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FSIS Docket Room  
FSIS Docket Clerk  
U.S. Department of Agriculture  
Food Safety and Inspection Service  
300 12<sup>th</sup> Street, S.W., Room 102 Cotton Annex  
Washington, D.C. 20250

**Re: Docket No. FSIS 2006-0040  
Product Labeling: Definition of the Term “Natural”  
71 Fed. Reg. 70503 (Dec. 5, 2006)**

Dear Sir or Madam:

Kraft Foods is a \$34 billion global company, the largest food manufacturer in North America, and the second largest worldwide. For over 100 years, Americans have trusted the well-known brands Kraft sells, including Oscar Mayer meat and poultry products. Today, Kraft makes many additional products containing meat or poultry that are regulated by the Food Safety and Inspection Service (FSIS), including Di Giorno and Tombstone pizzas and Kraft South Beach Diet meals. Kraft also makes a large portfolio of foods regulated by the Food and Drug Administration (FDA).

Kraft uses the word “natural” on product labels in many different contexts. For example, one important use of the word “natural” is to identify “natural cheese,” a category of products that has been recognized by both FDA and the United States Department of Agriculture (USDA) for well over half a century.<sup>1</sup> Kraft not only has a substantial interest in how the word “natural” is regulated, but also has an interest in encouraging FSIS and FDA to develop a single regulatory approach that accommodates the different common uses of the word “natural.”

## Summary

Kraft respectfully questions whether an effort to develop regulations for controlling use of the word “natural” on meat and poultry product labels is a sensible undertaking.<sup>2</sup> There are two primary reasons for our conclusion. First, fixing a definition of the

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<sup>1/</sup> Agricultural Marketing Service, *How to Buy Cheese*, Home and Garden Bulletin 256, available at <http://www.ams.usda.gov/howtobuy/cheese.pdf>.

<sup>2/</sup> See Product Labeling: Definition of the Term “Natural,” 71 Fed. Reg. 70503, 70504 (Dec. 5, 2006); Petition for the Issuance of a Rule Regarding Natural Label Claims, Hormel Foods Corp. 1 (Oct. 9, 2006, revised Oct. 25, 2006) available at [http://www.fsis.usda.gov/regulations\\_&\\_policies/Petition\\_Natural\\_Label\\_Claims/index.asp](http://www.fsis.usda.gov/regulations_&_policies/Petition_Natural_Label_Claims/index.asp) [hereinafter Petition].

word “natural” in a regulation will be exceedingly difficult, if not impossible. The word “natural” has many definitions in the dictionary and a long history of common use. Second, drafting a regulation that anticipates the many *contexts* in which the word “natural” is used will be an even more profound challenge. Knowing the *context* is critical to understanding and evaluating the impression the word creates in the minds of consumers. Precisely for these two reasons, past attempts to regulate the word “natural” have not succeeded. Therefore, rulemaking is not the right regulatory option.

We instead take the view that FSIS should rely on the existing pre-market label approval process to ensure that the word “natural” is used properly. The benefit of the pre-market label approval process is that it allows FSIS to evaluate on a case-by-case basis whether a manufacturer’s use of the word “natural” is permissible in the context in which it is used. If the agency’s reviewers determine that a label is misleading, it may not be used in production. FSIS reviewers evaluate labels in light of the longstanding policy on “natural” claims set forth in the Food Standards Labeling and Policy Book.<sup>3</sup> This policy helps manufacturers develop labels with acceptable “natural” claims, and the FSIS policy itself acknowledges the importance of context in evaluating claims. For example, FSIS explains why a “natural chili” claim is different from the claim “chili -- made with natural ingredients.” Given that the pre-market label approval process will exist whether or not a regulation defining “natural” is adopted, we recommend that FSIS rely on existing processes to regulate such a commonly used word.

If FSIS does reconsider the way in which reviewers evaluate use of the word “natural,” FSIS should only do so in a way that fosters the agency’s primary mission of protecting consumers from unsafe food. Specifically, FSIS under no circumstances should exclude natural preservatives from the types of ingredients that may be used in foods, just because the word “natural” appears on the label. Such a change in course would be neither logical nor sound public health policy. Natural ingredients that improve food safety have been used for centuries and even characterize many foods. The lactic acid producing starter culture used in making cheese is but one example. There is no inherent conflict between ingredients that help control undesirable microorganisms and “natural” positioning. As a major producer of ready-to-eat meat and poultry products, and a pioneer of food safety improvements, Kraft respectfully requests that any new “natural” policy continue to permit the use of natural preservation techniques, including the use of natural preservatives like sodium lactate from fermented corn sugar.<sup>4</sup>

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<sup>3/</sup> United States Department of Agriculture, Food Standards and Labeling Policy Book, “Natural Claims” (Aug. 2005). We doubt FSIS, if asked, would take the position that the hundreds of label approvals given over the past quarter century were wrong due to the lack of a formal regulation covering use of the word “natural”.

<sup>4/</sup> This comment discusses sodium lactate, as that particular substance was explicitly noted as a permissible ingredient in the August 2005 “natural claims” policy. Our analysis, however, is equally applicable to potassium lactate. Accordingly, any reference to “sodium lactate” is intended to encompass potassium lactate from fermented corn sugar.

Kraft is also concerned with the process that FSIS is following. In response to a single petition, FSIS has acted unilaterally, without waiting for and considering the input of others who are known to the agency and directly affected by the agency's decision. We are concerned that this type of action will serve only competitive interests, not consumers. Kraft is also concerned that FSIS might take swift action ahead of FDA. We believe that FSIS should work cooperatively with FDA, retailers, consumers, and manufacturers to ensure a rational, sustainable, transparent, and defensible approach to regulation of the word "natural" on food labels.

Kraft's recommendations on how FSIS should approach the regulation of "natural" claims follow. Kraft respectfully requests that FSIS give our recommendations serious consideration.

## **I. The Evaluation of "Natural" Claims Requires a Case-By-Case Approach, Not Rigid Regulation**

"Natural" claims are not a recent phenomenon. Over the last thirty years, federal agencies repeatedly have considered whether advertising and labeling claims that use the word "natural" should be subject to a government definition preserved in a formal regulation. After careful examination, the Federal Trade Commission (FTC), FDA, and in the past, USDA, all concluded that case-by-case claim evaluation is the best approach for the simple reason that "the context in which natural is used determines its meaning."<sup>5</sup> In short, the agencies recognized that when a word has a long history of common use, attempting to put boundaries around it is futile.

### **A. Regulation of "Natural" Claims Has Been Attempted**

The rulemaking history on "natural" claims began, not in the 1980s as suggested in the Hormel Petition, but in the early 1970s. Over the course of nearly a decade, the FTC, later joined by FDA and USDA, extensively examined proposals to restrict the use of the word "natural" on food labels and in advertising. These proceedings (and subsequent undertakings by FDA in the 1990s) did not result in any regulation defining "natural." Instead, the agencies concluded that "the context in which natural is used determines its meaning."<sup>6</sup> Consequently, Kraft questions whether the "need for codification"<sup>7</sup> of the word "natural" asserted by Hormel is merely a request to repeat the comprehensive efforts undertaken years ago.

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<sup>5/</sup> Termination of Proposed Trade Regulation; Rule on Food Advertising, 48 Fed. Reg. 23270, 2370 (May 24, 1983) (statement of Commission Chairman James C. Miller, III).

<sup>6/</sup> *Id.*

<sup>7/</sup> Petition at 5.

In 1974, the FTC initiated proceedings for various rules on food advertising. Along with the proposed rules, the agency issued an “Analysis and Statement of Issues by Section,” designed to elicit comments on a number of issues, including “natural” food claims. At that time, the FTC staff proposed prohibiting the use of “natural,” but allowing the use of factual statements such as “does not contain any artificial preservatives.”<sup>8</sup> The agency sought comment on this proposal and proposed several questions for commentators on issues raised by the use of “natural” claims.<sup>9</sup>

In March 1976, the Commission announced four public hearings concerning food advertising, including “natural” claims, to be held throughout the country during the summer and into the fall of that year.<sup>10</sup> Testimony given by Kraft at the time is attached as Appendix I.

Following these comprehensive hearings, the FTC published the Bureau of Consumer Protection’s Staff Report in November 1978. This report analyzed the evidence received during the rulemaking proceeding and made recommendations for final action to be taken by the Commission.<sup>11</sup> Although the Staff Report did make recommendations as to the form of a final rule to govern “natural” claims, it also stated that “the record makes it abundantly clear that there is no generally accepted definition, either regulatory or scientific, which delimits the appropriate use of the word natural as applied to food.”<sup>12</sup> The FTC staff also commented that “the scope of the problem can be illustrated simply by reference to Webster’s Third International Dictionary, which lists 33 definitions for the word “natural,” at least six of which are applicable to food.”<sup>13</sup>

The FTC staff found some common principles to guide the use of a “natural” claim, including the proposition that “a natural food is generally recognized as not containing

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<sup>8/</sup> Proposed Trade Regulation Rule; Explanation of Proceeding and Analysis; Statement of Issues; Opportunity to Submit Data, Views or Arguments, 39 Fed. Reg. 39842, 39849 (Nov. 11, 1974). The staff proposal was published but not adopted by the Commission.

By recognizing the category of artificial preservatives, the FTC staff implicitly acknowledged the existence of natural preservatives. Otherwise, the claim would have been worded simply, “no preservatives.”

