



Why We Eat What We Eat: Explanations for Human Food Preferences and Implications for Government Regulation

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Why We Eat What We Eat:

Explanations for Human Food Preferences and Implications for Government Regulation

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Food and Drug Law
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I. Introduction: Food For Thought

Tell me what you eat, and I'll tell you who you are. Most Americans are familiar with tales of exotic food

habits in foreign countries. Chances are that, if it's alive, someone, somewhere, is eating it as part of his or her regular diet. To cite just a couple of examples, the Tallensi of Ghana and the Poto of the Congo consider dog meat to be a delicacy,² and until quite recently, several tribes in New Guinea practiced cannibalism.³

No doubt most Americans consider such dietary practices to be repulsive, if not morally offensive. But what accounts for the vast attitudinal differences held by various societies toward the very same sources of food? The tremendous diversity of human food preferences the world over and the prevalence of powerful taboos against the consumption of certain foods—taboos which, at least to foreigners, oftentimes appear to be foolish, capricious, and uneconomical—pose a seemingly unresolvable intellectual dilemma for anthropologists.

Although the consumption of exotic foods has long been a favorite subject for works of fiction and sensationalistic

J.A. Brillat-Savarin, *The Philosopher in the Kitchen*

(1825)

²

See Frederick J. Simoons, *Eat Not This Flesh* 92 (1961).

See id.

newspaper articles, anthropologists did not begin a serious examination of the causes of human food preferences until fairly recently. In fact, it was not until the latter half of this century that scholars began to consider human food preferences a matter of serious academic interest.

This lack of scholarly interest is not all that surprising, however, when examined in light of human evolutionary history. For most of human history, hunger and the threat of starvation have been the foremost concerns for most of the world's inhabitants. All living creatures, including human beings, must eat in order to survive. When compared to the biological imperative of survival, the intellectual exercise of explaining why human beings prefer certain foods over others becomes a matter of secondary importance.

As this paper will demonstrate, however, understanding the reasons behind human food preferences can make a tremendous difference in the well-being of the world's people. To this end, Part II examines two competing theories for the origins of human food preferences: cultural idealism and cultural materialism. The first approach starts from the premise that human food preferences are fundamentally arbitrary—i.e., that food preferences are the results of irrational cultural prejudices—whereas the second theory posits that human food habits are rational adaptations to material conditions. Part

III illustrates these two theory's explanations for two well-known food taboos: the American taboo on dog meat and the Indian taboo on cow slaughter.⁴

Unfortunately, neither theory is entirely convincing. Having recognized that it may well be impossible to identify any single cause, or explanation, for all human food preferences and taboos, Part IV identifies several mutually-reinforcing factors that contribute to the development and maintenance of a society's food habits. These factors include human biology, technology, cultural beliefs, social and political institutions, and environmental conditions. Moreover, because food habits are at least partly adaptive, they are, by definition, constantly evolving in response to ever-changing conditions. This fact suggests that food preferences may even be subject to state-sponsored change.

Part V therefore examines the implications of the preceding discussion for the regulation of human food habits. Most importantly, Part V exposes the sheer relativity of American law in this area. In sum, Part V argues that American food law is fundamentally arbitrary in that it rests on unarticulated American beliefs about what constitutes

One note: most forbidden foods are animals, and not plants.

See Peter Farb & George Armelagos, *Consuming Passions* 113 (1980); Paul Fieldhouse, *Food & Nutrition: Customs & Culture* 169 (1986).

Therefore, the focus on this paper will be on the reasons behind prohibitions on the consumption of various types of flesh.

acceptable food. While the United States government has until now pursued a laissez-faire policy toward the regulation of human food preferences (in that the federal government has refrained from outlawing specific animal foods), Part V examines the possibility and future likelihood of increased governmental activism in shaping human food habits. In particular, the adaptability of human food preferences raises the question of whether the state *should* take an active role in shaping a society's food preferences. However, given the significant tradeoffs that such governmental action would entail, Part VI concludes that the government ought to limit its role to the prevention of significant threats to human health, rather than engage in a proactive policy of promoting what it considers to be the most desirable sources of food for human beings.

II. Why We Eat What We Eat: Two Competing Approaches All anthropologists agree that a society's food

preferences are related to that society's culture; they disagree, however, about the precise nature of this relationship. Cultural materialists believe that human food preferences are rational responses to material conditions, while cultural idealists believe that food preferences are arbitrary beliefs having their origins in the human mind. Both theories present themselves as absolute, and therefore incompatible, explanations.

A. Cultural Idealism

Cultural idealists explain variations in human food preferences as direct consequences of each society's distinctive culture. In other words, idealists regard eating behavior as part of a cultural code that reflects, symbolizes, and expresses the unique world view of a particular society. Specifically, cultural idealists have offered three kinds of explanations for food preferences: (1) food customs are the consequence of arbitrary whim, chance, or taste; (2) they are the symbolic expressions of a society's values and beliefs; and (3) they are the consequence of historical continuities that regress to an unknown beginning.⁶ Unlike materialists, then, cultural idealists claim that most human beings do not make their choices of what to eat on such rational bases as nutritional value.

Marshall Sahlins, for example, has argued that, human food habits reflect cultural reason, rather than adaptive rationality.⁸ He discusses human food preferences as an

See Marvin Harris, *Foodways: Historical Overview and Theoretical Prolegomenon*, in **Food and Evolution: Toward a Theory of Human Food Habits** 57, 57 (Marvin Harris & Eric B. Ross eds., 1987)

⁶ Id.

