



Nutritional Value of Popular Foods Offered to Monks by Thai Buddhists

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Abstract

Health issues have increased among monks in Thailand due to food consumption behavior diet based on food offered by Buddhists at present. Most foods offered by Thai Buddhists are often rich in carbohydrates and fat which may contribute to the monks' declining health. The objective of this research was to survey foods and analyze nutritional value of food offered to monks by Thai Buddhists. Cross-sectional survey revealed that the most common dishes are five-spice eggs (Kai Palo), Spicy minced pork (Larb moo), sour soup with mixed vegetables (Kaeng Som Pak Reum), omelet (Kai jieow) and curry with pickled bamboo shoots (Kaeng Pet Nor Mai Dong). Simple random sampling methods were used to collect samples. Samples of these popular dishes were collected from different restaurants and recipes and analyzed using the nutritional analysis program, INMUCAL V.3. The results from each 100 g of food showed that the five-spice eggs contained the most sodium and sugar (654.70 mg and 5.53 g, respectively). Spicy minced pork provided the highest carbohydrates, protein and calories (23.98 g, 14.29 g and 231.65 kcal, respectively). The food with the highest water content and vitamin C were sour soup with mixed vegetables (88.92 and 14.04 mg, respectively). Omelet contained the highest fat and cholesterol (17.08 g and 312.06 mg, respectively). Lastly, the food with the highest fiber content was the curry with pickled bamboo shoots (1.17 g). Conclusion, the popular dishes offered to monks by Thai Buddhists are high in carbohydrates, fat, cholesterol, sugar, and sodium but provides minimal fiber. The empirical data highlighted the main causes of the hazard. It is therefore recommended that the diet be balanced by medical practitioners in order to improve the food offerings. It would be beneficial to create more awareness and educate the vendors as well as Buddhists to adjust their food offering choices and recipes.

Keywords: Nutritional value, Food offering, Monks, Buddhists.

Introduction

Previous researches indicate that food is one of the risk factors for slow forming diseases which takes time to manifest. As the saying goes "We are what we eat and live in", diseases are often related to food (Khomlin, 2014). The current food and nutrition situation in Thailand lead to common diseases related to diets that are increasingly rich in fats, sugar, and sodium. The Public Health of Department has been diligently addressing challenges regarding food and nutrition. The monks in the city have high risk of obesity than the monks outside the city limits. After examining the food offered to monks, it was found the most food items were low in fiber. The common food items are either fried or stir-fried. All of the dishes are flavorful which includes spicy, sweet, oily and salty foods. (Unkhatawanich, 2014). that monks believe that not eating foods offered by Buddhists will cause the giver to miss out on their merit. Even if monks know that some of the food items offered should be avoided, they could not help but to follow tradition (Kiatkanon, 2016)

From studies regarding monk health, it was found that monks are overweight and have diabetes and high cholesterol due to poor nutrition and lack of exercise. Survey data from Northeastern provinces of Thailand found that monks in the urban area are subjected to greater risk of being overweight than monks in the rural



area. This is because most Buddhists in the city purchase food offerings from vendors who often prepare food items that are low in fiber such as five-spice eggs, green curry, fried pork and desserts. Monks do not have a choice to consume healthier foods. (Unkhatawanich, Wisetrit, Sangtean, & Somboonkul, 2014; Jittachareon, 2012; Srimanee et al., 2013; National Health Commission Office, 2017). From the 1st Nakorn Ratchasima Provincial Health Assembly in 2016, it was found that monks in Nakorn Ratchasima province lack access to continuous and holistic healthcare. These problems are bound to increase if there is no development in the support and care of the monks' health. (Nakorn Ratchasima Provincial Health Assembly, 2016). From the report in health monitoring project for monks in 2014 and the summary of Thai health checks for monks in 2015, Thai monks have a high risk of non-communicable diseases (NCDs) and other health issues. The monks were considered overweight (22.21%), high levels of uric acid (22.78 %), high blood pressure (14.64 %) and 18.19 % and 22.21 % of the monks also had increasing biomass trend in the year 2014 and 2015, respectively. (Region ninth Health Office, Nakhon Ratchasima, 2015; National Health Security Office for Nakorn Ratchasima District, 2016).

