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# *Functional Foods For Health: Negotiation and Implications*

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IF FUNCTIONAL FOODS ARE TO PROVIDE ONE OF THE SOLUTIONS TO THE PROBLEMS OF dietary health that we currently face, consumers will need to incorporate them into their lives, making sense of them in relation to existing beliefs and values. Therefore, we must understand not only the scientific means of producing foods with additional health benefits, but also the relationship between functional foods and existing understandings of food and health. More research is needed in this area, particularly in the United States where very little scholarly (as opposed to market) research has been conducted to examine the cultural dynamics of functional foods. Here I present some preliminary findings based on my analyses of the intersections between functional foods and beliefs about dietary health among American consumers.

The term “functional” is typically used to refer to foods that provide health benefits “that go beyond basic nutrition” (Clydesdale, 2004; Hasler and Brown, 2009) This definition is quite broad and very inclusive, generating questions and confusion: “Aren’t all foods functional?” “What is the difference between a functional food and an ordinary food?” “Do blueberries and cholesterol-lowering spreads really belong in the same nutritional category?” Therefore, my remarks identify and focus on a specific subset of functional foods; those that have had their nutritional profile engineered or enhanced in order to promote health or aid in disease prevention. These products are novel enough to require a particularly deliberate process of negotiation as consumers integrate them into existing practices and try to understand them in light of established beliefs and values. I will also argue that it is important to distinguish “nutritionally engineered” or “functionally enhanced” products from those inherently endowed with nutritional properties now recognized as conferring important health benefits, which we may call “intrinsically functional” and which may or may not also be “functionally marketed.”

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<sup>1</sup>The categories I distinguish here are influenced by those proposed by Scrinis (2008) and Leighton (2002).

## DRIVERS

Many social and demographic factors contribute simultaneously to growing consumer interest in functional foods and growing interest among manufacturers in innovating and marketing products with enhanced functional benefits. Hasler (2000) has identified several of these: the aging of the population in concert with rising healthcare costs generating interest among baby boomers in using food as a means of preventing the chronic diseases of aging; technological advances such as those in biotechnology and nutritional genomics that have (and will) make new benefits possible; a changing regulatory context that, since the 1990s, has allowed the kind of health claims that distinguish functional foods; and scientific research documenting the health benefits of specific foods or food components that back up these claims. These factors describe some of the enviroing conditions that create the possibility for functional foods to play a role in improving the dietary health of the population.

## NEGOTIATION

The process of changing food habits takes place on two levels. Structural changes such as the technological, regulatory and economic alterations described above as “drivers” define the widest possible constraints within which change can occur on the more intimate level of daily life. It is on this intimate level of the lived conditions of consumption that people incorporate new items, made possible by structural changes, into their daily rituals and invest them with meaning (Mintz, 1996). Although the drivers allow functional foods to exist, the specific ways in which they are used and the meanings that become attached to them are worked out through a process of negotiation that is shaped in part by already established understandings about food and health. In her analysis of how middle-aged health-oriented Finns view functional foods, Mari Niva (2007) describes the process that takes place on this intimate level as one of “contextualization.” She notes that consumers use “existing cultural categories to make sense of the new phenomenon and to find a place for the new products in everyday life.” The structural changes allowing for the possibility of functional foods to address dietary problems and improve population health are clearly in motion, but we know too little about the process of negotiation through which consumers may, or may not, make sense of these products, incorporate them into their daily rituals and invest them with meaning.

## FOOD, HEALTH AND PLEASURE

Among existing understandings about food and health that play roles in how functional foods are negotiated and invested with meaning by consumers, the “health-pleasure paradox” is particularly significant (Biltekoff, 2010). This is the long-standing idea that “good” foods taste bad and good-tasting foods are “bad for us.” Mark Twain (1897) expressed this paradox beautifully in *Following the Equator*: “The only way to keep your health is to eat what you don’t want, drink what you don’t like, and do what you’d rather not.” The sentiment endures because it expresses beliefs about the meaning of health that are prevalent in Western, individualist cultures. We see health through the lens of our social and cultural values, imbuing the pursuit and accomplishment of health (and dietary health

in particular) with many of the same qualities that have historically been considered essential to mature subjectivity and good citizenship: autonomy, willpower and self-restraint (Crawford, 1984). To the extent that we see health as an accomplishment that is achieved through the exercise of the thinking self over bodily desires, we also understand health as anathema to carnal pleasure and associate healthy practices with self-denial.

