

Knowledge, Awareness and Practice about Food and Nutrition of Adolescence in Muang District, Prachinburi Province

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Abstract

The research aimed to: 1. study and compare food and nutrition knowledge of adolescence by looking at gender and level of education. 2. study and compare the awareness of food and nutrition by comparing gender and level of education. 3. study and compare the practice of food and nutrition by comparing gender and level of education. 4. study the relationship between knowledge, awareness, and practice of food and nutrition of the adolescence in Muang District, Prachinburi Province. Tests and questionnaires were used to gather the data from 346 samples. The Stratified Random Sampling was used. The data were analyzed by using percentile, mean, standard deviation, t-test, one way analysis of variance and Pearson's Product Moment correlation at 0.01 - 0.05 significant level. The study found that

1. 71.4% of the samples were female and 41.0% of the samples were high school graduates.

2. The sampling adolescence had good knowledge of food and nutrition. Different gender had significantly different level of food and nutrition knowledge at 0.01 while different level of study had no different level of food and nutrition knowledge.

3. The sampling adolescence had food and nutrition awareness at high level. Different gender had significantly different level of food and nutrition awareness at 0.01 while different level of study had no different level of food and nutrition awareness.

4. The sample group had good food and nutrition practice at moderate level, with no difference between gender and level of study.

5. There was a positive relationship between food and nutrition knowledge, awareness, and practice of the adolescence at 0.05. The relationship between knowledge and awareness was moderate and the relationship between knowledge and practice was low.

Key words: Knowledge, Awareness, Practice, Food and Nutrition, Adolescence, level of education, Prachinburi

Introduction

Currently people tend to live in town and it causes changing in their life. Urgent life causes their value change. And consumerism causes to over nutrition. These will lead to various diseases as diabetes, and obesity hypertension. Coronary Artery Disease and cancer, are the cause of illness and death of people in primordial. (Ministry of Health, 2003) and Plan of National Economic and Social Development No. 10 year 2007 through 2011 (Office of National Economic and Social Development, 2006) contains information that people get sick of the overall reduction from 1,809.6 per thousand population in the year 2002 is 1,798.1 per thousand population in the year 2004 But illness is a preventable disease trends continue to increase, during the year 2004 there were the highest rate of patients with high blood pressure 18.4% , diabetes 14.2%, heart disease 13.4%, and cancer 4 % respectively. It causes many people are not aware of health care. Their behaviors in consuming are unhealthy. With The Tenth National Economic and Social Development Plan (A.D. 2007 – 2011) (Office of National Economic and Social Development, 2006) has set objectives for social development and is one of the accessories. Create a balance between health services promoting prevention treatment and recovery performance and create security in life and property. The main goal is the average age of people expect a higher than 80 years together with the lower rates of illness increase with disease prevention in the top 5 cardiovascular disease is high blood pressure, diabetes, vascular disease and brain cancer led to the increase image production and reduce labor expenses in the long term health of individuals.

The happiness of life depends on the practice of food and nutrition. The words that "You are what you eat ", which is to demonstrate the relationship of food to the nutritional conditions and health of each people. Because of the human body is perfect healthy or irregularity all that is associated with eating food (Siripan, in 2004). So health care to the body healthy. One of the important things is eating. Age each person must be needs vary food by age group and food needs to change the physical condition especially among school age children and an adolescent is the age at which the body is growing. Need to eat all those 5 each and those for various kinds and food for all 3 portions (Ministry of Health, 2003).

The growth of teenagers is rapidly developing. They prefer independence and decide by themselves. And the current advertising influence to the role of teenagers. These things all affect to eating behavior such as consumerism. Fast food and instant food is very popular among teenagers, it shows teenagers will have the unhealthiness. Moreover, they usually skip breakfast because some wake up late, and some are on diet. If they often do this thing, it will cause of dietary deficiency.

In addition, teenagers do not eat on time and they misbehave on nutrition care. (Op Chay, 1999) Therefore, teenagers should be well-advised on good nutritional consumption. And they should be promoted to play sport or exercise regularly and enough rest. If teenagers have good nutrition, it will be helpful their physical development and protects them from chronic disease (Department of Health, 2000).

