# Cultural, Religious, Social and Personal Customs "A Boon or Bane" for Oral and General Health

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#### **Abstract**

Professional dental care is increasingly conducted in multicultural environments. This article not only highlights disparities in oral and general health but also highlights the importance of cultural, religious, social, personal habits and practices and their effect on oral and general health and the need to adopt more holistic approaches to oral health promotion. Cultural beliefs, values and practices are often implicated as causes of oral health disparities, yet little is known about the breadth or adequacy of literature about cultural issues that could support these assertions.

**Keywords:** Culture; Religion; Dietary habits; Family.

#### Introduction

Culture

Culture plays an important role in human societies.[1] It is defined as learned behavior which has been socially acquired[2] and in other words "it is the shared and organized body of customs, skills, ideas and values, transmitted socially from one generation to other. It lays down norms of behavior and provides mechanisms which secure for an individual, his personal and social survival.[3] Thus culture is often described as coherent, shared patterns of actions or beliefs specific to named groups of people that provide basic life roadmaps or social contexts, defining behavioral norms and interpersonal relationships as well as unwritten rules for proper living.[4]

The word "culture" is an abstract term used

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to signify all those forms of behavior that a group of people who share the same tradition transmit entire to their children. It includes not only the arts and sciences, religions and philosophies to which the word "culture" has traditionally been applied but also the system of technology, the political practices, and the small intimate habits of daily life, such as the method of preparing or eating food, breast-feeding, the practice of oral hygiene, and so on.[5] Culture has three parts. It is an experience that is learned, shared and transmitted.[6]

Culture organizes the group's norms of family life, birth, childrearing, aging, and death[7] as well as their recognition of illness and care-seeking practices around health or medical conditions. Sometimes these beliefs and practices can facilitate or act as barriers to accessing health care services.[8]

Cultural factors in health and disease have engaged the attention of medical scientists and sociologists. Every culture has its own customs which may have significant influence on health and oral health.[9]

Race/ethnicity is a marker for oral health status. Underlying cultural beliefs and practices influence the condition of the teeth and mouth, through diet, care-seeking behaviors, or use of home remedies, for example. It is important to note that among, and within, all racial/ethnic groups there are substantial differences in beliefs and behaviors, which can lead to varying health status. Such differences are often associated with demographic characteristics.[10] Worldwide, there are multitudinous distinct ethnic minority and cultural groups. Some groups are indigenous to the country in which they are found; others are migrants. Every ethnic group has its own set of beliefs and attitudes towards oral health care.[11]

# African-American

One study from the Midwestern U.S. claims that the mother's diet during pregnancy is thought to be an essential factor in the later causation of "soft teeth" or dental caries in the child.[12] Some works suggest that African-Americans believe that caries can progress to become a serious problem if it is not treated.[13] Most (70%) African-American respondents in one study believed that pain in the oral cavity was an early symptom of oral cancer.[14] Among African-American elders; oral pain was often associated with needing dental care.[15]

Norman and colleagues report that parents who had fatalistic beliefs (such as: most children eventually develop dental cavities) have less knowledge about their children's oral health needs. They also are less likely to brush their child's teeth and seek dental care.[16] Broder and colleagues report the frequent use of bottle with juice, soda or other sweetened drinks by children at bed-time resulted in dental caries.[17] Kelly and colleagues compared African-American parents who utilize or do not utilize dental services for their children, reporting contrasting beliefs between the two groups. African-American families that visit a dentist regularly end to have stronger preventive beliefs, were more knowledgeable about infant gum and tooth care and long-term consequences of oral diseases. Some of the parents not utilizing dental services expressed dissatisfaction with the care they had previously received, an attitude that shaped their present practices.[18] Commonly reported home remedies comprised methods to relieve pain and swelling (e.g., use of cotton balls soaked in aspirin solution, alcohol or salt water) or to relieve toothache pain (e.g., cotton balls soaked in turpentine and sugar or oil of cloves) and self-medication with over-the-counter pain medication.[18,19]