One of the allures of functional enhancement is that it has the capacity to remake “bad food” as “good for us” and, perhaps, engineer a solution to the health-pleasure paradox. By combining the hedonics of a sinful treat with the nutrient profile of a “good food,” products like Vitamuffins™ and Super Donuts® seem to make it finally possible for Americans to indulge their way to health. While these products may indeed offer both pleasure and health, they are negotiated within the context of the health-pleasure paradox and understood by consumers in ways that clearly distinguish the pleasures that they offer from muffins and donuts that have not been enhanced with fiber, vitamins or essential fatty acids and packaged in calorie-controlled portions. The pleasure of the functional treat is what Coveney and Bunton (2003) call “disciplined pleasure”... “reasoned, reasonable and safe,” rather than risky or unplanned, and consistent with, rather than opposed to, the self-restraining dictates of health. This is not the reckless pleasure of a “sinfully” delicious dessert, but a studied attempt to achieve a balance between enjoyment and responsibility that is simply inconsistent with the experience associated with unrestrained—and therefore often guilt-inducing—gustatory pleasures. A fan of Deep Chocolate Vitalicious® VitaTops is quoted in the “Tastyimonials™” section of the company Website<sup>2</sup> raving about the *disciplined* pleasures that the product affords: “When I eat the chocolate ones I feel like I am cheating on my diet when in fact I am eating something really healthy...I thank you for helping me start my day off with something that looks and tastes sinful but is great for me.” Not surprisingly, in her study of Finnish consumers, Niva (2007) found that “functional foods had no place in indulgence. They were excluded since, by definition, they encompass a planned controlled health orientation...” Because the experience of disciplined pleasure is defined against indulgence, it also brings with it the pleasure of moral superiority over those whose unregulated pleasures are taken as a sign of irresponsibility, indifference and immorality (Niva, 2007). Product innovation that aims to use functional enhancement to align eating habits with healthy outcomes should attempt to better understand, motivate and capitalize on the existing drive for disciplined pleasures while bearing in mind the ways in which it is distinct from the pleasure of indulgence.

## THE WHOLE-DIET APPROACH TO NUTRITION

Functional foods are also negotiated and contextualized in relation to existing consumer understandings about what constitutes a healthy diet. But the appeal of functional foods—with its emphasis on single nutrients and the value of specific foods—conflicts with fundamental tenets of dietary health that have been promoted in the United States for over

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<sup>2</sup><http://www.vitalicious.com/testimonials.html>, retrieved May 16, 2010.

a century. Since the emergence of the science of nutrition in the late nineteenth century, dietary advice has focused on communicating the basic fact that foods are composed of nutrients and that certain foods are, therefore, nutritionally similar despite their apparent differences. Early twentieth-century dietary reformers sought to teach the urban poor that the protein in a cheap cut of tough meat is the same as that in the most expensive steak, and that the real value of food comes not from its cost but from its nutritional content. These ideas were popularized in a campaign during World War I that promoted the idea that beloved but scarce foods could be replaced by abundant yet unfamiliar ones at no nutritional cost. During World War II, the food-group approach to dietary health was introduced and Americans learned that eating right meant choosing at least one food from each of seven groups every day (Levenstein, 1988, 1993).