See Fieldhouse at *preface* (1986).

⁸ Marshall Sahlins, **Culture and Practical Reason** 170 (1976).

illustration of his general critique of the notion that human cultures are formulated out of utilitarian interests. Rather, Sahlins claims that human valuations of the edibility and inedibility of animal meats are qualitative, and are in no way justifiable by biological, ecological, or economic advantage.¹⁰ He cites the centrality of beef in the American diet as an example of this irrationality and argues that the American taboo on horses and dogs renders consumption of these two animals unthinkable, even though consumption of dogs and horses is technologically feasible and even logical from a nutritional standpoint)¹ Such observations cause Sahlins to conclude that

it is culture that constitutes utility, and not the other way

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round.

Another well-known proponent of idealist theory is Nick Fiddes. Fiddes claims that a society's attitudes toward what it consumes reflect its world view.¹³ Thus, Fiddes argues that

the consumption of meat (generally) is largely symbolic and

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reflects a society's cultural orthodoxy. Specifically,

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See id. at vii.

Id. at 171.

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See id.

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Id. at viii.

¹³ See id. at 5.

¹⁴ Nick Fiddes, *Meat: A Natural Symbol* 1 (1991).

Fiddes argue~ that meat eating symbolizes human control over the natural world.⁵ Although he acknowledges that most people do not consciously glory in animal subjugation when they eat meat, Fiddes claims that the association with environmental control is held communally and at the subconscious level. **16** Fiddes also argues that the consumption of meat has little to do with reason, since many people in the world eat little or no meat, yet are perfectly healthy.

Moreover, like Sahlins, Fiddes offers psychological explanations for why human beings avoid certain sources of food. Unfamiliar foods, Fiddes argues, do not provide the same security as familiar foods, since not only are human beings unaware of their safety, but they are also unaware of their symbolic status.⁷ Fiddes also explains that the western reluctance to eat certain animals results from the desire to avoid engaging in cannibalism. By tending for pets, Fiddes explains, human beings endow these animals with semi-human status. Humans thus consider pets to be socially the same as people. Similarly, most westerners consider primates, including monkeys, gorillas, chimpanzees, to be inedible. The reason for this taboo, Fiddes claims, is the close behavioral

See id. at 2.

16 See id. at 3.

See id. at 36.

and physical similarity that primates and human beings share. ¹⁹ In addition, predators and omnivores resemble human beings

functionally; like human beings, predators and omnivores

¹⁹

consume other animals in order to survive. In light of these similarities, Fiddes argues, eating primates, predators, or omnivores would be tantamount to cannibalism. Consequently, Westerners avoid these animal sources of food.

One additional explanation that idealists have offered for taboos on foods, which results in their non-consumption, is a group's desire to express separateness, or distinctiveness. For example, Paul Fieldhouse has argued that the Western aversion toward horse meat developed in the eighth century, when Pope Gregory III forbid the consumption of horse flesh by

Christian converts to signify their separateness from the

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Vandal pagans. Thus, according to Fieldhouse, the Western aversion toward consuming horse meat arose not as a result of any intrinsic unpalatability or environmental factors, but as a result of a desire on the part of early Christians to express their distinct identity.

Idealists can point to many examples of what appear to be arbitrary or irrational cultural prejudices in order to bolster

¹⁸ See id. at 135–36.

¹⁹ See id.

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See Fieldhouse at 163.

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their theory that food habits lack rational explanations. The Western aversion to eating insects, for example, is a uniquely

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Caucasian phenomenon. Millions of people around the world rely on insects as regular parts of their diets: Arabs in northern Africa consume locust dumplings, Indians consider red ant chutney a delicacy, and South Africans consume moth caterpillars. Insects are easy to catch, breed rapidly, and are rich sources of protein,²² yet most Westerners assume that insects taste terrible even though they have never tried them.²³ In fact, most Westerners will not eat from a stew that has been stirred with a brand-new fly-swatter.²⁴ The Western aversion to insects is especially puzzling given that most mass-produced foods today contain trace amounts of insect carcasses. But cultural idealists do not even need to cite such a dramatic example to illustrate their point. Until recently, Americans and Britons considered the eating of garlic

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to be a filthy foreign practice.

²¹ See **Jeremy MacClancy, Consuming Culture** 38 (1992).

²²

To illustrate: unlike beef, which is only twenty percent protein, fly larvae are sixty-three percent protein. See id. at

39.

²³ See id. at 40.

²⁴ See id. at 40.

²⁵

See id. at 37-38. Notably, this cultural prejudice even had racist overtones. See id.

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B. Cultural Materialism

Whereas idealists believe that food habits reflect human thought and perception, materialist explanations for human food preferences begin with the assumption that a society's food habits reflect a multitude of technological, biological, political-economic, and environmental influences. ²⁶ In the spirit of Karl Marx, then, materialists contend that these infrastructural processes lead to the formation of distinctive forms of structures (e.g., political organizations) and superstructures (e.g., religious systems) within societies. Of course, once these structures and superstructures are in existence, materialists recognize that they, in turn, can influence all aspects of social life, including food preferences.

