VEGETABLE COOKING MODEL IN THE EFFORT TO INCREASE VEGETABLE CONSUMPTION FOR SCHOOL CHILDREN IN THE WORK AREA OF THE KURANJI COMMUNITY HEALTH CENTER IN 2020

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ABSTRACT

Basic Health Research data in 2013 showed that the population aged 10 years who consumed less fruit and vegetables in Indonesia was 93.5% and Riskesdas data in 2018 was 95.5%, while West Sumatra in 2013 was 97%, (Depkes.2013). Based on Riskesdas, West Sumatra is still above the Indonesian average. This study aims to determine the effectiveness of the vegetable cooking model in increasing vegetable consumption for school children. The research was conducted in the working area of the Kuranji Community Health Centre. The population in this study were junior high school students in the Korong Gadang village, Kuranji district. Samples were taken purposively as many as 35 people. To find out the amount of consumption of the vegetable model consumed by the child, it was done by weighing using a digital food scale with an accuracy of 0.1 grams and a questionnaire to determine the identity of the sample and the sample's response to the vegetable cooking model. The provision of food is carried out in the time span for interlude, namely at 10.00-11.00 or at 16.00-17.00. Each child is only given one type of cuisine in 1 day. For data collection, it is assisted by graduates of the Department, who previously conducted a perception equation. The data was processed using a computer and analyzed descriptively. Most of the samples stated that the portion of the vegetable dish model given was in the medium category, namely the highest vegetable bakwan as much as 88.6%, skotel vegeta 80%, and others above 50% and most samples liked the vegetable model given, which was the highest in vegetable bakwan (74 ,3%) while the others were above 50% and no sample stated that they did not like the given vegetable model. The number of vegetables contained in the vegetable model available for one serving ranges from 35gr – 50gr. So that by presenting just one type of vegetable model in one day, it can increase vegetable consumption in the sample by around 35gr –50 gr. It is necessary to disseminate information to the community so that the community can produce models of vegetable dishes that are already available and cooperate with the school to provide vegetable cooking models so that they are always available in the school canteen.

Keywords; Vegetable Cooking Model, For School Children

BACKGROUND

In Indonesia, vegetables and fruit are foodstuffs that are very easy to obtain, even each region has vegetables and fruit as a characteristic for that area. Fruits and vegetables with various types and colors can complement each other's nutritional needs needed by the body, besides that foods that contain lots of fiber are found in vegetables and fruit. (Abas B Jahari 2001). Indonesia is a country that is rich in a variety of fruits and vegetables, but it is unfortunate that the consumption of fruit and vegetables in Indonesia is still very low (Ramayulis 2015). Data from the results of the 2013 Basic Health Research shows that the population aged 10 years who consume less fruit and vegetables in Indonesia is 93.5 while West Sumatra is 97%, with the fourth rank in Indonesia, previously occupied by the Provinces of South Kalimantan, Riau and West Sulawesi Provinces. . (Ministry of Health RI 2013) and Riskesdas in 2018 in Indonesia there was an increase to 95.5% and the province of West Sumatra was above the Indonesian average.

Consumption of vegetables and fruit in junior high school (SMP) children is influenced by two factors, namely external factors and internal factors. External factors are opportunities and obstacles that affect the consumption of vegetables and fruits that come from outside themselves while internal factors come from within. (Ramayulis 2015). In today's youth, external factors have a very large influence, this can be seen from the way school children choose food/snacks, where teenagers really like contemporary food which is a model of foreign food or from other countries. For that, one way that needs to be done in a long time and sustainable but whose sustainability can be guaranteed is by modifyingfood that is adapted to the habits and lifestyles of school children who spend most of their time outside and generally eat snacks at school.

Formulation of the problem

Can the vegetable cooking model made increase vegetable consumption in school children (Junior High School Teens)

General purpose

This study aims to determine the effectiveness of the vegetable cooking model in increasing vegetable consumption in school children

Benefit

The results of this study will be input for planning and improving nutrition programs, especially those related to the cultivation of vegetable consumption for school children.