Dental visits are said to be mostly problem – rather than prevention-oriented,[15,18] with women more likely than men to see a dentist on a regular basis.[19] Treatment preferences are said to be for extraction rather than to save a tooth, although this claim is likely to be strongly affected by income and socioeconomic status.[19] Gilbert and colleagues report self-extraction is a commonly employed method of relieving tooth pain among African-Americans in Florida.[20]

#### Chinese

Traditional Chinese Medicine (TCM) emphasizes the universe-human body relationship.[21] Chinese beliefs about health and illness management are holistic, woven into the social and cultural fabric of daily life, conceptualized within the context of yin-yang, hot-cold, and dry-wet balances, as well as qi and holism.[21,22]

Another theory the Chinese use is the Meridian Theory, which assumes that any disorder within a meridian or energy pathway generates disharmony along that meridian. For example; maxillary toothache may result from a disorder of the stomach meridian; likewise mandibular toothache may result from a disorder of the large intestine meridian because the large intestine and the mandible run along the same energy channel.[23]

Based on the concepts of TCM, the Chinese believe that tooth health depends on the condition of the kidneys. The kidneys determine the condition of the bone, as the bone is filled and nourished by marrow, which is believed to derive from the vital essence of the kidneys. The teeth are considered the odds and ends of the bone. Therefore, problems such as loosening of teeth are considered to be an expression of the imbalance between the two vital forces (yin/yang) in the kidneys. Similarly, the gums are related to the stomach via meridians through which vital forces (yin/yang) move. Gum inflammation is believed to result from intense heat or flaring fire in the stomach.[22]

The Chinese tend to use traditional medicine in conjunction with western medicine for minor, well-understood or common health problems; for uncommon or more serious ailments they often seek biomedical treatment. Western medicine is considered good for the treatment of symptoms while Chinese medicine is believed to be more effective in curing the disease.[22]

TCM is considered culturally appropriate, holistic, convenient, cost effective, and without side effects. It can be used by people who fear going to the dentist. TCM is also commonly used in response to oral mucosal lesions and periodontal disease.[24] These ideas lead to a strong reliance on self-care, which leads to delay in seeking care according to biomedical dental standards.[25]

The treatments based on TCM is initiated based on etiology, for example, if there is inflammation and bleeding of gums, suppuration and halitosis, this combination is believed to be due to 'heat in the stomach'. However, if there is tooth mobility, a diastema due to tooth migration, exposure of root surface due to gingival recession, sensitivity and slight redness, this combination is believed to be due to 'deficiency of the kidneys.[26] Drinking a cooling tea or taking herbal medicine is a common practice in treating 'hot' gum diseases.[22,27] Powdered alum, musk and frankincense, for example, are regarded as 'cool' materials and so used to treat 'hot' gum disease.[26]

Pain or troubles with teeth are common reasons for seeking oral health care. [28] White wine or vinegar applied directly to the hurting tooth is believed to ease tooth pain temporarily. [29] Acupuncture is occasionally used for local dental anesthesia in China. [30]

There is widespread belief that tooth brushing is necessary to prevent caries.[9] The Chinese consider the appearance of teeth psychosocially important, and able to influence social interaction.[30]

## **Filapinos**

In this population it is found that the values regarding general and oral health are usually passed on from the elders in the family and this is further supplemented with knowledge learned in school, and from reading and classes related to child rearing and Lamaze. [31]

Among the low-income Filipino population especially, however, cost rather than fear was the most common reason for not seeking professional dental care.[31]

# Hispanic/Latino

Mexican Americans residing in various parts of the US lack adequate knowledge about the role of fluoride in caries prevention, and lack knowledge about the connection between oral health and consumption of sweets and frequent snacking.[32] Mexican immigrants in rural California believe that diarrhea and or fever is common when the child's teeth erupt.[10] Certain dietary and infant feeding practices are commonly reported by Mexican Americans and Puerto Ricans, such as putting an infant to bed with a bottle of sweetened liquid, giving a child a pacifier dipped in honey, or sharing eating utensils among siblings and caregivers.[32,33]

