The Breakdown of the *Kapu* System and Its Effect on Native Hawaiian Health and Diet

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Once healthy and robust, Native Hawaiians today have the shortest life expectancy and highest incidence of diet-related diseases in Hawai'i. This article examines the historical changes in Hawai'i, the breakdown of the *kapu* (religious prohibition) system, alienation from the land, adoption of Western culture and practices, and the resulting diet changes that negatively affected the general health of Native Hawaiians. There is hope, however, in the resurgence of a traditional Hawaiian diet program that models health reform and reintroduces food choices of old Hawai'i as a viable option for contemporary lifestyles. This traditional diet emphasizes Hawaiian values and provides a healthy alternative both physically and spiritually.

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Since "discovery" in 1778 by Captain James Cook, Native Hawaiian culture and practices have changed substantially. In a land they once called their own, Native Hawaiians find themselves alienated not only from the land, but also from themselves and others. This article focuses on historical changes in Hawai'i and how the breakdown of the precontact system in Hawai'i led to the adoption of Western culture and practices. In particular, the article examines how diet changes affected general health of Native Hawaiians.

In 1999, 13% of children and adolescents and 61% of adults in the United States were overweight (U.S. Department of Health and Human Services [U.S. DHHS], 2001). Medical costs related to obesity are $90 billion (Vastag, 2004), and obesity is associated with 400,000 deaths, nearing the 435,000 deaths related to tobacco use (Mokdad, Marks, Stroup, & Gerberding, 2004). In the United States, an abundant food supply has almost eliminated disease related to food deficiency. Despite this fact, 5 of the 10 leading causes of death—heart disease, cancer, diabetes, stroke, and atherosclerosis—are diseases related to diet (U.S. DHHS, 1989). While there are a wide variety of factors that affect health outcomes, it is clear that diet is highly related to health and chronic disease (U.S. DHHS, 1989, 2001, 2004).

In the state of Hawai'i, diet-related diseases and obesity are serious concerns for Native Hawaiians. Before Western contact, Native Hawaiians were healthy and robust. When Captain James Cook arrived in the Hawaiian Islands in 1778, he found a flourishing civilization where inhabitants were vigorous and lived off the land. The ensuing colonization and Westernization of the islands resulted in the loss of cultural identity and practices (language, clothing, religion), devastating loss of life from infectious diseases (Bushnell, 1993), and the introduction of Western cultural and behavioral practices (Blaisdell, 1996; Mokuau & Matsuoka, 1995).

In the 2001 Hawai'i Health Survey, 63% of Native Hawaiians identified themselves as obese, higher than Filipino (50%), Other (48.7%), Caucasian (46.2%), Japanese (39.6%), and Chinese (30.6%; Hawai'i Department of Health, 2001). Obesity is much more than a behavioral risk; it is a disease that can lead to serious health problems including cardiovascular disease, hypertension, diabetes, cancer, stroke, degenerative arthritis, high cholesterol, and gallstones (U.S. DHHS, 1989, 2001). Many Native Hawaiians suffer from obesity as a result of low energy expenditure and a preference for foods that are high in fat, calories, cholesterol, and sugar while low in complex carbohydrates and fiber (Aluli, 1991; Blaisdell, 1996; Shintani, Beckham, O'Conner, Hughes, & Sato, 1994). Today, they suffer disproportionately

from morbidity and mortality when compared with the general population of Hawai'i (Aluli, 1991; Blaisdell, 1996; Look & Braun, 1995; Shintani et al., 1994). Since 1778, Native Hawaiian culture, education, socioeconomic status, and, most alarmingly, health and well-being have been declining (Blaisdell, 1996; Papa Ola Lokahi, 1992; Takenaka, 1995). Native Hawaiians have the shortest life expectancy in the state (Blaisdell, 1996) and are at high risk for many diet-related diseases (Look & Braun, 1995).

Native Hawaiians also have the highest infant mortality and highest mortality for heart disease, cancer, stroke, accidents, and diabetes (Blaisdell, 1996) when compared with other ethnic groups in Hawai'i. The five leading causes of death for Native Hawaiians mirror national and local mortality but occur with greater frequency because of late diagnosis and barriers to health care. Despite gains in health care reform and medical technology, Native Hawaiian health continues to decline.