RESEARCH METHODS

Research Types and Design

This research was conducted in stages. Phase I, which was carried out in 2019, is a descriptive study to describe the level of knowledge and actions of mothers, as well as the driving and inhibiting factors felt by mothers in providing vegetables for school children, describing the type, frequency and amount of vegetable consumption in school children, factors driving and inhibiting factors in vegetable consumption, as well as vegetable models favored by school children. Phase II research is to determine the acceptance of school children to the given vegetable cooking model.

Research Time and Location

This phase II research was conducted in 2020, namely to conduct a trial of the model obtained and measure the level of vegetable consumption in school children from the given model. This research was conducted at SMPN 18 Padang City, which is the location of the first phase of the research, but due to the COVID-19 pandemic conditions and the absence of activities at school, the research was conducted in the Korong Gadang sub-district, Kuranji sub-district, which is located close to SMPN 18 Padang.

Population and Sample

The population in this study were junior high school students in the Korong Gadang village, Kuranji district. Samples were taken purposively as many as 35 people with the consideration that it was difficult to get a good sample.

Research Instruments

To determine the amount of vegetables consumed, the instruments used were digital food scales with an accuracy of 0.1 grams and a questionnaire to determine the identity of the

sample and a form regarding sample responses to the vegetable cooking model.

Research Implementation

The application of the model is done by providing a vegetable dish that has been modified in the form of a snack consisting of 6 kinds of modified vegetable dishes in the formof: 1) Carrot sandwich, 2). Carrot Pempek, 3). Bakwan vegetables, 4). Vegeta skotel, 5). Dim Sum, 6).Carrot Spinach. The provision of this food is carried out in stages, namely one type of vegetable food for one time with large portions adjusted to the portion of snacks or snacks. Feeding is carriedout at intervals for interlude. Each child is only given one type of food in 1 day. Children's receptivity is assessed for each type of cuisine and asks the child to get the taste of the food using the form provided.

Types and Techniques of Data Collection

Data on the level of vegetable consumption was carried out by weighing vegetables given before and after eating. The data collection was assisted by graduates of the Department of Nutrition, who previously conducted an equalization of perceptions and data on the taste assessment of vegetable dishes were collected using a questionnaire.

Data processing

The data is processed using a computer to find out what percentage of vegetable dishes are consumed. Students' assessment of taste is seen for each type of cuisine by looking at the average sample assessment of the taste aspect which consists of large portions and the taste of vegetable dishes.

Permission and Research Ethics

The research permit was carried out through the Padang City Research and Development Agency and ethical clearance through the Ethics Commission of the Faculty of Medicine, UNAND Padang.

RESULTS AND DISCUSSION

Research result

Sample Assessment of the Large Portion of Vegetable Models Given

The sample assessment of the large portion of the given vegetable model can be seenin the following table.

Tabel 1. Frequency Distribution of Sample Opinion About Model Portion Size Given Vegetables

Vegetable Model	Portion							
	Small		Medium		Slighty Large		Total	
		%	n	%	N	%	n	%
Carrot Sandwich	6	17,1	20	57,1	9	25,7	35	100
Dimsum	6	17,1	24	68,6	5	14,3	35	100
Pempek Carrot	9	25,7	22	62,9	4	11,4	35	100
VegetableBakwan	0	0	31	88,6	4	11,4	35	100
Skotel Vegeta	2	5,7	28	80	5	14,3	35	100
Spinach Burger	4	11,4	27	77,1	4	11,4	35	100
Mean	**4**	**11,4**	**25**	**70,5**	**6**	**17,1**	**35**	**100**

Table 1 shows that most of the samples stated that the portion of the vegetable model given was in the medium category, which was the highest for carrot pempek as much as 88.6%, vegeta skotel 80%, and others above 50%. The sample that said the portion size was rather large was at dinsum, which was 25.7% and for the other models it was around 11.4%-14.3%. The average sample stating the portion was small was 11.4 and none said the portion was too large.

