The Study of Nutrition Knowledge, Consumption Behavior, and Nutritional Status of Kluaynamthai Bangkok Personnel

Supaluck Thongnun and Amornrat Charoenchai

Faculty of Home Economics Technology, Rajamangala University of Technology Phra Nakhon

Abstract

This research aimed to study the qualification of Kluaynamthai Hospital's (KLH) personnel in three aspects; nutrition knowledge, consuming behavior, and nutritional status. The research also studied on the relationship of the three aspects. The Stratified Random Sample method was used. Questionnaires and the 2008 annual check up information were used to gather the data from 236 samples. The data were analyzed by using frequency, percentile, mean, and standard deviation. The analysis of test score was done by a statistical method (Chi-square) with a 0.01-0.05 significant level. The study revealed that 65.68 % of Kluaynamthai Hospital's personnel had excellent nutrition knowledge and 26.69 %, 6.78%, 0.42% and 0.42% had nutrition knowledge at good, average, meet criteria and under criteria, respectively. The average of 2.91 of the group had good consuming behavior, and the frequency of good consuming behavior at 2.69 or 91.95 % of the group's consuming behavior was less affected by mass media. 49.58% of the group had normal nutrition status while 35.59% and 14.58 % had over nutrition and below nutritional status respectively. The study of the relationship between the nutrition knowledge and the consuming behavior revealed that there was the significant relationship between the two variables at significant level of 0.05.

Key words : Nutrition Status, Consumption, Behavior Nutritional status, Pesonnel

Introduction

Because of an economic, political, cultural, social had been changing, technology, and data and information, the people in urban society today must take their efforts to adapt and change their ways and life style for better situation. Each family does not much time and to concentrate their health, including bad behavior of consumption such as; eaten junk foods, lack of 5 nutrient foods balance consumption, consume over or less than health needs, and bad habit to eat a meal . They cause an illness such as gastric disease, malnutrition disease, obesity disease, diabetes, hypertension, etc.

 Nutritional knowledge and food consumption of personnel is very important because impacts on food–related behavior and human consumption conditions. Specially, an over- consumption problem and chronic diseases are the crucial issues of mental illness and early-dead. The nutritional problem is occurred because people lack of valid information which deliver to inappropriate behavior of consumers.

People in working age, should focus on food consumption together with an exercise in regularly. It's impact good healthy without sickness and disease and work effectively as well. Working age people is a group that tries to build their families. They should focus on food consumption in the right figure proportions and avoid to impact on overweight, obesity and malnutrition.

Good nutrition makes the human minds stronger, emotional platform maturity, fresh & bright, vigor, enthusiastic and defend against discourage. Specially, they are able to adapt themselves to society and/or the environment easily. A rapid growth of their EQ is quickly than the person who takes the poor nutrition and it's impact with their work effectively

Hospitals are institutions that provide patient care under the plan of medical care direction. In the hospital will include personnel with specific knowledge in many areas. To provide services to patients correctly. The staff in hospital should be a good health Knowledge of nutrition & nutritional conditions. With the reason, these people are became the important source to transfer knowledge to those who have been treated directly. Result in a treated healthy.

The research personnel of a private hospital. They are interested to make a research the Kluay Nam Thai Bangkok Hospital. A total of 600 employees who work regularly in the working age between 22-60 years old, divided into 4 working groups area of Department of medicine, Nursing of medical support, Department personnel offices, Location of care and safety. In overall of health after provided annually physical examination of employees year 2551, the statistic have shown that the good nutrition, health status 51.25%, 23.75% fat in the blood, high nutritional condition than in the blood

sugar condition 13.75% , 11.25% higher in respectively.

A research who is an employee of Kluay Nam Thai Hospital. He expected to all employee have a good health and have a knowledge of food consumption with appropriately. He pay attention to study and educate the nutrition foods knowledge, including personal foods consumption behavior and define the guideline for promote good nutritional conditions and prevention for their good health.

Objectives of this research are :

(1) To study the knowledge of nutrition of people Kluaynamthai Hospital .

(2) To study the behavior of food consumption Kluaynamthai Hospital .

(3) To study the state of nutrition of bookmarks similar Kluaynamthai Hospital.

(4) To study the relationship between knowledge of nutrition. Food consumption behavior and nutritional conditions of hospital personnel of Kluaynamthai Hospital.