<sup>9/</sup> *Id.*

<sup>10/</sup> Final Notice Regarding Proposed Trade Regulation Rule, 41 Fed. Reg. 8980, 8980 (Mar. 2, 1976).

<sup>11/</sup> Publication of Staff Report on Proposed Trade Regulation Rule, 43 Fed. Reg. 55771, 55771 (Nov. 29, 1978).

<sup>12/</sup> Staff Report and Recommendations, Proposed Trade Regulation Rule on Food Advertising, 16 CFR Part 437 Phase I (Sept. 25, 1978) at 209 [hereinafter Staff Report].

<sup>13/</sup> Staff Report at 210.

artificial additives or other artificial ingredients.”<sup>14</sup> The FTC staff also found that “there is widespread agreement that a “natural” food should be subjected to only minimal processing after harvest.”<sup>15</sup> Nonetheless, the staff recognized that the “major limitation of the regulatory approach” it recommended was “the difficulty in formulating the applicable standards.”<sup>16</sup> For example, the staff noted that a “complete elaboration of the processes which constitute minimal processing would be virtually impossible.”<sup>17</sup> Consequently, the staff laid out “illustrative, but not exhaustive, examples of minimal processing.”<sup>18</sup>

In 1983, the FTC ultimately decided it should not establish a definition for “natural.” In the notice terminating the rulemaking, Chairman James C. Miller III concluded that “a fundamental problem exists by virtue of the fact that the context in which ‘natural’ is used determines its meaning.”<sup>19</sup> He went on to state “[i]t is unlikely that consumers expect the same thing from a natural apple as they do from natural ice cream. The proposed rule assumes, without any evidence, that natural means the same thing in every context.”<sup>20</sup>

In addition to the FTC’s independent efforts, in June 1978, the FTC, FDA, and USDA announced a series of joint public hearings to discuss several issues relating to food labeling and advertising.<sup>21</sup> More than 2,800 people attended the hearings, 452 people testified, and more than 9,000 written comments were submitted.<sup>22</sup> In 1979, the agencies issued “Tentative Positions” on the various issues. With respect to “natural” claims, FDA and USDA chose to “take different approaches.”<sup>23</sup> FDA stated that the agency “does not attempt to restrict

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<sup>14/</sup> Staff Report at 212. The FTC staff also found that the word “natural” “refers to the processing of a food after it has been harvested, as distinguished from the word “organic,” which refers to the “method of growth.” *Id.*

<sup>15/</sup> *Id.*

<sup>16/</sup> Staff Report at 226.

<sup>17/</sup> *Id.*

<sup>18/</sup> Staff Report at 227.

<sup>19/</sup> 48 Fed. Reg. at 23270.

<sup>20/</sup> *Id.*

<sup>21/</sup> Food Labeling; Hearings, 43 Fed. Reg. 25296, 25296 (June 9, 1978).

<sup>22/</sup> Food Labeling; Tentative Positions of Agencies, 44 Fed. Reg. 75990, 75992 (Dec. 21, 1979). It is unclear from the rulemaking record how often “natural” was discussed at these hearings, but the hearings broadly covered food labeling and advertising. In addition, the agencies received comments regarding “natural” claims. Food Labeling; Report on the Analysis of Comments at 52-54.

<sup>23/</sup> 44 Fed. Reg. at 76012. With hindsight, in our opinion the two agencies should reconsider whether different positions on regulation of the same word can be justified. These are the types of differences that cause the Congress to question whether a single food agency would be more efficient.

such claims because it believes that the development and enforcement of standards in this area would be difficult . . . .”<sup>24</sup> USDA chose to continue to address use of “natural” through its prior label review program.<sup>25</sup> The agencies stated that they would “continue their current policies . . . pending their evaluation of FTC’s rulemaking efforts.” Once that review was completed, they would “determine whether additional action on such labeling claims [wa]s necessary.”<sup>26</sup>

FDA’s conclusion in 1979 that the development of standards regarding use of “natural” would be difficult is not surprising. As FDA stated in the background papers associated with the issuance of the agency’s “Tentative Position,” “[i]n the early 1970’s the Food and Drug Administration began to attempt to develop policy definitions for [use of natural], but these never progressed enough even for internal guidance, because FDA was unable to arrive at clear cut definitions.”<sup>27</sup> Again in the early 1990s when the agency conducted rulemaking to implement the Nutrition Labeling and Education Act, FDA recognized the wide range of issues that must be considered before undertaking rulemaking to define “natural.”<sup>28</sup> The agency also acknowledged that “[b]ecause of the multiple and diverse meanings currently in use, establishing a definition for the term “natural” that will be readily accepted and understood will be difficult.”<sup>29</sup> Although FDA solicited comments on several issues related to “natural” claims, “none of the comments provided FDA with a specific direction to follow for developing a definition regarding the use of the word ‘natural.’”<sup>30</sup> Thus, the agency chose to continue its policy of prohibiting artificial or synthetic substances in “natural” foods. As recently as December 2005, FDA responded to a petition requesting FDA define the word “natural.” The agency denied the petition, stating “you have not provided us with any information that wasn’t considered in issuing our final rule in 1993 that would assist us in developing a definition

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<sup>24/</sup> *Id.* In the 1991 proposed rule regarding nutrient content claims, FDA explained its longstanding “natural” policy: “In the past, FDA has not attempted to restrict use of the term “natural” except for added color, synthetic substances, and flavors under § 101.22.” The agency further elaborated that it considers “‘natural’ to mean that nothing artificial or synthetic (including colors regardless of source) is included in or has been added to, the product that would not normally be expected to be there.” Food Labeling: Nutrient Content Claims, General Principles, Petitions, Definition of Terms, 56 Fed. Reg. 60421, 60466 (Nov. 27, 1991).

<sup>25/</sup> 44 Fed. Reg. at 76012.

<sup>26/</sup> *Id.* at 76013. The agencies did, however, endorse the FTC position that claims should not convey that natural foods are inherently nutritionally superior to, or safer than, other foods. *Id.*

<sup>27/</sup> Food Labeling; Background Papers at 120 (1979).

<sup>28/</sup> *See* Food Labeling; Nutrient Content Claims, General Principles, Petitions, Definition of Terms, Definition of Nutrient Content Claims for the Fat, Fatty Acid, and Cholesterol Content of Foods, 58 Fed. Reg. 2302, 2407 (Jan. 6, 1993).

<sup>29/</sup> 56 Fed. Reg. at 60467.

<sup>30/</sup> 58 Fed. Reg. at 2407.

regarding the use of the word “natural,” thereby allowing us to move away from our current policy.”<sup>31</sup>

When the FTC declined to establish a definition to regulate “natural” claims in 1983, FSIS chose to continue to review “natural” claims on a label-by-label basis. In November 1982, FSIS published its “natural” policy in the form of Standards and Labeling Policy Memorandum 055. This document has served as a guide to manufacturers in the development of truthful and non-misleading “natural” claims since its inception. Over the years, FSIS has “modified the guidance on occasion to make it consistent with prevailing policies, to reflect case-by-case decisions made by the agency, and to update references to regulations.”<sup>32</sup> Kraft is not aware, however, of any effort by FSIS since the “natural” policy was adopted to abandon the policy in favor of a formal regulation, until now. Instead, the agency has maintained a relatively consistent policy on “natural” and applied it to pre-market label approvals on a case-by-case basis for decades. Surely FSIS would not now suggest the approval process that has been in place for so long was fundamentally flawed all that time. Thus, it is puzzling to us that the agency would suddenly conclude that rulemaking is necessary when the use of a general policy to guide case-by-case label review has been legally sufficient for twenty-five years.

In sum, regulation of “natural” has been considered carefully and the issues surrounding use of the word on food labels have been thoroughly examined. Nothing cited in the Petition or the FSIS Notice suggests that FSIS will now come to any different conclusion than the FTC, FDA, and USDA reached in the early 70s and on every occasion since then. If FSIS were to conclude differently now, the agency’s reasoning would be examined in great detail. A case-by-case approach has proven to be the best approach for a long time because the context in which “natural” is used is critical to evaluating whether a particular claim is misleading.

## **B. The Meaning of “Natural” Depends Upon Context**

While consumer understanding of natural claims ultimately is the key question, we think FSIS must ask whether it is productive to explore understanding of the word “natural” standing alone without surrounding words or graphics and absent the context provided by the label on a particular product, including the ingredient line. Examination of the current marketplace quickly leads to the conclusion that testing all the different ways the word is used now would not be practical or even possible.<sup>33</sup> Inevitably, then, a fixed regulatory definition for “natural” would be at odds with common usage and, of necessity, hopelessly complex.

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<sup>31/</sup> Letter from Margaret O’K. Glavin, Assoc. Comm’r Regulatory Affairs, Food and Drug Administration, to Antonio Zamora (Dec. 12, 2005).

<sup>32/</sup> 71 Fed. Reg. at 70504.