According to Marvin Harris, a self-described proponent of cultural materialism, the theory of cultural materialism is based on the simple premise that all human social life is a

pragmatic response to the practical problems of earthly

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existence. For Harris, then, the role played by ideology, or culture, is subordinate to the constraints imposed by

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See. e.o. **Farb & Armelago** at 4 (asserting that food choices are inseparable from the biology and behavior of human beings and from their adaptation to environmental conditions)

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Marvin Harris, Cultural Materialism: The Struggle for a Science of Culture (1979); see also **Farb & Armelago** at 11 ([F]ood customs are adaptive.)

ecological, political, economic, and other behavioral and etc
28 claims,
conditions. Harris for example, that the Indian
taboo on the slaughter of cattle and the Jewish taboo on eating pork origi-
nated as adaptive responses to infrastructural
conditions in both regions, rather than as a result of cultural

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or religious beliefs. In addition, Harris claims that these
two taboos actually enhance the material well-being of the populations that
observe them.

Notably, materialist theory has led to the development of several explanatory
principles for human food selection generally. Materialists argue, for example,
that most of the world's great dietary changes were responses to shifts in the
modes of production. Materialists claim, for example, that with the develop-
ment of intensive methods of agricultural production, human beings no longer
had to rely on animal foods as the principle part of their diet and could in-
stead rely on a broad spectrum of foods to sustain themselves. Materialists
also believe that divergences in food patterns correlate with local conditions of
climate, soil, flora, and fauna. Eric Ross, for example, has theorized that access
to productive, immobile, aquatic resources inclines a population to adopt a

28 **Harris** at 247.

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See id. at 242; see also Part 111(A), (B)

30 See **Harris** at 242-43.

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sedentary lifestyle; increased sedentarism, in turn, diminishes access to game animals and leads to greater a utilization of horticulture. ³¹ In time, if aquatic resources are plentiful enough, Ross contends that human beings will rarely hunt wild

animals and that human beings will eventually view wild animals

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as inedible, or taboo.

Of course, an implicit sub-tenet of materialist theory is that human food preferences and taboos are fundamentally rational responses to material circumstances. Cultural materialists deny that food taboos are irrational and detrimental to a society, or that there is anything capricious or whimsical about food preferences.³³ Rather, materialists argue that no taboo can last if it is maladaptive. They point out that, logically, if a food preference or taboo were not suited to existing material conditions, the practice would be detrimental to the population observing the taboo. Consequently, the people who observed such a taboo would not flourish and would have to abandon the harmful practice or risk extinction.

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See Eric B. Ross, *An Overview of Trends in Dietary*

Variation from Hunter-Gatherer to Modern Capitalist Societies, in

Food and Evolution: Toward a Theory of Human Food Habits 7, 9

(Marvin Harris & Eric B. Ross eds., 1987) (citing the Warao of the Orinoco and Ache of Paraguay as examples of this theory).

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See id.

See Farb & Armelago at 113.

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III. The Foods We Eat—And Avoid Eating: Prominent Food Taboos By way of illustration, this section presents the

materialist and idealist explanations for two specific taboos:

the Indian taboo on cow slaughter and the American taboo on dog meat.

A. The Sacred Cow 1.) The Idealist Explanation

Idealists claim that the Indian taboo (or, more precisely, the Hindu taboo) on the slaughter of cows developed as a result of evolving religious ideas. Although Indians sacrificed cows in ancient times, idealists argue that the cow came to be an object of religious veneration—a symbol of motherhood and fertility. ²⁴ More precisely, idealists argue that the Hindu prohibition on cow slaughter began as a means of countering the growing rival faiths of Buddhism and Islam. In other words, idealists claim that the taboo began as a way for Hindus to signify their cultural separateness on the Indian subcontinent.

Idealists support their thesis with evidence that the taboo on cattle cannot be explained as a rational adaptation to material forces. Idealists argue that cow slaughter is a primary cause of India's poverty and underdevelopment. The ban on beef slaughter, according to the idealists, has forced

See Field.house at 175.

See id. at 176.

Indians to consume scarcer, less nutritious foods (namely grains) . According to the idealists, while millions of people

go hungry in India every day, a ready supply of food wanders

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aimlessly in urban streets. In fact, idealists claim, because

India is largely a vegetarian nation, India's cattle actually compete with India's poor for scarce food. Furthermore, idealists note that India's cattle are not even valuable as sources of milk; only half of India's scrawny cows fail to produce any milk at all—a number insufficient to account for the millions of cows wandering about in India. In fact, Indian authorities themselves appear to agree with the idealist criticism that the prohibition on cow slaughter is detrimental to the well-being of Indians. The Supreme Court of India, for example, has noted that more money is spent to maintain an old cow at a state-sponsored nursing home than to educate an Indian child. **38**

2.) The Materialist Exolanation

Materialists, in contrast, view the prohibition on cow slaughter in India as being the outcome of rational adaptations to environmental forces, rather than from the irrational influence of ancient religious concepts. Specifically,

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See **Fieldhouse** at 178.

See **Farb & Armelago** at 118.

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See **Fieldhouse** at 180.

materialists point to a massive population increase in India two thousand years ago that necessitated increased cultivation of land to sustain the Indian population. This increased cultivation, materialists claim, resulted in mass deforestation and soil erosion, which increased the severity of India's periodic droughts. ⁴⁰ These changing environmental conditions, materialists argue, made the raising of domestic animals more difficult. Cows became essential as a means of cultivating rough terrain, and those Indians who ate their cows lost their means of producing future crops. Over the centuries, materialist argue that more and more farmers avoided eating

their cows until, eventually, a taboo against consuming beef

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developed. Thus, according to materialists, religious sanctions only developed to reinforce behavior that was essential for human survival.