Research Method

2.1 Tools Used

Questionnaire is a tool that provided for researching about nutrition in food consumption behavior, which affects the nutritional status of hospital personnel. It's sponsored by the research studies textbooks and related research. The researchers divide the questionnaire into two (2) areas.

Part 1 - Survey data are as gender, age, religion, status, basic education all of the family income per month. Characteristics questionnaire as a check list (Check list).

Part 2 -There are 30 questions in the questionnaire asking about nutrition knowledge. They are divided into two sections.

Section   1: knowledge about buying/ 15

Section   2: knowledge about food consumption and nutrition/ 15 questions

Part 3 -Survey of consumer behavior/a total of 35 food questions are divided into 3 sections

Section: 1 consumer habits questionnaire/ 12 questions

Section; 2 questionnaire about food consumption frequency/ 13 questions

Characteristics of questionnaire at parts 1 and 2 have a value rating scale (Rating scales) is in 4 level of frequency practices, Often ,Do rarely and Never do. Parts 3, the questionnaire is

asking about media influences on food consumption behavior. Ten questions are yes/no questions.

2.1.1 Tools Creation

1) Document research and education related to nutritional conditions. Behavior, food consumption and factors related to personnel in private hospitals.

2) Learn how to create guidelines and questionnaire from the book and various documents.

3) Take the data to establish a conceptual framework covered content research.

4) To create a query in nutrition knowledge and food consumption behaviors. The covers meet the objectives.

5) To propose the idea questionnaire for being reviewed and approved by an advisory board.

6) The questionnaire is reviewed by the Advisory Board. The accuracy of content is approved by three experts (Content Validity) (Siri Virgo, 2549).

2.1.2 The Confidence Scale.

A revised questionnaire is completed by personnel of Kluaynamthai Hospital. Branch of Kluaynamthai Hospital have 2 branches and Kluaynamthai clinics have 11 clinics. Manner similar to the sample 30 peoples to analyze the results obtained find Confidence of The questionnaire by Alpha Coefficient of Conbach.

2.2 Approach

This research is a survey research study. (Survey research) This is intended to study the knowledge of nutrition food consumption behavior and nutritional conditions personnel of Kluaynamthai Hospital.

Research conducted by, respectively:

1.1 Population

1.2 Representative sample

Data collection

Data analysis

2.2.2 Population and Sampling

Population

Population used in this study is 600 personnel of Kluaynamthai Hospital.

Sample

Population used in this study is hospital personnel Kluaynamthai Hospital in working age between 22-60 years. They are splited into 4 working groups as Department of Medicine and Nursing, Medical Support, Department Personnel Offices, and Place of care and safety. Amount 236 people from Stratified Random sample.

1. Determine the size of the sample is representative of the population. Use the table of Krejcie and Morgan (politely, 2550: Referral from Krejcie and Morgan.1997).

2. Share Kluaynamthai Hospital by employees of the hospital operations and calculate the number of samples in each group ,The proportion of the population size in each ratio uses the following formula (a Chidchanok, 2548).

Number of samples in each group = Sample size x Population in all parties   (1)

Total population

Calculation the Sample

1) Department of Medicine and Nursing employs a total of 280 people which present the number of sample 2.110 people.

2) Medical Support employs a total of 156 people which represent a total of samples 4.61 people.

3) Department Personnel Offices employs a total of 122 people which represent a total of samples 4.48 people.

4) Place of Care and Safety employs a total of 42 people which represent a total of samples 9.17 peoples.

3. To select people from each sample by simple random sample by the lot number of the sample, as shown Table 1

Table 1 Number of people and a population sample of work by the standard of Kluaynamthai Hospital

Group	Population (people)	Sample
Department of Medicine and Nursing	280	110
medical support	156	61
Department personnel offices	122	48
Place of care and safety	42	17
Total	600	236

2.3 Data collection

1. Do the research approval letter from Chairman Kluaynamthai Hospital.

2. Coordinate with HR staff. Ask them to distribute the list of test samples and random details and explain how to understand people with data collection.

3. The research is surveyed by observing people's behavior while in the hospital itself to collect the data of the research.

4. Verify and complete data to analyze in the next step.

2.4 Data Analysis

In this study, the study has set the process data as

1. Data collected from the respondents. Spatial analysis uses descriptive statistics. Statistics to evaluate include: Frequency, Percentage, and mean.