<sup>33/</sup> For example, as Wild Oats states on the company website, “Natural means many things to many people. At Wild Oats, natural means no artificial colors, flavors, or preservatives, no hydrogenated oils and no high-fructose corn syrup.” “*About Us*,” Wild Oats, available at <http://www.wildoats.com/u/about100095/> (accessed on Dec. 19, 2006). Similarly, Whole Foods Market states that the store “feature[s] foods that are free of artificial preservatives, colors, flavors, sweeteners, and hydrogenated fats.” “*Products*,” Whole

Because dictionaries reflect the common understanding and usage of words, the very existence of multiple definitions of “natural” demonstrates that consumers attach more than one meaning to the word and that the meaning of the word is context specific. By way of example, the website [www.dictionary.com](http://www.dictionary.com) lists thirty-eight definitions for “natural.”<sup>34</sup> Several of these could apply to food: “existing in or formed by nature,” “growing spontaneously, without being planted or tended by human hand,” “having undergone little or no processing and containing no chemical additives,” “not treated, tanned, refined, . . . in its original or raw state,” and “not tinted or colored; undyed.”<sup>35</sup> The American Heritage Dictionary defines “natural” as, among other things, “not produced or changed artificially.”<sup>36</sup> To us, these definitions are evidence that “natural” has a different meaning depending on the context in which the word is used on a food label. FSIS should not impose through policy or regulation a narrow meaning for the word “natural” that is not consistent with common consumer usage.<sup>37</sup>

The range of products bearing “natural” claims is further evidence of the variety of meanings the word may have. As Chairman Miller noted when the FTC terminated the rulemaking process for “natural” claims, consumers do not expect the same thing from natural ice cream as they do from a natural apple.<sup>38</sup> The meaning of the word is related to the product it describes.

We know of no better example of the relevance of context to determining the meaning of a “natural” claim than “natural cheese.” “Natural cheese” is a phrase used to distinguish some types of cheeses produced using classical methods from pasteurized processed cheese, cheese spread, cheese food, and cold pack cheese. As explained by USDA in its

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Foods Market, *available at* <http://www.wholefoodsmarket.com/products/index.html> (accessed on Dec. 19, 2006).

<sup>34/</sup> “Natural,” Dictionary.com, *Dictionary.com Unabridged (v 1.1)*, *available at* <http://dictionary.reference.com/browse/natural> (accessed on Dec. 21, 2006).

<sup>35/</sup> *Id.*

<sup>36/</sup> “Natural,” Dictionary.com, *The American Heritage Dictionary of the English Language* (4<sup>th</sup> ed. 2004) *available at* <http://dictionary.reference.com/browse/natural> (accessed on Dec. 28, 2006).

<sup>37/</sup> *See, e.g., Mrs. Paul’s Kitchens, Inc. v. Califano*, 1978-1980 FDLI Jud. Rec. (E.D. Pa. 1978) (ruling that FDA could not force Mrs. Paul’s Kitchens to label its product “fish portions” rather than “fish filet”). In concluding that referring to a product composed of more than one piece of fish as “fish filet” was not false or misleading, the court examined the dictionary definition of the word “filet,” the history of marketing the product and those of competitors as “fish filet,” and the public’s understanding of what it was purchasing. The court stated, “There is no one all-encompassing definition of the word filet.” *Id.* Thus, its use on the product was appropriate.

<sup>38/</sup> 48 Fed. Reg. at 23270.



publication “How to Buy Cheese,”<sup>39</sup> pasteurized process cheese is a blend of fresh and aged natural cheeses that have been shredded, mixed, and heated, after which no further ripening occurs. Natural cheese is made by separating most of the milk solids from the milk by curdling with rennet or bacterial culture. The curd is separated from the whey by heating, stirring and pressing.<sup>40</sup>

“Natural cheese” has been part of the industry’s vernacular since at least the mid 1930s and part of the consumer’s since the 1940s.<sup>41</sup> Furthermore, cheese is a food category with many well-recognized standards of identity.<sup>42</sup> Indeed, USDA recognizes “natural cheese” in its publication “How to Buy Cheese”<sup>43</sup> and, therefore, explicitly acknowledges that “natural” has a specific meaning in this context.

Finally, the FSIS “natural” policy has long recognized that the meaning of “natural” is context dependent. The policy specifically states that “[t]he decision to approve or deny the use of a natural claim may be affected by the specific context in which the claim is made.”<sup>44</sup> In addition, FSIS distinguishes between a “natural” claim and an “all natural ingredients” claim.<sup>45</sup> These careful distinctions explicitly acknowledge that the meaning of “natural” varies by the context in which it appears.

### **C. A General Guideline with Case-By-Case Approval is the Best Option**

In our view, a rigid regulatory definition, even a complex one taken at a snapshot in time, cannot take properly into account the various meanings of “natural,” which are of necessity context-specific and tend to evolve over time. Fortunately, by applying the FSIS policy for “natural” claims to label-by-label review, the agency accomplishes the tailored review that is appropriate. Reviewing each use of “natural” individually enables the agency to view the claims in the context in which they appear on the food label. In addition, FSIS has modified the

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<sup>39/</sup> Agricultural Marketing Service, *How to Buy Cheese*, Home and Garden Bulletin 256, available at <http://www.ams.usda.gov/howtobuy/cheese.pdf>.

<sup>40/</sup> *Id.*

<sup>41/</sup> Prepared Testimony of Dr. J. Bryan Stine before the Federal Trade Commission (1976) (attached as Appendix I).

<sup>42/</sup> 21 C.F.R. Part 133. Note for example, that the standard for Cheddar Cheese includes use of antimycotic agents. 21 C.F.R. § 133.113. Today the natural preservative natamycin is most typically used.

<sup>43/</sup> Agricultural Marketing Service, *How to Buy Cheese*, Home and Garden Bulletin 256, available at <http://www.ams.usda.gov/howtobuy/cheese.pdf>.

<sup>44/</sup> United States Department of Agriculture, Food Standards and Labeling Policy Book, “Natural Claims” (Aug. 2005).

<sup>45/</sup> *Id.*

“natural” policy over the years to keep it current. The flexibility of this approach ensures that technological innovations are taken into account. It also reserves scarce agency rulemaking resources for more pressing matters.

The importance of flexibility is illustrated by the provisions of the current “natural” policy. Under the policy, a product containing an ingredient that has undergone more than minimal processing may not be called “natural.” As FSIS has stated, however, “there are exceptions” to this general view. Indeed, the agency has long “granted [exceptions] on a case-by-case basis if it could be demonstrated that the use of such an ingredient would not significantly change the character of the product to the point where it can no longer be considered a ‘natural’ product.”<sup>46</sup> In this manner, the agency considers the context in which the word “natural” is used and whether it appropriately describes the product in question. Kraft supports the continued existence of case-by-case exceptions like this one and opposes a static regulation.

Experience has taught us that regulations, once promulgated, are very difficult to modify even when developments in technology, nutrition, or consumer perception leave them outdated and largely unworkable. The backlog of food standard modernization petitions at FDA illustrates the impediments posed by codifying definitions that do not take into account the potential for technological innovation.

We anticipate that a regulation defining “natural” will be as inflexible as food standard regulations and, thus, fail to accommodate critical change, particularly in the area of food safety enhancements. This would be especially true should the agency codify the existing policy with the changes requested by Hormel (i.e., prohibit *any* substance that serves to retard product deterioration in a “natural” product).<sup>47</sup> Certainly, one area that should not be unduly restricted is the ability to make food safer for consumers. In recent years, the agency has appropriately put a great deal of emphasis on improving food safety. A flexible policy for “natural” based on a limited set of key principles, rather than a complex regulation that must be updated through notice and comment rulemaking, will best ensure the necessary consistency without sacrificing food safety and other consumer benefits.

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<sup>46/</sup> 71 Fed. Reg. at 70504.

<sup>47/</sup> For example, a rigid regulation could close the door on emerging technological innovations such as the use of bacteriophages and green tea, and lemon balm extracts, as well as more established substances such as the natural antimicrobial nisin. See Food Additives Permitted for Direct Addition to Food for Human Consumption; Bacteriophage Preparation, 71 Fed. Reg. 47729 (Aug. 18, 2006); George Reynolds, “All-Natural Extract Prevents Meat Oxidation,” available at <http://www.foodnavigator-usa.com/news/printNewsBis.asp?id=73847> (accessed on Feb. 2, 2007); “Danisco Launches Green Tea ‘Flavour Protector,’” available at <http://www.foodnavigator-usa.com/news/printNewsBis.asp?id=74083> (accessed on Feb. 9, 2007). For a description of nisin and its use in controlling organisms like *Listeria monocytogenes* and *Clostridium botulinum*, see “Nisin,” Whole Foods Market, available at <http://www.wholefoodsmarket.com/wholebody/ingredients/nisin.html> (accessed on Feb. 21, 2006).

It goes without saying that rulemaking is a resource- and time-intensive undertaking. The agency's resources would be better directed at more pressing matters that must be solved by rulemaking. Priorities for the agency's rulemaking resources include approving new ingredient uses, allowing structure/function claims, modernizing food standards, and streamlining the prior approval process.

