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# SOUTHEAST ASIAN AMERICAN FOOD HABITS



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By spring 1980, over 325,800 Southeast Asian refugees resettled in the United States. Approximately 40 percent are children. Many more refugees (up to 14,000 each month) will be admitted to the United States in 1980 from Vietnam, Cambodia, and Laos. Because of food shortages and the prevalence of disease in these countries, members of these groups are particularly vulnerable to nutritional problems. Pregnant and lactating women, infants, and preschool-age children are at particular nutritional risk.

The Supplemental Food Program for Women, Infants, and Children (WIC) and the Commodity Supplemental Food Program (CSFP) are means by which the nutritional status of Southeast Asian Americans can be enhanced. In addition to supplying nutritious foods to supplement the diets of eligible women, infants, and children, Southeast Asian Americans can learn about the foods in the American marketplace through WIC and CSFP.

Nutrition education can be defined as a deliberate attempt to influence the nature of the diet people consciously choose, in an effort to improve or maintain their health. To accomplish this goal, the nutrition educator needs to weave a dietary plan from the traditional nutritional fibers of the culture.

## FOOD HABITS PYRAMID—A CONCEPTUAL MODEL

Table 1 depicts a conceptual model in which foods of Southeast Asia can be viewed. The food habits pyramid identifies three categories of foods that are characteristic of many Southeast Asian cultures (a staple food, seasoned food mixtures, and status foods) and depicts their relative caloric contribution to the total diet.

Many cultures have a staple food that forms the foundation of their diet.

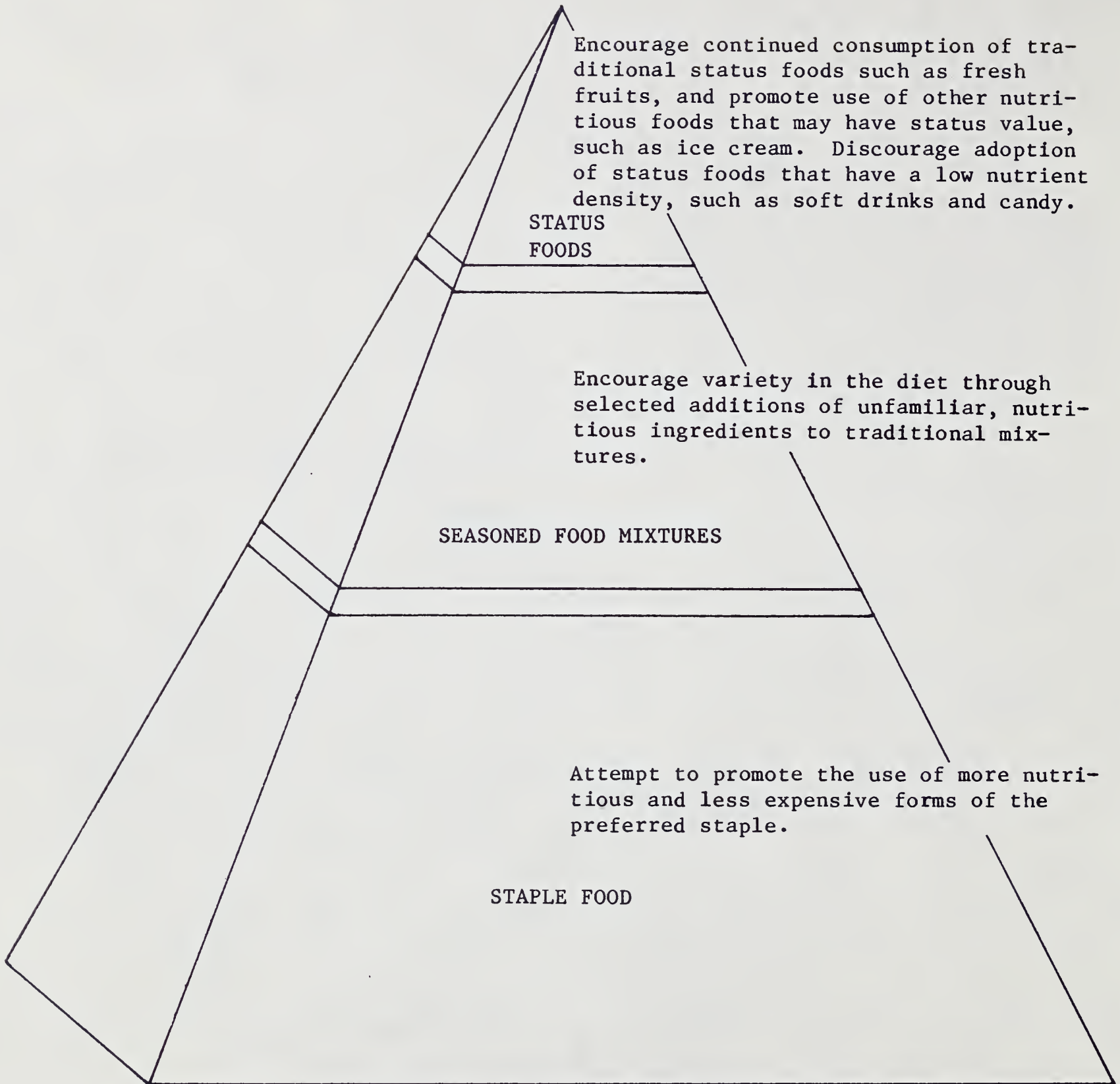
This food is typically bland, relatively inexpensive, and easy to prepare. The staple food provides energy. It also provides protein that is of low biological value to the overall diet. Staples of different cultures include cereal grains such as rice, wheat, millet, and corn, or starchy tubers such as potatoes, yams, taros, and cassava.