Prachinburi Province Health Office (2007) has summarized the results of monitoring growing of students in Muang district, Prachinburi province that students in kindergarten class in the number of 418 weight less than 6.7% age criteria skinniness start bloated 7.66% 18.8% primary education level in the number of weight less than 1,833 people age criteria meager 5.73% 6.76% 21.71% obese begin in Number of high school weighing less than 6,235 people age criteria meager 1.91% 3.70% 8.10% obese begin to see that students in the district town, Prachinburi Province. Start conditions are conditions higher than obese and lean conditions, age, and weight less than standard. All levels in obese and start conditions are likely higher level of kindergarten (18.18%) to primary education (21.71%) starting conditions are likely reduced in obese high school (8.10%), this condition may result from Start children into teenagers. Make up the body quickly, or may result from the child's knowledge and awareness of their food and nutrition practices. For this reason the research is interested in learning the knowledge and awareness of their food and nutrition practices of adolescents in Muang district, Prachinburi province. Approach is to encourage youths to happiness is good health.

Research method

The research of knowledge, awareness and practice about food and nutrition of adolescence in Muang District, Prachinburi province. The researcher proceed in this way:

Population and Sample

Population

Populations used in this research are the students who belong to boundary of educational pursuits, Prachinburi province open for the high school grade 10 and above for 4 locations. It contain all of 3,188 students according to table no.1

Sample Group

Population used in this research are the students who belong to boundary of educational pursuits, Prachinburi province open for the high school grade 10 and above for 346 students from the Stratified Random Sampling as the following process :

Step 1: Fix the size of sample group and use the table of Krejcie & Morgan, 1970. Size of the Sample Group of 346 peoples.

Step 2: Divide the students of each school by calculating the proportion of the sample group in each school. Compare the proportion according to table no.1

Step 3: The Simple random (Simple Random Sampling) by drawing the sample number.

Table 1 show amount of the populations and sample of groups.

Name of school	Population	Number of sample group
Prajin Radsadon Umrong School	1,797	195
Prajin Kanlayanee School	1,269	138
Thairatviittaya 7 School	97	10
Adual Sadsanakij sukxa Sahool	25	3
Total	3,188	346

Tools used in research

Research tools used in this experiment and a questionnaire that including 4 parts:

Part 1: General information of respondents. Characteristics questionnaire as a check list and open - ended questions.

Part 2: Knowledge of food and nutrition test. Quiz answers are selected option 4 choose.

Part 3: Food and nutrition awareness test. Survey estimates a rating Scale is a 5 level especially agree, agree, not sure, disagree, and especially disagree.

Part 4: The questionnaires of food and nutrition practice are rating scales with 4 levels:

Regularly means the practice 5 - 7 days a week.

Quite often means the 3 - 4 days per week.

Rarely means the practice 1 - 2 days per week.

Never means no action.

Finding quality tools

Knowledge of nutrition and food quality test analysis tools by:

Reliability knowledge of food and nutrition test and the rating system is answer the wrong answer to points 1 to 0 score confidence scale by using a formula $20(KR - 20)$, and the manual de Richardson (Kuder - Richardson) have values, beliefs, confidence test knowledge of food and nutrition equals 0.85.

Difficulty analysis evaluation questionnaire by the difficulty of easily determine the ratio between the numbers of respondents in each of the test is to test how people respond. Easy difficulty has a value between 0.13 to 0.95.

Discrimination Diagnostic evaluation of classification authority by the coefficient for Conbach's alpha between the scores of the entire score. Distinguish between the power values from 0.36 to 0.66 since the food and nutrition awareness. Questionnaire and conduct food and nutrition. Reliability for the coefficient of Conbach's alpha questionnaire awareness of nutrition and food costs have confidence 0.84 Survey and conduct nutrition and food costs have confidence 0.66.

Data analysis

The research provides a test Questionnaires and received back complete check of the answers and then proceeds with data analysis computer. Steps are as follows:

- 1) General data of respondents explained by the frequency and percentage values.
- 2) Analyze the level of knowledge. Awareness and practices of food and nutrition. The average value and standard deviation.
- 3) Comparative analysis of average differences in knowledge and awareness of food and nutrition practices. As independent variables t - test for gender and One Way Analysis of Variance for variable levels. And a pair test by Scheffe 'Mothod.
- 4) Find relation between awareness and awareness of food and nutrition practices by the Pearson's Product Moment Correlation.

