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The Future of Food Information Services

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With growing attention to E. coli outbreaks and mad cow disease, consumers are increasingly questioning the food they eat. In response, many in the food industry are beginning to provide both transparent and convenient information regarding a food's history. Many small scale farms recognize this needed service and have created blogs that explain general farming principles, provide photos of the land, animals, and equipment, and portray the daily lives of farmers and their families. This paper describes these current information services provided to consumers and predicts the future direction of these vital services.

Introduction: Farmers' Markets and Transparency

“Good food starts in fields and orchards well tended. This is knowledge we ignore at our peril, for without good farming there can be no good food; and without good food there can be no good life” Alice Waters (qtd. in Cooper and Holmes 64).

It's a Saturday morning at the weekly Berkeley Farmers' Market¹. I visit my favorite apple stand and find stacks of wooden crates filled with some beauties, a deep red variety, tart and crisp, with a pink inner core. I sample a few slices and chat with the farmer from Sebastopol. He explains that this is the last week they will sell this variety (just as the week before he announced it was the last week they would sell the golden delicious variety). Each week, depending on the season, I may buy citrus from a Watsonville farm, peaches and plums from a farm in Brentwood, carrots from a family from Winters, and ingredients for salsa from a farm in Lodi. And at each stand I talk with the farmers about their season, try samples, and ask for

¹ A USDA survey defines a farmers market as “a common facility or area where multiple farmers/growers gather on a regular recurring basis to sell a variety of fresh fruits, vegetables, and other farm products directly to customers” (Payne 1).

preparation recommendations. I attend this market every week. Not only do I enjoy eating my purchases throughout the week, but I also benefit from knowing the history of the food I consume. Each orange, eggplant, bag of leafy greens, strip of bacon, jar of pickles, block of cheese, and handful of cherries has an extensive history: the soil and water used, the people and equipment involved in collection and transportation, the neighboring crops and livestock, and the inspections by the farm as well as by government officials. At the farmers' market, because the individuals that pick the apples and bottle the salsa are often the same individuals that sell these same goods, the consumer can learn the history of their food by simply asking questions and listening to the farmers' stories.

While many people shop at farmers' markets each week², they do not provide the same convenient service as supermarkets. In an ideal world I would only buy food from the local farmers' market; however, it is only open five hours a week. In contrast, the closest supermarket is open one hundred and twelve hours a week³. Rappoport notes that the majority of consumers prefer convenience to healthy foods and home-cooked meals. And as a result the food industry will continue to focus on providing convenience to consumers (184).

However, unlike farmers' markets, supermarkets do not provide the same transparency regarding a food's history. In fact, supermarket customers are largely disconnected from the origins of the food they consume:

For most of us in modern societies, the cognitive leap from raw to cooked is shortened by commercial processing. Instead of a chicken carcass complete with head, feet, and feathers, what we see in the supermarket is a clean, neatly packaged, and perhaps frozen object that has already come more than halfway the distance from being a dead chicken to a Sunday dinner. (Rappoport 143)

Rappoport also explains that this separation from animal products is intentional; consumers wish to remain disconnected from the slaughtering process (144). Unfortunately, this lack of transparency prevents consumers from making educated choices about food consumption: "Americans lack the information they need to make healthy food choices. Rather than take the time to educate ourselves, we seem to prefer to ignore the problems created by our current methods of food production" (Cooper and Holmes 35). Therefore, consumers have generally preferred convenient, rather than transparent, food services.

The Media, the Government, and Food Contamination

However, recent E. coli and other food-borne illness outbreaks may prompt changes in food transparency. In the last three months two E. coli outbreaks, bagged spinach in supermarkets and lettuce used in Taco Bell restaurants, have induced not only rampant sickness,

² An average of 2,760,000 people shopped at farmers' markets each week in 2000 (Payne iv).

³ The main Berkeley Farmers' Market (located at Center Street and MLK Jr. Way) is open on Saturdays from 10am – 2pm. The closest supermarket is Andronico's Market (located on Shattuck and Cedar Avenues) is open daily from 8am – 12pm.

but also widespread media coverage. Eric Schlosser, author of *Fast Food Nation*, attributes the greater potential for food-borne illness outbreaks to the centralized food system⁴ (less than fifteen slaughterhouses process the majority of beef consumed in the United States and many restaurants utilize mass produced fruits and vegetables that are shipped across the country.) This is because a centralized food system increases the potential for a greater numbers of individuals to come in contact with contaminated foods. Furthermore, the media has provided the consumer with extensive coverage of such food contaminations⁵. Cooper and Holmes suggest that this media coverage also prompts a government response to such outbreaks: “Food-borne illness outbreaks are on the rise in the United States, and our government’s position is often reactive, not proactive. The media is largely responsible for the government’s post-outbreak heightened awareness. Hard hitting media stories often spur local health departments to action” (129). Therefore, the greater potential for future outbreaks as well as widespread media coverage of food-borne illnesses will cause consumers to become increasingly aware of both contamination and potential contamination in the food supply. This added awareness will also cause consumers to demand more transparent food services.

Government officials and politicians have responded to this extensive media coverage, as well as to demands by consumers, by proposing greater labeling efforts. Such labels would require food suppliers to trace a food’s origin and subsequent storage or transport locations. Despite widespread public support, the food industry finds such labeling mechanisms ineffective because they are both arduous for suppliers and confusing for consumers (Belasco 260). Meanwhile, food transparency advocates also find labeling mechanisms ineffective because the information provided only includes details that companies care to disclose instead of providing information that consumers would benefit from (Cooper and Holmes 121). Lastly, labeling systems can lack of extensiveness. For example, in response for the appearance of mad cow disease in England, officials instituted a system to track every cow in the Britain. However, they soon realized that live cattle cannot spread mad cow disease and instead required a system to track cow parts (Klinkenborg).