2. Analyze of test knowledge of nutrition and food consumption behaviors to find mean, Percentage, and Standard deviation values.

3. Assessment of nutritional status personnel assessed by using weight (Kg) and height (cm), then evaluate the body mass index (BMI) data from health examination of Kluaynamthai Hospital.

4. Analyze the relationship between knowledge of nutrition and food consumption behavior, nutrition conditions of personnel Kuay Num Thai hospital using statistical Chi-square.

The Results of Data Analysis

1. To study the knowledge of nutrition of personnel of Kluaynamthai Hospital

Personnel of Kluaynamthai Hospital personnel knowledge on nutrition is very positive, representing 65.68 percent . Subordinate in a good medium, through minimum criteria, and lower than standard is 26.69%, 6.78%, 0.42 %and 0.42%, respectively. The analysis is summarized at 2.

Part 1   knowledge about buying food

Personnel of Kluaynamthai Hospital have most of the nutrition knowledge about buying food in a very good level. Secondary 79.66% Subordinate in the medium, good, through the minimum criteria, and Criteria below is 11.44%, 7.20%, 0.85% and 0.85%, respectively.

Part 2   knowledge about food consumption and nutrition

Personnel of Kluaynamthai Hospital have most of the nutrition knowledge about Consumptive food and nutrition in a very good level at 72.46% Subordinate levels , Median , Through the minimum criteria , and Criteria below is 13.56, 12.29, 1.27 and 0.42 respectively.

2. To study the behavior of people consuming food of personnel of Kluaynamthai Hospital

Information about food consumption behaviors Summary results of the analysis is at 3

Part 1   Consumer habits

The behavior of consumers about food consumption habits in the overall levels is equal to the average 2.91. It found that the behavior of a class action, include The rinse before eating is equal to the average 3.43, including the subordinate eating half-cooked, Food waste is more like fruit, vegetables, drinking water 6-8 glasses per day, Helping end eating 3 day cold morning, drink 1 bottle of sparkling water a day, eating all those full 5 days, eating of sweet / salty arrange / organize it. In the food and punctually. Is equal to the average 3.40, 3.34, 3.18, 3.14, 2.99, 2.84, 2.82 and 2.70, respectively.

The behavior of a class action, including a pretty day drinking milk box 1 or box 2 is equal to the average 2.47, including any subordinate eating dinner over helping others. In the food-like repeated. It is equal to the average 2.36 and 2.25, respectively.

Part 2   Frequency of food consumption

Practices associated with food consumption behavior in the frequency of food consumption in overall levels is equal to 2.69, based on the average in each type of food found at a food frequency behavior in food consumption levels are good foods and vegetables. It is equal to the

average 2.92. Subordinate foods include sweets foods, Meat foods, and food starch is equal to the average 2.84, 2.82 and 2.63, respectively.

The type of food on a behavior, food consumption levels are pretty include Canned foods is equal to the average 2.46 , subordinate the fried foods is equal to the average 2.43 .

<u>Part 3</u> from the media to influence food consumption behavior

Most of Personnel of Kluaynamthai Hospital food consumption behavior were influenced by media. In low levels representing 91.95 percent, subordinate influence food consumption behavior in a fairly, Much, Medium, and Most is 4.66%, 1.69%, 1.27% and 0.42%, respectively.

3. To study the nutritional status of personnel of Kluaynamthai Hospital Bangkok hospital.

Personnel of Kluaynamthai Hospital are the largest normal nutritional conditions, representing 49.58 percent. Secondary to nutritional conditions has exceeded the standard, And substandard Representing 35.59% and 14.83% respectively.

 4. To study the relationship between knowledge of nutrition. Food consumption behavior and Nutritional conditions of personnel of Kuay Num Thai Bangkok hospital.

<u>Hypotheses 1</u>   in knowledge about nutrition, food buying People's Kluaynamthai Hospital did not find relationship with nutritional conditions.

<u>Hypotheses 2</u>   knowledge about nutrition in food consumption and nutrition People's Kluaynamthai Hospital did not find relationship with nutritional conditions.

<u>Hypotheses 3 </u> Behavior of consumers about food consumption habits of people Kluaynamthai Hospital had found that relationships with nutritional conditions. A statistically significant level at 0.05 .

<u>Hypotheses 4</u>   Behavior regarding food consumption frequency of food consumption in humans Kuay Num Thai Bangkok Hospital not found relationship with nutritional conditions.