Conclusion

This research studied the knowledge and awareness of their food and nutrition practices. Teenagers in the city's districts, Prachinburi Province and the results of this research as follows:

General information of sample

Most of teenagers sample number of 247 people are female 71.4% secondary level education in years the number of 142 people aged between 41.0% from 16 to 17 years a total of 185 people is 53.4 per cent cumulative average learning effect between 2:00 - 2:50. 93% 26.9 Number of people get to school each day from 51 to 60 baht a total of 35.0% of 121 people, most teenagers lived with

parents 82.7% number of people 286 adolescents received the knowledge of food and nutrition from their families, school and medias. Level similar number is 243 people, 230 people and 216 people respectively 27.1%, 25.6 and 24.1 respectively.

Food and nutrition knowledge of adolescent in the district town, Prachinburi Province

Teenagers in Muang district, Prachinburi Province had knowledge of food and nutrition in the overall positive both female and male, with average 75.83%, 77.43 and 71.77 levels, respectively. Teenagers in Muang districts, Prachinburi Province in secondary school at levels 4, 5 and 6 had knowledge of food and nutrition in the average scores of 74.43%, 74.37%, and 77.83%, respectively.

Food and nutrition knowledge of adolescent in the district town, Prachinburi Province

Teenagers in Muang district, Prachinburi province was aware of food and nutrition in a large Overall both female and male. The average of awareness in female is 4.27 and 4.15 in male. All levels had the awareness in high level. The secondary-level 4-year average awareness level of 4.27 to 5 year high school level is 4.14 and the average awareness level of 6-year secondary education awareness 4.26 average.

Conduct food and nutrition of adolescents in the district town, Prachinburi Province

Teenagers in the city districts, Prachinburi province to conduct a food and nutrition in the overall average 2.75 was equal to the average male in the conduct of food and nutrition, the average female was equal to 2.78 and the conduct of food and nutrition as the average level of 2.74. Adolescents with conduct food and nutrition in the overall average in both year levels, secondary 4, 5 and 6 with a 4-year secondary education levels 2.77 was equal to the average level of 5-year secondary education is equal to 2.76 and the average level of 6-year secondary education was equal to the average 2.72.

Testing hypotheses

Hypothesis test results found that

1) Different gender of teenagers in the city districts, Prachinburi province had difference of knowledge in food and nutrition with statistical significance at 0.01.

2.) Different level of teenagers in the city districts, Prachinburi province had no difference of knowledge in food and nutrition with statistical significance at 0.01. And different gender of teenagers had difference of awareness in food and nutrition with statistical significance at 0.01.

3) Different levels of teenagers in the city districts, Prachinburi province had no difference of awareness in food and nutrition. And different gender of teenagers had no difference of practice in food and nutrition.

4) Different levels of teenagers in the city districts, Prachinburi province had no difference of practice in food and nutrition. And there was positive correlation in awareness and practice of food and nutrition with statistical significance at 0.05. Moreover, there was correlation between knowledge and awareness at the moderate level ($r = 0.34$) and knowledge, awareness, and practice of teenagers had correlation at the low level ($r = 0.21$ and $r = 0.13$, respectively).

Discussing

From the study of knowledge and awareness of their food and nutrition practices. Teenagers in the city's districts, Prachinburi Province. The discussion of the research:

The study of food and nutrition knowledge of adolescents in the district town, Prachinburi Province

The study found that teenagers in the city districts, Prachinburi province with knowledge of food and nutrition levels. The average score was 75.83% because the teens may be interested in that age range is curious things. Moreover, recent knowledge of food and nutrition from a variety from families with teenagers in schools and media had the most knowledge about the health benefits of food. Eating foods with excessive fat requirements would cause obesity. Eating fruits and vegetables were vitamin and mineral fibers. To help purge the skin and maintenance of which would be seen that the basic knowledge that teens know already. But teenagers have found that knowledge levels were low on food sources of iron. And most teenagers did not know the 6 types of nutrients include protein, fat carbohydrates vitamins minerals and water that the water is not Teen nutrients so that the knowledge of food and nutrition knowledge and repeated. Teens will have to take the correct knowledge to perform in food consumption accurately.