Rice, which is the staple food for Southeast Asians, provides up to 80 percent of the calories they consume daily. In Vietnam, when one person asks another, "Have you eaten today?", he or she is actually asking "Have you had rice today?" As the staple food in Southeast Asia, rice is the major part of each meal. When food is served without rice, the Southeast Asians consider it a snack.

The staple food of any culture is relatively resistant to change. However, the use of enriched or whole-grain rice can improve the nutritional contribution of rice to the diet.

The nutritional value of the Southeast Asian diet is enhanced by a variety of vegetables, legumes, nuts, fish, eggs, meats, and certain grains. Because these foods contribute protein of high biological value and a variety of vitamins and minerals to the diet, they are called protective foods. These protective foods are used in various combinations, along with traditional spices, to prepare seasoned dishes that give palatability and ethnic identity to a meal. Southeast Asians are referring to these dishes when they ask "Did you enjoy your meal?"

The quantity and type of protective foods consumed are influenced by various factors including geography, income, religion, and taboos. Families with higher incomes typically eat a greater amount of meat or fish and a greater



**FOOD HABITS PYRAMID—A CONCEPTUAL MODEL  
TABLE 1.**

variety of protective foods than do lower income families. These familiar seasoned food mixtures are susceptible to certain modifications when Southeast Asians resettle in the United States. Therefore, a major focus for nutrition education should be to enhance the quality or increase the quantity of these dishes. For example, ingredients could be added to a familiar dish to enhance its nutritional contribution without significantly altering its characteristic flavor.

Other foods that are characteristic of cultures are status foods. These foods are generally expensive and are not commonly a part of the daily diet in the native country. Southeast Asians regard fruits, soft drinks, and alcohol as status foods. Status foods high in sugar, such as soft drinks, can complicate the already existing dental caries among Southeast Asians. Economic and nutritional benefits may be obtained by discouraging consumption of status foods with a low nutrient density and encouraging continued consumption of status foods that have a high nutrient density and are also acceptable to the culture. Fruits and certain status foods that use milk products, such as pudding, could be promoted in this way.

Knowledge of traditional food habits of a culture will provide a solid base for educational plans and will also help in achieving specific nutritional goals. The following section contains information on Southeast Asian meal patterns, food preparation techniques, and traditional foods.

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## MEAL PATTERNS

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Daily food fare for Vietnamese, Cambodians, and Laotians consists of three meals and optional snacks. One or several dishes are prepared for each meal (this varies with family income) and are served communal style. In spite of similarities, there are variations in cuisine among and within Southeast Asian countries. French and Chinese influences are apparent as a result of these nationalities' historical

occupation of Southeast Asia. Further change in food habits occurs after refugee families resettle in the United States<sup>1,2</sup>.

Breakfast - (a light meal)

Soup (broth, fish or meat, greens, sprouts, and noodles)

or rice and fish, meat, or egg

Bread

Coffee or tea (coffee is usually taken with sugar and cream, tea without these additions)

Lunch and Dinner

Rice served with small portions of fish or meat and vegetables, and fish sauce or soy sauce and seasonings

Soup

Fruit

Beverage (tea, coffee, soft drink, or alcoholic beverage such as beer or wine)

Table 2 identifies sample meals for the Vietnamese, Cambodians, and Laotians.