#### Religion and its role in dietary practices

Since the beginning of time, dietary practices have been incorporated into the religious practices of people around the world. Some religious sects abstain, or are forbidden, from consuming certain foods and drinks; others restrict foods and drinks during their holy days; while still others associate dietary and food preparation practices with rituals of the faith.[34]

The role of fasting

Many religions incorporate some element of fasting into their religious practices. Fasting has been identified as the mechanism that allows one to improve one's body (often described as a "temple" created by God), to earn the approval of Allah or Buddha, or to understand and appreciate the sufferings of the poor.

Fasting has also been presented as a means to acquire the discipline required to resist temptation, as an act of atonement for sinful acts, or as the cleansing of evil from within the body. Fasting may be undertaken for several hours, at a specified time of the day (e.g., from sunrise to sunset, as practiced by modern Jews), for a specified number of hours (e.g., twelve, twenty-four, or more, as observed by Catholics or Mormons who fast on designated days), or for consecutive days, such as during the month of Ramadan for certain Muslims. Regardless of the time frame or rationale, religious groups observe the practice of fasting worldwide.[35]

Health Benefits and Risks Associated with Specific Practices

Certain groups of people must necessarily be excused from fasting and restrictive practices. These groups include pregnant or nursing women; individuals with diabetes or other chronic disorders; those engaged in very strenuous work; malnourished individuals; young children; and frail elderly or disabled persons. Most fasting practices allow certain intakes of liquid, particularly water. In fasting regimes where water is restricted, a danger of dehydration exists, and those fasting should be monitored. Those who fast without liquids increase their risk of a number of health problems. Symptoms of dehydration include headache, dry mouth, nausea, fever, sleepiness, and, in extreme cases, coma.

Some negative health consequences have been observed as a result of fasting practices, however, especially those carried out over longer periods, for example gastric acidity which may results in a sour taste in the mouth, a burning in the stomach. The other ill effects include peptic ulcer, malnutrition, nutritional anemia, and loss of weight, which may have deleterious impact on health and oral health.[35]

The restriction of, or abstention from, certain foods may have a direct impact on the health of those engaged in such practices. Research results have documented a 50 percent reduction in heart disease and longer life expectancy in people who eat a well-planned vegetarian diet.[35]

Use of, and Abstention from, Stimulants

A stimulant is a product, food, or drink that excites the nervous system and changes the natural physiology of the body, such as drugs and consumable products that contain caffeine, such as tea, coffee, or chocolate. The use of caffeine is prohibited or restricted by many religions because of its addictive properties and harmful physical effects. Many also restrict spices and certain condiments, such as pepper, pickles, or foods with preservatives, because they are injurious by nature and flavor the natural taste and effect of foods.

The use of wine in religious ceremonies is regarded as acceptable by certain groups. For example, Roman Catholics, Eastern Orthodox Christians, and certain Protestant denominations use wine as a sacramental product to represent the blood of Christ in communion services. Mormons, however, specifically forbid wine or any alcoholic drinks because of their stimulant properties. Jews regard grapes as a fruit of idolatry, and therefore forbid the use of wine or products made from grapes except under special conditions.

Many religious leaders and health care experts regard tobacco, another stimulant, as a malignant poison that affects the health of its users. Research continues to support the harmful and deleterious effects of the use of cigarettes and tobacco products. Cancer, high blood pressure, and heart disease have all been linked to tobacco use.