## **II. Meat and Poultry Products Containing Sodium Lactate and Similar Ingredients Comply with the FSIS "Natural" Policy**

### **A. FSIS "Natural" Policy Has Long Permitted Natural Preservatives, Prohibiting Only Chemical Preservatives**

Label approvals of products containing sodium lactate and other natural preservatives are consistent with the plain meaning of FSIS's natural policy, regardless of which iteration is in effect. The "natural" policy has always contained two essential prongs. First, "natural" may be used if the product "does not contain any artificial flavor or flavoring, coloring ingredient, or chemical preservative (as defined in 21 C.F.R. 101.22), or any other artificial and synthetic ingredient." Second, FSIS requires that the product and its ingredients must not be more than minimally processed.<sup>48</sup> These elements have been part of the "natural" policy since its inception. In addition, the policy requires that products bear a statement explaining what is meant by the term "natural" – that the food "contains no artificial ingredients and is only minimally processed."<sup>49</sup>

We think the meaning of the term "chemical preservatives" in the policy is plain. The policy excludes the use of chemical preservatives, not all preservatives. To interpret the policy as excluding all preservatives from "natural" products would render the use of the word "chemical" meaningless. It is a longstanding principle of statutory construction that courts must give effect to each word in a statute.<sup>50</sup> The same principle applies to the agency's "natural" policy.

Moreover, the term "chemical preservative" is followed by the phrase "or any other artificial or synthetic ingredient." This phrase suggests that the overall category of prohibited ingredients refers to those that are artificial or synthetic.<sup>51</sup> Thus, the term "chemical

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<sup>48/</sup> See Policy Memo 055 (Nov. 22, 1982); United States Department of Agriculture, Food Standards and Labeling Policy Book, "Natural Claims" (Aug. 2005).

<sup>49/</sup> *Id.*

<sup>50/</sup> See, e.g., *Negonsott v. Samuels*, 507 U.S. 99, 106 (1993) (citing *Moskal v. United States*, 498 U.S. 103, 109-110 (1990)).

<sup>51/</sup> This interpretation is reinforced by the FTC staff report accompanying the proposed trade regulation rule in 1978. The proposed rule recommended by the FTC staff was substantially similar to the policy adopted by FSIS. The staff report noted that the rule was drafted to be consistent with FDA regulations defining natural and artificial flavors, artificial colors, and chemical preservatives. Staff report at 227. Nonetheless,

preservative” is understood as a kind of “artificial ingredient” not as a term that encompasses natural preservatives. Therefore, we suggest that under the plain meaning of the policy, only those preservatives that are artificial or synthetic are prohibited; natural preservatives are permitted.

The FSIS “natural” policy appropriately contemplates the need for preservation to help make foods safe. The policy includes in the definition of minimal processing “those traditional processes used to make food edible, to preserve it, or to make it safe for human consumption.” Likewise, allowing for the use of natural preservatives strikes a proper balance between food safety and ensuring that “natural” is not misleading to consumers. As the FTC staff explained, “the rationale for allowing processing necessary for safety . . . is apparent. Preservation should be allowed on general policy grounds, so long as unacceptable additives are not utilized.”<sup>52</sup> In our view, a policy that would allow for preservation methods (such as freezing, or drying) but prohibit natural additives like sodium lactate that have the same effect, would be at odds with both scientific principles and the agency’s food safety mission.<sup>53</sup>

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in summarizing the record before the agency, the staff stated that “a natural food is generally recognized as not containing artificial additives or other artificial ingredients.” Staff Report at 212. *See also* Staff Report at 221 (“‘natural’ foods appear to be premised upon two elements: minimal processing and the absence of artificial additives or ingredients”); Staff Report at 224. The FTC staff focused on “artificial” ingredients, not all additives, added ingredients, and preservatives.

FSIS has also summarized the policy in these terms by requiring “natural” products to bear a statement explaining the meaning of the term, “i.e., that the product is a natural food because it contains no *artificial* ingredients and is only minimally processed.” United States Department of Agriculture, Food Standards and Labeling Policy Book, “Natural Claims” (Aug. 2005) (emphasis added).

<sup>52/</sup> Staff Report at 228.

<sup>53/</sup> The Petitioner’s argument that a codified definition of “natural” will address the needs of purchasers with health and allergy concerns is misplaced. First, as the FTC, USDA, and FDA have previously expressed, “it is false and misleading to claim that foods described as natural . . . are inherently superior in nutrient content or safety. . . .” 44 Fed. Reg. at 76013. Furthermore, the Petition’s broad assertion linking food additives to food allergies and intolerances is not scientifically valid. With respect to the Petition’s claim that sodium lactate is linked to adverse reactions in lactose intolerant children, no scientific evidence is presented to support this assertion. As sodium lactate is derived from corn, neither lactose nor milk protein are present in this ingredient and thus it does not pose a concern for those with either lactose intolerance or milk allergies. In fact, the respected organization FAAN (Food Allergy and Anaphylaxis Network) states that sodium lactate does not contain milk protein and is not a concern for those with milk allergy. <http://www.foodallergy.org/allergens/milk.html>.

Moreover, the link between food additives and behavioral problems, such as hyperactivity or learning disabilities, has not been validated by well-controlled studies. A Consensus Development Panel of the National Institutes of Health concluded in 1982 that there was no evidence to support the claim that additives or coloring cause hyperactivity. *See* Defined Diets and Childhood Hyperactivity, NIH Consensus Statement 1982 Jan 13-15; 4(3): 1-11.

With respect to the Petition’s claim that sodium lactate is linked to adverse reactions in lactose intolerant children, no scientific evidence is presented to support this assertion. As sodium lactate is derived from corn, lactose or milk protein is not present in this ingredient and thus does not pose a concern for those with

Equally troubling would be a policy prohibiting any substance “which serves to retard product deterioration” as suggested in the Petition.<sup>54</sup> Many ingredients have dual purposes – they function as both flavors and preservatives. For example, rosemary can prevent spoilage and impart flavor to products. The same is true of other common natural preservatives such as salt, vinegar, and other spices.<sup>55</sup> These natural ingredients should be allowed in “natural” meat and poultry products regardless of whether they are added for flavor, preservation, anti-microbial effect or other purpose.

### **B. Sodium Lactate is a Natural Preservative**

Under the FSIS policy, a “natural” meat or poultry product must not contain any artificial or synthetic ingredient and the product and its ingredients must not be more than minimally processed. Sodium lactate is a natural preservative and therefore is permissible in “natural” meat and poultry products. To produce sodium lactate, corn sugar is fermented by bacteria to produce lactic acid. The lactic acid is filtered, dried, and purified, and then is neutralized to form sodium lactate. The fermentation, drying and neutralization processes are consistent with the production of natural ingredients. Moreover, sodium lactate is derived from a natural and renewable source: corn.<sup>56</sup>

In addition, sodium lactate is a minimally processed ingredient. As described above, sodium lactate is isolated after corn sugar is fermented and dried, two processes that are

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either lactose intolerance or milk allergies. In fact, the respected organization FAAN (Food Allergy and Anaphylaxis Network) states that sodium lactate does not contain milk protein and is not a concern for those with milk allergy. <http://www.foodallergy.org/allergens/milk.html>.

<sup>54/</sup> Petition at 14. In support of this definition, Hormel takes the incredible position that the existing FSIS policy contains far reaching exceptions for artificial and synthetic ingredients and preservatives that swallow its purported prohibitions, making the policy meaningless and eroding the meaning of a natural claim. Petition at 4-5. At the same time, the company proposes to dramatically expand exceptions within the policy by taking the novel position that artificial and synthetic ingredients may be used as incidental additives and processing aids in natural products -- a position for which we know of no precedent and that certainly conflicts with consumer expectations. Petition at 14. At best, this contradiction is disingenuous.

<sup>55/</sup> In this regard, sodium lactate is similar to salt, an ingredient commonly regarded as “natural,” although it undergoes significant purification to remove mineral impurities. Both sodium lactate and salt reduce water activity, protect against pathogen growth, and serve as flavor enhancers. See “*Why Is Salt a Good Food Preservative?*” Food and Drug Administration, available at <http://www.cfsan.fda.gov/~dms/qa-sto5.html>.

<sup>56/</sup> Potassium lactate is produced through an identical process. Corn sugar is fermented to produce lactic acid. The lactic acid is filtered, dried, purified, and then neutralized (with potassium hydroxide instead of sodium hydroxide) to form potassium lactate.

specifically included in the definition of minimal processing.<sup>57</sup> Accordingly, the ingredient is minimally processed under the criteria FSIS has been applying.<sup>58</sup>

Indeed, FSIS has previously determined that sodium lactate (from a corn source) complies with the “natural” policy. In August 2005, the agency amended the policy to state “sugar, sodium lactate (from a corn source), and natural flavorings from oleoresins or extractives are acceptable for ‘all natural’ claims.” The agency also approved a number of product labels with “natural” claims and the ingredient sodium lactate. Although the agency now questions whether sodium lactate conflicts with the word “natural” because of its antimicrobial properties, the agency has not raised questions regarding the source or processing of sodium lactate. Evidently, the agency continues to regard sodium lactate as a natural ingredient, at least when used as a natural flavor.

In our opinion, neither the function of the ingredient in the product nor the amount used should determine whether use of the ingredient is consistent with a “natural” claim. Rather, the proper test is whether the ingredient is synthetic or not. That single test should dictate whether an ingredient is “natural.”

