

Perspectives in Nutrition

It is hoped that Perspectives in Nutrition will review the literature selectively, interpret it moderately and present a spectrum of ideas that will serve as a continual stimulation to nutritional research applied to medical problems.

Parallel Food Classifications in Developing and Industrialized Countries^{1,2}

DERRICK B. JELLIFFE, M.D., F.R.C.P., F.A.P.H.A.³

FOOD CLASSIFICATIONS are always of great complexity and usually the result of numerous interlocking historical, social, and economic factors influencing the culture pattern.

These subconscious classifications comprise some of the most deep-rooted aspects of all culture patterns. They are learned by imitation in early childhood and are notoriously difficult to modify or change.

Innumerable systems of classification can be made, but the following five are arbitrarily considered here because they appear to be world-wide, affecting both developing and industrialized regions, and also because they are often of importance to the public health nutritionist.

CULTURAL SUPERFOODS

In all communities, one or more items have become the cultural superfood.

The characteristics of cultural superfoods (Table 1) are that they are usually, but not always, the dominant staple and main source of calories, while their production and preparation occupy a major part

of the community's work time, both agriculturally and domestically.

Because of their importance for the survival of the particular community, they often have semidivine status, being interwoven into local religion, mythology, and history.

Examples of cultural superfoods from both developing parts of the world and industrialized regions are given (Table II), together with a brief comment on some indication of their religious or social significance.

The nutritional importance of the cultural superfood is that it will usually be the main source of protein, as well as calories, and will also be the food on which mothers will prefer to feed their young children. A group with a relatively high protein cultural superfood such as millet, is at an automatic, base-line advantage with regard to infant feeding and is likely to avoid kwashiorkor, compared with a group predominantly eating a low protein staple, such as plantain or cassava.

PRESTIGE FOODS

All cultures have prestige foods, which are mainly reserved for important occasions or, even more, for the illustrious of the community.

¹From Makerere Medical School, Kampala, Uganda.

²Presented at a Round-Table Discussion on Food Habits at the VIIth International Congress on Nutrition, Hamburg, August 1966.

³Professor of Pediatrics and Child Health.

TABLE I

Characteristics of Cultural Superfoods

1. Dominant staple and source of calories
2. Major part of work time (agricultural, food preparation)

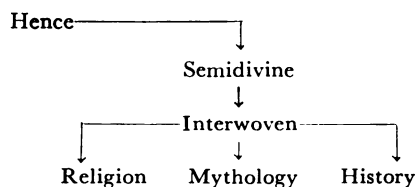


TABLE II

Food	Geographic Area	Socioreligious Significance
Wheat bread	Northwestern Europe	Lord's Prayer, Mass, "Staff of Life"
Rice	Southern India	Annaprasmam (Hindu rice-eating ceremony in infancy) (1)
Steamed plantain (<i>Matoke</i>)	Buganda, East Africa	Introduced by Kintu, historical founder of Baganda people (2)
Corn (maize)	Guatemala, Central America	Preconquistador god

TABLE III
Prestige Foods

Food	Group
"Game" (venison, pheasant)	Northwestern Europe
Special milk dessert (shree-kand)	India (vegetarian)
Camel stuffed successively with goat, turkey, chicken, dove	Arab (traditional)
Poi dog	Ancient Hawaii (3)

Examples from various parts of the world are given (Table III). Examination suggests that, even in vegetarian societies, these are usually protein, frequently of

animal origin. They are usually difficult to obtain, so that they are expensive and relatively rare (Table IV). In the western world they may have been hunted wild, as opposed to domesticated, or imported

TABLE IV

Characteristics of Prestige Foods

1. Usually protein (often animal)
2. Difficult to obtain and/or prepare (expensive; rare; wild; imported)
3. Socio-historical association with dominant group
(game → medieval hunting laws)