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**TABLE 2    SAMPLE MEAL PATTERN**

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VIETNAMESE

Breakfast

soup "pho" contains rice noodles, thin slices of beef or chicken, bean sprouts, and greens

or boiled eggs and crusty bread

or rice and leftover meat

or combinations of above foods

tea or coffee

Lunch and Dinner  
(similar)

rice

fish and/or meat and vegetable dish

fish sauce "nuoc mam"\*

clear soup with vegetables and/or meat

tea, coffee, soft drinks, or alcoholic beverage

Snacks

fruits

clear soup

CAMBODIAN

Breakfast

soup with meat and noodles and/or rice

tea or coffee

Lunch and Dinner  
(similar)

rice

fermented fish "prahoc"\* fish sauce  
"tuk-trey"\* with vegetables (cabbage,  
cucumbers and/or turnips)

tea, coffee, soft drinks, or alcoholic beverage

Snacks

sweets made from palm sugar

bananas

clear soup

\*See Glossary

LAOTIAN

Breakfast

rice

boiled egg, roasted meat, or fish with  
sauce

tea or coffee

Lunch and Dinner  
(similar)

fish "padek" and/or meat stew with hot  
peppers

rice

cucumber salad

tea, coffee, soft drinks, or alcoholic  
beverage

Snacks

bananas

stew

\*See Glossary

Source: See 4, 6, 8, 11, 14

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## GLOSSARY

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Sweet or Glutinous Rice: This type of rice is often called "sticky rice" because, when cooked, the rice grains blend together into what is nearly a dough. In addition to its exclusive use among ethnic Laotians, glutinous rice is also used by Southeast Asians in special recipes and in dessert cakes or sweets<sup>3</sup>.

Fermented Fish Paste ("Padek"--Laos, "Prahoc"--Cambodia): This fermented fish (and its broth) is a staple of the ethnic Laotian and Cambodian diets. Small whole fish and salt (rice bran is also sometimes added) are put into covered jars and left to ferment for several months. The result is almost equal parts liquid and solid chunks of fish with a penetrating odor<sup>4</sup>.

Fish Sauce ("Nuoc Mam"--Vietnam, "Tuk-trey"--Cambodia): This sauce is commonly used as a seasoning in Vietnamese and Cambodian dishes. "Nuoc mam" is made by tightly packing layers of fresh, small fish and salt into wooden casks and allowing the fish to ferment. After several months, a liquid that contains significant amounts of protein and other water-soluble nutrients is drained off. The first draining is considered to be the best quality of fish sauce. "Nuoc mam" refers both to the full strength liquid used in cooking, and to a "dip" made of the sauce, water, vinegar, sugar, and additional seasonings<sup>3</sup>.

Soy Sauce: This is liquid extracted from fermented steamed rice, roasted soybeans, and salt. It is used as a seasoning.

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## FOOD SHOPPING AND PREPARATION

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PROVIDE SOUTHEAST ASIAN AMERICANS WITH INFORMATION ON PROPER STORAGE OF PERISHABLE FOODS.

PROVIDE SUGGESTIONS FOR CUTTING DOWN COSTS WHEN SHOPPING, SUCH AS USING STORE BRANDS, UNIT PRICING, AND SALES INFORMATION.

In Southeast Asia, food is generally purchased daily from independent vendors who sell meat, produce, canned goods, and other foods in open markets and in food stores. Frequent shopping among urban families is common because of the availability of household help. Because many households do not have refrigerators, perishable foods must be purchased often. However, when Southeast Asians resettle in the United States, they must make changes in food buying practices. They do not purchase food as often as in Southeast Asia, and shop for it in oriental food stores and supermarkets.

Traditional Southeast Asian dishes take considerable time to prepare. Certain ingredients, such as spices, may be ground with a mortar and pestle in a traditional household or with an electric grinder in a contemporary one. An increase in the popularity of electric grinders among Southeast Asian families in the United States has been influenced by the fact that more women are working outside the home, and they desire to simplify meal preparation.

In many Southeast Asian dishes, meat or fish and vegetables are chopped into small, uniform pieces before cooking. Cooking methods include stir-frying, roasting, boiling, and steaming. Vegetable oils and pork fat are principal fats used in cooking<sup>5</sup>. However, overall fat content in the diet is small. Modest fat intake can be attributed to the small proportion of meat in the diet compared to the large proportion of rice.