It is particularly troubling to Kraft that the agency would consider prohibiting the use of a natural ingredient, sodium lactate, in “natural” products because of its antimicrobial effects. Sodium lactate inhibits the growth of *Listeria monocytogenes*, a pathogen that may cause serious illness. We also think that the focus in the letters sent to manufacturers on whether sodium lactate extends shelf life is misplaced. Shelf life and pathogen growth should not be equated. The shelf life of a ready-to-eat meat or poultry food product typically is based upon the deterioration in quality that occurs over time as the growth of spoilage organisms occurs and affects the appearance and taste of the food. A policy prohibiting natural preservatives that make foods safer for human consumption, like sodium lactate from corn sugar, would be at odds with the agency’s food safety mission.<sup>59</sup>

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<sup>57/</sup> “Minimal processing may include: (a) those traditional processes used to make food edible or to preserve it or to make it safe for human consumption, e.g., smoking, roasting, freezing, drying, and fermenting . . . .”

<sup>58/</sup> In contrast, we note that whether high pressure processing is compatible with the minimal processing requirement is debatable. See 71 Fed. Reg. at 70504 (stating that the “long standing policy on ‘natural’ has been challenged by advances in food processing and in packaging methods, e.g. the use of techniques such as high pressure processing . . . .”). We also note that it has always been difficult to draw lines around what constitutes minimal processing. See text accompanying *supra* notes 17 and 18. Accordingly, we believe that use of “natural” should depend upon whether a product contains artificial or synthetic ingredients, not on whether the product and its ingredients are minimally processed.

<sup>59/</sup> While we do believe that FSIS should maintain a “natural” policy consistent with the agency’s food safety mission – one that allows for natural preservatives – we believe that sodium lactate is consistent with a “natural” claim because it is not an artificial or synthetic ingredient. As such, we urge the agency not to succumb to the petitioner’s request to choose between food safety techniques such as the use of sodium lactate and high pressure processing. See Petition at 11-12.

The use of sodium lactate in “natural” meat and poultry products is neither false nor misleading.<sup>60</sup> Therefore, Kraft respectfully requests that the agency continue to allow the use of natural preservatives, including sodium lactate from fermented corn sugar, in “natural” meat and poultry products.

### **III. FSIS Notice, New Policies, and Related Actions Raise Legal Concerns**

In addition to our substantive concerns with the issues raised by the December 5, 2006 Notice, this proceeding raises important procedural issues. The agency’s actions in response to the Petition not only suggest that it is questioning its longstanding labeling policy, but that it has already prematurely reached conclusions about the substantive questions under consideration. The Petition requests that FSIS: (1) initiate rulemaking to codify a ‘natural’ definition in a fashion that excludes the use of certain widely used preservatives; and (2) on an interim basis revoke allowances for sodium lactate from a corn source and ingredients appearing in the National Organic Program’s National List in “natural” meat and poultry products.<sup>61</sup>

By removing the reference to sodium lactate from a corn source as well as the reference to the ingredients on the National Organic Program’s National List from the August 2005 “natural” claims policy before the Notice was published, FSIS has effectively signaled its agreement with the Petitioner’s position. The Notice states that “[t]he value and integrity of the 1982 [natural] policy is challenged further by new uses of ingredients that have previously been used for flavoring purposes, for example, as antimicrobial agents.”<sup>62</sup> Questioning the use of antimicrobial ingredients in natural products, FSIS has separately sent letters to approximately 30 companies, including Kraft, threatening to revoke previously approved labels due to the use of lactates.<sup>63</sup>

Kraft is troubled by each of the agency’s actions. In response to a single petition, FSIS has acted unilaterally, without waiting for and considering the input of others who are known to the agency and directly affected by the agency’s decision. Additionally, in light of the rulemaking history on “natural,” Kraft is surprised that the agency would publicly commit to rulemaking in the absence of a clearly defined problem associated with use of the claim on FSIS

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<sup>60/</sup> As previously explained, by the very terms of FSIS’s policy, “all products claiming to be natural or a natural food should be accompanied by a brief statement which explains what is meant by the term natural . . . .” In addition, all packaged products contain an ingredient statement, allowing consumers to confirm the “natural” claims on the package. Such disclosure and definition of terms clearly provide consumers with meaningful information and serve to prevent both confusion and deception.

<sup>61/</sup> Regarding the National Organic Policy, we agree that some synthetic substances are on the National List and sanctioned for use in organic products, but still are not appropriate for “natural” products.

<sup>62/</sup> 71 Fed. Reg. at 70504.

<sup>63/</sup> We urge the agency to uphold label approvals consistent with the August 2005 “natural claims” policy while rulemaking is ongoing.

approved labels. The absence of a clearly defined problem increases the likelihood that any “remedy” arrived at by the agency will serve only competitive interests, not consumers.

The agency’s decision to immediately implement changes to the “natural” policy and, at the same time, engage in rulemaking that could further alter use of the word “natural” also has important implications for the food industry. As many parties expressed at the December 12, 2006 public meeting, the agency’s recent decisions have had a detrimental impact on current business and on capital investments. Without a clear sense of the agency’s direction on “natural” claims, the food industry must guess which technologies designed to enhance product safety are viable in the “natural” category.

Although FSIS has made some modifications to its “natural” claims policy over the years, the basic elements of the policy have remained consistent. The changes made in August 2005 merely clarified elements of the policy. They did not fundamentally change it. Changing the policy to classify sodium lactate as an approved ingredient only if it can be established that it has no antimicrobial effect revises a longstanding policy that has allowed for natural preservatives. This change creates widespread confusion regarding the entire “natural” policy.

Kraft is also concerned that FSIS might take swift action ahead of FDA. We believe that FSIS should work cooperatively with FDA, retailers, consumers, and manufacturers to ensure a rational, sustainable, transparent, and defensible approach to regulation of the word “natural” on food labels. Policy development conducted without input from FDA will only add unnecessary complexity. There are numerous past examples of FDA and USDA working successfully together to establish uniform regulatory policies.<sup>64</sup>

As both agencies recognize, there is value in a consistent approach. Although consumer understanding of “natural” varies among product categories, consumers are not aware of the jurisdictional divisions between the two agencies and do not expect the government to apply different rules to the same word. The fact that many FDA regulated foods are used as ingredients or components in FSIS regulated foods underscores this point. A regulatory approach that guides use of “natural” should be consistent across the agencies and sufficiently flexible to reflect the many types of processed foods. Thus, Kraft urges FSIS to remove the minimal processing component from its “natural” policy to achieve harmony with FDA. In addition, under the terms of Executive Order 13422, FSIS must avoid policies that are inconsistent or incompatible with regulations or guidance documents of other federal agencies.<sup>65</sup>

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<sup>64/</sup> For example, on May 20, 2005, FDA and FSIS jointly issued a *Federal Register* notice soliciting comments on a proposed rule to modernize food standards by establishing a set of general principles to guide the creation, revision, or elimination of food standards. 70 Fed. Reg. 29214 (May 20, 2005). Similarly, FSIS and FDA promoted harmonization when implementing the Nutrition Labeling and Education Act and more recently, FSIS has announced its intention to propose rulemaking on trans fat label declarations and allergen labeling to ensure consistency with FDA.

<sup>65/</sup> Executive Order 13422, 72 Fed. Reg. 2763 (Jan. 23, 2007).



This Executive Order requires FSIS and FDA to work together to develop a harmonized approach to “natural” claims.

### **Conclusion**

For these reasons, we urge FSIS to apply the “natural claims” policy, as reflected in the August 2005 Food Standards and Labeling Policy Book, to each label on a case-by-case basis and drop efforts to proceed with rulemaking. This flexible approach will ensure that each “natural” claim is evaluated in the context in which it appears. It will preserve agency resources, allow for modifications of the policy to account for developments in food technology, and acknowledge the futility of establishing a single definition of “natural” for all food products in all contexts. Finally, this approach will continue to provide appropriately for the use of natural preservatives in “natural” products. In this manner, FSIS will help ensure that consumers receive the safe and wholesome food they expect when they purchase a “natural” product.

Thank you for your consideration of these comments.

Respectfully submitted,



Sheryl A. Marcouiller  
Chief Counsel, Food Law

# Appendix I

CHADWELL, KAYSER, RUGGLES, MCGEE & HASTINGS

135 SOUTH LASALLE STREET

CHICAGO, ILLINOIS 60603

312 726-2545

VICTOR P. KAYSER  
JOHN H. HOGLUND  
GLENN W. MCGEE  
GEORGE R. HOOPER  
JAMES E. HASTINGS  
PAUL H. LARUE  
DAVID J. GIBBONS  
RICHARD S. RHODES  
PAUL W. GABLER  
MERRILL S. THOMPSON  
C. LEE COOK, JR.  
DAVID A. NELSON  
JOHN J. McNUGH  
THOMAS W. JOHNSTON  
DAVID L. AUFDERSTRASSE  
JOSEPH V. GIFFIN  
ROBERT S. ROBIN  
JOHN M. CANNON  
JOHN C. BERGHOFF, JR.  
CHAMP W. DAVIS, JR.

WILLIAM J. GERARD  
PETER R. SONDERBY  
J. EDWARD THOMPSON  
ROBERT F. WARD  
JAMES A. BURSTEIN  
ALAN I. GREENE  
DAVID E. BENNETT  
JURIS KINS  
BRIAN J. REDDING  
WILLIAM E. SNYDER  
DAVID C. BOGAN  
MARK M. HEATWOLE  
JEFFREY P. CARREN  
WILLIAM VAN HAGEY  
THOMAS L. ALDRICH  
J. MICHAEL NEWTON  
JOANNE M. GANOBCEK  
FREDERIC D. FLOBERG  
HOWARD S. BISHOP, JR.  
DANIEL C. HURLBUTT, JR.