Sample Responses About The Taste Of The Given Vegetable Model

The results of the sample assessment of the taste of the given vegetable model can beseen in the following table.

Table 2. Frequency Distribution Of Sample Opinions About The Taste Of The Vegetable Model Which Is Given

Vegetable model	Level of Pleasure							
	Very Like		Like		Less Like		Total	
	n	%	n	%	N	%	n	%
Carrot Sandwich	8	22,9	20	57,1	7	20	35	100
Dimsum	11	31,4	21	60	3	8,6	35	100
Pempek	7	20	22	62,9	6	17,2	35	100
Carrot Vegetable	5	14,3	26	74,3	4	11,4	35	100
Skotel Vegeta	8	22,9	23	65,7	4	11,4	35	100
Spinach Burger	6	17,1	22	62,9	7	20	35	100
Mean	**8**	**22,9**	**22**	**62,9**	**5**	**14,3**	**35**	**100**

The results showed that most of the samples liked the given vegetable model, which was the highest in the vegetable bakwan (74.3%) while the others were above 50%. The sample who stated that they did not like the vegetable model that was given the highest on the carrot sandwich and spinach burger was 20% and the sample that stated that they really liked it the highest was the dimsum, which was 31.4%.

Vegetable Ingredients for One Vegetable Model

The vegetable model created can be used as a portioned meal or a snack. The numberof vegetables contained for one serving can be seen in the following table

Tabel 3. Frequency Distribution of Number of Vegetables for One Serving According toVegetable Cuisine Model

Vegetable Model	Portion Given	Number of Vegetabled (gram)
Carrot Sandwich	1 bh	42
Dimsum	4 bh	35
Pempek	2 bh	50
Vegetable Bakwan	2 bh	50
Skotel Vegeta	2 bh	35
Spinach Burger	1 bh	50

The number of vegetables contained in the modified vegetable model for one servingranges from 35 gr – 50 gr. The highest amount of vegetables was found in pempek, vegetable sandwich, and spinach burger, while the least was in skotel vegeta dimsum, which was 35gr.

Consumption Rate of Sample Vegetables from Given Vegetable Model

The results showed that in general the sample could finish all the given vegetable cooking models. Of the 6 models given, only 7 samples were left, namely 4 (11.4%) for the carrot sandwich

and 3 (8.6%) for the spinach burger with an average remaining 18.2gr (16.5%)for a carrot sandwich and 15.6 g (16.4%) for a spinach burger. The reasons for not spending it are because they are full, the portion is rather large, and they don't like it. Based on the acceptability of the sample for the given vegetable model, it can be seen that in general the sample can finish any given vegetable cooking model. Giving just one type of vegetable model in one day can increase vegetable consumption in the sample by around 35gr –50 gr.

Discussion

The vegetable model given to children in this study was not a complement to the main food menu but in the form of snacks or snacks. From the results of the study, it was found that the vegetable model given to junior high school children was generally acceptable. Of the 6 models given, only 11.4% of children could not finish the carrot sandwich and 8.6% for the spinach burger with an average remaining 16.5% for the carrot sandwich 16.4% for the spinach burger.

Giving vegetables in the form of snacks or snacks can increase the level of children's vegetable consumption by as much as 35 grams-50 grams per day and can also increase the availability of vegetables for school children outside the home because based on phase I research the reason children do not consume vegetables is due to the unavailability of vegetables. and the variety of vegetables available.

The existence of this vegetable cooking model will be able to provide a vegetable menu for children not only at the family level but can also be provided outside the home such as at school. This vegetable model made will be able to be an alternative to the snacks provided by the school.Judging from the activities of school children, that most of the time children areoutside the home and in general they meet their consumption needs with street food

CONCLUSIONS AND RECOMONNDATIONS

The taste of the vegetable cooking model provided in the form of snacks / snacks canbe accepted by school children both in terms of large portions and in terms of taste, with the vegetable content contained in the model ranging from 35-50 grams for 1 serving. In general, children can spend on vegetable cooking models. There needs to be socialization to the community through housewives, schools, and street food sellers

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