

## The Health Benefits of Consuming Fruits and Vegetables

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### Abstract

Fruits and vegetables is very important to meet the needs of fiber, vitamins and minerals. Without dietary fiber, bowel movements are not smooth. The main vitamins in vegetables and fruits that are difficult to replace by other foods are vitamin C, folic acid, and the carotene group (pigments that give red, orange, and yellow colors to fruits and vegetables), especially beta-carotene (a substance that functions as a provitamin A and antioxidant) which will work as an antioxidant. However, the level of fruit and vegetable consumption is still low, especially among adolescents, who are the age group with the lowest consumption, influenced by the development of fast food. Until now, adolescents' knowledge and attitudes about fruit and vegetable consumption are still lacking. It is recommended that there be health education and movements to increase adolescent awareness of the benefits of fruit and vegetable consumption, as well as an evaluation of their daily diet. Routine evaluation of adolescent eating habits is important to see the development and changes in their attitudes in consuming fruits and vegetables. With the right approach, it is hoped that a healthier diet can be formed from a young age, so that adolescents can have a better health foundation in the future.

**Keywords:** Health, Benefit of Fruits and Vegetables, Consumption, Adolescent.

### 1. Introduction

Vegetables and fruits are food sources rich in vitamins and minerals that are very beneficial for the body because they are important in the body's metabolism process. Some of the vitamins and minerals found in vegetables and fruits function as antioxidants so that they can reduce the incidence of non-communicable diseases related to nutrition, as an impact of excess or lack of nutrition (Kemenkes, 2014; Afriansyah, 2008).

Consuming less fruit and vegetables can cause the body to experience a lack of nutrients such as vitamins, minerals and fiber so that it can cause various diseases (Kemenkes, 2019). Consuming enough fruit and vegetables can save around 2.7 million lives (1.8%) each year (WHO, 2003). Although the need is relatively small, the function of vitamins and minerals is almost irreplaceable so that the fulfillment of the need for consumption of these substances becomes essential (Sabru Ulfa. A. 2021). Eating fruits and vegetables is a highly recommended lifestyle. Adolescents are in dire need of nutrition as they are experiencing rapid growth (Susianto, 2010). Therefore, adolescents should consume plenty of fruits and vegetables as they contain many vitamins, minerals, and dietary fibre that are good for the growing mass, and the lack of these nutrients can lead to many diseases (Widani, 2019). During

adolescence, a lack of fruit and vegetable consumption correlates with an increased risk of obesity and obesity. This leads to high blood pressure, hypercholesterolemia, osteoporosis, various cancers, chronic obstructive pulmonary disease, respiratory problems, and mental health problems (Dhandevi and Rajesh, 2015).

Knowledge about fruits and vegetables, especially about the benefits and consumption recommendations of fruits and vegetables, is proportional to the consumption of fruits and vegetables in adolescents. When adolescents know how much fruit and vegetables are good to consume, they will be aware and interested in trying to consume them, thus increasing their consumption (Fibrihirzani, 2012). Knowledge about fruits and vegetables especially regarding the benefits and recommendations consumption of fruits and vegetables can increase consumption of fruits and vegetables in individuals. Fruit and vegetables can increase awareness and skills in preparing fruits and vegetables for consumption so that it will increase the amount of fruit and vegetable consumption in individuals (Kristjansdottir et al., 2006).

According to research by Estetika (2007), there is a relationship between pocket money and adolescent fruit and vegetable consumption. Adolescents who have a large enough pocket money will usually consume modern foods that are full of prestige in the hope that they will be accepted by their peers. However, they are more likely to choose unhealthy foods such as pastries, fast food, and chips over fruits and vegetables (Rasmussen et al., 2008).

Parents influence the amount of fruits and vegetables children consume. Parental support affects adolescents' fruit and vegetable consumption. Adolescents' fruit and vegetable consumption behaviour is influenced by their peers, in addition to their parents. Adolescent girls are more likely to consume nutritious foods around their friends than around their mothers. According to research conducted by Reynolds (2004), there is a correlation between fruit and vegetable availability and fruit and vegetable consumption by adolescents. This is because foods that are more accessible are more likely to be consumed, whereas foods that are not easily accessible will not be consumed. The aim of this study was to identify all variables associated with adolescent fruit and vegetable consumption.

## 2. Method

In this research, we use descriptive qualitative methods to obtain data that can support this research. We distributed questionnaires containing questions about daily fruit and vegetable consumption in adolescence. The study involved adolescents aged 17-25 years old with the majority of respondents being 18 years old. This study took 36 samples of respondents' answers. This study aims to determine the level of fruit and vegetable consumption in adolescence.