JOHN T. CHADWELL  
(1900-1975)  
ERWIN P. SNYDER  
(1891-1975)

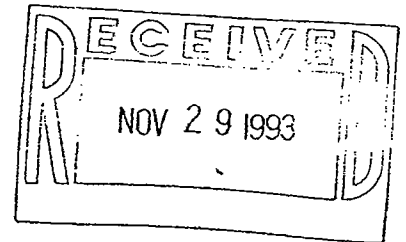
RICHARD M. KECK  
RUDY L. RUGGLES  
OF COUNSEL

JAMES A. RAHL  
VANCE N. KIRBY  
COUNSEL

CABLE ADDRESS  
"CHADLAW CHICAGO"

October 25, 1976

Ms. Lois Dinmore  
Division of National Advertising  
Bureau of Consumer Protection  
Federal Trade Commission  
Washington, D. C. 20580



Re: Proposed Trade Regulation Rule  
Food Advertising  
16 C.F.R. Part 437

Dear Ms. Dinmore:

We are counsel of record for Kraftco Corporation with respect to the above matter. Kraftco has asked Dr. J. Bryan Stine to appear as a witness during the forthcoming hearing commencing November 15, 1976 in Washington, D.C. He has agreed to do so and has asked me to give the required notice to you in his behalf.

Dr. Stine will testify concerning the long-standing and uncontroversial use of the term "natural" in advertising to distinguish natural cheeses from processed cheese products. Five copies of his curriculum vitae and of a summary of his testimony are enclosed.

He will testify in relation to proposed Section 437.6 and issues numbered (8), (11) and (12) stated in the March 2, 1976 Final Notice regarding the proposed trade regulation rule.

Dr. Stine has advised me that his schedule is quite flexible following November 15, through the middle of December.

CHADWELL, KAYSER, RUGGLES, MCGEE & HASTINGS

Ms. Lois Dinmore  
Page Two  
October 25, 1976

We presently estimate that Dr. Stine will require no more than thirty minutes for his direct testimony.

If any further clarification or information would be helpful, please call me at your convenience.

Sincerely,



Merrill S. Thompson

MST:mn  
Enclosures

cc: Mr. William D. Dixon  
Presiding Officer  
(w/enclosures)

My name is J. Bryan Stine. I live at Route 4, Box 264, Wichita Falls, Texas 76301.

Last July I retired after spending 42 years in various management positions for the Kraft Foods Division of Kraftco Corporation. As is evident from my curriculum vitae (Exhibit 1), I spent many of my early years supervising the production of cheese of various kinds and conducting related research.

In the late 1950's, my responsibilities began to include a greater emphasis upon the company's efforts to cooperate with federal agencies in the development of appropriate regulations governing the production, packaging and labeling of cheese products as well as other foods. Eventually I became a vice president and a part of the senior group of Kraft executives who met regularly to review and analyze problems which arose in the process of presenting Kraft products to the public. My job included counseling the production, marketing and advertising departments in connection with technically oriented consumer complaints and regulatory compliance. For many years I also spent quite a bit of time giving food-related talks to small groups of consumers.

During the same period I became active in a number of trade associations, I was Chairman of the National Cheese

Institute's Research Committee for fifteen years, and I have testified a good many times in food standards hearings, including practically all of the cheese hearings that have been held by the Federal Food and Drug Administration since 1938.

More recently, starting in the early sixties, I have been quite active in the Codex Alimentarius, which is an international food standards program sponsored by the Food and Agricultural Organization and the World Health Organization of the United Nations. Since about 1961, I have been active on the Committee of Government Experts Concerning Milk and Milk Products which is one of the subcommittees of the Codex Alimentarius.

Before I retired, my responsibilities required that I become generally familiar with the proposed rules which are the subject of this hearing and I became particularly concerned about the fact that as I understand it, the FTC staff is considering the possibility of asking the Commission to ban the term "natural" from all advertising. Thinking of it from the standpoint of cheese, this seemed like a very artificial solution to a non-problem, so I was not at all reluctant to agree to testify when I was asked to do so by my former employer. The company's request also gave me a chance to spend a good bit of time putting these thoughts together with the help of the company lawyer with whom I've worked on many occasions through the years. I don't have that kind of help available to me on my farm in Texas.

As I understand it, in the proposed issues, the staff groups the term "natural" with several other terms such as "natural food", "naturally grown", "organic", etc. and is asking the public whether these terms have created public confusion to an extent requiring that they be banned from advertising.

In my opinion, based on my experience, the long-standing and specific use of the word "natural" as an adjective to describe cheese simply doesn't belong in the same group and doesn't raise any serious question of confusion at all. Also, I wonder whether it's very productive to explore the consumer's understanding of the word "natural" all by itself because certainly in the case of cheese advertising, it is always used in some specific context describing cheese. We never ask the consumer to understand the word "natural" used alone.

My reason for being here is my rather strong belief that no matter what the Commission might decide to do, it would be contrary to the best interests of consumers and unfair to a lot of people to suddenly outlaw the use of terms like "natural cheese", "natural cheddar", "natural colby", and the many other similar uses of the term "natural" in advertising describing natural cheese.

It's my recollection that the cheese industry in general and Kraft in particular has been using "natural" to distinguish unprocessed cheese from processed cheese products ever since I have been in the business and probably for many years before that. When I started in the middle 1930's, the word "natural" was an established part of the cheese-man's vernacular, and I recall specifically a number of Kraft ads prominently referring to "natural" cheeses as early as 1942.

When saying "natural cheese" we were then, and we are now, talking about the many varieties of the commodity made by combining milk, bacterial cultures developed from milk, salt and rennet in ways that produce various cheeses having characteristics determined by the particular strains of bacteria used. This cheese-making process is, as a matter of fact, a very natural one and one which, in relation to the many processed cheese products which we have today, reflects a true minimum degree of processing. But that's not really my point. My point is that the word "natural" has been an extremely convenient handle for everyone, including manufacturers, scientists, advertisers and consumers, permitting them to quickly identify and distinguish major groups of cheese products.

The Commission's staff is probably already aware of the fact that nearly all of the commercially important cheese



products are made and labeled in accordance with definitions and standards of identity which the Food and Drug Administration promulgates under the Federal Food, Drug, and Cosmetic Act. Virtually all of the well-known natural cheeses are governed by this type of standard, which makes the product characteristics and qualities relatively uniform and predictable; and there haven't been very many significant changes in the characteristics of the products themselves during the last 30 or 40 years. There is one problem connected with this system, though, which is that the legal names of the processed cheeses get kind of long and complicated. For example, the word "cheddar" is included in the legal name "pasteurized process cheddar cheese". This means that it sometimes helps to be able to use the name "natural cheddar cheese" when you aren't referring to the processed product.

I think that because the products have been relatively standard through the years, and because the industry has very uniformly used the word "natural" to describe these standard type cheese products, there can be little doubt that the consumer and everyone else knows generally what you are talking about when, for example, you talk about a "natural cheddar cheese".

When J. L. Kraft started producing processed cheese way back when, the use of the word "natural" on the unprocessed cheese seemed quite logical. Process cheeses subsequently were

expanded to include more and more products involving more and more processing and more added ingredients, like the process cheese foods and the process cheese spreads on the market today. There are enough such products on the market now to make any readily understood brief descriptive term like "natural" very serviceable for consumers.

In recent years, we have even seen the development of a number of imitation cheese products which are labeled and advertised as "imitations". Certainly the preservation of the right to use the term "natural cheese" in the historical sense I've described makes a lot of sense from that standpoint as well.

Just to provide some idea of the extent to which a variety of publications have used the word "natural" to differentiate natural cheeses from processed cheese products, I am offering as exhibits copies of the title page and pages 1 through 3 of the United States Department of Agriculture, Agriculture Handbook No. 54 entitled "Cheese Varieties and Descriptions", as it was issued in December of 1953 (Exhibit 2); pages 343 and 344 from The New Good Housekeeping Cookbook, published in 1963 by Harcourt, Brace & World, Inc., and copyrighted by The Hearst Corporation (Exhibit 3); and page 22 from Agriculture Handbook No. 8 entitled "Composition of Foods", published by the Agricultural Research Service, United States Department of Agriculture, in this case as of December 1963 (Exhibit 4). I am sure that if I had spent any significant

amount of time looking I could have found many more and many older published uses of the phrase "natural cheese" to help consumers distinguish the natural cheeses from the process cheese products.

Whenever I've worked with government agencies in the past trying to develop an improved regulation, I have generally realized that many new regulations themselves cause a certain amount of consumer confusion. In this case it's only logical that if we suddenly and arbitrarily ban the use of the word "natural" after so many years of using it to describe certain cheese products, consumers will have to re-learn another way to distinguish between the cheese products because as a practical matter the products simply have to be distinguished. This consumer disadvantage in relation to cheese would be a cost that should be weighed against any advantages the staff may have in mind.

I gather from the way the issues are stated that the staff might be concerned about the possibility that the word "natural" automatically implies some sort of superiority. Insofar as cheese products are concerned, I am sure that the main thing communicated by the words "natural" and "processed" is the fact that the products are functionally different in predictable ways. It is true that by and large the natural

cheeses are more expensive than process cheese because they are usually made from more costly ingredients. The natural cheese may also be considered superior for certain recipes or uses by consumers, but the same consumer is just as likely to consider a process cheese product superior to a natural cheese for other uses. There are many times when a natural cheese would be totally unsuitable for the consumer's purposes because of its melting quality or keeping quality or some other functional characteristic.