<u>Hypotheses 5</u>   Food consumption behavior of media influence on the behavior of food consumption of bookmarks similar Kuay Num Thai Bangkok Hospital did not find relationship with nutritional conditions.

<div align="center">

Discussion of the research

</div>

This research intends to study the current state of knowledge about nutrition and food consumption behavior. And nutritional conditions of hospital personnel Kluaynamthai Hospital based on the research found.

1. The Basis of Data Samples.

Selected sample of hospital personnel Kluaynamthai Hospital . The share of the work 4. Department of Medicine, and is nursing Employing a total of 280 people, medical support, employs a total of 156 people, office personnel employs a total of 122 people, places and maintain a total of 42 people including security personnel. All of 600 people selected sample total number of 236 people is likely to be a sample that covers the distribution of sufficient data in the study.

2. Knowledge about How to Buy Food and Knowledge about Food Consumption and Nutrition

2.1 Knowledge about buying food.

Hospital Shopping considering economics as a basis to 47.03 percent, which is an incorrect understanding. Due to economic conditions have changed many people now turn to consideration of a major expense. Forget to consider the value of nutrition that the body should be and quantity of food sufficient for the needs of the body (Thep, 2550), buying food ready cooked stored in normal room temperature. Nearly 55.08 percent of the time people understand the issue of food-storage errors. Think that food can be stored and cooked at normal room temperature. The main food sanitation are sold in the shopping malls. Must be available in the chilled cabinet temperatures below 7 degrees Celsius thermometer notice from the chilled cabinet noted the mall that day month, production on the label. Should buy the new product. Do not buy food to cook with because it produces more than 3 days may be a rotten easy, however when buying food and cooking to prepare the assembly should immediately because cooking food component through various processes. ago to reduce putrid and increase the number of pathogens. (Department of Food Sanitation Division Ministry of Public, in 2548, buying cooked food from restaurants that have successfully prepare table 60 cm high from the ground up from the study found. Personnel have knowledge of food sanitation standards or requirements for food restaurant Representing 69.92% of all the people. The Food Sanitation for the main restaurant outside tables outside to prepare - to prepare a high from the floor at least 60 cm table is made of materials with smooth surface. Easy to clean, such as Stan-Four mega etc. (Food Sanitation Division, Department of Water and Health, 2550).

2.2 Knowledge about food consumption.

This research shows that The majority of hospital employees Kluaynamthai Hospital personnel's knowledge about food consumption levels very well. Representing 72.46 per cent and secondary level is down. Representing 13.56 per cent and by the knowledge of nutrition to consumers

about food and nutrition is more of a question will see that With any questions. Bleeding as a mark left by the teeth showing symptoms of the disease lack of vitamin C. All the answers were 229 people, representing 97.03 per cent is the highest level of education and knowledge in food consumption. At the same time, the question is who is the least understood. That is the question. Sausage and a fat dressing. Is a question in the negative. It is sausage and salad dressing are not very many fat volumes to understand this in a number of 78 people representing 33.05 per cent, much less considered because most people are understanding that this is incorrect. Volume 5-inch chicken sausage with an energy of 115 kilo calory dressing 1 tablespoon water to condense energy 100 kilocalorie (Ministry of Public Health Division, Department of Nutrition, 2532).

3. **Food Consumption Behavior**.

    3.1 Consumer behavior in food consumption habits.

    Good food is helping all 3 eating all those 5 drinking water clean enough. Eating foods and vegetables. Is consistent with the research (Pornrimol, 2544), but have found some of the consumption habits of the class is pretty drink per day or 1 box 2 boxes of milk because the protein is an important mineral calcium. phosphorus and vitamins. Especially vitamin B 2 milk helps bones and teeth healthy. Slow decay of the bones. And cause tissue. Act normal elderly adults should drink 1-2 glasses milk per day. milk of cow are nutritious. Is necessary and important nutrients essential to health. Fresh milk is the best fresh milk does not taste sweet to taste, reduce obesity and dental caries risk (Anuthin, 2549) and eating dinner over helping others. Most people focus on eating dinner over helping others. Due to the potion morning rush to work and not eating. Or lunch time is not full of food. Result is to make dinner feel hungry faster or more hungry. Combined with the urgency of not eating. Time to eat in a somewhat Family dining with a friend sent it to eat dinner and other than helping the body use. The food is correct. Is eating breakfast every day. Amount of energy to distribute food to fit the needs of the body. Also helps the body. Not hungry in the afternoon and evening. And helps to control eating dinner less Eat enough to fill each potion. Consumers and not be too much. Natural food timber Should select natural food timber And should eat dinner from time to sleep at least 4 hours (Suthep, 2550) to eat like a replay. Most consumers tend to prefer dining repeated due primarily focused favor forget to think. Value of nutrition that the body should be. This is how very wrong. Principles of food is correct. 5 foods to eat all those volumes of each of those should be in moderation and eat a variety of selection. To receive nutrients. Complete as a body will want to eat. Conditions have resulted good nutrition (Doungporn, 2546).