Other materialists have been a bit bolder, explaining why it was the cow, and not some other animal, that became the object of Indian veneration. Harris, for example, has offered three reasons: unlike other large mammals, Indian cattle are cheap to maintain (since they can survive on short rations, garbage, and leaves); unlike horses and donkeys, cattle show

See Field.house at 178.

⁴⁰ See id.

⁴¹

See id.

remarkable resistance to heat; and cattle outperform other

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species in pulling plows. In addition, materialists claim that, because of deforestation in India, cow dung has become an

important source of fuel for the poor. Indian cows produce roughly 800,000,000 tons of manure each year, manure which is carefully collected by Indian peasants and which produces the energy equivalent of about 200,000,000 tons of coal. For these reasons, materialists claim that today India actually

suffers from a shortage of cattle, rather than a useless

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surplus.

B. The Beloved Dog 1.) The Idealist Exolanation

Marshall Sahlins cites the American taboo on eating dogs as an example of an irrational cultural bias. About dogs, Sahlins writes: "D]ogs climb upon chairs designed for humans, sleep in people's beds, and sit at table after their own fashion awaiting their share of the family meal. According to Sahlins, such treatment indicates that dogs participate in American society as subjects, or near equals to human beings. Like people, dogs have proper names. In contrast, Americans

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See Harris at 253.

See Farb & Armelago at 120.

See Id.; Fieldhouse at 179.

Salilins at 174.

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generally treat other animals, like pigs and cattle, as anonymous objects. Because dogs have the status of semi-humans in the United States, Americans are incapable of eating them.

For an American, to eat a dog would amount to metaphorical

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cannibalism. Thus, Sahlins proclaims, 'edibility is inversely related to humanity.'⁴⁷

2.) The Materialist Explanation

Marvin Harris is a critic of Sahlins' theory that nothing but the whimsical feeling that dogs are like people explains Americans' aversion to the thought of eating dogs.⁴⁸ Rather, Harris argues that the taboo on dogs arose as a result of the relative disadvantages of an American dog meat industry. Dogs, Harris argues, provide valuable companionship and security to human beings. Therefore, Harris reasons that dogs are only consumed as a food source in cultures that lack cheaper alternative sources of protein from other domestic animals.

IV. The Need for a Balanced Approach: Rejecting the False Materialist-Idealist Dichotomy

Any theory that claims to explain the intricacies of the human mind in absolute terms should be subject to intense

See id.

Id. at 175.

⁴⁸ Harris at 255.

See id.

skepticism. In fact, both idealism and materialism are imperfect theories.

The primary failings of idealist explanations for human food preferences and aversions stem from their inability to offer specific selection principles that can account for the variations (or similarities) in food habits between different cultures. As discussed previously, idealists attribute beef rejection in India to Hindu religious beliefs, but they cannot explain *why* Hindu beliefs differ from those of Christianity, Islam, or Judaism. Similarly, idealists attribute the Jewish aversion toward pork to Jewish religious beliefs, yet they cannot explain why other cultures did not develop similar aversions toward pork. In short, idealists are unable to explain why cultures evolved as they did (beyond mere whim or chance) without borrowing from materialism. Thus, critics of idealism claim that idealism amounts to nothing more than an intellectual shrug of the shoulders, which precludes any productive scientific inquiry into specific reasons for human food habits.

Materialist theory suffers from several flaws as well. First, if materialists are correct that human food preferences are utilitarian responses to environmental forces, then religious and cultural proscriptions against the consumption of foods—i.e., taboos—would not be necessary. Materialist theory suggests that utilitarian self-interest should be enough

to perpetuate an aversion toward certain foods. If this is true, however, cultural taboos on the consumption of these foods are superfluous, and irrational. 50

Another obvious weakness of materialist theory is the proposition that human food habits are rational. In fact, human food choices can be downright dangerous. Consider the Japanese delicacy *fugu*—the meat of the toxic pufferfish. The meat and internal organs of the pufferfish contain tetrodotoxin, a poison hundreds of times more deadly than cyanide. While specially trained chefs usually succeed in removing the fish meat from the extremely toxic organs, despite these precautions, death from pufferfish meat claims over three

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hundred Japanese each year. Materialist theory simply fails to explain why individuals would choose to consume foods that threaten their survival.

In addition, not all dietary habits are well-adapted to material factors. In reality, the eating habits of many groups around the world are poorly suited to their environments, and

50 Materialists have attempted to respond to this criticism by arguing that taboos are nonetheless necessary to overcome human ambivalence and instances of ambiguity. See Marvin Harris,

Foodways: Historical Overview and Theoretical Prolegomenon, in

Food and Evolution: Toward a Theory of Human Food Habits 57, 78 (Marvin Harris & Eric B. Ross eds., 1987). Needless to say, this explanation is not very convincing.