TABLE V

Body-Image Foods

1. Systematized
 1. Tridosha (India) — hot-cold foods (1)
 2. Yin-Yang (China) (dualist) — mixed dishes characteristic, to balance the two principles
 3. Galenic humoral (United Kingdom) — milk unsuitable for men (choleric) — spleen inedible (melancholic)
2. *Allegre-Triste* (Basque)
3. Unsystematized
 1. Upright fetus (Baganda) — Avoidance of hot fluid, etc., in pregnancy as taken in by fetus (2)

TABLE VI

Sympathetic Magic Foods

1. Pomegranate juice—hemorrhage (Bengal)
2. Walnut—brain food (Gujerat)
3. Underdone steak—athletes (United Kingdom—early 20th century)
4. Eggs—avoided by women (in many East African groups) (infertility) (2)

TABLE VII

Physiologic Group Foods

1. Egg, chicken, mutton, fish restrictions—East African groups for women (2)
2. Epeme meat (fat portions)—men (Hadza hunters) (4)
3. Pork restricted for women (ancient Hawaii) (3)
4. Fish restricted for children up to 2 years (Malaya)

from distant regions. Lastly, and of much significance, they may quite often have been long associated with the dominant sociohistorical group—as, for example, with “game” in western Europe, probably dating back to the medieval social system and hunting laws.

BODY-IMAGE FOODS

Many cultures have their own body image—that is, their concepts concerning the workings of the body and its physiology. These may be systematized, as with the ancient Hindu classification of body physiology into doshas (humors), especially hot and cold (1), or the Chinese system of Yin-Yang. The importance of these classifications is that both foods and illnesses are also categorized in this way, so that the diet taken may be considerably influenced, in both health and disease, in relation to its supposed influence on the body's balance of active principles (Table v).

Relics of ancient classifications exist in industrialized countries. For example, the Galenic humoral concept of illness may influence modern food intake. One reason that spleen is not eaten to any extent in modern Britain is that, by this classification, it is traditionally the prime seat of melancholic humor.

SYMPATHETIC MAGIC FOODS

All over the world, some foods are eaten, at least in part, because of subconsciously assumed sympathetic magic properties (Table vi).

In Gujerat, the convoluted walnut is regarded as a brain food; while underdone steak—symbolically representing vigor, energy, and masculinity—was used for training University athletes in Europe until recently.

PHYSIOLOGIC GROUP FOODS

Special foods are often reserved for, or forbidden to, certain physiologic groups, including males (especially elders), women (particularly when pregnant, puerperal,

or lactating), and children (more importantly in infancy and the “preschool” age group). Examples are given from various parts of the world (Table vii).

DISCUSSION

This brief review suggests that certain food classifications are common to all parts of the world. Certainly many others are also virtually universal.

Public Health Importance

Affluent societies with an abundant supply of foods, covering a wide range, can, as it were, “afford” the idiosyncrasy of scientifically absurd food restrictions. In western Europe, the taboo on protein-rich rat (a food of celebration among the Ibo of eastern Nigeria) is not important; whereas a parallel avoidance of fish for young children in Malaysia may be disastrous.

Examination of the food classifications briefly presented here suggests that they often have a public health significance in developing regions. In general, they are often related to protein foods (especially those of animal origin). While they may be nutritionally helpful, they more often tend to be restrictive or limiting of food intake (“cultural blocks”). They are often aimed at mothers and young children. They can have, therefore, a direct and important relevance to the dietary causation of protein-calorie malnutrition in these vulnerable groups.

REFERENCES

1. JELLIFFE, D. B. Cultural blocks and protein malnutrition of early childhood in rural West Bengal. *J. Pediat.* 20: 128, 1957.
2. JELLIFFE, D. B., AND F. J. BENNETT. Cultural and anthropological factors in infant and maternal feeding. *Federation Proc.* 20: 185, 1961.
3. JELLIFFE, E. F. P., AND D. B. JELLIFFE. Children in ancient Polynesian Hawaii. *Clin. Pediat.* 3: 604, 1964.
4. JELLIFFE, D. B., J. WOODBURN, F. J. BENNETT, AND E. F. P. JELLIFFE. The children of the Hadza hunters. *J. Pediat.* 60: 907, 1962.