From the reasons above, we became interested in studying the food and nutritional value of the common food items offered to monks by Buddhists in the Nakorn Ratchasima province. As the province urbanizes, the population way of life changes. We would like to help increase awareness for the vendors as well as the Buddhists are bringing these food items to offer to monks.

Objectives

1. To study the food items offered to monks by local Buddhists.
2. To analyze the nutritional value of popular food items offered to monks by local Buddhists.

Materials and Method

This research is a Cross-sectional survey study which has been approved by the ethical committee of Surindra Rajabhat University for research done on human subjects (**HE-SRRU3-0002**)

Population and Samples

1. Population for the first objective includes Buddhists 1) the persons who offer food to monks 2) the persons who prepare the food offering and 3) the persons who cook food to monks in the temples. The Cochran method for sample size selection (Cochran, 1977) was used with 95% confidence level and 5% error level (Wanichayabancha, 2014) which resulted in a sample size of 320.

2. Population for the second objective is five most popular food items offered to monks identified from the population of the first objective, twenty five food samples (Supsiri, 2012; Asksorntup, 2006).

Tools

1. Data collection form to record food items that local Buddhists offer to monks.
2. Form to record food weight measures by digital balance which has the maximum capacity of 10 kg with 1 g precision. (Dream Electronic Kitchen Scale Model: SP400W manufactured in 2015)



3. INMUCAL V.3 is the nutritional analysis software program used to evaluate nutritional values for individuals. The database contains more than 2000 food items in Thailand from reliable sources (Banjong, Wanijjakul, Peemane, & Ananthasuk, 2016; Institute of Nutrition, Mahidol University, 2016)

Assessment of research tools

1. Data collection form for food items offered by Buddhists and records of food weight were examined by four experts using the same content validity index (Content Validity for Scale: S-CVI). The score received was 1.00. (An acceptable S-CVI is 0.8 or higher). (Davis, 1992; Waltz, Strickland, & Lanz, 2005, referenced in Patithat, 2016).

2. Quality of measurement is controlled throughout the research by using the same digital balance which has the maximum capacity of 10 kg with 1g precision that passed testing in Thailand. To further ensure accuracy, each sample is weighed three times. The scale is also calibrated every time before use. The scale is reset to zero on a stable and leveled surface with no wind. (Munkwamdee, 2015). Consistency is ensured by multiple or comparing the results to another secondary scale. (LoBiondo-Wood & Haber, 2010. Referred to in Wongpiriyayota, 2015)

Data Collection Method

1. The data were collected via a survey of common food dishes which 320 Buddhists offered to monks using multiple stage sampling. Data were categorized from 1) various municipalities within the Nakorn Ratchasima province including Mueang, Pak Chong, Pak Thong Chai and Sikhio district by calculated population ratio followed by area 2) divided sample group ratio in the areas where food offering is common, for example, along alms-giving route and at temples using convenience sampling on different days. At different locations along the alms-giving route and at different times of day to find the five most common food items offered to monks. (Kuntaraksa, 2004).

2. Simple random sampling method was used to collect food samples from dishes offered to monk by Buddhists who either prepared their own food offering or purchased them from food vendors.

3. The weight of the ingredients were entered into the software program called INMUCAL Version 3 (Institute of Nutrition, Mahidol University, 2013) for a statistical analysis.

Statistical analysis

Descriptive statistics, frequency, percent and mean were used in this research.

Results

1. Categorization of food offered to monks by local Buddhists.

Data collected from food offered to monks by 320 Buddhists in the Nakorn Ratchasima province showed that the foods offered could be categorized into 14 types. The five most popular types of foods were boiled (15.69%), fried (13.51%), stir-fried (12.85%), coconut-based soup (9.37%) and spicy foods such as Yum or Larb (8.71%) respectively. See details in Figure 1.