3.2 Frequency of Food Consumption.

Research found that the frequency of food consumption overall. Levels. 2.69 is considered equal to the average behavior of food consumption. Is eating a variety of food which does not overlap too much with the information that consumers have a tendency to eat like a pretty level when repeated on the classification issue is the consumer, will have some of that score. For example, type in a so-so seafood. Foods other than rice flour. Fried foods. R for type finish. And drink coffee category. Research reflects that hospital personnel Eating foods that average at least 2 - 4 times per week. If a future eating disorder is continued or increased may affect the risk of obesity prevalence. Fat in the blood. High blood pressure. Vascular diseases and diabetes. Consistent with the research (Boonta, 2543) If you continue to keep exercising regularly. Control and modify behavior with food consumption to fit the needs of the body. Or with the appropriate activity in each day. Can reduce the risk of disease is different (Office of Health and Social Security Administration Mahidol University, 2552).

3.3 The influence of media on behavior, food consumption,

Research found that Influenced by media affect food consumption behavior with hospital personnel. Kluaynamthai Hospital in a 91.95% less when the classification is the study of a sample found on the beliefs of nutrients that enter the products that benefit the body. And hearing the announcement of the price if the price is not expensive to meet the needs will choose to purchase it so influenced by the media affect food consumption behavior is less risk to the health nutrition Kluaynamthai Hospital . Bangkok 4th nutrition conditions. Personnel in Kluaynamthai Hospital of a total of 600 people who regularly work in ages. Working age group between 22-60 years to work out a division of the Department of 4 nurses and doctors. Support Medical Department personnel offices. And location of care and safety. Look at the overall health of people find that nutritional conditions are 49.58% normal nutritional conditions than standard nutritional conditions and substandard Representing 35.59% and 14.83 respectively.

The research found the practice of nutrition knowledge. In buying food and knowledge about nutrition and food consumption do not correlate with nutritional conditions. However, a remark that Who have knowledge in the minimum criteria of 100% will result in people with normal nutritional conditions. And 50% over standard 50% knowledge 100% of average people has resulted in substandard conditions. 12.50% have normal nutritional conditions. 37.50% more than standard nutritional conditions. 50% knowledge level from 100% resulted in people with substandard conditions. 22.22% have normal nutritional conditions. 41.27% more than standard nutritional conditions. 36.51%

very good level of knowledge resulting from 100% to people with substandard conditions. 12.26% have normal nutritional conditions. 54.19% more than standard nutritional conditions. Representing 33.55 per cent.

Therefore, the overall analysis found that the practice known as indirect boost the nutritional status is If people have knowledge, through medium and low criteria will have problems in nutritional conditions than people with good knowledge. Knowledge but do not correlate directly to alleviate the problem of nutritional conditions.

Of food consumption behavior study of hospital personnel Kluaynamthai. Bangkok has a relationship with a state nutrition. Found that the behavior of consumers about food consumption habits of people Kluaynamthai is associated with nutritional conditions. With statistical significance at the .05 because of the consumption habits. Likely to be conversant in the food and cause a consumption habits. And make the choice of dining category. Initiate behavior as well as food consumption. This is consistent with studies (Charoen-Sri: in 2548, กัลยา: 2541, Somsri: 2531,Kamala: 2531, to Malin: 2537) is the consumption habits are important factors that will affect the nutritional health of hospital personnel Kluaynamthai . Bangkok Meet the benchmarks set (Department of Health, 2546).

