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## Will Globalization Overwhelm Local Traditional Food Culture?

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Many countries in developing countries are experiencing a rapid nutrition transition characterized by a double burden of disease in which chronic diseases become more prevalent while infectious diseases remain undefeated. This is a universal trend dominating the health profile of increasingly large numbers of people in developing countries. The epidemiologic transition and concurrent shift in diet, physical activity and body composition in many developing countries has been rapid, unlike the gradual transition in the United States and most European countries

Globalization has been blamed as one reason for rapid nutrition transition in developing countries. Globalization certainly has been expanded as indicated by enhanced free trade, a drive toward reduction of trade barriers in the developing world, and the increasing penetration of international corporations into the commerce in each country. Globalization increases accessibility to Western supermarkets and fast food franchises (McDonaldization). In Southeast Asia such as Malaysia, Thailand and Vietnam, food sales transacted through the modern retail sector are increasing (Cadilhon et al, 2006). Cheap vegetable fat and sugar that has flooded the market in developing countries increases consumption of sweet soda pops, biscuits and snacks produced by multinational companies. Kato (1987) suggested an association between the increase of Western style fat-rich foods, such as butter and margarine, cheese, bread and ham and sausage, with an increase of mortality from degenerative diseases such as heart disease and cancer.

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How far is the increasing of food preferences toward more Western food pattern styles changing the food consumption pattern? This study was conducted to confirm whether changing in food pattern is corresponding to nutrition transition in Southeast Asian region.

## Methods

The study was conducted in Indonesia, Malaysia and the Philippines. In each country, one rural and one urban setting area were selected. Rural areas are presumably still maintaining traditional food patterns, while urban areas presumably have much change. In Indonesia, the study was conducted in the province of West Sumatra. Padang as the capital city of the province was chosen as the urban area, and two districts (Pariaman and Limapuluh Kota) were chosen as the rural areas. In the Philippines, Manila was chosen for the urban area and Calabanga in the province of Camarines Sur was chosen for the rural area. In Malaysia, the study was done only among the Malay population. Bandar Baru Bangi – Selangor was chosen for urban area, and Tanjong Karang – Kuala Selangor was the rural area.

Three methods were used in this study. Interviews were used to determine lifestyle, food consumption pattern and to differentiate lifestyle and food consumption pattern between the people in rural and urban areas. A questionnaire on lifestyle and general food habits and practices was developed and administered. Information on the intake of individual foods and dishes was obtained using the Food Frequency Questionnaire. This method is intended to document traditional foods, the amount of traditional food consumption and the difference between rural and urban participants.

The second method was Focus Group Discussion (FGD). FGD was used to obtain an in-depth understanding of the people's food culture. Discussion was done to get information and explore the focus groups on food habits and food preparation and changes. FGD is intended to document food culture and to determine any changes in dietary pattern among the people.

The third method was analyzing government reports and national surveys on socio-economic changes. These reports are used to determine nutrition transition in the countries.

The whole data from the three methods were analyzed qualitative and quantitatively to determine the relationship between traditional food consumption and nutrition transition in Malaysia and the Philippines. The project had been approved by the Ethics Committee of the Faculty of Medicine and Health Sciences of Universiti Putra Malaysia (UPM/FPSK/PADS/T7-MJKEtikaPer/F01) and the Faculty of Medicine of Andalas University (15/KEP/FK/2008).

## Results

### Interview

The interview was done by interviewing 90 subjects in Philippines, 95 subjects in Malaysia and 437 subjects in Indonesia. The characteristics of the subjects are showed in Table 1 below. The results show that both in Indonesia, Philippines and Malaysia, the subjects in the urban area were younger and had higher education levels (87%, 72%, 32% in the Philippines, Malaysia and Indonesia, respectively) compared to those in rural areas. The interviews were done mostly with women.

Table 1: Characteristics of the subjects

	Philippines		Malaysia		Indonesia	
	Urban	Rural	Urban	Rural	Urban	Rural
Education (%)						
Low	2.27	17.39	6.00	45.50	17	38
Middle	9.09	39.13	22.00	32.70	51	57
High	88.63	43.47	72.00	3.60	32	5
Gender (%)						
Female	86.36	86.95	54.00	61.05	82.91	88.81
Male	13.63	13.04	46.00	38.94	17.09	11.19
Age (years)						
Mean	33.48	49.82	32.80	52.04	49.02	51.08
SD	15.00	11.42	11.52	17.18	10.11	16.12

The source of fat used by most subjects in the Philippines was vegetable oil. There were 23% who still use coconut oil. In Malaysia,



none of the subjects used coconut oil as their source of fat. All of the subjects had replaced coconut oil with palm oil. In Indonesia, some participants suggested that since the last two decades, coconut oil was gradually replaced by palm oil because of the increasing price of coconut oil. To measure food variation in Malaysia and Indonesia, 50 traditional foods were scored by the frequency of consumption of the foods. The result showed that subjects in the urban area had significantly higher scores of food variation compared to those in rural areas.