## 3. Results and Discussion

### 3.1 Results

Tables 1. Knowledge

Indicator	Agree	Disagree
1. In your opinion, do fruits and vegetables contain nutrients that are not required by the human body?	11,1%	88,9%
2. Eating fruits and vegetables can keep us healthy	100%	-
3. Good and nutritious fruit is delicious and expensive	13,9%	86,1%
4. There should be a variety of fruits and vegetables consumed every day	83,3%	16,7%
5. Eating fruits and vegetables regularly does not prevent disease	16,7%	83,3%
6. Vitamins, minerals, and fiber are abundant in fruits and vegetables	100%	-
7. Vitamins, minerals, and fiber are nutrients that are not needed by the body	8,3%	91,7%
8. Tomatoes, spinach, carrots are sources of vitamin A	94,4%	5,6%
9. Orange-colored fruits are a source of vitamin C	94,4%	5,6%
10. Vegetables and fruits should be consumed every day	100%	-

Tables 2. Availability of fruit and vegetables at home

Indicator	Every day	Almost every day	Sometimes	Rarely	Never
Is there always a variety of fruits and vegetables available at home?	22,2%	36,1%	30,6%	8,3%	2,8%

Tables 3. Availability and Peer influence

Indicator	Yes	No
1. Are there any fruit or vegetable sellers around where you live?	97,2%	2,8%
2. When you are with your friends, do you ask them to eat vegetables or fruits?	52,8%	47,2%
3. Would you eat fruits and vegetables if your friends did?	97,2%	2,8%

Tables 4. Awareness of the beneficial of fruit and vegetable as teenager

Indicator	Important	Very important	Not important
1. How important do you think it is to eat fruits and vegetables in your teenage years?	19,4%	80,6%	-

### 3.2 Discussion

According to the results of the study, the level of fruit and vegetable consumption in adolescence is still at a low level. Teenagers nowadays consume fast food more often than fruits and vegetables because they consider fast food to be more practical so that it can shorten time, tastier, and considered more modern. Whereas fruits and vegetables have many benefits for the body, for example, such as maintaining the body's immunity from various diseases, helping growth and development, and maintaining the digestive system.

From the answers received, the nutrients contained in fruits and vegetables on average have health benefits. The fruits and vegetables we consume do not have to be delicious and expensive to get the benefits, but we can consume a variety of fruits and vegetables to get a variety of nutrients contained in them (Widani, 2019). These fruits and vegetables contain minerals, vitamins, and fiber that are needed by the body and should be consumed every day. The role of others in helping us consume fruits and vegetables is also very important, because according to research results we will consume vegetables and fruits if our friends consume them too and offer them to us.

Devouring a adequate amount of natural products and vegetables offers a few critical wellbeing. Natural products and vegetables offer assistance lower the hazard of heart illness and stroke by diminishing blood weight and progressing cardiovascular health (Solin et.al. 2024). Certain natural products and vegetables, such as cruciferous vegetables, have been appeared to diminish the chance of different cancers

It boosts safe work. Vitamins C and A display in numerous natural products and vegetables reinforce the safe framework, making a difference to battle off infections. Fiber in natural products and vegetables helps in absorption, avoids clogging, and advances a sound intestine microbiome.

Fruit and vegetables also bolsters weight administration. Due to their moo calorie thickness but tall volume, natural products and vegetables contribute to sentiments of completion, helping in weight control (Muna, 2019). Wealthy in basic supplements like vitamins, minerals, and cancer prevention agents, natural products and vegetables back generally wellbeing and well-being.

It anticipates other conditions. Utilization of natural products and vegetables has been connected to a lower hazard of conditions such as dementia, certain eye maladies, rheumatoid joint pain, osteoporosis, asthma, unremitting obstructive pneumonic infection (COPD), discouragement, and hip fractures. Higher add up to natural product and vegetable admissions is related with lower hazard of cognitive decrease, profiting mental wellbeing

A discussion of the research shows that fruit and vegetable consumption is still relatively low among adolescents, despite their awareness of the various health benefits associated with these intakes. The main factor influencing this low consumption is the modern lifestyle, which tends to favor fast food, which is considered more convenient, tasty and trendy (Mercedes et.al 2020). In addition, the perception that high-quality fruits and vegetables come at a high price is also a major deterrent.

Knowledge of the benefits of fruits and vegetables is not always directly proportional to consumption patterns. Most teens are aware that fruits and vegetables contain vitamins, minerals, and fiber that are essential for health, but this does not encourage them to make their consumption a daily habit (Qibtiyah, 2021). This situation is exacerbated by the influence of the social environment, such as peers, who often prefer modern food choices over healthier options. From a family perspective, the availability of fruits and vegetables at home is one of the most important factors that can increase consumption. Research shows that adolescents tend to consume more fruits and vegetables when they are easily accessible.



Parental support also plays an important role in shaping healthy eating habits. Increasing fruit and vegetable consumption among youth requires a collaborative effort involving families, communities, and educational institutions (Rigyalfa et.al. 2023). Innovative and engaging health education, especially through social media or group-based activities, can be an effective first step.

In addition, approaches that involve peers as agents of change can create positive trends that encourage adolescents to adopt healthier eating habits. Long-term interventions, such as national campaigns and increased availability of fruits and vegetables in schools, can help overcome these barriers. With appropriate and effective strategies, fruit and vegetable consumption habits can be improved, positively impacting the health of future generations of youth.