Based on the research relationships between food consumption behaviors associated with the frequency of food consumption in humans Kluaynamthai hospital Found that people with the frequency of food consumption by 100% is pretty substandard nutritional conditions. 20.41% normal nutritional conditions. 46.94% 32.65 outsized and nutrition conditions of the people on the consumption level of good health is 100 percent lower than the standard diet. 13.37% normal nutritional conditions. Representing 50.27% and 36.36 so outsized nutritional conditions of the relationship between food consumption behaviors associated with the frequency of food consumption in humans Kluaynamtai hospital. Bangkok The relationship of nutrition, health nutrition personnel conditions. In addition to depending on food consumption behavior. Also depends on exercise. And other factors such as genetics and devour nutrients in the body.

Research on food consumption behavior from the media to influence food consumption behavior of hospital personnel Kluaynamthai has a relationship with a state nutrition. The analysis found. The influence of media on behavior, food consumption level of 100% less nutrition conditions are substandard. 15.67% normal nutritional conditions. 49.31% 35.02 outsized and nutrition conditions of the influence of media on behavior, food consumption levels from 100% moderately substandard nutritional conditions. 5.26% normal nutritional conditions. Representing 52.63% and 42.11 so outsized

nutritional conditions of the relationship between food consumption behaviors associated with the media to influence food consumption behavior of hospital personnel Kluaynamthai has no relationship with nutritional status of people.

However in this research. Get to know the knowledge of nutrition. Behavior, food consumption and nutritional status of hospital personnel that a sufficient knowledge of nutrition? The food consumption behavior? Used as a way to encourage people with appropriate consumer behavior. And control conditions such as poor nutrition, the nutritional conditions in excess of Conditions, high blood sugar. High cholesterol in the blood. 5 Suggestions 1 should be studied factors and personal factors, behavior and practices in private hospitals. As is Changing the way the lives and lifestyles different from the past. To provide information to the format of nutrition education is consistent with the factors that affect food consumption behavior. 2 should make a comparative study of nutritional knowledge. Food consumption behavior. Between nutrition and health. Government hospitals and private hospitals in the same area. That is different? And any factors that correlate?

References

กมลา วัฒนายิ่งเจริญชัย . 2531. **ปัจจัยที่มีผลต่อภาวะโภชนาการของเด็กนักเรียนชั้นประถมศึกษา ใน เขตอำเภอพล จังหวัด ขอนแก่น** . วิทยานิพนธ์ปริญญามหาบัณฑิต มหาวิทยาลัยขอนแก่น.

กัลยา ศรีมหันต์. 2541. **ศึกษาภาวะโภชนาการและพฤติกรรมการบริโภคอาหารของเด็กวัยเรียนใน เขต อำเภอเมือง จังหวัดราชบุรี**. วิทยานิพนธ์มหาบัณฑิต มหาวิทยาลัยมหิดล.

กรมอนามัย กระทรวงสาธารณะสุข. 2546. **ข้อปฏิบัติการกินอาหารเพื่อสุขภาพดีของคนไทย**. กรุงเทพมหานคร.

_____ . 2548. **การดำเนินงานโภชนาการในประเทศไทย**. กรุงเทพมหานคร.

กองโภชนาการ กรมอนามัย กระทรวงสาธารณสุข. 2532. **ปริมาณพลังงานในอาหาร** . [Online] . แหล่งที่มา: http://www.on - diet.com/energy.asp

กองสุขาภิบาลอาหาร กรมนามัย กระทรวงสาธารณะสุข. 2548. **การเลือกซื้ออาหารพร้อมปรุง**. [Online]. แหล่งที่มา: www.agri.ubru.ac.th. [เข้าถึงเมื่อวันที่ 12 กรกฎาคม 2548]

กองสุขาภิบาลอาหารและน้ำ กรมอนามัย. 2550. **ข้อกำหนดด้านสุขาภิบาลสำหรับร้านอาหาร**. โรงพิมพ์ องค์การสงเคราะห์ทหารผ่านศึก.

เจริญศรี จันทร. 2548. **ภาวะโภชนาการ พฤติกรรมการบริโภคอาหาร และ ปัจจัยที่เกี่ยวข้องของ นักเรียนระดับมัธยมศึกษาตอนต้นในจังหวัดสุราษฎร์ธานี**. วิทยานิพนธ์ปริญญามหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย.

ชิดชนก กัณกูล. 2548. **พฤติกรรมการบริโภคอาหารของนักเรียน ระดับประกาศนียบัตรวิชาชีพใน
โรงเรียนพาณิชยาการสุโขทัย**. มหาวิทยาลัยศรีนครินทรวิโรฒ.