Why are Native Hawaiians, the once healthy indigenous people of Hawai'i, suffering disproportionately? A historical explanation is offered: The breakdown of the kapu system and the traditional subsistence economy, and the ensuing dependence on a capitalistic cash economy brought by Western influence have led, in combination with other factors, to the current decline in health and well-being among Hawaiians.

Precontact Social Structure and Culture

Before the arrival of Cook in 1778, Hawai'i had a highly stratified social structure with the power held by ruling *ali'i* (royalty). Within this "structure of dominance," religion constituted the relationship among Hawaiians:

> Religion governed the political and economic elements of the social totality, with all aspects of human relationships and practices religiously constituted and infused with

> sacred meaning. Religion determined the status of groups and individuals, and religion was the basis for the allocation, appropriation, and distribution of land and goods. (Buck, 1993, p. 33)

Religion, as Buck (1993) described, is a complex and ambiguous relationship between the concepts of *mana*, *kapu*, and *noa*.

Mana is a complex concept defined as "process, performance, power, abstract force, and effect or all these things." Mana is the "positive manifestation of spirituality and power [which] emanated from the gods and was channeled through the ali'i" (Buck, 1993, p. 33). Buck further stated that mana manifested itself in the well-being of a community, in human knowledge and skills (canoe building, harvesting), and in nature (crop fertility, weather, etc.).

Kapu and *noa* are ideological concepts that are binary opposites. According to Durkheim (1912), *kapu* is associated with what is divine (i.e., sacred and forbidden), and *noa* is associated with things that are not divine (i.e., profane). Both people and things could be considered either kapu or noa depending on whether they were tied to things that were considered divine.

The kapu system in ancient Hawai'i established rules and regulations that not only provided for living in harmony with the land but also dictated daily life. There were three types of interaction: (a) among classes of people, (b) between people and the gods, and (c) between people and nature.

The first type of interaction was among different hierarchical groups of people. Ancient Hawai'i was socially stratified into groups with hierarchical class roles. There were three major groups: the ali'i, the *maka'āinana* (commoners) and the *kauā* (outcasts). The ali'i were persons who "derived their high status by virtue of the fact that they were direct descendants of the gods; hence they were sacred relative to the maka'āinana, who were in theory also descendants of the gods but through junior branches" (Levin, 1968, p. 408). Ali'i possessed great amounts of mana because of their relationship to the gods. The *kahuna* (priests and occupational experts) were part of the ali'i class and included traditional medical doctors called *kahuna lā'au lapa'au*.

Even in the ali'i class, there was social stratification based on mana, or the relationship of each ali'i to the gods. There were four different ranks of ali'i. From highest to lowest, they were *pi'o*, *nī'aupi'o*, *naha*, and *wohi*. The higher the rank, the closer the relationship to the gods and the more strict the kapu. For example, for *pi'o* and *nī'aupi'o*, anyone in their presence or the presence of their personal articles was required, upon penalty of death, to prostrate themselves (Levin, 1968).

The makaainana were also descended from the gods, although not directly like the ali'i, and were the workers of the subsistence economy. The maka'āinana were the farmers, fishermen, and craftsmen and were deeply embedded into the Hawaiian subsistence economy. A clear relationship existed between these two groups.

> Between the *ali'i* and makaainana there existed a bond of mutual obligations and duties. The makaainana were obligated to give goods and services in the form of taxes in kind and labor. In return the ali'i confirmed their tenure rights to the land which they tilled and on which they resided. More importantly, it was the duty of the ali'i to secure for the makaainana supernatural protection from natural calamities and to petition the gods for abundant harvest from the fields and the seas through temple rituals. (Levin, 1968, p. 408)

This relationship is of vital importance with Western trade and influence and is discussed below. Because of their closeness to the gods, the ali'i (through their mana) were responsible for the second type of interaction: the connection between people and the gods.

The kauā were the class of outcasts reserved for ritual killings or sacrifices. While the ali'i and the makaainana were groups descended from the gods, the kauā were thought to be earlier migrants to Hawai'i that were later conquered (Levin, 1968) and were viewed as antithetical, or profane, to the sacredness of the ali'i (Kamakau, 1905/1968).

The kapu system was based on sets of binary oppositions where male elements were held sacred and female elements were profane. In the *Kumulipo*, or the Hawaiian creation chant, the elements are set up as the binary opposition of *Pō* (darkness, which is female) and *Ao* (light, which is male). From darkness and light, life is created. According to Levin (1968), the male element Ao represented life, light, sky, day, strength, and knowledge. The female element Pō represented darkness, death, earth, night, weakness, and ignorance.