### Focus Group Discussion

In the Philippines, Focus Group Discussions were done once each in urban and rural area. The discussions were conducted among 10 to 12 participants, aged from 18 to 60 years old. In Malaysia, three focus group discussions were done. In the urban area, two discussions were conducted in Bandar Baru Bangi among only females and only male participants. In the rural area, the focus group discussion was done in Tanjong Karang, conducted among male participants aged from 35 to 64 years old. In Indonesia, in the urban area of Padang, nine women joined in the discussion, aged 30 to 67 years. In the rural area, three group FGDs were done, thirteen women participated in the FGD in Pariaman, aged from 46 to 67 years. The second group consisted of seven women aged 46 to 81 years old, and thirteen women, aged 33 to 77 years old participated in the third group FGD in the rural area.

The results show no difference in food preference between those in urban and rural participants in their breakfast food pattern. Although bread, crackers or oats have been chosen as the alternative foods for breakfast, rice – whether boiled or fried – was the main food staple both for rural and urban participants.

In Malaysia, *nasi lemak* is the first choice as the breakfast food for most of the participants both in urban and rural. *Nasi lemak* is rice cooked with coconut milk and served with anchovies, roasted nuts, cucumbers, a slice of egg, a chili paste known as *sambal* and a choice of curries and *rendang*. Participants in urban area had also other local breakfast food favourites, such as, *roti canai* and bread. *Roti canai* is a thin bread with a flaky crust, fried on a skillet and served with

condiments. *Teh tarik* literally meaning “pulled tea”. Tea is sweetened using condensed milk, and is prepared using out-stretched hands to pour piping hot tea from a mug into a waiting glass, repetitively.

Food pattern for lunch and dinner in urban and rural Philippines consists of rice, vegetables and fish. The foods are prepared in traditional ways such as *sinigang* and *kalderetta*. *Sinigang* is stewed fish/meat and soured by tamarind, while *kalderetta* is stewed pork with tomato sauce. In Malaysia, lunch and dinner consists of rice, vegetables along with either chicken or fish. Boiled rice is served with sautéed vegetables. Chicken or fish are deep-fried or boiled with coconut milk. Chicken curry and mutton curry are popular dishes in Malaysia.

In Indonesia, basic daily dishes consist of steamed rice, a hot fried dish and a coconut milk dish, with minimal variation from breakfast to evening meals. Like other parts of Indonesia and Southeast Asia, rice is the most important food, along with fish, coconuts, vegetables and chilli. Fish is usually fried or boiled with coconut milk. Some herbs and spices, including turmeric, ginger, galanga (*Languas galangal*), chilli, onions, turmeric leaves, lemon grass, small green chilli and lime juice, are mixed with the fish before it is cooked with coconut milk. The most important herbs and spices used in almost every coconut milk dish are chilli, turmeric, ginger and galanga. In meat preparation, herbs, spices and coconut contribute flavours and are useful for preservation. Meat can be deep-fried, boiled with or without coconut milk, or grilled (as *satay*).

From Focus Group Discussions, all subjects from the three countries admitted that between older and younger generations, changes in meal patterns have occurred; this was partly because of the ease with which food can now be obtained, and the acculturation process. According to the older participants in the FGDs, when they were young they seldom bought cooked food. In present days, the young generation can easily purchase cooked food. On the other hand, they also recognized that food was more available at the present time than before.

All participants agreed there has been little or almost no difference in food tastes between the two generations interviewed. Traditional food was still the first choice. Taste preference among Indonesian people was a combination of the hot and spicy taste and the flavour of herbs and



spices, with a little bit of salt. Western food such as McDonald was hardly known to the villagers. However, the older generation mentioned that, compared to 40 to 50 years ago, more food was now available. Restaurants and food outlets can now be found everywhere. Novel foods have also been introduced, such as instant noodles, tofu and tempeh, which were now commonly used in households.

## Discussion

### Nutrition Transition

Nutrition transition in Southeast Asian countries has been extensive. There have been tremendous increases in the prevalence of obesity amongst adults and children. The increases of obesity risks are diabetes mellitus, coronary heart disease and stroke; although under-nutrition problems such as underweight, severe malnutrition, anemia, iodine deficiency are still undefeated.