ดวงพร สุตสุนทร. 2546. **ปัจจัยที่มีผลต่อการส่งเสริมสุขภาพในด้านการบริโภคอาหารของบุคลากร
ทางการพยาบาล โรงพยาบาลพระมงกุฏเกล้า**. บัณฑิตวิทยาลัย มหาวิทยาลัยเกษตรศาสตร์.

บุญตา กิริยานันท์. 2545. **ภาวะโภชนาการ พฤติกรรมด้านอาหารโภชนาการ และพฤติกรรม สุขภาพ
ของบุคคลวัยทำงาน จังหวัดพิษณุโลก พิจิตร และอุตรดิตถ์**. กลุ่มงานโภชนาการกรมอนามัย
กระทรวงสาธารณสุข.

พุทธชาด สวนจันทร์. 2550. **ความรู้ทางด้านโภชนาการ การบริโภคอาหารและภาวะโภชนาการของครู
โรงเรียนเอกชน**. เรยีนาเซลี วิทยาลัย.

พรพิมล บุญโคตร . 2544. **ความรู้ เจตคติ และพฤติกรรมการบริโภคอาหารของนักเรียน ระดับ
มัธยมศึกษาตอนต้น โรงเรียนดอยสะเก็ดวิทยาคม จังหวัดเชียงใหม่**. วิทยาศาสตร์มหาบัณฑิต.

มาลิน ทรัพย์เจริญ. 2537. **นิสัยการบริโภคและภาวะโภชนาการนักเรียนชั้นประถมศึกษาปีที่ 3 กลุ่ม
โรงเรียนบ้านดู่ อำเภอเมือง จังหวัดเชียงราย**. วิทยานิพนธ์ปริญญามหาบัณฑิต. มหาวิทยาลัยเชียงใหม่

เทพ หิมะทองคำ. 2550. **วารสารโภชนาการ   การเคี้ยวรักษาโรคอ้วนและสมองเสื่อมได้จริงหรือ**. หน้าที่
5. ปีที่ 42 ฉบับที่ 2 เมษายน – มิถุนายน 2550. บี มิเดีย โฟกัส (ประเทศไทย) จำกัด

ธานินทร์ ศิลป์จารุ. 2551. **การวิจัยและวิเคราะห์ข้อมูลทางสถิติด้วย SPSS**. เอส. อาร์. พริ้นติ้งแมสโปรดักส์
จำกัด.

สิริกันย์ แก้วพรหม. 2549. พฤติกรรม**การบริโภคอาหารตามสุขบัญญัติแห่งชาติ ของนักเรียประถมศึกษา
ปีที่ 6 อำเภอท่าศาลา จังหวัดนครศรีธรรมราช**. ปริญญานิพนธ์ มหาวิทยาลัยศรีนครินทรวิโรฒ.

สุภาพ ฉัตราภรณ์. 2550. **เอกสารประกอบการสอนวิชาวิธีวิจัย**. มหาวิทยาลัยเกษตรศาสตร์.

สุเทพ เพชรมาก. 2550. **คลินิกคนไทยไร้พุง ทางเลือกใหม่สำหรับผู้ต้องการลดรอบเอว**. [online].
แหล่งที่มา : http// hpc 5. anamai.moph.go.th [เข้าถึงเมื่อวันที่ 9 ตุลาคม 2550]

สมศรี เกิดโชค . 2531. **ปัจจัยที่มีความสัมพันธ์กับนิสัยการกินของเด็กวัยเรียน อำเภอดอนเจดีย์**.
วิทยานิพนธ์ปริญญามหาบัณฑิต มหาวิทยาลัยเกษตรศาสตร์.

สำนักงานประกันสังคม และ คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล .2552. **คู่มือดำเนินโครงการ
ประกันสังคม รวมพลังลดน้ำหนักป้องกันโรคในสถานประกอบการ**. คณะสาธารณสุขศาสตร์
มหาวิทยาลัยมหิดล.

อนุทิน ชาญวีรกูล. 2549. **สถิติคนไทยดื่มนมน่าตกใจ น้อยกว่าน้ำอัดลม-ชาเขียวเท่าตัว**. กองการแพทย์
ทางเลือก ผู้จัดการ [online]. แหล่งที่มา : www. Dtam. Moph. Go. Th /aiternative.   [เข้าถึงเมื่อวันที่
12 มีนาคม 2552.]