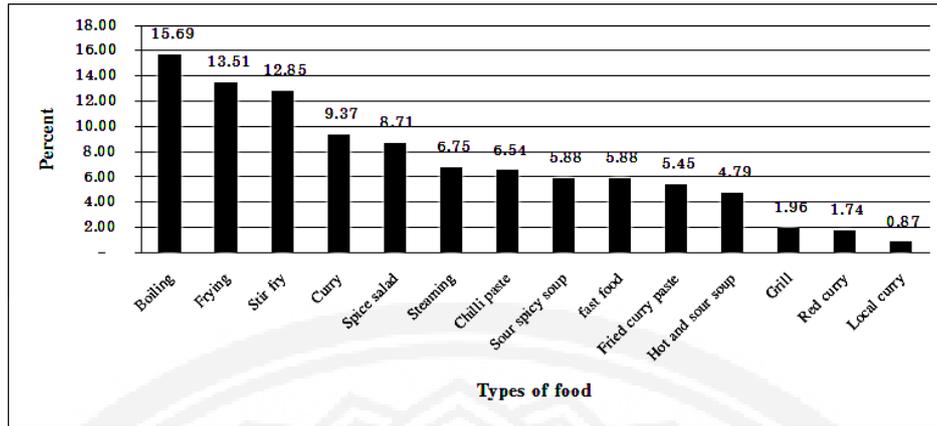


Figure 1 Types of foods offered to monks in the Nakorn Ratchasima province

When 459 food items surveyed were examined to find the most common food items offered to monks by Buddhists, it was found that the five most common food items are five-spice eggs (7.19%), spicy minced pork (6.32%), sour soup with mixed vegetables (5.88%), Thai-style omelet (5.23%), curry with pickled bamboo shoots (3.49%) respectively. The food items which ranked 6th – 127th had less than 3% popularity for example boiled egg and Thai pork sausage salad. See details in Figure 2.

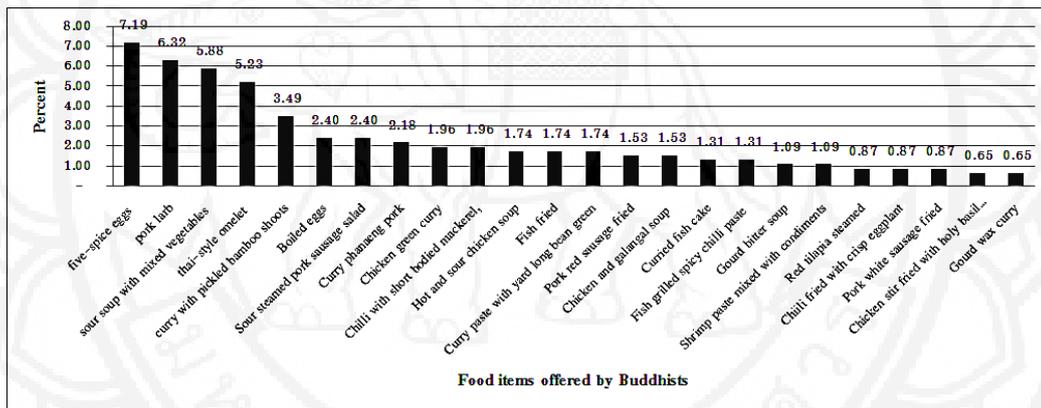


Figure 2 shows the percent of food items offered to monks by local Buddhists.

2. Nutritional value of food items offered to monks by Buddhists.

The software called INMUCAL V.3 was used to analyze the nutritional value of food samples (100 g) from the offering by Buddhists to monks it was found that:

1) It was found that spicy minced pork provided the highest calories (231.65 kcal), while sour soup with mixed vegetables contained the lowest calories (40.59 kcal). See details in Table 1.

2) Fat is responsible for the majority of calories in most of the food items offered to monks by Buddhists. Thai-style omelet (50.73%), spicy minced pork (15.52%), five-spice eggs (14.36%) and curry with pickled bamboo shoots (14.02%), respectively. Sour soup with mixed vegetables had the lowest caloric distribution from fat (1.73%). Protein provided the second caloric contribution especially Thai-style omelet (14.47%), spicy minced pork (10.92%), sour soup with mixed vegetables (5.33%), five-spiced eggs (4.09%) and curry with pickled bamboo shoots (4.02%), respectively. The caloric contribution from



carbohydrate was as follows: five-spiced eggs (5.37%), sour soup with mixed vegetables (4.79%), curry with pickled bamboo shoots (3.04%) and Thai-style omelet (0.86%), respectively. See details in Table 1.

