

## **The Effectiveness of Nutrition Counseling using Leaflets and Videos to Increase Adolescents' Knowledge About Fast Food at Dayah Jeumala Ama Lueng Putu Boarding School**

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*Submitted: 01/06/2022*

*Accepted: 25/06/2022*

*Published: 30/06/2022*

### **Abstract**

Although boarding school students are already provided with food, they still prefer to eat fast food. However, the food provided for them are most likely low in fiber content and far from the word 'variety.' Therefore, counseling and nutrition education about the negative effects of fast food will significantly affect the development of adolescent knowledge. This study aims to analyze the effectiveness of nutrition counseling using leaflets and videos on increasing knowledge. This research is quantitative research with a quasi-experimental method. The population in this study was 62 teenagers. The sample collection in this study used the total sampling method. Pre- and post-test designs using a questionnaire were distributed to eighth-grade students. Data analysis was carried out using an independent t-test. Data are presented in tabular and textual forms. There is an increase in knowledge about the negative effects of fast-food using leaflet media, as evidenced by a p-value of 0.006. There is also an increase in counseling knowledge using video media, as evidenced by a p-value of 0.001. The average students' knowledge about the negative effect of consuming fast food before counseling using leaflet media was 48.84; after counseling, it increased to 52.84. Meanwhile, counseling without the use of video media resulted in an average of 50.42, and it increased after counseling using video media to 54.58. Thus, it can be concluded that video media is more effective than leaflet media.

**Keywords:** fast food, knowledge, leaflets, videos

### **Introduction**

Adolescence is an important growth period and the second fastest after the baby's growth period. During this period, there are rapid physical, psychological, and cognitive changes. Therefore, adolescents should pay attention to balanced nutrition so that their growth and development period is good and healthy. (Fikawati, 2017). Changes in adolescence will affect the need for, absorption, and use of nutrients. This is accompanied by rapid enlargement of the organs and tissues of the body. Improper intake of nutrients can potentially cause nutritional problems in adolescents (Depkes RI, 2010). The nutritional needs of adolescents really need to be considered. This is because the nutritional needs of adolescents are increasing due to increased growth and development. In addition, changing lifestyles and eating patterns will also affect nutritional intake in adolescents. The adolescent age group is preoccupied with lots of physical activity inside and outside the room.

Therefore, it is indispensable to pay attention to the need for calories, protein, and micronutrients in adolescents (Icha Pamela, 2018). The same problem also occurs with teenage students in Islamic boarding schools. The food consumption pattern of students at Islamic boarding schools usually experiences quite significant changes compared to the pattern of food consumption when they are still at home (Pratiwi, 2013).

Students in Islamic boarding schools usually live in a dormitory or hut far from their parents and are required to live independently, one of which is in terms of food consumption. Students tend to choose fast food, and even though the fulfillment of food is obtained from the boarding school, it is likely that it is still low in fiber and far from the word ‘variety.’ Therefore, it is necessary to have education and understanding about healthy eating patterns and the impact that can be caused if excessive consumption of fast food is ready (Pratiwi, 2013). Various media are used as supports and tools for counseling methods, one of which is visual media that can convey messages in the form of visual communication symbols that need to be understood in the form of leaflets and audio-visuals that can provide real stimulation containing motion pictures and sound elements with a duration relatively short time shown in video form (Notoatmodjo, 2007).

One of the media that can be used effectively to provide information in health education is a leaflet. Leaflets have several advantages; they are more durable, can be carried anywhere easily, cover many people, are low-cost, and facilitate understanding (Suraya, 2011). Various media are used for the smooth running of extension activities as supports and aids for the learning approach, one of which is audio-visual media directed both at the senses of sight and sense of hearing, for example, video. Video is a digital media that shows the arrangement or sequence of pictures and gives illusions, images, fantasies, and moving pictures.

## Methods

This type of research is quantitative with a quasi-experimental approach (quasi-experimental) where the design form used is two group pre-test and post-test, namely knowing the effectiveness of increasing knowledge about the negative effects of fast food using visual media (leaflets) and audio-visual media (video) at the Islamic boarding school Modern Jeumala Amal Lueng Putu before and after counseling. The sample is part of the population selected or determined for research purposes taken in a certain way and also meets the criteria of a researcher who can represent the population. This study used total sampling so that the sample for this study was the entire population of students in 8 and 9 grades of Dayah Jeumala Amal.