The nutrition transition in the Philippines has been reflected in changes in the proportion of macronutrients and food intake, and in dramatic shifts in causes of death from infectious to chronic non-communicable diseases. Deaths from infectious diseases have shown a progressive descent since the 1940s, while deaths from heart disease and cancer, a progressive increase. In the early 1990s, diseases of the heart and of the vascular system assumed number one and two in the national mortality statistics (Dayrit, 2003). There have been steady decreases in the prevalence of under-nutrition in children in the Philippines, from 34.55% in 1990 to 24.6% in 2006. However, obesity was found among 14% of the children in Manila and 24.5% in adults. The Philippine economy has been remarkable over the past 26 years, including the economic crisis in mid 1997. Gross Domestic Product increased dramatically from 600 million PhP in 1980 to 1,200 million PhP in 2006. Such high economic growth increased food availability and enhanced purchasing power of the people, which accelerated nutrition transition.

Since attaining independence in 1957, Malaysia has achieved marked socio-economic development including advances made in the health care delivery system. Vital statistics over the decades show much improvement in the health status of Malaysians in general. Khor (1997)

reported that Malaysia was seen to have a better socioeconomic and health status than several countries in the Southeast Asian region, in terms of life expectancy at birth (74.5 years for women and 70.1 years for men), and infant, toddler and maternal mortality rates (9, 10, and 39 per 100,000 live births, respectively). The nutritional status of Malaysians mirrors a society that is undergoing nutrition transition. Consequences of the dual burden of under- and over-nutrition are evident in various age groups in rural and urban areas. On the one hand, protein-energy malnutrition persists in the form of underweight and stunting among young children in rural areas, ranging between 20-30% and 25-35%, respectively in 1997 (Khor, 1997) to 16%-13.2% and 19.4-15.8% from the Third National Health and Morbidity Survey (NHMS III) 2006 (Department of Statistics Malaysia, 2008). In contrast, prevalence of overweight in children from urban areas is emerging and levels of 10-15% have been reported (Bong and Jaafar, 1996), the figure was reported to be 5.4%-6.3% from NHMS III. Overweight among adults has been growing, increased from 26.5% in 1997 to 29.1% in 2008 (Department of Statistics Malaysia, 2008).

There have been remarkable changes in the Indonesian economy over the past 45 years, including the economic crisis in mid 1997. GDP increased dramatically from 1970 to 2010. In 1970, the GDP was \$70, then it increased to \$1,000 before the crisis in 1997, and became \$3,010 in 2010. This was in line with the high average economic growth of 7.8% in the 1970s, 6.5% in the 1980s and 7.2% in the 1990s and 6.5% in 2011. Such high economic growth increased food availability and enhanced purchasing power of the people, which accelerated nutrition transition (Indonesian Statistics Bureau, 2011).

The rapid shift in income was associated with changes in occupation distribution. Indonesia labour force data indicates a clear trend over the six population surveys (SUSENAS 1971- 2007). The share of the agricultural labour force fell continually, from almost three-quarters of the total in 1961 to less than one-third in 2007. During the same period, that of industry doubled, while that of services rose by about 85%. A shift alteration from labour-intensive occupations in the rural primary product sectors of agriculture, forestry and fisheries, to occupations in the services and manufacturing was in agreement with



the marked increase in the GNP of Indonesia. The current occupational structure of Indonesia is similar to that of most Western countries. This transition is linked to a major reduction in energy expenditure at work.

### Dietary Habits and Food Culture

Indonesia, Malaysia, and the Philippines have bred sister cuisines that find similarities as well in Thailand, Vietnam, Laos, Cambodia, and Brunei Darussalam, because of the similarities in the climate, contours, topography, and geography. It is thus possible to speak of Southeast Asian cuisine even while acknowledging the regional differences that come from history, society, and culture. Indonesia, Malaysia, and the Philippines therefore demonstrate cuisines that grew on virtually the same soil and in analogous weather conditions, but which developed individual, regional characteristics through the actions of history and society on the cultures of the countries. Certain similarities and commonalities stand out, however, even before the differences.