> Thus the kapu system as a system of classification pointed out those things which were considered sacred having been derived from the positive male aspect of nature and those things that were common and unsacred being derived from the negative female aspect of nature. (Levin, 1968, p. 12)

According to Durkheim (1912), sacred things are "set apart and forbidden" collectively by a group of people, and the object or idea remains sacred as long as the group continues. This notion greatly influenced not only the kapu system but also the existence of food kapu. Certain foods represented aspects of male gods (Levin, 1968). Although all food in a realistic sense is mundane, certain foods become sacred when specific meaning is attached to them. For example, pork was a symbol for the god Lono, coconut and the *ulua* fish were symbolic of Kū, and *niuhi* (white shark) was symbolic of Kāne. Because these and other foods symbolized the male gods, women were not only prohibited from eating these foods but were also prohibited from eating with men.

The third type of interaction the kapu system dictated was the relationship between people and nature. It did this by providing environmental rules and control that were essential for a subsistence economy. Within the Hawaiian calendar, there were two ceremonial cycles. One dictated rules for planting and the other for harvesting (Levin, 1968). During *kau* (temperate dry season) planting, building, and warfare occurred. During *ho'oilo* (temperate wet season) warfare was forbidden and the *makahiki*, or harvest festival, occurred.

As mentioned above, the ali'i were responsible for providing the maka'āinana with supernatural protection from forces that could destroy crops and food. If an ali'i did not perform religious duties accordingly, he could be replaced by another ali'i who could handle the religious responsibilities, thereby providing more efficiently for the needs of the maka'āinana (Malo, 1903/1968).

The three types of interaction in ancient Hawai'i follow Marx's ideas of the dimensions in which individuals become alienated (a) from others, (b) from their work, and (c) from nature. Buck (1993) offered a Marxist structural analysis that may be useful in determining the relationships between material and economic production (kapu system) and how it was socially distributed (through those with mana) and how ideological and religious practices bring legitimacy to relationships based on power. Buck (1993) stated that "although Marx fully recognized the power of human consciousness and agency, he believed that ideas, beliefs and values do not exist independent of the material conditions of life and human activities" (p. 20). The kapu system was the ideological system, governed by those with mana, that dictated material and economic production and social relationships. Agency was determined by the hierarchical station one held.

Breakdown of Traditional Norms and Values

Kamehameha I, in 1795, united the islands of Hawai'i with the exception of Kaua'i and Ni'ihau. His newfound status allowed him to make fundamental changes in the way land was distributed and administrated. Kamehameha I no longer confirmed tenure rights to hereditary lands (traditional family lands) but now gave smaller portions of land to his family and supporters according to their rank and service (Westervelt, 1923/1968). This left ali'i with tenure rights to the land but took away their administrative rights. A *kuhina*, or administrator, was now appointed by Kamehameha I, primarily to collect taxes. The more influential ali'i were required to live with Kamehameha I, not on their own lands. Kamehameha I made these changes deliberately to take away power from the ali'i. The changes he made were powerful and caused the

> break up [of] the kinship ties between the ali'i of a *moku* and their constituents and [alienation] from each other. There was no longer the feeling of mutual obligation between the ali'i of the *moku* and their junior kinsmen, the makaainana. A consequence was the greater and more effective exploitation of the makaainana. This exploitation occurred in the form of excessive taxation and later in the form of an increased demand for labor to haul sandalwood. (Levin, 1968, p. 420)

Kamehameha I was the first to systematically damage the kapu system by eroding the relationship based on mutual obligation between the ali'i and the maka'āinana classes. This would eventually lead to an alienation of the maka'āinana from the land. Kamehameha's son, Liholiho, would overthrow the kapu system.

The food kapu was the first kapu to be broken. Liholiho gave his consent to overthrow the kapu system by eating with his stepmother Ka'ahumanu. Ka'ahumanu, along with support from other powerful female ali'i, had first conceived of overthrowing the eating kapu because it would not involve any religious kapu and subsequent kahuna involvement (Mellen, 1952/1968). The overthrow of the kapu system would have serious effects on the social stratification of Hawai'i. The mutual ties of mana between the ali'i and the maka'āinana were broken, and the subsistence economy and access to traditional foods were replaced with a cash economy and dependence on other food sources.