## Results

### Knowledge

Before using leaflet media, it can be seen that the average knowledge of students before counseling using leaflet media is 48.84, and after counseling using leaflet media becomes 52.84. There is an increase in student knowledge before and after counseling using leaflet media with a difference of 4.

**Table 1.** Knowledge Level of Students Before and After Counseling Using Leaflet and Video

Variable	Leaflet				Video			
	Mean	Min	Max	SD	Mean	Min	Max	SD
Before	48.84	35	57	4.641	50.42	37	55	4.193
After	52.84	47	59	3.513	54.58	48	59	2.778

Meanwhile, in video media, it can be seen that the average knowledge of students before counseling using video media was 50.52, and after counseling using video media became 54.58. There was an increase in students' knowledge before and after counseling using video media with a difference of 4.06.

*The Effect of Counseling Using Leaflet*

The average difference between students' knowledge and counseling using Leaflet media is 48.84, with a standard deviation of 4.64. The results of this statistical test obtained a p-value of 0.006 ( $p < 0.05$ ), with a CI of 95%; thus,  $H_0$  was rejected and  $H_a$  was accepted. Therefore, it can be concluded that at a significance level of 95%, there is an influence on students' knowledge after being given counseling using Leaflet media about the negative effects of consuming fast food at Boarding School Dayah Jeumala Amal Lueng Putu, Pidie Jaya district.

**Table 2.** The Effect of Counseling Using Leaflet Towards Knowledge

Category	N	Mean ± SD	Difference Mean±SD	P
Before	31	48.84 ± 4.64	-4±1.13	0.006
After	31	52.84 ± 3.51		

*The Effect of Counseling Using Video*

The difference in the average knowledge of students with counseling using video media is 54.58, with a standard deviation of 2.77. The results of this statistical test obtained a p-value of 0.001 ( $p < 0.05$ ), with a CI of 95%. Therefore, it can be concluded that at a significance level of 95% there is an effect on students' knowledge after being given counseling with video media about the negative effects of consuming fast food.

**Table 3.** The Effect of Counseling Using Video Towards Knowledge

Category	N	Mean ± SD	Difference Mean ± SD	P
Before	31	50.42 ± 4.19	-4.16 ± 1.42	0.001
After	31	54.58 ± 2.77		

*The Effectiveness of Education Media*

The results of the independent t-test analysis conducted on the leaflet and video groups before and after being given the media showed differences. The leaflet media obtained a value of 48.84, and after being given, it became 52.83. Based on this, there was an increase of 3.99. In the group without video, a p-value (0.034)  $< 0.05$  was obtained with an average value before being given the media at 50.42, and after given the media at 54.58. Based on these results, there was only an increase of 4.16. So, it can be concluded that there appears to be a significant effect on the treatment group given video media when compared to the leaflet group. Counseling using video media is more effective when compared to using leaflet media because video media has clearer content than leaflets and is easier to understand.

**Table 4.** The Effectiveness of Leaflet and Video Media Towards Knowledge

Variable	Leaflet				Video			
	Mean	N	SD	<i>p</i>	Mean	n	SD	<i>P</i>
Before	48.84	31	4.64	0.16	50.42	31	4.19	0.034
After	52.83	31	3.51		54.58	31	2.77	

## Discussion

### *Knowledge*

The study showed that counseling without the use of leaflet media resulted in average pre-test and post-test values of 48.84 and 52.85, respectively. It means that there is an increase (4.01), with a p-value of 0.006, which means that there is a difference between the pre-test and post-test on counseling using leaflet media. Knowledge can be obtained in various ways, such as by attending education, training, counseling, seminars, or reading. Knowledge is closely related to education, and education is inseparable from the teaching and learning process. Nutrition education through counseling using media for school children is believed to increase knowledge effectively. A person's level of knowledge is also influenced by the place where the person studies, one of which is the student who attends Jeumala Amal with school A accreditation and gets many achievements, so it is certain that the students who want to enter the school have been well selected so as to give birth to high-quality alums.