## 2. Conclusion

This research addresses the critical importance of fruit and vegetable consumption among adolescents, a demographic particularly vulnerable to the nutritional gaps caused by modern eating habits and the rise of fast food culture. By analyzing adolescents' awareness and attitudes through a structured survey, the research sheds light on current dietary practices and highlights the urgent need for targeted educational efforts. The findings reveal a concerning disparity between the understanding of nutritional benefits and the consistent application of healthy eating practices. This underscores the importance of interventions aimed at fostering long-term behavioral changes. Initiatives to promote varied and sufficient intake of fruits and vegetables must be integrated into public health strategies to combat the risks associated with inadequate nutrition during critical developmental years. Beyond its immediate implications, this research contributes to a growing body of knowledge on adolescent nutrition by providing a foundation for actionable public health campaigns. Future studies could explore the impact of specific educational programs, assess behavioral shifts over time, and evaluate the role of environmental and social factors in dietary choices. Expanding this research to encompass diverse populations could offer a broader perspective and strengthen global efforts to address adolescent

nutritional challenges. Ultimately, by advocating for early intervention and consistent dietary habits, this work aligns with global health priorities and sets the stage for practical applications that can enhance community well-being over time.

### 3. References

- Afriansyah, N. (2019). *Rahasia jantung sehat dengan makanan berkhasiat*. Jakarta: Penerbit Buku Kompas; 2008
- Dhandevi, P. E. M., & Jeewon, R. (2015). Fruit and vegetable intake: Benefits and progress of nutrition education interventions-narrative review article. *Iranian journal of public health*, 44(10), 1309.  
<https://pubmed.ncbi.nlm.nih.gov/articles/PMC4644575/>
- Estetika. (2007). *Faktor yang Berhubungan dengan Frekuensi Konsumsi Fast Food pada Mahasiswa*. Skripsi. Jakarta: UI
- Fibrihirzani, H. (2012). *Hubungan antara Karakteristik Individu, Orang Tua dan Lingkungan dengan Konsumsi Buah dan Sayur pada Siswa SDN Beji 5 dan 7 Depok Tahun 2012*. [Skripsi]. Depok: Universitas Indonesia.
- Kristjansdottir, A. G., Thorsdottir, I., De Bourdeaudhuij, I., Due, P., Wind, M., & Klepp, K. I. (2006). Determinants of fruit and vegetable intake among 11-year-old schoolchildren in a country of traditionally low fruit and vegetable consumption. *International Journal of Behavioral Nutrition and Physical Activity*, 3, 1-9.  
<https://link.springer.com/article/10.1186/1479-5868-3-41>
- Muna, N. I., & Mardiana, M. (2019). Faktor-faktor yang berhubungan dengan konsumsi buah dan sayur pada remaja. *Sport and Nutrition Journal*, 1(1), 1-11.  
<https://journal.unnes.ac.id/sju/index.php/spnj/>
- Mercedes del Rio-Celestino, & Rafael Font (2020). The Health Benefits of Fruits and Vegetables. *The National Institutes of Health*.  
<https://pubmed.ncbi.nlm.nih.gov/articles/PMC7143647/>
- Qibtiyah, M., Rosidati, C., & Siregar, M. H. (2021). Perilaku Konsumsi Buah dan Sayur Pada Remaja. *Jurnal Gizi Kerja dan Produktivitas*, 2(2), 51-60.  
<https://shorturl.at/66Mkw>
- Rasmussen, M., Krølner, R., Klepp, K. I., Lytle, L., Brug, J., Bere, E., & Due, P. (2006). Determinants of fruit and vegetable consumption among children and adolescents: a review of the literature. Part I: quantitative studies. *International journal of behavioral nutrition and physical activity*, 3, 1-19.  
<https://link.springer.com/article/10.1186/1479-5868-3-22>
- Rigyalfa Da Wafi, Asep Bayu Dani Nandiyanto (2023). *Counseling on The Benefits of Eating Vegetables for The Health of The Body*, Universitas Pendidikan Indonesia.  
<https://shorturl.at/ZUdSM>
- Sabrul, U. A. (2021). *Edukasi Konsumsi Buah dan Sayur pada Siswa Sekolah Dasar melalui Simulasi Kuartet* (Doctoral dissertation, Universitas Hasanuddin).
- Solin A., Bara H.B., Auzi M.I, Tanjung, C.A., Amirul B. (2024). The Importance of Consuming Vegetables For Body Health. *Universitas Islam Negeri Sumatera Utara*  
<https://jurnal.penerbitdaarulhuda.my.id/index.php/MAJIM/article/viewFile/2273/2312>
- Widani, N. L. (2019). Penyuluhan pentingnya konsumsi buah dan sayur pada remaja di sosial Desataruna jakarta. *Patria: Jurnal Pengabdian Kepada Masyarakat*, 1(1), 57-68.  
<https://journal.unika.ac.id/index.php/patria/article/view/1779>