The Impact of External Contact and Cultural Colonialism

Western contact came slowly at first and was limited to the coastal areas of the islands. Supported by Western influence, Kamehameha I took the first steps of making Hawai'i dependent on the West and open to external control.

The breakdown of the subsistence economy started with the sandalwood trade from 1804 to 1842. Iron implements like nails, bullets, and guns were items with which Kamehameha I and other ali'i were fascinated. Initially, they traded foodstuffs for iron implements, but this type of small trading did not put a burden on the subsistence economy.

By 1810 the sandalwood trade had become an economic and social force in Hawai'i and was part of an international global marketplace (Kent, 1993). Kamehameha I and other ali'i were avid consumers of Western goods. After the death of Kamehameha I, other ali'i took over the sandalwood trade and widened the path to economic destruction. By ordering maka'āinana to search for sandalwood, ali'i left them little time to tend to traditional food production or food gathering. Because of the erosion of the relationship between ali'i and maka'āinana, the ali'i needed another way in which to demonstrate their mana. Mana manifested itself in the well-being of the community, and many at this time fell into disarray; Western goods became the manifestation of mana in the ali'i.

With the overthrow of the kapu system, kau, the season of planting, and ho'oilo, the season of harvesting, were no longer strictly observed. This meant that farming was sporadic and unproductive compared with earlier times. Eventually, more foraging was required to pay off the outstanding debt the ali'i incurred from purchasing iron implements. The reciprocal relationship once enjoyed by the ali'i and the maka'āinana was gone. The maka'āinana were reduced to laborers exploited by the ali'i, and dependency on the West had begun.

The development of the whaling industry was the next substantial movement in the breakdown of the subsistence economy and was the first instance of the masses being drawn into a cash economy in Hawai'i. Native Hawaiians, accustomed to living off the land, were being drawn into the cities of Honolulu and Lāhaina. They became proletariats, selling their labor for cash (Kent, 1993). The maka'āinana no longer grew food to sustain themselves; rather, they produced food for the purpose of selling it in town or to whaling ships in the harbors. In the spirit of capitalism, ali'i took two-thirds of the maka'āinana profit and spent it on Western consumer items to increase their mana. Native Hawaiian women did not sell their labor; instead, they sold themselves as prostitutes to sailors as a means to earn money. "The sexuality of Hawaiians, which had been religiously constituted and a source of mana and enjoyment, was devalued religiously (sex as sin) and revalued as commerce (sex as trade)" (Buck, 1993, p. 62).

The economy had become dependent on whaling for income and led to the *haole* (White, foreign) class dominating Hawai'i's economy. The conversion of Hawai'i from subsistence economy to mercantile economy took only 75 years.

The rise of the sugar industry in the 1850s destroyed the old society. Western religion, primarily Calvinism, replaced the kapu system and beliefs (Kent, 1993). Calvinist missionaries believed in a Protestant work ethic and supported labor on sugar plantations that was routine, regimented and backbreaking. To Native Hawaiians, who were used to a much different way of life and work (subsistence farming and fishing), this type of endeavor did not make sense. Native Hawaiians did not work the plantations, and they were subsequently labeled and stigmatized as "lazy." The Native Hawaiian capacity for hard work and industry is well known, especially when it furthers worthwhile group goals (Howard, 1974; Kanahele, 1996). Due to these factors, labor to work the sugar fields was imported and thus began the start of a massive migration of foreigners into Hawai'i.

Sugar spurred the growth of the modern capitalistic economy in Hawai'i and was fully endorsed by missionaries and merchants of the plantation economy. In the case of both the whaling and sugar economies, Native Hawaiians had become marginalized. The shift to a cash economy was destructive to the traditional Native Hawaiian lifestyle. Hawaiians no longer lived off the land but instead worked for wages to buy food and other necessities to live.

Westernization of Food Habits

Native Hawaiian food habits and patterns have changed. It can be said of both ancient and modern Hawai'i that a significant part of a day is spent preparing and consuming food. Food preparation and consumption are governed by rules and ceremonies, in the past by the kapu system, and in the present by social rules and norms.

The Native Hawaiian traditional diet has been radically altered with the introduction of new foods (including those high in fat and calories), new methods of preparation (microwave), new means of acquisition (supermarket), and new

technologies in planting and harvesting (fertilization, ability to grow plants out of season). These advances have made it possible to harvest at human convenience; no longer do human work cycles follow the growth cycle of plants (Cohen, 1987).