Video media obtained average pre-test and post-test scores of 50.42 and 54.58, respectively. It indicates that there is an increase (4.16), with a p-value of 0.001, which means that there is a difference between the pre-test and post-test on counseling using video media. Health education is an activity carried out by spreading messages and instilling beliefs so that people are not only aware, know, and understand but are also willing and able to carry out recommendations related to health (Machfoedz & Suryani, 2007). One of the goals of nutrition counseling is to increase knowledge about food consumption according to the level of nutritional needs so that in the end a good nutritional status is achieved (Supariasa, 2012). One of the tools to support the success of nutrition counseling is the media. Media in health promotion is one of the efforts to support the success of the learning process so that it attracts more attention and the material presented will be more easily understood by participants. Through health promotion using lecture methods and media learning situations are more fun, creative, and not boring (Haryani, 2015). The media can provide benefits if used properly, including avoiding misunderstandings, being easier to capture, remembering longer, dancing or focusing attention, and can provide a strong incentive to do what is recommended (Wibowo, 2014). Video media is an intermediary whose material and absorption are through sight and hearing so as to build conditions that enable students to acquire knowledge and skills. Balanced nutrition material in the video is packaged in the form of moving image effects with an interesting storyline and sound so that it gives a more real picture (Kholid, 2014).

### *The Effect of Counseling Using Leaflet and Video*

The effectiveness of using leaflets and video media about negative effect of consuming fast food at Boarding School Dayah Jeumala Amal Lueng Putu. Based on the research results at Dayah Jeumala Amal Lueng Putu Boarding School, the level of knowledge about the negative effects of consuming fast food using leaflets and videos has increased, and it can be seen that there is an increase in scores before and after counseling. Counseling using leaflets and video media has been effective, with an average significant increase in student

knowledge at Boarding School Dayah Jeumala Amal Lueng Putu. After statistical tests were carried out using the independent t-test on knowledge using leaflet media, a mean value of 52.84 was obtained while using video media, a mean value of 54.58 was obtained from the total score obtained, which means that the group value on video media was higher compared to leaflet media but the scores in the leaflet media group were not too different and were still categorized as good. Thus, it can be concluded that video media was more effective than leaflet media in increasing student knowledge.

### Conclusion

Based on the research the average students' knowledge about the negative effects of consuming fast food before counseling using leaflet media was 48.84 and increased to 52.84 after counseling. At the same time, counseling without using video media obtained a knowledge value of 50.42 and increased to 54.58 after being given video media. Therefore, it can be concluded that video media is more effective than leaflet media.

### References

- Abdulloh Hamid. 2017. *Pendidikan Karakter Berbasis Pesantren*. Surabaya : IMTIYAZ.
- Abror Lutfi. 2017. *Pengaruh Efektivitas Pembelajaran Kewirausahaan Dan Literasi Sosial Media Untuk Berwirausaha Dengan Minat Berwirausaha Siswa SMK Di Kota Blitar* diakses dari <http://Mulok.Library.Um.Ac.Id/Index3.Php/83792.Html>
- Achmadi, A.D., 2015. *Pengaruh pendidikan gizi dengan media buku saku terhadap peningkatan pengetahuan dalam pemilihan jajanan anak SD Muhammadiyah 16 Surakarta*. Diakses dari <http://eprints.ums.ac.id/38164/3/02.%20Naskah%20Publikasi.pdf>.
- Ahmad, Kholid. 2014. *Promosi Kesehatan*. Jakarta: Raja Grafindo.
- Bonita, I. A., dan Fahmi, D. Y., 2017. *Konsumsi Fast Food dan Aktivitas Fisik Sebagai Faktor Resiko Kejadian Overweight Pada Remaja Stunting SMP*. Jurnal Nutrition College 6(1), pp. 52-60.
- Budiman & Riyanto A. 2013. *Kapita Selekta Kuisisioner Pengetahuan Dan Sikap Dalam Penelitian Kesehatan*. Jakarta: Salemba Medika pp 66-69.
- Cornelia, dkk., 2013. *Konseling Gizi*. Jakarta. Penebar Swadaya Grup
- Depkes, Poltekkes. 2010. *Kesehatan Remaja : Problem dan Solusinya*. Jakarta: Penerbit Salemba Medika.
- Fikawati, S., Syafiq, A., & Veratamala, A. (2017). *Gizi Anak dan Remaja*. Depok: PT. Raja Grafindo Persada.
- Fitrialaras, 2017. *Pendidikan Gizi Menggunakan Media Buku Saku Meningkatkan pengetahuan Dan Praktik Konsumsi Sayur Dan Buah Pada Siswa Sekolah Dasar*. Jurnal Kesehatan Vol 12 (2).
- Hamid. 2017. *Pendidikan karakter Berbasis Pesantren*. Surabaya: IMTIYAZ.
- Haryani, W. 2015. *Sikap Pelihara Diri Gigi dan Mulut sebagai Upaya Pencegahan Dini Terjadinya Karies Gigi Anak*. Buletin Warta Kampus. Vol. 10. No1. pp. 26-27.
- Kholid. 2014. *Promosi Kesehatan*. Jakarta: Raja Grafindo.
- Machfoedz, I., dan Suryani, E. 2007. *Pendidikan Kesehatan Bagian Dari Promosi Kesehatan*. Fitrayama: Yogyakarta.
- Mahdiah, Z dan Asih, E. K. 2004. *Peran Mahasiswa dalam Mengurangi Pola Konsumsi Fast Food Pada Remaja Kota*. Karya Tulis Ilmiah. Mahasiswa Bidang Ilmu Pengetahuan Sosial. IPB. Bogor.