See **MacClancy** at 22.

even in nutritional terms. This reality suggests that while people's dietary habits may be influenced by material factors, contrary to materialist theory, food preferences are not necessarily *determined* by material conditions. While material conditions undoubtedly constrain food choice—i.e., constrain the range of foods available to a population—materialism alone cannot explain why individuals will choose one food over another within this range. This is the most serious criticism of materialist theory: while materialism may explain why it was *possible* for a population to create taboo, materialism fails to explain why it was *necessary* to do so. Ultimately, only idealist theory may be able to explain human choices within the aforementioned material bounds.

The inadequacies of both major theories clearly suggest that, ultimately, it may be impossible to identify any single cause, or explanation, for all human food preferences and taboos, and that at most, it may be possible to identify several mutually reinforcing factors that contribute to the development and maintenance of a society's food habits. These factors no doubt include human technology, cultural beliefs, social and political institutions, and environmental conditions. This Part will now identify two basic constraints shaping human food preferences: biology and availability.

A. The Biological Baseline

Humans, like all other animals, require nourishment in order to survive.⁵³ This nourishment, of course, comes from food. Thus, any account of human food habits must start from the realization that, because food is central to survival, the hunger drive compels people to eat whatever foods are available to them. This biological imperative forms the baseline from which all explanatory theories must begin.

In fact, the biological imperative of self-preservation is so strong that it can overcome any cultural aversion to a food source. When people are starving, most will eat anything in order to survive. During the Nazi siege of Leningrad in 1941, for example, almost three million Russians were forced to eat such things as crows, sparrows, cats, dogs, briefcases, lipstick, sawdust, wallpaper, and rats; rumors of cannibalism abounded. It is only after the basic imperative of survival is satisfied that people are in a position to be selective about their food preferences.

In addition to constituting a basic imperative, evidence also suggests that biogenetic factors endow human beings with

⁵² See **Farb & Armelago** at 183 (explaining that all animals must obtain about forty or fifty substances as part of their diets in order to survive)

See MacClancy at 47-48.

certain food preferences and aversions at birth so as to foster the acquisition of vital nutrients and to protect against the ingestion of harmful substances. Studies indicate, for example, that human beings have a genetic preference for animal fats and proteins over plant matter. In a similar vein, scientists have observed that meat stimulates distinct behavioral responses in primates, responses that scientists cite as additional evidence for the existence of genetic predispositions to certain types of foods. **56**

Moreover, human beings, like other mammals, appear to have an innate predisposition to certain tastes that promote adaptive food choice. Scientists believe, for example, that human beings possess an innate preference for sweet substances and an innate aversion to bitter and irritating substances. Scientists attribute these innate preferences to bioevolutionary adaptations that, in the case of preferences for sweet foods, serves to encourage the intake of high-energy, nutritious foods, and that in the case of aversions to bitter

See. e.g., L. Abrams, *Vegetarianism: An Anthropological!*

Nutritional Evaluation, **32 Journal of Applied Nutrition** 53, 53-87 (1980)

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See. e.g., J. Goodall, *Life and Death at Gambi*, 155 **National Geographic** 592, 592-620 (1979).

57

See Paul Rozin, *Psychobiological Perspectives on Food*

Preferences and Avoidances, in **Food and Evolution: Toward a Theory of Human Food Habits** 181, 182 (Marvin Harris & Eric B. Ross eds., 1987)

substances, serve as bioevolutionary protections against potentially poisonous substances. Similarly, there is some evidence that human preferences are related to palatability, and the palatability bears a direct relationship to nutritional value. For example, one study found that animal foods, which are high in protein, are tastier than vegetable foods, which are high in starch.

Researchers have also identified other psychobiological processes that contribute to human likes and dislikes. For example, studies indicate that mere exposure to certain foods

over long periods of time can produce a liking for those

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foods. Similarly, the pairing of an unfamiliar food with an already liked food, such as sugar, can lead to a liking for the

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unfamiliar food. However, there is also evidence indicating

that human beings have an innate aversion toward unfamiliar foods. Studies have documented the fear of new foods, or neophobia, in most other mammals, including primates. 62

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Id.

See **John Yudkin & J.C. McKenzie, Changing Food Habits** 15-19 (1964)

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Id. at 188.

61

Id.

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This behavior is probably an evolutionary trait, since an aversion to new foods is advantageous for survival. Foods

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addition, scientists have concluded that the physiological effects of ingestion can induce likings for particular foods. Thus, humans tend to prefer foods with a high satiety value.⁶³

Thus, while biological factors cannot fully explain the

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intricacies of human food preferences, evidence suggests that

human beings possess some instinctive knowledge of their dietary needs and that human food preferences may reflect this knowledge. Moreover, even though scientists acknowledge that social, political, and economic factors can influence (and at times override) biological food preferences, ⁶⁵ biology remains an ever-present constraint on daily human dietary choices. In sum, biology alone cannot explain tastes and distastes, but it is an influential factor that must not be ignored.

B. The Constraint of Availability

Human beings the world over thus have the same need of securing an adequate diet. The ways in which these similar nutritional requirements can be met, however, vary greatly between societies.

previously eaten without difficulty are clearly safe, while new foods risk possible danger. See Farb & Armelago at 191.

⁶⁰ Id.

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But see George Armelagos, *Biocultural Aspects of Food Choice*, in **Food and Evolution: Toward a Theory of Human Food Habits** 579 (Marvin Harris & Eric B. Ross eds., 1987).

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See Farb & Armelagos at 195.