Table 1 Energy and Caloric contribution per 100 g of food samples

Energy and Caloric contribution	Five-spice eggs	Spicy minced pork	Sour soup	Omelet	Curry with pickled bamboo shoots
Energy (kcal)	162.95	231.65*	40.59**	204.42	131.27
Caloric contribution of Carbohydrate (%)	22.53	41.37	64.12*	3.76**	19.89
Caloric contribution of Protein (%)	17.18**	24.21*	27.11	21.36	17.86
Caloric contribution of Fat (%)	60.30	34.42	8.77**	74.88*	62.25

* Maximum, ** Minimum

3) For energy providers such as carbohydrate, protein and fats – Spicy minced pork contains the highest amounts of carbohydrates (23.96 g) and protein (14.29 g). Thai style omelet contains the highest fats (17.08 g). Sour soup with mixed vegetables contains the lowest amounts of protein (2.88 g) and fats (0.42 g) while Thai-style omelet contains the lowest amount of carbohydrates (1.95 g). See details in Table 2.

4) For sugars (sweet taste), cholesterol (oily taste) and sodium (salt taste), it was found that five-spice eggs contained the highest level of sugar (5.53 g) and sodium (654.70 mg). Thai-style omelet had the highest cholesterol content (312.06 mg). Spicy minced pork had the lowest sugar (0.37 g) and sodium (75.59 mg), and sour soup with mixed vegetables had the lowest cholesterol content (10.62 mg). See details in Table 2.

5) Regarding water and fiber content, it was found that sour soup with mixed vegetables had the highest water content (88.92 g), on the other hand, spicy minced pork had the lowest water content (51.75 g). Curry with pickled bamboo shoots had the highest fiber content (1.17 g), while the Thai-style omelet had the lowest fiber content at (0.29 g). See details in Table 2.

Table 2 Nutritional values of each 100 g of food samples.

Nutrient	Five-spice eggs	Spicy minced pork	Sour soup	Omelet	Curry with pickled bamboo shoots
Carbohydrate (g)	8.99	23.98*	6.40	1.95**	6.71
Protein (g)	7.24	14.29*	2.88**	10.87	6.03
Fat (g)	10.91	8.83	0.42**	17.08*	9.39
Sugars (g)	5.53*	0.37**	4.79	0.86	3.04
Cholesterol (mg)	33.3	51.08	10.62**	312.06*	16.17
Sodium (mg)	654.70*	75.59**	565.14	412.51	581.87
Dietary Fiber (g)	0.32	0.99	1.08	0.29**	1.17*
Water (g)	70.4	51.75**	88.92*	75.88	76.95

* Maximum, ** Minimum

6) For vitamins, it was found that spicy minced pork had the highest vitamin A (905.98 RAE) and vitamin B (0.44 mg). Sour soup with mixed vegetables contained the most vitamin C (14.04 mg). Curry with pickled bamboo shoots had the lowest amount of vitamin A (5.16 RAE). Sour soup with mixed vegetables had the lowest amount of vitamin B (0.44 mg) and five-spice eggs contained the lowest vitamin C (0.41 mg). See details in Table 3.



7) For minerals, it was found that Thai-style omelet had the highest calcium content (42.89 mg) and spicy minced pork had the highest iron content (4.11 mg). On the other hand, sour soup with mixed vegetables contained the lowest amount of calcium (22.94 mg) and iron content (0.95 mg). See details in Table 3.

Table 3 Amount of Vitamin and mineral detected in 100 g of the food sample.

Nutrient	Five-spice eggs	Spicy minced pork	Sour soup	Omelet	Curry with pickled bamboo shoots
Vitamin A (RAE)	14.58	905.98*	8.30	191.37	5.16**
Vitamin B1 (mg)	0.08	0.44*	0.03**	0.08	0.10
Vitamin C (mg)	0.41**	11.81	14.04*	3.16	3.22
Calcium (mg)	40.99	33.7	22.94**	42.89*	26.67
Iron (mg)	2.45	4.11*	0.95**	1.20	1.64

* Maximum, ** Minimum

8) Percentage more than 100% of Thai RDI. It was found that Thai-style omelet had the percentage of Cholesterol content (104.02%) and spicy minced pork had the percentage of vitamin A content (113.25%). See details in Table 4.

9) Percentage of fiber compared to Thai RDI. It was found that Five-spice eggs, Spicy minced pork, Sour soup, Omelet, and Curry with pickled bamboo shoots had a Dietary Fiber content of less than 5 percent of Thai RDI. See details in Table 4.