Farm Blogs and Future Services

Alternatively, farms can provide the consumer with convenient and transparent access to a food’s origin by using blogs that provide insight into daily farming activities. These blogs provide convenience because the consumer does not have to attend a farmers’ market or visit the

⁴ Schlosser also compares the current food system to the food system of the mid 1900’s: “the nation’s diverse agricultural and food-processing system limited the size of outbreaks. Thousands of small slaughterhouses processed meat, and countless independent restaurants prepared food from fresh, local ingredients. If a butcher shop sold tainted meat or a restaurant served contaminated meals, a relatively small number of people were likely to become ill.”

⁵ The media’s portrayal of food quality began at the end of the nineteenth century when Upton Sinclair investigated dangerous working conditions of the Chicago slaughterhouses. In his research, he also discovered that the same slaughterhouses produced contaminated food eventually sold to consumers. His book, *The Jungle*, “marked the entrance on the food fears stage of three new actors: the press, the consumer, and the state—or, rather, three old actors, called on to play new roles.” Before the press began reporting concerns regarding food it was nearly impossible to find evidence of widespread food dangers (Ferrieres 319 - 325).

farm itself, instead the consumer can discover information about a food's history through the use of a computer and internet access. These blogs provide transparency by explaining general farming principles, providing photos of the land and the equipment, and portraying the daily lives of farmers and their families. For instance the Boulder Belt Eco Farm uses a blog, www.boulderbelt.blogspot.com, to provide insight into the farm's daily activities. Farmer Lucy Goodman also explains the farms' philosophy regarding chicken-raising, provides photos and descriptions of various animals and pets, and describes the weather conditions experienced in their location of southwest Ohio. Currently the farm is experiencing a warm winter, which reduces ground freezing and allows tilling to begin as early as January. Another blog, www.stonyfield.typepad.com/bovine, represents the Howmars Farm, a cattle ranch in Vermont. The writer and farmer, Jonathan Gates, also describes the current weather conditions and explains the challenges associated with such conditions. Currently the farm is experiencing large amounts of rain, which presents difficulties in spreading compost and storing bales of hay. The blog also provides photos of the equipment used on the farm (such as the new milking equipment purchased the previous summer) as well as updates on particular farm animals (one cow previously suffered from calcium deficiency and Jonathan gave an update on the cow's condition and explained the treatment received.)

In the future, farm blogs will provide even more information services than the Boulder Belt Eco Farm blog and Howmars Farm blog described above. In fact each animal, crop, water source, and plot of land will have its own blog that links to related aspects of the farm. For instance, a cow's blog will contain links to similar site belonging to the cow's parents and provide details regarding the cow's food, location, and medical information. The blog will also link to the sites of neighboring animals and various water and food sources. Essentially, each blog will provide an extensive and traceable history, searchable and reviewable by the consumer. Patrick Martins, the founder of the company Heritage Foods USA (a distribution company that connects small farms with consumers and wholesale accounts), describes such tracking as the "future of food". He also describes a future label that will provide information about every animal that a farm sells, specifically information about an animal's diet as well as its upbringing and slaughtering (Friedland).

Conclusion: Anticipating Change

While no individual wants to experience E. coli or other food-borne illnesses, further contamination could inspire change: change by individuals who will value the history of any consumed food, change by farmers who will be more careful in preventing contamination, and change by government to promote decentralization of the nation's food structure. Ferrieres describes the affect food fears have on change:

Food fears are not negative or paralyzing. They inspire action. The history of food fears is the history of human efforts to evaluate and, if possible, to reduce and master the risks. Its woven through with compromise. Compromise between the principle of reality and the ideal of security. Compromise among the actors, the government, the public, and, later, the press. (328)

While further contamination may inspire individuals and farmers to compromise and encourage safety, it is difficult to imagine similar compromise by the government. Schlosser notes that since 2000, the government has only decreased food-safety regulations despite an increased contamination of the food supply. In fact, the beef industry has donated four-fifths of its political contributions to Republican candidates that support fewer regulations. And as recent as last month, the Bush Administration abandoned a mandatory program to register all cows, pigs, and chickens into a tracking database, intended to limit contamination outbreaks (Quaid).

However, after numerous E. coli outbreaks the government will eventually compromise and find solutions to curb food contamination. Moreover, the government might utilize future food blogs as solutions to the rising obesity epidemic. Because the information provided by the blogs includes detailed information about the food's history and ingredients, individuals can make more educated and healthy decisions about the food they consume. For instance, if a consumer is choosing between the consumption of a smoothie or an individual piece of fruit, the blog can compare the various ingredients and processes required to produce each item. Potentially the consumer will chose to eat the food with fewer processed ingredients and a simpler food history.

The proposed food blogs will not be without problems: farms cannot control wild animals that may infect their domesticated animals, participants may fabricate a food's history, and certain industries will prevent the establishment of such tracking solutions. However, while there is no perfect solution to food-borne illnesses and other contamination issues, any improvements made to the current system will only prevent future outbreaks and promote public health. The proposed food blogs provide both convenience (easy accessibility through the use of a computer and the internet) and transparency (providing a detailed description of every food item's history). While not all consumers have the time and opportunity to shop at local farmers' markets, an eventual system will hopefully be in place to provide a similar service, one that provides food knowledge, traceability, accountability, transparency, and most importantly, convenience.

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