of unhealthy food and drinks but students still eat and drink these snacks.

CONCLUSION

Schools are strategic places to find out students' habits in paying attention to health when choosing packaged foods and drinks, but students' ignorance in reading food labels makes students careless in choosing snacks at school. The program of

bringing supplies and sports together with programs that support healthy living, but the development of science learning regarding reading packaging labels and the absence of teacher initiatives in providing knowledge and reminding to get used to reading packaging labels before buying snacks. And the types of food and drinks do not yet have policies regarding the types of food available in elementary school canteens. With these conditions, schools can optimize through empowering teachers in elaborating health materials in science learning and school policies that support health in elementary schools so that this study answers the challenge of educating food and beverage packaging labels to be able to educate properly both from schools, families, and community participation.

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