Table 4 Comparison of nutrient in the food sample with Thai RDI (weight 100 g)

Nutrient	Thai RDI	Comparison of nutrient (%) with Thai RDI (weight of the food sample 100 g)				
		Five-spice eggs	Spicy minced pork	Sour soup	Omelet	Curry with pickled bamboo shoots
Energy	2000 kcal	8.15	11.58	2.03	10.22	6.56
Carbohydrate	300 g	3.00	7.99	2.13	0.65	2.24
Protein	50 g	14.48	28.58	5.76	21.75	12.06
Fat	65 g	16.79	13.59	0.64	26.28	14.44
Sugars	24 g	23.04	1.54	19.97	3.57	12.67
Cholesterol	300 mg	11.10	17.03	3.54	104.02*	5.39
Sodium	2000 mg	32.73	3.78	28.26	20.63	29.09
Vitamin A	800 RAE	1.82	113.25*	1.04	23.92	0.64
Vitamin B1	1.50 mg	5.61	29.40	2.13	5.10	6.76
Vitamin C	60 mg	0.68	18.63	23.41	5.27	5.37
Calcium	800 mg	5.12	4.21	2.87	5.36	3.33
Iron	15 mg	16.33	27.41	6.36	8.02	10.90
Dietary Fiber	25 g	1.26	3.95	4.33	1.15	4.69

Remark: Sodium intake based on recommendations of the World Health Organization. (WHO, 2012: 12)

* Percentage more than 100% of Thai RDI



Discussions

The results showed that boiled, fried, stir-fried, coconut soup and spicy food (for example yum or larb) were the most popular types of foods offered to monks by Buddhists, respectively. The most popular food items offered to monks by Buddhists were five-spice eggs, spicy minced pork, sour soup with mixed vegetables, Thai-style omelet and curry with pickled bamboo shoots, respectively. This is consistent with the study by Unkhatawanich et al. (2014). The qualitative study about way of life, food characteristics, and nutritional situation of monks from the four regions of Thailand. It was found that in the urban area, the most common types of foods prepared for monks were fried and stir-fried. Also, the most common food items offered to monks by Buddhists were five-spice eggs, fried pork, fried fish, stir-fried vegetables, blanched vegetables with chili paste, Thai-style omelet, fried eggs, soup, and coconut soup. In the northeastern region, it was found that spicy minced pork or other meats (larb, a name of the food is called in Thai) were also a popular from time to time. Pachan and Mukapuntu (2015) also found that half of the monks sampled in the Mueang district of Khon Kaen also consumed fried and stir-fried food items every day. Therefore, the food that monks consume is dependent on the food that the locals offered to them. This is consistent with the study by Hirunpradit (2010) and the study by Srimanee et al. (2013). It was found that monks mostly consumed food from alms-giving which are fat-rich such as fried and stir-fried dishes. Most food offered are bought from stores or markets (53.7%). The reason given was a convenience (62.3%). A majority of the food bought were precooked (54.9%). From interviews with monks at temples in Nakorn Ratchasima, it was found that most food items offered were savory food with coconut milk, sweet and were fried. The nutrition intake and health conditions of monks are dependent on the types and characteristics of these food items. Tunsakul, Pomrew, and Rojchanavipad (2017) studied the food intake of monks in the Taweewattana district in Bangkok and found that monks' most favorite food was fried eggs. Also, monks prefer flavorful foods that were spicy, sweet, oily and salty. Most of the food consumed by monks were offered as alms. Most of them were pre-cooked such as spicy soup (tom yum), fried pork, fried chicken, coconut soup, and Thai-style omelet. Food offered as alms often lacks vegetables and fruits which restrict the monks from having healthier options. Most foods were savory dishes with coconut milk, sweet and are fried.

From the nutritional analysis of the common food items offered to monks by Buddhists, it was found that most calories were from fat in dishes like Thai-style omelet, spicy minced pork, five-spice eggs and curry with pickled bamboo shoots, respectively. Most food items contained low fiber content and were high in sugar, cholesterol, and sodium. It was found that the five-spiced eggs had the highest sugar and sodium while the Thai-style omelet had the highest in cholesterol. This is consistent with the results from the study by Srimanee et al. (2013) which found that by taking food offered during alms or given by local Buddhists, monks ended up consuming foods that are rich in fats and carbohydrates. These types of food if consumed in large quantities, could lead to chronic diseases. One third of the group in the study had high blood pressure, diabetes, and high cholesterol. Data collected from monks in the Northeastern region of Thailand by Unkhatawanich et al. (2014) indicate that monks in the city have high risk of obesity than the monks outside the city limits. After examining the food offered to monks, it was found the most food items were low in fiber. The common food items are either fried or stir-fried. All of the dishes are flavorful which includes spicy, sweet, oily and salty foods. This result is also supported by the data from the report regarding food and