Comparison of knowledge between male and female adolescents found that female had more food knowledge than males with statistical significance at the 0.01. Because female adolescent were interested in themselves, fond of dressing up and careful diet. Thus resulting in further education scale of food knowledge and nutrition than in males. Consistent with studies of the Chayanit (2000) studied on consumer behavior, health food, high school education of students. Nawamintharachinuthit Satriwitaya 2 Elementary Education Department Bangkok found that most students had good knowledge in class and students with different sexual knowledge and attitude about food, a different statistical significance at 0.05. The comparison of food and nutrition knowledge between levels found

that adolescent in secondary level at 4 years, 5 and 6 with knowledge of nutrition and food did not vary. Because adolescent in all levels of knowledge of food received and nutrition from the nearby school and may receive more knowledge from the self-study or supported from family.

Awareness of Food and nutrition knowledge of adolescents in the district town. Prachinburi Province

The study found that teenagers in the city districts, Prachinburi province were aware of food and nutrition in the overall level. Because adolescent had knowledge of food and nutrition in the overall level. Thus allowing more teenagers were aware. Adolescent were aware of the levels in most drinking water was clean, healthy drinking more sparkling water, drinking and driving causes an accident. Teenagers should gain 5 groups of nutrition, each group to eat vary group that adolescents may be more aware because of the widely promoted by both government and private sector such as the campaign does not drive drunk. Project and Thai children not eat a sweet. Part of the teenagers had little awareness. The level of awareness in many average and is eating dry seeds, beans, eggs or various kinds of food valued close to the expensive meat, eat fritter make pimply teens and frozen foods no food value. That adolescent are less aware of this. May be because adolescents consume media pretentious than real. Mouth and eating indulgence regardless of results. Comparison of food and nutrition knowledge of adolescents in the district town, Prachinburi Province between females and males found that the differences between a statistical significance at 0.01 by the female adolescent were aware of food and nutrition than male adolescents. Because female adolescent were interested on food and nutrition than the male. The comparison of food and nutrition knowledge between levels found that adolescent in secondary level at 4 years, 5 and 6 were aware of nutrition and food did not vary because adolescents in all levels of knowledge in a similar level. And adolescent in all levels had almost the same comprehension in nutrition and food.

The practice of food And nutrition of adolescent in the district town, Prachinburi Province

The study found that teens from the district town, Prachinburi Province conduct a food and nutrition in the overall average. From comparisons between female and male, and a comparison between the 4-year secondary level, 5 and 6 found that the conduct of nutrition and food did not vary. The food and low in nutrition is eating a very sweet drink, eating sweets crunchy crispy eating fried food and lack of exercise. The practice of food Nutrition and this may affect nutritional status of adolescents. So should encourage adolescents to comply with food Nutrition and correctly.

Relationship between knowledge awareness and conduct food and nutrition of adolescents in the district town. Prachinburi Province

The results found that knowledge and awareness of food and nutrition are interrelated in a moderate ($r = 0.34$) because adolescent had the knowledge level. Resulting in as much knowledge. This is consistent with Good (Good, 1973) recognizes the practice occurs when a person has been fueled by stimulation or touch the stimulus Cause of the cognitive stimulation and the understanding of stimulation as a thought. To learn the knowledge and awareness is realized when it will happen.

By studying the correlation between knowledge and practice and awareness found that relationship is found in low because most teenagers food consumption taking into account taste. And comfort is primary. Also present in the food business with a variety of how to increase the incentive to customers by advertising through various media which will affect food consumption behavior of adolescents. For this reason, it was the relationship between knowledge and practice and awareness. Correlate with lower levels consistent with studies of the glory of Sirinya (2000) studied of knowledge attitude and practices regarding food consumption of secondary school students. Schools under the Department of General Education Bangkok found in practice with the knowledge about food consumption. Correlate with relatively low levels and consistent with the study of Wanrude (2001) who studied of knowledge attitude and practices regarding food consumption of secondary school students in school opportunity. Bangkok found under the bar and know about the consumption of food students are positively related. Correlate with relatively low levels. And consistent with studies of help (2002) who studied on knowledge attitudes and behavior, food consumption at the end of high school students. Schools under the Department of General Education Bangkok found in practice to know the behavior, food consumption, Attitudes and behavior are related to the positive is statistically significant at 0.01 level, but not consistent with the study of the Chayanit (2000) who studied of health behaviors associated with consumption of food students high school education. Nawamintharachinuthit Satriwitaya 2 Elementary Education Department Bangkok found that the relationship between knowledge about the consumption of food students. No relationship of positive and inconsistent with Chidchanok (2005) study. Food consumption behavior of students in professional schools of Panichiyakarn Sukhothai found knowledge about food consumption did not correlate with food consumption behavior.

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