From all of my years of experience, I can't recall a single instance where a consumer has indicated any confusion about what the term "natural cheese" meant; and most of the last 20 years I was in a position where I would have heard about it if the company had heard about any such confusion.

This is pretty convincing when you remember how many millions and perhaps billions of pounds of consumer packages of natural cheese Kraft has produced, advertised and sold during those years and when you realize that the Kraft products have for all of those years been advertised and sold in every state in the country.

Which reminds me of another point. It has been my experience that when a term used to describe and sell food is causing misunderstanding in the marketplace, you usually will

cause a few consumers or government officials to become upset enough that they raise official complaints. Nearly every city and state in the country has a law or ordinance which prohibits labeling or advertising which misleads consumers, and of course there are a number of other federal agencies besides the FTC that also have laws or regulations prohibiting statements which mislead or confuse consumers. Yet in all my years I don't know of a single state, local or federal agency which has objected to the way the cheese industry, and for that matter home economists, use the term "natural" to describe the natural cheese varieties sold and consumed in this country.

I suppose that by being here I run the risk of suggesting that the Commission or the staff is conscious of the way "natural" is used to describe cheese and that the Commission might intentionally ban that use. I don't know that to be the case at all and I certainly hope it is not the case. I guess I'm basically concerned that the Commission might unconsciously and almost incidentally ban even the very uncontroversial and well-understood use of "natural cheese" in its effort to solve problems possibly associated with the use of "natural" to attract health food faddists to other foods.

To me it would be a disservice to the public in general and real overkill to ban or seriously restrict the use of a common word like "natural" in the very common context

of cheese advertising just because a few people may have recently started to use the same word in some new way which may not be completely understood by everybody. In my opinion any regulation which the Commission decides on should one way or another permit the continued use of "natural" in relation to cheese the way it's been used for more than forty years.

October 25, 1976.

JAMES BRYAN STINE  
CURRICULUM VITAE

Address:

Route 4, Box 264, Wichita Falls, Texas 76301.

Date and Place of Birth:

June 27, 1911, Pecos, Texas

Education:

Amarillo High School, Amarillo, Texas - 1929  
B.S. - Dairy Manufacturing - Texas Technological College -  
1933  
M.S. - Dairy Bacteriology - Iowa State College - 1934  
Ph.D. - Dairy Bacteriology - Iowa State College - 1936

Employment:

Summer 1929 - Plant Manager - Texas Wheat Pool Elevator  
Corporation - Vega, Texas  
1934-present - Kraft Foods Division of Kraftco Corporation  
in the following capacities:  
1934-37 - Plant Manager  
1937-42 - Cheese Research  
1942-47 - Production Manager for Foreign-type cheese  
1947-53 - Director of cheese research  
1953-62 - Production Manager for Foreign-type cheese  
1962-67 - National Production Manager  
1967-68 - Director of Quality Standards and Regulatory  
Compliance  
1968-76 - Vice President of Quality Standards and  
Regulatory Compliance  
July 1, 1976 - Retired.

Scientific and Professional Affiliations:

Chairman - Research Committee of the National Cheese  
Institute  
Member - U.S. Delegation to the Committee of Government  
Experts on Milk and Milk Products  
Member - U.S. Delegation to the Codex Alimentarius

Honor Societies:

Southern Scholarship Society  
Sigma Xi  
Phi Kappa Phi

TABLE I.—COMPOSITION OF FOODS, 100 GRAMS, EDIBLE PORTION—Continued

Values in parentheses denote values imputed—usually from another form of the food or from a similar food. Zero in parentheses indicates that the amount of a constituent probably is none or is too small to measure. Dashes denote lack of reliable data for a constituent believed to be present in measurable amount. Calculated values, as those based on a recipe, are not in parentheses.

Food and description (M)	Water (O)	Food energy (D)	Protein (F)	Fat (P)	Carbohydrate		Ash (I)	Calcium (J)	Phosphorus (K)	Iron (L)	Sodium (M)	Potassium (N)	Vitamin A value (O)	Thiamine (P)	Riboflavin (Q)	Nicotin (R)	Ascorbic acid (S)	
					Total (U)	Fiber (V)												
Cereals: See Sauces, solid oils, and linoleon oils: Items 1990-1991.																		
Barley, Swiss																		
Conkoff, solid, drained	91.7	25	2.4	0.3	4.6	0.8	1.6	88	30	3.2	147	560	0.500	0.00	0.17	0.8	32	
Charlotte russe, with ladyfingers, whipped-cream filling	46.5	18	1.8	.2	3.3	0	1.0	73	24	1.8	80	321	5.400	.04	.11	.4	10	
Chayote, raw	91.8	28	.6	.1	33.5	Trace	.5	46	01	.7	43	64	7.10	.03	.10	.1	Trace	
Cheese, natural and processed (cheese foods) cheese																		
Natural cheeses:																		
Blue or Trappist type	40	308	21.5	30.6	2.0	0	6.0	316	330	(.5)	—	—	(1,210)	.03	.01	1.2	(0)	
Brie	41.0	370	22.2	30.6	1.0	0	4.4	730	466	(.6)	—	—	(1,240)	.03	.05	.1	(0)	
Camembert (domestic)	82.2	200	17.6	24.7	1.8	0	3.8	105	184	1.5	700	82	(1,018)	.04	.75	.8	(0)	
Cheddar (domestic type, commonly called American)	37	308	25.0	32.2	2.1	0	3.7	760	478	1.0	—	—	(1,318)	.03	.40	.1	(0)	
(Cheese (large or small curd)):																		
Creamed	78.3	106	13.6	4.2	2.9	0	1.0	94	152	.3	220	85	(170)	.03	.25	.1	(0)	
Uncreamed	70.0	88	17.0	3	2.7	0	1.0	00	178	.4	200	72	(10)	.03	.28	(.1)	(0)	
Limburger	61	374	8.0	37.7	2.1	0	1.2	02	05	.2	250	74	(1,840)	(.02)	.24	(.1)	(0)	
Parmesan	45	348	21.2	28.0	2.2	0	3.6	800	303	.0	—	—	(1,140)	.03	.80	.2	(0)	
Sauces: See Sauces, solid oils, and linoleon oils: Items 1990-1991.																		
Pasteurized process cheese:																		
American	40	370	23.2	30.2	1.9	0	4.9	407	771	.9	1,130	80	(1,220)	.02	.41	Trace	(0)	
Pluvinet (American)	40	371	23.0	30.2	1.8	Trace	8.0	887	807	(.0)	1,167	100	(1,000)	(.01)	.40	(.1)	(0)	
Swiss	40	356	20.4	26.0	1.0	0	8.1	670	764	(.0)	—	—	(880)	(.02)	.58	.2	(0)	
Pasteurized process cheese food, American	43.2	323	10.8	21.0	7.1	0	6.0	805	876	(.0)	—	—	(870)	(.01)	.64	.2	(0)	
Pasteurized process cheese spread, American	48.6	288	10.0	21.4	8.2	0	5.8	605	801	(.2)	—	—	(840)	(.01)	.71	.2	(0)	
Cheese fondue, from home recipe	54.2	205	14.8	18.3	10.0	Trace	2.7	317	301	1.2	105	240	840	.00	.24	.2	Trace	
Cheese fondue, from home recipe	65.0	218	9.9	17.1	6.2	Trace	1.8	201	105	1.0	304	121	800	.03	.24	.2	Trace	
Cheese spreads	21.7	463	11.2	29.9	34.6	1	2.7	260	200	.6	721	63	300	.02	.11	1.3	0	
Cherimoya, raw	73.6	94	1.3	.4	24.0	2.2	.8	23	40	.6	—	—	10	.10	.11	.3	0	
Cherries:																		
Raw:																		
Bour, red	83.7	68	1.2	.3	14.3	.2	.5	22	10	.4	2	181	1,000	.05	.00	.4	10	
Sweet	80.4	70	1.3	.2	17.4	.4	.0	22	16	.4	2	101	110	—	.00	.4	10	
Canned:																		
Bour, red, solids and liquid:																		
Water pack:	88.0	43	.8	.2	10.7	.1	.3	15	13	.3	2	130	680	.03	.02	.2	6	
Strip pack:																		
Light:	80.0	74	.8	.2	18.7	.1	.3	14	13	.3	1	126	600	.03	.02	.2	6	
Heavy:	70.0	80	.8	.2	22.7	.1	.3	14	12	.3	1	124	650	.03	.02	.2	6	
Extra heavy:	70.1	112	.8	.2	28.6	.1	.3	14	12	.2	1	121	630	.03	.02	.2	6	
Sauces: See Sauces, solid oils, and linoleon oils: Items 1990-1991.																		
Water pack, with or without artificial sweetener:																		
Strip pack:	80.6	48	.9	.2	11.9	.3	.4	15	13	.3	1	130	60	.02	.02	.2	3	
Light:	82.0	65	.9	.2	16.6	.3	.4	15	13	.3	1	126	00	.02	.02	.2	3	
Heavy:	78.0	81	.9	.2	20.6	.3	.4	15	13	.3	1	126	00	.02	.02	.2	3	
Extra heavy:	73.0	100	.8	.2	26.6	.3	.4	14	12	.3	1	123	50	.02	.02	.2	3	
Unsweetened:																		
Sweetened:	84.9	65	1.0	.4	13.4	.3	.3	13	22	.7	2	188	1,000	.04	.07	.3	6	
Sweetened, bottled, solids and liquid:	70.6	112	1.0	.4	27.8	.3	.2	12	15	.6	2	130	480	.03	.00	.3	6	
Unsweetened, bottled, solids and liquid:	70.0	116	.2	.2	20.4	.3	.2	—	—	—	—	—	—	—	—	—	—	
Unsweetened:	80.7	67	.3	.9	11.6	—	.5	—	—	—	—	—	—	—	—	—	—	—
Unsweetened:																		
Unsweetened:	82.8	101	2.9	1.6	42.1	1.1	1.0	27	88	1.7	6	464	—	.22	.22	.0	—	
Dried:	81	377	6.7	4.1	78.6	2.6	2.2	62	102	3.3	12	876	—	.32	.38	1.2	—	
Unsweetened:	11.4	362	6.1	3.7	70.2	2.0	2.6	50	104	3.3	11	847	—	.25	.37	1.0	—	
Unsweetened:	3.6	317	—	—	66.2	—	1.1	—	—	—	—	—	(0)	(.0)	(.0)	(.0)	(.0)	