The idea that certain kinds of foods share nutritional qualities with others and that a good diet is varied and balanced remained central to dietary advice throughout the post-war period. As the nutrition and health communities shifted their focus from preventing vitamin-deficiency diseases to managing the chronic diseases of middle age, dietary advice became increasingly focused on warning people to avoid or reduce consumption of potentially harmful foods (sodium, cholesterol, fat, *etc.*). The USDA Food Pyramid's hierarchical structure conveyed the notion that some foods are better eaten in abundance and others in moderation, but remained focused on the dietary totality. In the context of this new dietary paradigm, which Warren Belasco has termed "Negative Nutrition," the food industry—concerned about the potential for negative impact on sales—played a major role in shaping an ongoing "no good foods or bad foods" approach to dietary advice that emphasized the importance of the whole diet rather than the role of specific foods within it (Belasco, 1989; Nestle, 2002)

Some observers have claimed that the emergence of functional foods represents a shift from a "food negatives" paradigm to a more positive approach to dietary health that entails seeking out functional benefits in food (Hasler, 2000; Leighton, 2002). While consumers are clearly interested in using foods to enhance health in new ways, the emphasis on the nutritional distinctiveness of particular foods and the particular value of specific micro-nutrients conflicts with traditional nutritional ideals. Although individual functional-food products may appeal to consumers seeking particular benefits, the general concept of functional foods may confuse consumers and be difficult to integrate into existing understandings of dietary health. In her analysis of lay perspectives on functional foods, Lotte Holm (2003) pointed to two related dangers. She noted that the "detail oriented and fragmented" messages of functional foods are similar to food-safety messages that have historically generated "confusion, uncertainty and ambivalence." She also noted that by introducing elements of one group into foods from another (vitamins in candy, for example), functional foods disturb the logic of food groupings and may, therefore, be "counter-productive to the nutritional health of populations."

## THE NATURE OF HEALTHY FOOD

As the products of scientific innovation and industrial processing, functionally enhanced foods promise healthfulness but conflict with understanding held by many consumers

that healthy foods are those that are the most “natural.” In interviews with consumers in five European cities, Holm *et al.* found that healthy eating means avoiding additives, and that eating “pure” foods (homemade from raw ingredients and containing few additives) was understood to provide protection against the dangers of “modern foods” (Holm, 2003). Niva’s subjects described healthy food as “pure,” “natural,” and “unprocessed” and felt that “foods enriched or fortified with healthy ingredients, even if they were extracted from nature, cannot attain the original balance and perfection of unprocessed foods” (Niva, 2007). Researchers report that while American consumers are receptive to the idea that some foods are naturally functional, they are skeptical of functionally engineered foods that emerge from labs and factories. In their 2007 telephone poll of 682 people, the Hartman Group found that when consumers are looking for health promotion and disease prevention they choose fresh and “real” foods (vegetables, fruits, vegetable juice, water, whole grains, fruit juice, fresh seafood, soy products, dairy products) over fortified or enhanced foods (Demeritt, 2008).

The association of “naturalness” with healthfulness may seem irrational to those who are using technologies to improve the nutritional profile (and safety) of foods through processing, but it is consistent with long-standing beliefs associating health with a simpler, more rural past in which people lived closer to nature. The historian Rachel Laudan argues that the idea that food was better and healthier in the pre-industrial past is based on a distorted view of history. She reminds us that, for our ancestors, “Natural was something quite nasty” and describes a not-so-distant past in which natural not only tasted bad, but was also unreliable and often indigestible. Processed and preserved foods were healthier, tasted better and freed those who were not members of the aristocracy (in some cases up to 95% of the population) from unending agricultural and domestic toil (Laudan, 2001). Nonetheless, the idea that pre-modern foods were more pure, healthy and wholesome, and that contemporary eaters should avoid the dangers of processed foods by eating as much as possible like our great-great-grandmothers did, clearly has traction, as evidenced by the popularity of Michael Pollan’s work advising exactly this (Pollan, 2007, 2008). In fact, longing for a past seen as simpler, more natural, and healthier is a historically consistent companion to our ongoing quest for progress through innovation and technology. There is evidence that even Plato longed for a more wholesome past, a lost Golden Age that included whole meal ground at home (McCance and Widdowson, 1956). Foods offering nutritionally engineered functional benefits may appeal to our love of science, innovation and progress, but they also push up against these deeply held beliefs about the dangers of technology and the reassuring purity of those foods that are as close to nature as possible.