nutrition from the food and nutrition policy for health promotion (2015) and the Thai food committee (2016). The survey published by the Office of Thai Population Health Survey regarding the 5th survey in 2013 – 2014 indicates that the Thai population has little control over their own health and nutrition. They rely mostly on prepared food from outside sources other than home cooked food since it is more convenient than preparing one's own food. These food items are usually low in fiber and high in fat, cholesterol, sodium and sugar. The ease of access of such foods results in over consumption of calories, fats, sodium and sugar, are also not consuming enough fruits and vegetables. Risk factors for obesity and NCDs caused by these habits are reasons to be concerned. Most Thais are unaware of the risks nor the long term health effects of their own behaviors. (Khunpaek, Phonsuk, Tantapirak, & Ponguttha, 2015; Bhudiyi & Tungsupum, 2016; Lampuré et al., 2016; Kim, Kim, Vijayakumar, Kwon, & Chang, 2017). The results is consistent with the study by Pachan and Mukapuntu (2015). It was also found that half of the monks in the Mueang district of Khon Kaen is overweight and one fourth of the monks are considered fat. However they consume only half of the daily calories recommended for an average Thai male. In the study of the chronic disease prevalence among monks in the Warinchumrap district of Ubolrachathani province, Sararak, Sangwalee, and Kumpangsri (2018) found that of the monks who are ill (14.68%), most exhibit high blood pressure (65.63%) and high cholesterol. In the study by Kiatkanon (2016) regarding the relationship between selected factors and food consumption behavior and health conditions of monks suffering from NCDs, it was found that monks believe that not eating foods offered by Buddhists will cause the giver to miss out on their merit. Even if monks know that some of the food items offered should be avoided, they could not help but to follow tradition.

When the nutrient from the most popular food items offered to monks by Buddhists weighing 100 grams to calculate the percentage of nutrients recommended for daily consumption for Thai people aged 6 years and above (Thai Recommended Daily Intakes–Thai RDI). The percentage of cholesterol in the Thai-style omelet was up to 104.02 %. The percentage of vitamin A in the pork fat was 113%. It was found that food items offered to monks (Thai-style omelet, spicy minced pork, five-spice eggs and curry with pickled bamboo shoots, respectively) had a fiber content of less than 5 percent. Monks should choose the right foods for me. Therefore, Buddhist food distributors and clergy have been instrumental in promoting the health of monks and others. Report of the Research Program on Food Policy and Nutrition For health promotion in 2015, dietary and food habits have been a major contributor to obesity and NCDs. The changing behavior of food consumption is largely due to changes in the environment. Food Today's fast-paced lifestyle leads to eating out and buying ready-to-eat foods from convenience stores. Accelerate production and distribution of foods with high fat, sugar and sodium content. Marketing that encourages buying behavior in large quantities each time, so they can buy food at lower prices. The culture and values of society in food This is called obesogenic environment, which promotes obesity-induced obesity and NCDs. Consumption of salty foods should be avoided. And enough vegetables and fruits, but statistics from many sources. It indicates that Thai people are more likely to consume sweeteners while fruit and vegetable consumption is still below recommended levels. As can be seen, sugar consumption has increased to 23.1 teaspoons / person / day. In 2010, fat consumption is on the rise. It can be seen from the results of the survey on food consumption behavior in 2005 – 2013, indicating that the proportion of Thai people consuming high fat diets is constantly increasing. It also found that sodium It is an important ingredient of salt, soy sauce and seasonings. The World Health Organization recommends that sodium intake should not exceed 2,000 milligrams per day (Khunpaek et al., 2015).