An essential aspect of Asian cooking is the interesting assortment of seasonings used in cooking. Fish sauce and soy sauce, both of which are high in sodium,



typically replace table salt as a seasoning. Hot peppers are used generously in Laotian dishes<sup>4</sup>. Ginger root, garlic, onions, leeks, mint, coconut, cinnamon, coriander, lemon grass, and other herbs and seasonings contribute to the robust flavor of Southeast Asian dishes<sup>3</sup>.

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## RICE

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ENCOURAGE THE CONTINUED CONSUMPTION OF RICE AS A STAPLE FOOD.

ENCOURAGE THE USE OF IRON-FORTIFIED INFANT RICE CEREAL WHEN SOLID FOODS ARE INTRODUCED INTO THE INFANT'S DIET. DEMONSTRATE THAT THE INTRODUCTION OF IRON-FORTIFIED INFANT RICE CEREAL IS COMPATIBLE WITH TRADITIONAL FOOD HABITS AND OFFERS THE BABY ADDITIONAL NUTRITIONAL BENEFITS.

ENCOURAGE INTRODUCING SOLID FOODS OTHER THAN RICE IN AN INFANT'S DIET AFTER 6 MONTHS, ONE AT A TIME. AFTER INTRODUCING VEGETABLES AND MEATS INTO THE DIET SEPARATELY, THESE MAY BE COMBINED WITH RICE FOR A BABY'S COMPLETE MEAL.

Rice is the staple of the Southeast Asian diet. It is eaten at almost every meal and accounts for the greatest proportion of calories consumed daily. Differences in variety and methods of rice preparation are perhaps subtle to Westerners, but are of extreme importance to Asians. For example, the Vietnamese like rice that is very dry and flaky, as do the Cambodians. Most Laotians, however, prefer glutinous rice, which is sticky. The exception is the Laotian hill people (including the Hmong) who prefer non-glutinous rice.

Grains other than rice (such as corn) are not consumed in quantity by rural Southeast Asians<sup>6</sup>. As a result of French influence, bread is popular among urban families. Noodles made from wheat and rice are used in soups and main dishes. Examples are rice vermicelli (thin rice noodles) and rice sticks.

The first solid food Southeast Asians usually introduce to infants is rice (or rice flour and water in the form of a

gruel). This feeding practice may be initiated as early as 1 month of age<sup>7-10</sup>. However, introducing other solid foods is often delayed until the infant is at least 1 year old. This feeding habit may result in lower weight gain for these infants or in deficiencies of needed nutrients. Weight records are useful tools that can assist in identifying such unhealthy feeding practices, one of the focuses for nutrition education.

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## LEGUMES

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ENCOURAGE THE INCREASED CONSUMPTION OF LOCALLY AVAILABLE NATIVE LEGUMES SUCH AS SOYBEANS AND MUNG BEANS.

Common legumes in Southeast Asia include soybeans, mung beans, and peanuts. The versatile nature of the soybean in preparing sauces, bean curd, and soy milk makes it popular among Cambodians and Vietnamese<sup>11,12</sup>. Mung bean noodles and bean sprouts are used in soups and dishes.

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## VEGETABLES

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PROMOTE THE CONTINUED CONSUMPTION OF A WIDE VARIETY OF VEGETABLES.

ENCOURAGE HOME AND COMMUNITY GARDENING AS A SOURCE OF NATIVE VEGETABLES.

INFORM SOUTHEAST ASIANS THAT VEGETABLES GROWN IN AMERICAN SOIL CAN BE EATEN RAW AFTER BEING RINSED WITH TAP WATER (BOILING WATER IS UNNECESSARY).

ENCOURAGE EXCHANGE OF EXPENSIVE NATIVE VEGETABLES FOR INEXPENSIVE ACCEPTABLE SUBSTITUTES.

A large variety of vegetables are grown and consumed in Southeast Asia. However, in some regions of Laos and Cambodia, few leafy vegetables are consumed<sup>7,8</sup>. Fresh, crisp vegetables are preferred to those in cans, since the latter are "mushy" when cooked. A number of vegetables used in Southeast Asian dishes can easily be purchased in American markets. These include tomatoes, onions, cucumbers, green beans, eggplants, peppers, green leafy vegetables, carrots, lettuce,

squash, and mushrooms. Other Southeast Asian vegetables including spinach-like greens, cabbages, and various herbs are not widely available. These items are frequently obtained from oriental food markets, home gardens, or ordered by mail.