Although marijuana has been shown to control pain in advanced diseases such as cancer, it has been considered a restricted drug by all but those practicing Rastafarianism because they consider it the "weed of wisdom," and they believe that it contains healing ingredients.[36,37]

Social factors Family

Family is a group of biologically related individuals living under the same roof and eating from the common kitchen. Family as a cultural unit reflects the culture of the wider society of which it is a part and determines the attitude and behavior of its members.[2]

The presence of parents, grand parents, uncles, aunts, and other near relatives in a joint family plays a vital role in child rearing as well as in shaping the attitude and behavior of the child.[2]

The lack of parental attention (especially if both parents are earning) in the nuclear families and peer pressure may provoke the child into deleterious habits like smoking, alcoholism, drug addiction, dating etc. at an early age (a common practice seen in most developed countries). These adverse cultural practices in turn increase the incidence of oral cancers, venereal diseases and mental illnesses.[2]

The rural folk in a developing country like India have many misconceptions related to the family size and structure. Many believe that children are god's gift, the number of children in the family is determined by god, children are poor man's wealth, and the family is not complete without the birth of a male child. These misconceptions may lead to large families which has a significant impact on the economic status and there by, on health as well as oral health of an individual. The close birth intervals here may result in maternal malnutrition, nutritional anemia, low birth weight and increased maternal and infant mortality rates.[2]

Sex and Marriage

Sexual customs vary among different religious and ethnic groups. Muslims have religious restrictions on oro-genital sex and intercourse during menstruation. Similarly, orthodox Jews are forbidden to have intercourse for seven days after menstruation ceases. This may have an influence on oral health and family planning.[38] The practices of polygamy and polyandry attribute to the high rate of venereal diseases and affect the oral health.[2] United States of America is termed as the genetic melting pot due to excessive racial mixing. This may result in high frequencies of jaw and tooth size discrepancies leading to malocclusion. This may be the cause for high rate of malocclusion in U S A compared to any other primitive population lacking racial mixing.[2]

#### Maternal and Child health

Mother and child health (MCH) is surrounded by a wide range of customs and beliefs all over the world. The various customs in the field of MCH have been classified as good, bad, unimportant and uncertain. Prolonged breast feeding, oil bath, massage and exposure to sun are among the good customs. The avoidance of foods such as papaya, milk, fish, meat, egg and leafy vegetables among pregnant women in some parts of the country, more so in Tamil Nadu and Pondicherry, with the misconception that they may induce heat in the body, which may have an adverse influence on the fetus are amongst the bad customs. Punching of ear and nose, application of oil or turmeric on the anterior fontanel of the fetus are some unimportant customs. The application of kajal or black soot mixed with oil to the eyelids partly for beautification and partly for warding off of the evil eye are amongst the uncertain habits.[2]

The deliveries conducted by untrained dais, who have very minimal knowledge on asepsis and sterilization, and whom the villagers trust

more than the trained health care workers in many rural areas of the country may increase the incidence of maternal and infant mortality. The child is not put into breast feeding in the first three days after birth in some rural parts of the country (Gwalior region of Madhya Pradesh) due to the misconception that colostrum is harmful. Here instead, the child is put on water. This may prevent the transfer of maternal antibodies and there by increase the risk for many opportunistic infections in the infant. Adulteration of milk, delay in the start of weaning foods are misconceptions related to child rearing that may result in protein energy malnutrition and adversely affect the child's health and oral health. There are some beliefs that diarrhea among children is common during teething and does not need to be taken care of. They also believe that diarrhea will take off the heat from the body and hence the child should not be fed milk and other liquids. This result in dehydration.[39]

Personal habits and Practices

Purdah system

It is practiced among Muslims and high caste Hindus. The practice protects against the exposure to harmful sunrays and there by prevents the occurrence of Basal cell carcinoma. The lack of exposure to sunlight may result in decreased synthesis of vitamin D, leading to hypoplasia of the teeth. There is evidence that the frequency of droplet infections like tuberculosis and diphtheria to be relatively high among people who practice purdah system.[2]

# Smoking and alcoholism

The habit of alcoholism is prohibited among Muslims and high caste Hindus. This may promote the oral health. The younger generation and the population in the western world consider the habits of smoking, alcoholism etc. as a reward, status symbol or something glamorous. This may have an adverse consequence on the health as well as oral health.[40] The habit of reverse smoking

is highly prevalent in Andhra Pradesh. This increases the risk of palatal malignancies.[41]