Social, cultural, economic, and political factors constrain human food patterns, resulting in an unequal distribution of food and health care in most societies (Roosevelt, 1987). This situation exists in Hawai'i. Like the hierarchical system of kapu, Hawai'i today continues to be a stratified society. There exists an inequity between groups with reference to subsistence. In stratified societies, the disadvantaged populations have poorer health and longevity, with health improvement seemingly only for the elite (Roosevelt, 1987). This stratification can clearly be seen in the Native Hawaiian population today.

Because Native Hawaiians are disproportionately represented in the lower socioeconomic levels, they have fewer options available to them. The Nutrition Branch of the Hawai'i State Department of Health (1993) reported on diet-related behaviors of adults in Hawai'i and found that (a) Native Hawaiians are the most likely of all ethnic groups in Hawai'i to consume fruits and vegetables five or more times daily but, at the same time, consume high amounts of fat in their diet; and (b) adults with higher income and educational levels are more likely to read food labels and make selective food decisions based on nutritional value.

Return to a Traditional Diet

Today, economic and social realities are dismal for most Native Hawaiians. There is, however, a glimmer of hope concerning diet and its relationship to good health and a healthy lifestyle. Contrary to the belief held about Hawaiian body type today, the people of old Hawai'i were physically fit, slender, and in excellent health. Only the ali'i were allowed to lead a sedentary lifestyle and consume meats such as pork and chicken on a regular basis (Pukui, Haertig, & Lee, 1972). In comparison with the Western diet prevalent in Hawai'i today, the traditional Native Hawaiian diet of the maka'āinana was comprised of poi, taro, coconuts, sweet potatoes, yams, breadfruit, bananas, mountain apples, seaweed and seafood, and occasionally, chickens and pigs. This diet was high in fiber and starch but low in saturated fat and sugar (Aluli, 1991; Blaisdell, 1996; Shintani et al., 1994).

Some hope for Native Hawaiian health today may be found in the traditional Hawaiian diet. This diet controls body weight, diabetes (Type II by low sugar intake), and hypertension (by controlling serum cholesterol). An example of a Hawaiian diet and a model of health and lifestyle reform is the Wai'anae Diet (Shintani et al., 1994). This is a health education and promotion program based on traditional Hawaiian foods developed to improve diet-related disease and obesity in the individual, the 'ohana, and the community. The diet emphasizes *pono*, or the way in which ancient Hawaiians lived in harmony with the land. The success of the program is its foundation in the community-based, culturally competent promotion of a traditional Native Hawaiian diet. According to Shintani et al. (1994), the participants

> adhere to a strict, traditional Hawaiian diet under close medical monitoring. Evenings are spent dining together and attending education sessions. Educational sessions include cultural teachings, nutrition education sessions and motivational presentations. Participants are encouraged to become role-models and thus have an impact on others. Follow-up sessions are designed so the participants will sustain the dietary changes encouraged in the program. (p. 136)

Dr. Shintani worked with staff at the Wai'anae Coast Comprehensive Health Center and members of the Wai'anae Coast Community Committee to develop the Wai'anae Diet. The diet includes eight innovations in clinical intervention and health education and promotion: noncalorie restricted obesity weight loss protocol, dietary clinical intervention, cultural sensitivity, transition diet, whole-person approach, group 'ohana support, community intervention, and role-modeling (Shintani et al., 1994). Recent Hawaiian diet programs have added an exercise component to the traditional Hawaiian diet with some success in increasing the health of participants (Hughes, 2001; Leslie, 2001).

Conclusion

Once healthy and robust, Native Hawaiians today have the shortest life expectancy and highest incidence of diet-related diseases in the state of Hawai'i. The breakdown of the kapu system in Hawai'i offers an explanation of how Native Hawaiian health, along with other socioeconomic indicators, declined with the rise of Western culture in Hawai'i. The breakdown of the kapu system resulted in the transition of Hawai'i to a cash economy that marginalized Native Hawaiians and reduced their socioeconomic status. Native Hawaiians, instead of living off the land, became part of the workforce to sustain themselves.

With Westernization came changes in Native Hawaiian food habits and patterns. Hope can be found, however, in the resurgence of a traditional Hawaiian diet. The diet program outlined above emphasizes traditional Hawaiian values and bridges food choices of old Hawai'i with the realities of today. Although the food kapu is no longer honored, the traditional Hawaiian diet remains a healthy alternative both physically and spiritually and a source of pride.

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