The most important constraint (second to biological necessity) is availability, since one cannot eat what one does not have.⁶⁶ Millions of people, for example, are vegetarians by necessity rather than by choice. The diets of many of the world's poor consists almost exclusively of cereals, fruits, and vegetables. This does not mean, however, that these people prefer such a limited diet, but only that sources of meat are not readily available to them. Availability is thus an ever-present constraint affecting human food choices.

Of course, availability is in turn influenced by many other material factors, both natural (e.g., the ecology) and man-made (e.g., human technology). Thus, material factors can affect the availability of food sources, in addition to influencing their acceptability as sources of food. ⁶⁷ Political and economic structures, for example, undoubtedly acts as constraints on food availability, in addition to affecting

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dietary choices. However, as previously noted, the material factors are at best partial explanations for human food preferences. While economic and political structures, for

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Elaine N. McIntosh, American Food Habits in Historical Perspective 207 (1995)

⁶⁷ See **Field.house** at *preface*.

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See, e.g., Gretel H. Pelto, *Social Class and Diet in Contemporary Mexico*, in **Food and Evolution: Toward a Theory of**

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Human Food Habits 517, 517-56 (Marvin Harris & Eric B. Ross eds., 1987)
example, can certainly limit an individual's range of food choices, these factors fail to explain human food choices within the range of possible alternatives.

V. Implications for the Regulation of Human Food Preferences

The study of human food habits has a significance far greater than that of an interesting intellectual exercise. Understanding the reasons for human food preferences offers the possibility of improving people's lives. The study of human food habits affords researchers the opportunity to develop general principles that may assist in understanding existing human dietary behavior, not to mention possible future variations in human diet. Such predictive principles are of immense importance to policymakers wishing to shape their population's patterns of food consumption so as to maximize human nutrition and health.

This section therefore examines both the likelihood and desirability of additional governmental regulation of human food preferences in the United States. As this section will demonstrate, although there are persuasive arguments for increased governmental activism, there are substantial tradeoffs associated with increased governmental intrusion in this area of human activity—costs that make any further

governmental activity in this area both undesirable and unlikely. Government regulation of human food preferences should be confined narrowly to instances where specific sources of food present a significant threat to human health. Such regulation should not be based on relativistic aesthetic and moral beliefs, however.

A. What is Food? It's Relative

The classification of a product as a food determines the regulations to which that product must comply. In certain cases, the classification of an item as food can affect its very legality. Obviously, the definition of such basic terms as food can be a matter of fundamental importance.

Yet, as this paper has demonstrated, because of the unique set of material and cultural constraints that shape each society's dietary habits, different societies may have radically different conceptions of what constitutes food. The Scots, for example, cook a mixture of cows' lungs, intestines, pancreas, liver, and heart stuffed in a sheep's stomach and

call it haggis; the Aghori ascetics of Benares survive on

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alms, excrement, and on occasion, a putrid corpse. But most Americans, however, would not consider these examples to be food.

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See MacClancy at 1.

This diversity of understandings in the world is problematic. It suggests that each society's conception of food is fundamentally arbitrary—i.e., that there is nothing inherently more valid or appropriate about American preferences. The inability to find such basic terms as food universally indicates how relativistic Western notions of food truly are.

Moreover, this diversity suggests that laws regulating food consumption cannot be understood apart from their cultural and material contexts. To illustrate, Congress defined food

in the Federal Food, Drug, and Cosmetic Act as articles used

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as food. This definition, however is obviously not very

helpful, since whether something is used as food can not only vary from country to country, but in a large nation such as the United States, can vary from city to city. Similarly, terms such as fit for human consumption, edible and filthy are meaningless absent a cultural context.

B. The Existing Governmental Role

Under existing U.S. law, regulatory bodies such as the FDA and USDA exert only an indirect influence on human food preferences. Unlike other countries, such as India, for example, where the government has prohibited the sale and consumption of a specific source of food (i.e., beef), the U.S.

70 21 U.S.C. §321(f)(1).

government generally avoids constraining consumer freedom by enacting outright bans on the sale and consumption of food products.⁷¹ Thus, provided that a product is not harmful to human health, that a market for a particular animal product exists, and that the manufacturers of that product comply with existing sanitation and food safety regulations, American businessmen are generally free to sell any type of food product that they wish.⁷²

C. The Potential for Greater Governmental Activism

Arguably, governmental bodies such as the FDA already possess the requisite statutory authority to prohibit the sale of certain foods. First, such prohibitions arguably would not be beyond the FDA's mission—to ensure that food is safe, pure, and wholesome.⁷³ As previously noted, terms such as wholesome are subject to open interpretation. In addition, the Federal Food, Drug, and Cosmetic Act prohibits the sale of adulterated foods; the statute defines adulterated foods,

⁷¹ Animal food products are subject to specific regulatory requirements under existing law. Meat, for example, is regulated by the USDA under the Federal Meat Inspection Act. But although manufacturers of food products must comply with regulations governing the slaughter of animals and their processing, few restrictions exist that prevent manufacturers from exploiting specific sources of meat.

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The sale and consumption of human flesh is a notable exception, however.

⁷³ For a concise statement of the FDA's mission with respect to food, see S. Rep. No. 101-84 (1989)

which are defined under the Act as any food that consists in whole or in part of any filthy ... substance, or ... is otherwise unfit for food.⁷⁴ Again, terms such as fit for human consumption, edible, and filthy are subject to open interpretation. Moreover, the courts have held that, under existing law, sterilized filth, although harmless, may be prohibited by the FDA on aesthetic grounds alone.⁷⁵ Given that current law enables the FDA to prohibit the sale of *sterilized* filth on aesthetic grounds alone, the FDA could conceivably ban the sale of certain items, such as rat meat, as filth per se, however sanitary or nutritional such a product might be.