## Betel-nut chewing

The habit of betel-nut chewing is commonly practiced in South and Southeast Asia. The betel nut itself contains tannin and at least four different alkaloids.[42] In addition to betel nut, the "quid," or "cud," contains slaked lime and tobacco wrapped in the leaf of the betel palm. Observers in India, Ceylon, and the Philippines have claimed that carcinoma of the cheek and tongue is very prevalent in habitual betel-nut chewers.[43] According to Balendra, regular betel-nut chewing is associated with periodontitis.[42] This view has been supported by Mendelson. Inveterate, or "chain," betel-nut chewing results in severe abrasion of the teeth and is associated with a diffuse atrophy of the periodontal tissues; the teeth are stained black, and the oral mucous membrane commonly exhibits hyperplasia. Although there is no definite evidence that the betel nut has a direct carcinogenic action, it is possible that the chronic irritation and continued friction of the cheeks against the "quid" and the sharp edges of abraded teeth may cause traumatic ulcers to become malignant.[42]

Offering pan having betel leaf, slaked slime, areca nut, and catechu is a way of welcoming the guests in North Indian states like Rajasthan, Uttar Pradesh, Maharashtra and West Bengal.[39] This may encourage the people to get into the habit of chewing pan, which is a proven risk factor for periodontal diseases, oral sub mucous fibrosis and oral malignancies.[44,45]

#### Drug addiction

Hindu sadhus have the habit of incorporating charas, bhang and ganja into the cigarettes. This habit is spreading into the younger generation in India and is a common practice in western culture (USA) resulting in physical and psychological dependence, which may be deleterious to health and oral health.[2]

Sedentary life style

Lack of physical exercises among the upper class people is the main cause for obesity, which in turn predispose the person for many cardiovascular diseases, diabetes mellitus etc. These diseases have deleterious impact on oral health. Cola and Khat chewing: These habits are widely seen in African countries.[2] The cola has tannin, Theo bromine, and Caffeine. This may facilitate healing of oral mucosal lesions where as Khat chewing causes dry mouth, thirst, pain, buccal keratosis and clicking in the temporomandibular joint region.[41] Alum rinsing and fomentation: Alum rinsing done with the belief that it may make the gingiva stronger may have an adverse effect in the long run. Fomentation for reducing the pain associated with a decayed tooth may not worsen the pain at times, but it may result in cellulitis.[39]

#### Food habits

Food habits are amongst the most deeply entrenched habits in any culture having deep psychological roots, religious influence and influence of the local conditions in the form of climate and soil. Ariboflavinosis due to deficiency of riboflavin is common among the population whose staple diet is rice, seen predominantly in the eastern and southern parts of the country. [46] Pellagra due to niacin deficiency is more in the population (Telangana region of Andhra Pradesh) whose staple diet is maize or jowar.[47] The high concentration of molybdenum in jowar facilitates retention of fluoride in the body, and there by, may increase the severity of fluorosis among the population whose staple diet is jowar than in the population whose staple diet is rice, especially in an endemic fluoride belt.[48]

Vegetarianism is given a place of honor in Hindu religion. Orthodox Hindus are pure vegetarians and hence may not take any foods of animal origin including the milk. This may result in Vitamin B12 deficiency leading to Moeller's glossitis.[49] Adverse cultural practice in the cooking and preparation of foods such as discarding the cooking water from cereals, which is commonly seen in the rural areas of the country, reduces the nutritive value of food.[2]

Restriction of Hindus for eating beef, and Muslims pork, have a protective function as they prevent the occurrence of taeniasis caused by an adult form of Taenia Saginata and cystecercosis which manifest as edematous oral ulcers, gingival bleeding and lesions mimicking mucocles.[50]