- Mulyasari. 2007. *Hubungan Besar Uang Saku Dan Frekuensi Konsumsi WesternFast Food Dengan Status Gizi Siswa Studi Kasus Di Kelas X.13 SMA 3 Kota Semarang*. Diakses: 18 Maret 2015. eprints.undip.ac.id
- Notoatmodjo, S.2014. *Ilmu Perilaku Kesehatan*. Jakarta: Rineka Cipta.  
olahraga, faktor genetik dan durasi tidur dengan status gizi lebih pada
- Pamelia, Icha. 2018. "Perilaku konsumsi makanan cepat saji pada remaja dan dampaknya bagi kesehatan." *IKESMA* 14.2 (2018): 144-153.
- Pratiwi Viera Nu'riza, Nur Amin, 2017. *Penyuluhan dampak Negatif konsumsi fast food berlebihan Pada students Remaja pondok pesantren qomaruddin gresik*. Jurnal Kesehatan Volume 1 No. 2 December 2017
- Pratiwi, Wahyu. 2013. *Hubungan Pola Makan dengan Gastritis pada Remaja di Pondok Pesantren Daar El-Qolam Gintung, Jayanti, Tangerang*. Universitas Islam Negeri Syarif Hidayatullah. Jakarta (skripsi). Jember. Universitas Jember.
- Salah AJ. 2019. *Hubungan kebiasaan konsumsi makanan siap saji (fast food), status gizi dan kejadian hipertensi dengan fungsi kognitif pada remaja* (Tesis). Universitas Sebelas Maret;2019.
- Sinaga. 2016. Pengaruh pola konsumsi makanan cepat saji terhadap kadar kolesterol siswa kelas XI SMA negeri 8 dan SMA pangudi luhur. Universitas sanata darma. Yogyakarta.
- Supariasa, I.D.N. dkk. 2013. *Penilaian Status Gizi (Edisi Revisi)*. Jakarta: PenerbitBuku Kedokteran EGC
- Supariasa. 2012. *Pendidikan Dan Konsultasi Gizi*. Jakarta: EGC
- Supariasa., 2014. *Penilaian Status Gizi*. Jakarta: EGC
- Wandansari, desy natalia.2015. Hubungan antara konsumsi fast food, kebiasaan
- Waryana, 2016. *Efektifitas penyuluhan menggunakan media leaflet terhadap peningkatan pengetahuan anak smp tentang pedoman gizi seimbang*. Jurnal Kesehatan
- Waryana. 2016. *Promosi Kesehatan, Penyuluhan dan Pemberdayaan Masyarakat*.Yogyakarta. Nuha Medika.
- Wibowo. (2014). *Manajemen Kinerja*. Edisi Keempat. Jakarta: Rajawali Pers.Masyarakat Vol 2 (1).