D. The Case for Greater Governmental Activism

Although the federal government has in the past shown a great reluctance to interfere with human food preferences, the federal government could always choose to reverse this policy if it felt that compelling considerations warranted greater governmental regulation of American food habits.

1.) Moral and Aesthetic Arguments

Compelling arguments exist for why the government ought to prohibit the sale of animal products that offend Americans'

21 U.S.C. §342(a) (3)

See. e.g.. United States v. 484 Bags, More or Less, 423 F.2d 839 (1970) (holding that a food substance may be condemned as unfit for food even though it is not decomposed, filthy or putrid).

moral beliefs (e.g., dog meat) or aesthetic sensibilities (e.g., worms).

While the consumption of products such as dog meat or worms may seem far-fetched, many Americans are already engaged in the distribution and consumption of exotic animal products. The sale of ostrich meat, for example, has become a thriving industry in the United States, particularly in the Midwest; at present, there are about 650 ostrich farms in 40 different

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states. Ostriches are cheaper to raise than cows and pigs

these days, and they produce more offspring and greater profits as well. Perhaps not as exotic, the buffalo, or bison, industry is also thriving. In fact, the demand for buffalo meat is currently outpacing the supply.⁷⁸ From a business standpoint, the sale of one buffalo is worth as much as selling 18 cattle; from a consumer standpoint, buffalo meat is low in fat and cholesterol—qualities that appeal to the health conscious.⁷⁹ Motivated by similar health considerations, in addition to a bit of curiosity, Americans have also been

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See Profile: Ostrich farms are growing in popularity in the Midwest, NBC Nightly News, June 28, 1995.

See id.

⁷⁸ See Ann Toner, Buffalo Return to Plains, **Omaha WorldHerald**, Sept. 3, 1995, at 1W

See id.; see also Victoria Griffith, *Management: Taste of buffalo country*, **The Financial Times**, October 26, 1995, at 15.

experimenting with other nontraditional foods, such as snake, **80**

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goat, and alligator meat.

As immigration continues to draw individuals from diverse

cultures around the world, the likelihood that additional exotic food preferences will become part of American diets increases. Certain foreign food preferences, however, are likely to upset American moral and aesthetic sensibilities. For example, the Quechua Indians of Peru enjoy eating furry guinea pigs—animals which Americans have traditionally

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regarded as children's pets. In Turkey, sheep's brain is a delicacy, and in Jordan, freshly plucked sheep eyes are

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regarded as tasty treats. In South Korea, dog meat is still

popular, despite a government ban; in fact, one survey of Seoul residents found that nearly half of them had eaten dog meat within the past month. **85**

In China, vole, or rat, is eaten by

80 — Celia

See Sibley, *Snake dinner awaits, if you're game enough for it*, **Atlanta Journal and Constitution**, Jan. 13, 1996, at J1.

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See Christopher Rose, *The Goat Vote*, **New Orleans Times-Picayune**, April 21, 1996, at D1.

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See Manny Lopez, *Let your taste buds take a walk on the wild side*, **The Detroit News**, Feb. 23, 1996, at C8.

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See Steve Silk, *Daring Dining*, **Newsday**, March 24, 1991, at 21.

84 See id.

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See Paul Shin, *Dog Meat Still Popular in Korea*, **The Associated Press**, Nov. 22, 1996; *Survey Finds S. Koreans Back Eating of Dog Meat*, **Buffalo News**, June 10, 1994, at A4.

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individuals living in rural areas, especially during hard

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times. Were any of these foreign practices to make their way into the United States, some individuals would undoubtedly

demand that the U.S. government prohibit the sale of such foods, even if they are not harmful to human health.

Moreover, vegetarians have advanced some potent arguments for why the government should more actively discourage the consumption of meats generally, particularly beef. Many vegetarians argue that meat-eating evinces a sustained disregard for fellow sentient creatures, and that consuming meat is therefore immoral. ⁸⁷ They bolster this argument by pointing to the inhumane manner in which most livestock is treated. In Holland, for example, baby calves are wrenched from their mothers when three days old. They are then squeezed into stalls less than sixty centimeters wide and one hundred-forty centimeters long. These calves eat only a liquid diet, which is kept low in iron and certain vitamins so that their meat will not discolor. Since their diets lack fiber, the calves nibble at their crates and their own hair. They endure

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See Robert Benjamin, *If diners smell a rat in this restaurant, it's probably in their soup*, **Montreal Gazette**, March 1, 1992, at BS; Woodene Merriman, *The Year of Eating Dangerously*:

When in China, you do as the Chinese do—dining on rat, for instance, **Pittsburgh Post-Gazette**, Feb. 11, 1996, at H9.