Because the distinction between processed and “natural” foods is one that many consumers find important when choosing a healthy diet, it may be counterproductive to continue to include intrinsically (or naturally) functional foods (such as blueberries and almonds) and functionally enhanced foods in the same broad category of “functional foods.” Gyorgy Scrinis (2008) argues that the inclusion of whole or unmodified foods in the category of functional foods is a sleight of hand that extends the “aura of healthfulness attached to whole foods across to the ‘functional’ processed foods” and undermines

the “processed / unprocessed distinction as a basis for evaluating the healthfulness of foods.” The Hartman Group has found that consumers do not use or understand the term “functional foods” in the same way that those in the food industry do; for lay people, the notion of functionality is integrally related to the natural health-giving properties in food. They suggest that opportunity lies in offering products that mediate between the poles of naturally functional and artificially engineered foods (Demeritt, 2008). Those who are developing and promoting functional foods can better address consumers in their contexts by adopting terminology and practices that recognize the meaningfulness of the distinction between intrinsically and enhanced functional foods while striving to find the optimal and acceptable intersection between them.

## THE POLITICS OF HEALTH

Understanding existing beliefs about food and health can improve our ability to design and promote functionally enhanced foods that make sense to consumers, but if our aim is a healthier future then we should also consider broader historical contexts and implications. Hasler (2000) describes the emergence of functional foods as a radically new approach to diet among consumers that began in the last decade of the twentieth century. But the changes she observes—consumers increasingly using food as a means to pursue optimal health and wellness—are part of a larger set of changes in the culture and politics of health in the United States that have been underway since the 1970s. Though they involve increased effort among individuals to control and mitigate health risks through their eating habits, it is not clear that these changes have been, broadly speaking, “good for us.”

Functional foods as a product category and a health practice emerge from and participate in the establishment of a particular set of understandings around health that began in the 1970s. Around that time, the American public became increasingly concerned about health and safety in the context of growing awareness of environmental / occupational health hazards (carcinogens in food, air pollution, environmental degradation) and lifestyle hazards (smoking, high cholesterol). Political and corporate resistance to health-related regulations combined with a growing professional and public emphasis on individual health promotion led to the emergence of what Robert Crawford (2006) calls “the new health consciousness.” He describes this as an “ideological formation that defined problems of health and their solutions principally, although not exclusively, as matters within the boundaries of personal control.”

For the middle class in particular, the pursuit of health has become a major focus of attention, activity and concern. Understood as an outcome of individual effort and calculation, health also is an increasingly significant marker of self-control and responsibility. Crawford (2006) warns that, as the tasks related to maintaining personal health proliferate, awareness of the social aspects of health recede, leaving “little room for responsibility beyond the quest for personal well-being.”

Functional foods are an artifact of this new health consciousness, one of many strategies that twenty-first-century Americans can use to manage an ever-increasing sense of health hazards and to pursue health through individual effort and calculation. Functional foods

play a role in increasing the required breadth of health knowledge (by introducing terms such as plant sterols and omega-3s into the public lexicon, for example) and add new tasks to an already extensive list of responsibilities. In doing so, they may participate in the foreclosure of our ability to see beyond individual responsibility and the marketplace of goods as a source of health and to recognize and act proactively in regard to the social factors that shape and impede health. While the aim of functional foods is to promote health, they also add to an ever-increasing sense of health risk; “Am I getting enough antioxidants?” was not an issue that most people worried about before products bearing antioxidant health claims hit the shelves. What Crawford (2006) calls the “anxiety / control spiral” (the more we seek to control risk, the more we know about risk, the more anxious we become about risk) may drive people to buy functional foods, but it may at the same time undermine a sense of security that is also an important aspect of well being.

An expansive view of the future of dietary health will include functional foods, but not to the detriment of social, political and legislative remedies that address the structural determinants of health. A better understanding of the ways that consumers negotiate functional foods on the intimate level of consumption in the context of existing values and beliefs about food and health is crucial to offering solutions in the marketplace. But we should not lose sight of the aspects of health that lie beyond consumption and beyond the reach of individual control, those enviroing social conditions that set the widest possible constraints for dietary health and its pursuit.

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