# Dietary habits

Tribal and primitive populations have diet patterns which are coarse and fibrous in nature and free from refined carbohydrates.[51] This may reduce the risk for dental caries and also facilitate adequate stimulation of the jaws, jaw muscles and teeth eruption which may reduce the risk for malocclusion to some extent. The western diet on the other hand consists of refined foods which increase the risk for caries as well as malocclusion due to inadequate stimulation of jaw and jaw musculature.[52] Scandinavian food habits mainly include variety of fishes, cheese etc. which may offer some anticaries benefit. Similarly, the Caribbean food habits in the form of local fruits and vegetables, cassava (a starchy root) and great deal of fishes offer them some protection against dental caries.[53] The trona salt is used extensively as a preservative, tenderizer, flavoring agent in food as well as for medicinal purposes (in the treatment of dyspepsia) by Africans. This salt contains high concentration of fluoride (as high as 7900 PPM) and it may increase the risk for dental fluorosis.[54] Excessive consumption of spicy food in the form of green chilies is commonly seen in some regions of Andhra Pradesh and Northern Karnataka. This may predispose to the occurrence of peptic ulcer, oral sub mucous fibrosis and oral malignancies as well.[41]

# Personal hygiene

Majority of the people in the rural areas use open fields for defecation which may result in water, food, soil contamination, favor the breeding of mosquitoes and flies. Well water, tanks, lakes are subject to contamination due to human activities like bathing, washing of clothes and utensils. Some rivers are considered to be holy. People go on pilgrimage, carry samples of holy water in bottles, preserve them for long duration and carry them over long distances to be distributed among the relatives and friends. This is also cause for epidemics of cholera and gastroenteritis.[2]

# Oral hygiene practices

Orthodox Jains clean their teeth using fingers and without using the brush. This may have a negative impact on their oral health. Muslims offer prayer in the form of namaz, five times in a day. During each namaz, as part of the ritual, they use miswack stick, tooth picks and do gum massaging. This may promote the oral health. Use of chewing twigs: Neem/Banyan/ coconut twigs/datun / twigs from Salvaodora Persicca are used for cleaning the teeth. The twigs offer mechanical cleaning action and some twigs may have antimicrobial properties. The salvadora persicca twig has high concentration of fluoride, which may offer anticaries benefit. These twigs have to be properly used and the method should to be taught to them, otherwise, improper use may lead to gingival and periodontal trauma over a period of time. Dentifrices: The rural people use brick, charcoal, rangoli powder, mud, salt, ash etc. for cleaning the teeth. This may result in gingival recession, abrasion and dentin sensitivity.[39,41]

#### Miscellaneous customs and Habits:

Mutilations: These may be in the form of tooth avulsion, alteration in the shape of the crown by filing and chipping, lacquering and staining of teeth, decorative crowns and inlays, tattooing, facial scarring and uvulectomy. They are practiced in the primitive population in different parts of the world as a sign of tribal identification, sign of bravery, marriageable age in females, ceremonial sacrifice, ceremonial rebirth, to ensure life after death, for esthetics and fashion, differentiation of sexes etc.

whatever may be the reasons for these habits, they definitely will have harmful effects on the oral tissues and hence have to be discouraged.[39,41] Archeological research has disclosed that deliberate mutilation of the teeth was a common practice in Neolithic and Mesolithic times. Even today the practice is common in parts of Africa, Southeast Asia, and among the aborigines of Australia. The types of mutilation include extracting one or more incisors, altering the shape of incisors, shaping incisors to a point, covering incisors with gold plate, and placing inlays of precious stones. In some cases the custom has a religious connotation or is associated with the rites of puberty. In general, these operations, though painful, cause little harm except when the removal of enamel and dentin endangers the life of the pulp.[19]

Lacquering: Reports from China and Vietnam have suggested that the black lacquer which was, and in isolated cases still is, applied to the teeth remained in position indefinitely. This is especially interesting in view of the research now being undertaken in an attempt to find a protective substance that will form a physical bond with enamel and dentin.[55]