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See. e.g. **MacClancy** at 148.

fourteen weeks of this treatment and are then finally slaughtered. ⁸⁸

Vegetarians also claim that meat-eating is uneconomical, and therefore immoral. Raising livestock, they claim, is a wasteful use of natural resources as compared to agriculture, since animals eat far more in grain than they eventually produce as meat. A cow, for example, needs sixteen kilos of grain for every kilo of meat it produces. Even a chicken requires three kilos of grain for every kilo of meat. Notably, an acre of land utilized as pasture for cattle produces enough meat protein to keep an adult alive for less than 250 days, while the same plot of land sown with soybeans will provide ten times the amount of protein. In light of these facts, vegetarians ask, should not the government take a more active

role in discouraging the consumption of inefficient food

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sources like cattle?

Furthermore, starving people in the Third World would be shocked to learn that thirteen million dogs and cats (or six million kilos of edible meat) are destroyed each year in U.S.

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See id. at 149. For further discussion on the barbarity of meat-eating, see **Fiddes** at 94-118.

⁸⁹ See MacClancy at 150. However, meat-eaters can point to studies that suggest that only 10 percent of the earth's surface can be cultivated efficiently, and thus, that the only efficient use of this non-arable land is the raising of livestock. See id. at 153.

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pounds.⁹⁰ If Americans stopped restricting their diets to expensive and ecologically inefficient cuts of beef, lamb, and pork, and started incorporating foods like dog meat in their diets, food aid to the Third World would increase dramatically. In the United States, for every one percent increase in production in beef, the amount of food shipped to the Third World decreases by ten percent.

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2.) Health and Nutrition

Moral and aesthetic concerns aside, the increasingly poor dietary habits of Americans argue for increased governmental regulation (if not prohibition?) of certain unhealthy foods, such as junk foods or certain types of meat.

American dietary habits are in an abysmal state. Despite an abundant variety of available foods, poor nutrition plagues America, and this is a worsening trend. Although few Americans suffer from malnutrition today, the twentieth century has seen a general trend of over-consumption of fats and sugars and under-consumption of complex carbohydrates. ⁹² Over the course of this century, the proportion of calories derived from fat

has increased by about 25%.

Whereas most of the

carbohydrates

⁹⁰ See id. at 180—81.

⁹¹ See id. at 181.

⁹² See McIntosh at 220-21.

See Farb & Armelagos at 214.

in the American diet use to come from complex starches, today they come from refined sugar, yet Americans now obtain fewer

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calories than ever from fruits and vegetables. Even worse,

despite a consistent trend toward over-consumption, the diets of too many Americans are low in several essential vitamins and minerals, such as calcium and iron. As more sugars and fats are consumed, the quantity of minerals and vitamins consumed by Americans diminishes •96

Not surprisingly, the people of the United States are facing health problems that stem from the poor quality of what most Americans consume. Obesity has become a rampant problem; recent estimates suggest that as many as fifty percent of Americans are overweight.⁹⁷ Moreover, since about 1940, there has been a sharp rise in diseases such as hypertension, cardiovascular disease, and diabetes.⁸⁸ Today, more than 70% of the deaths in this country each year are caused by illnesses such as high blood pressure, stroke, coronary disease—all diseases associated with poor eating habits and obesity.⁸⁸

See id.

See McIntosh at 220-21.

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See Farb & Armelagos at 214.

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See McIntosh at 220-21.

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See id.

See Farb & Armelagos at 214.

E. The Costs of Greater Governmental Activism and the Case for Governmental Restraint

The principle cost of increased governmental activism in this area lies in the degree to which such activism would constrain the individual liberty of every American. Deciding what one wishes to eat has always been a matter of personal preference. No doubt few Americans would tolerate a policy in which the government attempted to constrain their ability to choose their own diets, no matter how noble the motives.

Indeed, the suggestion that the government should take a more active role in shaping human food preferences raises significant questions about the proper role of government. Critics of governmental regulation typically argue that the government should refrain from doing that which individuals are capable of doing for themselves. The notion that Americans are incapable of regulating their own diets, and therefore, that the government ought to do it for them, is a rather extreme position. It would also have been anathema to the Founding Fathers because of the immense expansion in governmental powers that such a policy would entail.

Government intrusion in this area would also have effects beyond those of augmenting governmental power and constraining individual choice. Such a policy would undoubtedly have an

~oo Of course, whether or not one can indulge one's preferences depends on other factors, such as wealth.

effect on the very evolution of American culture and society. American cuisine, to cite but one aspect of American culture, is the ever-changing product of the contributions of America's many immigrants. Each wave of immigration to the United States has brought its own unique contributions to American culinary culture. Added governmental intrusion into American dietary patterns would risk stifling the evolution of such cultural institutions.

In short, although strong arguments may weigh in favor of increased government activism, the liberty interest at stake is so great as to warrant a policy of governmental restraint in this area. Therefore, absent a clear indication that a particular food is harmful to human beings, the government should allow American food habits to evolve unfettered. Such a laissez-fair policy toward human dietary preferences not only protects individual choice, but preserves the American spirit of ingenuity and innovation that has served America well for over two centuries.

VI. Conclusion

As this paper has demonstrated, food preferences are not reducible to simple, single-variable explanations. Rather, a society's food habits reflect a complex set of circumstances, including technological, biological, political, economic, ecological, and cultural factors. This paper has provided a brief overview of the various theories that attempt to explain

human food habits, in addition to examinations of two specific food taboos. The findings of this paper suggest that federal agencies in charge of food safety and human health must operate within a society possessing numerous cultural predispositions and aversions, and thus that they cannot base their policies on science alone. Instead, they must appreciate both the rational and irrational explanations for human behavior if regulators are to truly understand the public that they serve.