According to a study by Klajon (2010, 2015), the study of food intake as a remedy by a balanced with Buddhist Medicine. Find out if food is one of the causes for 9 illness. Food poisoning is not balanced, food is toxic and unbalanced. Teantaworn (2012) found that most of today's vegetables contain chemicals that are harmful to the body and life, so they need to know how to choose vegetables and wash vegetables. Safely eat some fresh vegetables such as cucumber, lettuce and other vegetables. Wash 2-3 times. Vegetables, organic or non-chemical vegetables should be washed several times or soaked for 10 minutes. There are many other ways that are not recommended, but it is important to wash them thoroughly before eating. Consistent with Klajon (2015) found that the process of production and cooking. Seasoning too Unbalanced food Toxic from waste and heat from the process. Metabolism and metabolic poisoning from ignorance, eating techniques, healthily well-being And do not know how to reduce the mental craving for food poisoning straight so it invented a balanced diet of vegetarian tastes. Cook with salt and water, Digestive System, and chew it thoroughly. In line with the study of Model development of monk's holistic health care in Khon Kaen province through the network participation by Phrakrusuwithanphaddhanabandhid, Thawarat, and Vachatchawan (2015). It is found that factors in the food of the monks. What is needed to accelerate. Part of the lack of knowledge in holistic health in various dimensions, especially in the body. Eating foods that are risky in the non-chronic diseases such as diabetes, high blood pressure. In the case of food, monks should eat food that is hygienic, such as reducing salty, fried, grilled, which is a source of disease such as high blood pressure, high cholesterol, cerebrovascular accident, and cancer.

It can be observed that the food items offered to monks exposed them to higher risk of NCDs. We would like to encourage all parties involved to understand the impact of food selection when it comes to almsgiving. Together the monks, local Buddhists, food vendors can help to educate one another on healthy choices. There are many Thai food recipes which does not require coconut milk or oil. Desserts can be made to be less sweet. Healthy food be just as tasty and higher quality. Since food is medicine, it is imperative that we improve the nutritional values of foods given to monks so that monks can live longer and healthier lives. Everyone in the Thai society will benefit from having healthy monks who are crucial in further preserving the Buddhist tradition. Those who are instrumental ensure that monks get the proper nutrition and that healthier food choices are available to these monks are the food vendors as well as the Buddhists themselves.

Conclusion

There is empirical evidence that the common food items offered to monks were boiled, fried, stir-fried, coconut soup and spicy food, respectively. These food items are prepared in a way that makes them oily and high in fats. It was found that the popular items offered to monks are five-spice eggs, spicy minced pork, nutritional values of these food items, it was found that calories from fats, carbohydrates and proteins are high. Food items were also high in sugar, sodium and cholesterol. Five-spice eggs had the highest of sugar and sodium while the Thai-style omelet had the highest cholesterol and fats. Most food items were low in fiber and had medium levels of vitamins, minerals and water. Most of the nutritional analysis showed that these foods were high caloric food items mostly from fats. Thai-style omelet had the highest calories from fats while sour soup with mixed vegetables had the lowest calories from fats but it was high in sodium. The most popular food items offered to monks by Buddhists weighing 100 grams to calculate the percentage of nutrients



recommended for daily consumption for Thai people aged 6 years and above (Thai Recommended Daily Intakes–Thai RDI). The percentage of cholesterol in the Thai–style omelet was up to 104.02 %. The percentage of vitamin A in the pork fat was 113%. It was found that the food offered to the five priests (Thai–style omelet, spicy minced pork, five–spice eggs and curry with pickled bamboo shoots, respectively) had a fiber content of less than 5 percent. These are indicators that the most common dishes offered to monks by Buddhists are sweet, oily and salty as well as high in calories.

Suggestion

1. From this research, it was found that the nutritional value of food items given to local Buddhists are low in fiber and high in sodium (salty taste), fats (oily) and sugar (sweet taste). The public health organizations and religious bodies should help increase awareness to monks, food vendors and Buddhists.

2. Monks should also change their consumption behavior and make better choices. They should consume all groups of foods by reducing the oil, sweet and salty foods and consuming more vegetables and fruits. Furthermore, monks should increase their knowledge about healthy food and nutrition so they are a role model and help educate local Buddhists about the right kinds of food items to offer to the monks as well as their family members. This would be the one of the ways that both monks and Buddhists can help each other promote good health and further prolong the Buddhist tradition.

3. Buddhist should take the data on nutritional value to develop healthy recipes for food items to be offered to monks in the future.

Suggestions for future research

There should be further study regarding nutritional value to develop healthy recipes for food items to be offered to monks. Then distribute them to Buddhists as guidelines on what to offer to monks in the future.

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