Philippine cuisine has numerous indigenous and foreign influences. Throughout the centuries, the islands have incorporated the cuisine of the early Malay settlers, Arab and Chinese traders, and Spanish and American colonizers, along with other Oriental and Occidental accents and flavors. The strongest culinary influence was from Spain which ruled the Philippines for almost 400 years. Food historians claim that 80 per cent of Philippine dishes are of Spanish origin. Because the Spaniards formed the elite, dishes adapted by upper-class Filipinos were also Spanish-inspired. Thus many of the party and fiesta dishes and those served for special occasions bear names like *relleno*, *morcon*, *paella*, *callos*, *embutido*, *caldereta*, etc. Most Spanish recipes had been modified to accommodate what were readily available ingredients. Thus, the emergence of a cuisine Filipinos called their own, adapted to their tastes. Chinese influence is evident in noodle dishes which go by the general name of *pancit*. The American confounded the native Filipino's approach of cooking by proposed well-planned, neat kitchens of modern America's architectural approach (Prudente Sta Maria, 2006). Unlike their Southeast Asian neighbors, most Filipinos do not eat chili-hot dishes, although dishes from the Bicol region are distinguished by their use of chili and coconut milk, similar to

Indonesian, Malay and Thai food. Muslim food retains the flavor of its Malaysian origin. It is spicy and uses coconut milk, chilies, cassava and rice. Many Philippine desserts, particularly those made of rice and coconut are similar to those of Indonesia and Malaysia. Among these are *biko* and *suman*, sticky rice cooked with coconut milk and sugar and wrapped in banana or *pandan* leaves, *bibinka*, *puto* and *kutsinta* which are different types of rice cakes, and *bukayo*, a crunchy sweet made of grated coconut cooked in molasses and pressed into bars. Rice is the main staple; corn is a substitute in other places. Throughout all the influences, the Filipino has adapted and absorbed the strange tastes of all the many culture to suit their preferences and adapting them to the Filipino taste.

Indigenous Malaysian cuisine has been influenced by Chinese, Indian, Thai and many other cultures to produce an entirely new and rich cuisine of their own. Unlike the Philippines, the influence of colonization on Malaysian food culture was negligible. Dietary habits of the people have remained relatively intact despite the influx of changes. This is probably due to the conservative attitude of the Malays towards food. The colonial experience gives Philippine dishes a European-American dimension, just as British colonization colored Malay-Singapore food and Dutch domination redefined Indonesian cooking. Of the latter two, however, the Dutch influence is the lightest because the colonizers were not too interested in changing the native culture of the colonized. However, Spanish colonization of the Philippines, which meant Christianization as well, was much more deeply engaged in culture change, as was American colonization, which made its impact through language and education. In Malaysia, the Indians, Chinese, immigrant elites from East and Southeast Asia, and Europeans influenced food more strongly than did the British.

### Food Pattern Transition

This study shows that most of the participants still maintain their own food consumption pattern. The nutrition transition in the regions could not be explained by the introduction of Western foods because the practice of consumption of Western food in this study population was minimal. According to some participants in FGDs, Western foods were



considered as snack foods that were consumed for recreation and in leisure times. This study shows that there has been only a slight change in food preferences amongst the participants. Mostly the participants have not changed their dietary patterns. There was little or almost no change in food tastes between younger and older generations. The similar pattern of preserving traditional food patterns was found in Korea. Kim et al, (2003) and Lee et al (2002) reported there has been a recent boom in the demand for traditional restaurants in South Korea. Restaurants called 'country dining table' that serve mostly vegetable side dishes, 'raw vegetable house' where people use assorted vegetables to wrap their own food, and 'native local food restaurants' and 'Buddhist temple restaurants' where meats are excluded, are gaining popularity, even among modernised people.

From his study in China, Popkin (2001) revealed nutrition transition in many developing countries has been reflected in dramatic shifts in food consumption. These diet shifts include large increases in energy density, in the proportion of the population consuming a high fat diet and in animal product intake. People living in urban areas consume diets distinctly different from those of their rural counterparts. One of the more profound effects is the accelerated change in the structure of diet, only partially explained by economic factors. The improvement of economic status in the Philippine and Malaysia has increased the food purchasing power of the people. This does not mean that people changed their food preferences. The addition of more animal products, sugar and oil to the same traditional recipes was probably the major cause of the increasing of obesity that ended up to nutrition transition in the region.

### Conclusion and Recommendation

The results of this study found that Indonesians, Malaysians and the Filipinos have maintained many of the aspects of their traditional diet, although there was a significant difference between urban and rural in food varieties. Western food franchise and culture have not yet overwhelmed local food culture in this region. The rapid nutrition transition in this region may be due to the increase in food availability

and food purchasing power rather than a shift of food preference toward modern Western food patterns.

By the increase of nutrition related-non communicable diseases, such as diabetes mellitus, coronary heart disease and cancer, it is still important to increase and maintain the campaign to consume local traditional foods. Healthy food campaign to increase the consumption of fiber, vegetables, fruits, and decrease consumption of fat and sugar, should be increased by strengthening local food culture and the revival of the traditional diet using an approach that is acceptable. It is also recommended to the governments in Southeast Asian countries to focus more on the prevention of obesity and its risks.

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