#### Conclusion

Health is a consequence of an individual's lifestyle as well as a factor in determining it. Every one of us, have our own beliefs and practices concerning health and disease irrespective of the area of residence. Not all cultural practices are harmful. Achievement of optimum health demands adoption of healthy life-styles. We have to identify the cultural factors that are deleterious and beneficial. We, the health professionals have to discourage the unhealthy practices through intensive health education and promote the adoption of healthy practices.[9]

A well trained dentist should be not only need to be an expert in clinical skills but also able to elicit, recognize, accept and respect their patients' cultural beliefs. Since health care is a cultural construct arising from beliefs about

Table I: World religions, food practices and restrictions, and rationale for behavior

Type of religion	Practice or restriction	Rationale
Buddhism	<ul><li>Refrain from meat, vegetarian diet is desirable</li><li>Moderation in all foods</li><li>Fasting required of monks</li></ul>	Natural foods of the earth are considered most pure    Monks avoid all solid food after noon
Eastern Orthodox Christianity	<ul><li>Restrictions on Meat and Fish</li><li>Fasting Selectively</li></ul>	Observance of Holy Days includes fasting and restrictions to increase spiritual progress
Hinduism	Beef prohibited • All other meat and fish restricted or avoided • Alcohol avoided • Numerous fasting days	Cow is sacred and can't be eaten, but products of the "sacred" cow are pure and desirable    Fasting promotes spiritual growth
Islam	Pork and certain birds prohibited    Alcohol prohibited     Coffee/tea/stimulants avoided    Fasting from all food and drink during specific periods	• Eating is for good health • Failure to eat correctly minimizes spiritual awareness • Fasting has a cleansing effect of evil elements
Judaism	<ul> <li>Pork and shellfish prohibited</li> <li>Meat and dairy at same meal prohibited</li> <li>Leavened food restricted</li> <li>Fasting practiced</li> </ul>	• Land animals that do not have cloven hooves and that do not chew their cud are forbidden as unclean (e.g., hare, pig, camel) • Kosher process is based upon the Torah
Mormonism	<ul> <li>Alcohol and beverages containing caffeine prohibited</li> <li>Moderation in all foods</li> <li>Fasting practiced</li> </ul>	Caffeine is addictive and leads to poor physical and emotional health    Fasting is the discipline of self-control and honoring to God
Protestants	Few restrictions of food or fasting observations     Moderation in eating, drinking, and exercise is promoted	God made all animal and natural products for humans' enjoyment     Gluttony and drunkenness are sins to be controlled
Rastafarianism	• Meat and fish restricted • Vegetarian diets only, with salts, preservatives, and condiments prohibited • Herbal drinks permitted; alcohol, coffee, and soft drinks prohibited • Marijuana used extensively for religious and medicinal purposes	Pigs and shellfish are scavengers and are unclean       Foods grown with chemicals are unnatural and prohibited     Biblical texts support use of herbs (marijuana and other herbs)
Roman Catholicism	Meat restricted on certain days    Fasting practiced	Restrictions are consistent with specified days of the church year
Seventh-day Adventist	Pork prohibited and meat and fish avoided    Vegetarian diet is encouraged    Alcohol, coffee, and tea prohibited	Diet satisfies practice to "honor and glorify God"

the nature of disease and the human body, cultural issues are actually central in the delivery of health services treatment and preventive interventions. A deeper understanding of health behaviors as influenced by culture, health beliefs, acculturation, and attitudes is needed to formulate appropriate oral health promotion policies. Carefully crafted, thorough investigations will assist dental and medical clinicians to elicit, recognize, accept and respect their patients' cultural beliefs, and to

develop appropriate therapeutic strategies as well as oral health promotion policies. The knowledge gained from researches into cultural, social, religious beliefs and its association with oral/general health and dental care seeking behavior and practices would be helpful in designing future preventive and treatment strategies. Such programs with special considerations to ethnic beliefs could have a positive impact and increase utilization of preventive services.[19]

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