CHEESE VARIETIES AND DESCRIPTIONS

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Cheese Varieties and Descriptions

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## Introduction

Cheese is a highly nutritious and palatable food. It is of value in the diet because it contains in concentrated form almost all the protein and usually most of the fat, as well as essential minerals, vitamins, and other nutrients, of milk.

Cheese is made wherever animals are milked and produce more milk than the people use in fluid form. Most cheese is made from cow's milk, simply because cows are milked more generally throughout the world than other animals. Smaller quantities are made from the milk of goats and ewes. Cheese is also made in some countries from the milk of other animals, such as camels, asses, mares, buffaloes, and reindeer.

People all over the world like and eat cheese. People in the United States are no exception. Although we do not eat nearly so much cheese per capita in the United States as do people in some countries, we eat nearly twice as much now as 20 years ago, or about 10 pounds (all kinds) per capita per year. This increased consumption is the result, at least in part, of improvements made in recent years in the quality and uniformity of many kinds of cheese.

No one knows who made the first cheese, but according to an ancient legend it was made accidentally by an Arabian merchant. The merchant put his supply of milk into a pouch made of a sheep's stomach when he set out on a long day's journey across the desert. The rennet in the lining of the pouch combined with the heat of the sun caused the milk to separate into curd and whey. He found at nightfall that the whey satisfied his thirst and the cheese (curd) satisfied his hunger and had a delightful flavor. Thus, according to the legend, the making of one of our most useful foods was begun.

According to ancient records, cheese was used as a food more than 4,000 years ago. It was made and eaten in Biblical times. Travelers from Asia are believed to have brought the art of cheesemaking to Europe. Cheese was made in many parts of the Roman Empire when it was at its height. Then cheesemaking was introduced to England by the Romans. During the Middle Ages—from the decline of the Roman Empire until the discovery of America—as well as later, cheese was made and improved by the monks in the monasteries of Europe. Gorgonzola was made in the Po Valley in Italy in 879 A. D. and Italy became the cheesemaking center of Europe in the 10th century. Roquefort was mentioned in the ancient records of the monastery at Conques, France, in 1070. The Pilgrims included cheese in the ship's supplies when they made their famous voyage to America in the Mayflower in 1620.

Until the middle of the 19th century, however, cheesemaking was a local farm industry. Housewives made cheese from the surplus milk produced

combination of these, or as unripened. Following are examples of cheeses in these classifications:

1. Very hard (grating):
  - (a) Ripened by bacteria: Asiago old, Parmesan, Romano, Sapsago, Spalen.
2. Hard:
  - (a) Ripened by bacteria, without eyes: Cheddar, Granular or Stirred-curd, and Caciocavallo.
  - (b) Ripened by bacteria, with eyes: Swiss, Emmentaler, and Gruyère.
3. Semisoft:
  - (a) Ripened principally by bacteria: Brick and Münster.
  - (b) Ripened by bacteria and surface micro-organisms: Limburger, Port du Salut, and Trappist.
  - (c) Ripened principally by blue mold in the interior: Roquefort, Gorgonzola, Blue, Stilton, and Wensleydale.
4. Soft:
  - (a) Ripened: Bel Paese, Brie, Camembert, Cooked, Hand, and Neufchâtel (as made in France).
  - (b) Unripened: Cottage, Pot, Bakers', Cream, Neufchâtel (as made in the United States), Mysost, Primost, and fresh Ricotta.

Accidental modifications or changes in one or more steps of the cheesemaking process throughout the centuries were largely responsible for the development of the different kinds of cheese. These changes were little understood and difficult to duplicate because scientific knowledge of bacteriology and chemistry was lacking. As a result, cheesemaking was considered an art, and the making process was a closely guarded secret passed down from father to son.

With increased scientific knowledge, especially since 1900, has come an understanding of the bacteriology and chemistry involved in the making of many cheeses. Thus it has become possible to control more precisely each step in the making process and to manufacture a uniform product. Now, cheesemaking is becoming a science rather than an art.



agent. Heating halts the ripening, so their flavor and texture are always uniform. Process cheese has no rind or waste and melts smoothly without ever getting stringy during cooking. It comes in several tasty flavors—in slices, in ½ lb. or economy 2 lb. loaves, etc.

PROCESS CHEESE FOODS spread, melt, and cook more easily than process cheese, because they contain extra moisture and less fat. They come in ½ lb., 1 lb., and 2 lb. loaves; in rolls, etc.

### Care after Opening Cheeses

*If It's Process Cheese, Cheese Food, or a Cheese Spread:* Open packaged kind with care, so that unused cheese can be carefully rewrapped in original wrapping and refrigerated. If wrapper is not usable again, wrap cheese tightly in foil, saran, plastic bags, etc.

*If It's a Loaf Process Cheese,* do not remove all of wrapper. Simply cut off what cheese you need; then cover exposed surface with foil.

*If It's a Jar Spread,* refrigerate, with lid tightly in place, after using.

*If It's Packaged Prepared Cheese Dips:* Use up dips, such as cottage cheese, cream cheese, or sour cream, promptly after opening.

*If It's Natural Cheese:* To store small pieces, wrap tightly in foil, saran, etc.; refrigerate.

To store a large piece over a long period, cover cut surfaces with a coating of melted paraffin; then wrap tightly in foil; refrigerate. Or, if it's to be used daily, wrap in a clean kitchen towel, dampened with a vinegar solution of 1 teasp. vinegar to 1 qt. water.

To store ends of cheese, grate; refrigerate in covered jar; use in casseroles, etc.

To store cheese with a very strong aroma, like Limburger, etc., use a covered container; plan to use within a week after refrigerating.

Mold on natural cheeses is not harmful to the cheese. Cut or scrape off the mold; then use cheese beneath.

*If It's Cottage or Cream Cheese (soft cheeses):* Refrigerate, tightly covered, and plan to use promptly after purchase.

*To Freeze Cheese:* Research indicates that, in general, cheeses do not freeze without damage to texture and consistency.

### To Grate Cheese with Ease

*If cheese is soft,* like process cheese, use a coarse grater, which insures long flakes of grated cheese. Many times you can merely slice or dice a soft cheese and add it to sauce.

*If cheese is very dry,* use a fine grater.

### Cheese as a Garnish

From the first to the last of the meal, a little cheese can enhance many everyday dishes.

**CHEESE CROUTONS:** Cut cheese into small cubes; drop into bowls or cups of soup just before serving.

**CHEESE POPCORN:** Mix equal parts of grated cheese and melted butter or margarine; pour over freshly popped corn.

**EASY STUFFED TOMATOES:** Marinate cheese cubes in French dressing; use to stuff seasoned hollowed-out tomatoes; serve on lettuce as salad.

**CHEESE-SALAD CURLS:** Run vegetable parer down side of ½ lb. piece of packaged process cheese. Roll up each thin shaving. Use as garnish for fruit or tossed green salad.

**CHEESE SCRAMBLE:** Just before scrambled eggs are done, sprinkle with grated cheese.

**CRUNCHY CHEESE TOPPING:** After tossing fresh bread crumbs with melted butter or margarine, toss with some grated cheese (Parmesan or process Cheddar). Use to top main-dish casseroles or scalloped vegetables. Or just sprinkle over hot seasoned vegetables before serving.

**CHEESE PICKUPS FOR VEGETABLES:** Stir a little grated cheese into canned or stewed tomatoes.

Top creamed onions with grated cheese, tossed with chopped nuts.

Stir a little grated cheese into creamed potatoes—just enough to give a subtle flavor.

**REAL CHEESE APPLE PIE:** Before adjusting top crust, place a few slices of process sharp cheese on top of apples.

### CHEESE AS THE MAIN DISH

#### CHILI RABBIT

1 can chili con carne	undiluted
½ cup light cream	1 lb. process sharp
½ cup canned condensed consommé,	cheese slices
	Corn crisps

In blazer of chafing dish, over direct heat, to chili con carne, add light cream, consommé.