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## ANIMAL PROTEIN

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FAMILIARIZE SOUTHEAST ASIAN AMERICANS WITH THE PRICE PER SERVING OF ANIMAL PROTEIN TO ENCOURAGE ECONOMICAL FOOD BUYS. POULTRY AND EGGS SERVE AS ECONOMICAL SUBSTITUTES FOR PORK AND FISH.

PROVIDE TIPS ON ECONOMICAL BUYS IN LINE WITH TRADITIONAL FOOD HABITS (SUCH AS PREPARING FROZEN FISH IN ACCEPTABLE WAYS).

Compared to the American diet, Southeast Asian diet has a much smaller amount of animal protein. Many varieties of fish and shellfish are popular among Southeast Asians. Fresh fish may be cooked with a sauce and served over rice. In some areas of Laos, fish is eaten raw<sup>9</sup>. Other traditional forms of fish preparation are designed to preserve fish. Fermented fish provides the basis for popular Laotian and Cambodian dishes. Sauces derived from fermented fish are widely used by the Vietnamese, Cambodians, and Laotians.

Other animal protein sources used in cooking are pork, chicken, duck, beef, eggs, and organ meats. On coming to the United States, Southeast Asians encounter differences in cost and availability of traditional foods. Chicken and eggs are less expensive in American food markets than pork and fish, which were the least expensive animal protein sources in their native lands<sup>13</sup>.

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## MILK AND CHEESE

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ENCOURAGE CHILDREN AND PREGNANT AND LACTATING WOMEN TO USE DAIRY PRODUCTS AND TO INCREASE THE VARIETY AND QUANTITY OF FOOD IN THEIR DIETS.

On a per capita basis, Southeast Asians consume very few dairy products, although children consume more than adults<sup>11,14,15</sup>.

Fresh milk and cheese are typically unavailable in Vietnam, Cambodia, and Laos. However, canned sweetened condensed milk and evaporated milk can be purchased in stores. Of these two, the sweetened condensed milk is often preferred<sup>16</sup>. Lactose intolerance, which affects many Asians, may discourage consumption of dairy products, especially among adults<sup>16</sup>. However, people who are intolerant to lactose can frequently consume small quantities of dairy products without any symptoms and adapt over a period of time to increased quantities of dairy products in their diets. Alternative sources of calcium in the diet include fermented fish products, dried fish and small whole fish, soft-shell crabs, shrimp, bean curd, soy milk, and leafy vegetables<sup>17</sup>.

Many Southeast Asian women do not increase their caloric intake during pregnancy and lactation, and many do not include milk in their diets<sup>7,8,15,18</sup>. In some cases, traditional food practices restrict the consumption of animal protein, vegetables, fruits, and other foods<sup>18,19</sup>.

ENCOURAGE BREASTFEEDING. POINT OUT THE NUTRITIONAL ADVANTAGES OF BREAST MILK. IT MAY BE HELPFUL TO INFORM MOTHERS THAT BREASTFEEDING AMONG MANY MIDDLE AND UPPER INCOME AMERICAN WOMEN HAS INCREASED.

PROVIDE INSTRUCTIONS ON FORMULA PREPARATION, SANITATION, AND STORAGE.

In Southeast Asia, the majority of infants are breast-fed. The breast-feeding period usually extends until a child is at least 1 year old<sup>10,15,18,19,20</sup>. Infants who are not breast-fed may be given sweetened condensed milk<sup>7,8,10</sup>.

In the United States, there is a growing trend toward bottlefeeding among Southeast Asian Americans. Use of infant formula in bottles has increased among Southeast Asian women because of its availability and because it is seen as a status symbol. Also, Southeast Asian women working outside the home may choose to bottlefeed because it is convenient. Problems with bottlefeeding occur because

of difficulty in understanding the instructions for preparing the formula. For example, Southeast Asian Americans may prepare concentrated and ready-to-feed infant formulas the same way. Sanitation problems may occur during the preparation and refrigeration of formula<sup>21</sup>.

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## FRUITS

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SUPPORT USE OF FRUITS AS DESSERT AND POINT OUT THE POSITIVE NUTRITIONAL ASPECTS OF THIS CULTURAL PRACTICE.

FIRST, ENCOURAGE EATING ORANGES AS A SOURCE OF VITAMIN C. THEN, SUGGEST USING OTHER CITRUS FRUITS. ENCOURAGE FRUIT JUICES AS ALTERNATIVES TO SOFT DRINKS AND FRUIT DRINKS.

IDENTIFY FRUITS IN SEASON TO ENCOURAGE ECONOMICAL BUYS.

Southeast Asians usually serve fruits fresh as desserts or snacks. Popular fruits include mangos, pineapples, papayas, lichees, jackfruit, coconuts, bananas, and oranges. Of these, bananas are the most universal and in some regions of Cambodia and Laos, the only fruit available<sup>7,8,22</sup>. Oranges are very expensive in Southeast Asia and are considered a status food. In American markets, however, oranges are inexpensive and are widely available.

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## SWEETS

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SUPPORT THE TRADITIONAL DIETARY PRACTICE OF LIMITED CONSUMPTION OF STATUS FOODS THAT ARE SWEET.

Pies and cakes prepared from flour are not widely available in Southeast Asia. Relatively few households in Asia are equipped with ovens. Instead, common desserts are fresh fruits, steamed cakes, and sweets prepared from glutinous rice<sup>3</sup>. Southeast Asians new to the United States are quickly exposed to a wide range of products that are high in sugar, such as soft drinks, sweetened cereals, and candy. Both television and in-store merchandising of these products enhance their image as status foods and encourage eating as much as possible of these foods.

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## BIBLIOGRAPHY

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1. Tong, A.: "Food habits of Vietnamese immigrants in the greater Washington DC area." Thesis. Howard University, Washington, DC, 1979.
2. Crane, N., Green, N.: "Food habits and food preferences of Vietnamese refugees living in northern Florida." *Journal of the American Dietetic Association* 76:591, 1980.
3. Steinberg, R.: *Pacific and Southeast Asian Cooking*. NY, NY, Time Life Books, 1972.
4. Gerhold, C.: "Food habits of the valley people of Laos." *Journal of the American Dietetic Association* 50:4932, 1967.
5. Hamilton, L.: "Vietnam - Foods and customs." US AID, Washington, DC.
6. Whitaker, D.P.: *Area Handbook for Laos*. US Government Printing Office, Washington, DC, 1972, p. 87.
7. Budlovsky, J.: "Nutrition advisory services assignment report, Laos." Regional Office for the Western Pacific, World Health Organization, Manila, Philippines, 1971.
8. Budlovsky, J.: "Nutritional problems of rural areas of Cambodia." Regional Office for the Western Pacific, World Health Organization, Manila, Philippines, 1971.
9. Harinsuta, C., Grossman, B.A., Underwood, B.A.: "Nutrition and some related diseases of public health importance in the Lower Mekong Basin: A review." SEADAG (Southeast Asia Development Advisory Group) Papers, The Asia Society - SEADAG, NY, NY, 1973.
10. Coengracht, I.: "Nutrition advisory services assignment report, Laos." Regional Office for the Western Pacific, World Health Organization, Manila, Philippines, 1970.

11. Manuel Cambodgien de Nutrition. Service National de la Nutrition et de L'Alimentation, Phnom Penh, Cambodia, 1970.
12. Ngo, B., Zimmerman, G.: The Classic Cuisine of Vietnam. NY, NY, Barron's /Woodbury, 1979.
13. Du, P.: Personal Communication. Cambridge, Massachusetts.
14. Kaufman, M.: Vietnam, 1978: "Crisis in food, nutrition, and health." Journal of the American Dietetic Association, 74: 310, 1979.
15. Ireson, C.: "Nutrition survey of six Lao villages." International Voluntary Services, Washington, DC, 1969.
16. Ann, N.T., Thuc, T.K., and Welsh, J.D.: "Lactose malabsorption in adult Vietnamese." American Journal of Clinical Nutrition 30:463, 1977.
17. Leung, W.T., Butrum, R.R., Chang, F.H.: Food Composition Table for Use in East Asia. National Institute of Arthritis, Metabolism, and Digestive Diseases, National Institutes of Health, US Department of Health, Education, and Welfare, Bethesda, MD, 1972.
18. Migasena, P.: "Nutrition, health status, and the impact of development in the Lower Mekong Basin." SEADAG Papers, The Asia Society - SEADAG, NY, NY, 1972.
19. Republic of Vietnam Nutrition Survey. Interdepartmental Committee on Nutrition for National Defense, Saigon, Vietnam, 1960.
20. Sany, P.: "Results of the research in the first pilot zone of the Cambodia nutrition project." SEADAG Discussion Paper, The Asia Society - SEADAG, NY, NY, 1972.
21. Cairns, K.A.: "Hmong food ways in Ramsey County." Ramsey County Community Health Services, St. Paul, Minn, 1979.
22. Whitaker, D.P.: Area Handbook for the Khmer Republic (Cambodia). US Government Printing Office, Washington, DC, 1972, p. 92.



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