



September 29, 2009

Agri-Mark, Inc.
Arkansas Dairy Cooperative Association
Associated Milk Producers, Inc.
Continental Dairy Products, Inc.
Cooperative Milk Producers Assn.
Dairy Farmers of America, Inc.
Dairymen's Marketing Cooperative, Inc.
Dairylea Cooperative Inc.
Ellsworth Cooperative Creamery
Farmers Cooperative Creamery
First District Association
Foremost Farms USA
Humboldt Creamery
Just Jersey Cooperative, Inc.
Land O'Lakes, Inc.
Lone Star Milk Producers, Inc.
Manitowoc Milk Producers Coop.
MD & VA Milk Producers Cooperative Association, Inc.
Michigan Milk Producers Assn.
Mid-West Dairymen's Company
Northwest Dairy Association
Prairie Farms Dairy, Inc.
St. Albans Cooperative Creamery, Inc.
Scioto County Co-op Milk Producers' Assn.
Select Milk Producers, Inc.
Southeast Milk, Inc.
Swiss Valley Farms, Co.
Tillamook County Creamery Assn.
United Dairymen of Arizona
Upstate Niagara Cooperative, Inc.
Zia Milk Producers

Katharine Haxall, MPH
Cardiovascular Disease Prevention and Control Program
NYC Department of Health and Mental Hygiene
2 Lafayette St. 14th Floor
New York, NY 10007

Dear Ms. Haxall:

The National Milk Producers Federation wishes to respond to the July 23, 2009 "Dairy Products and Substitutes" webinar presented as part of the New York City Department of Health and Mental Hygiene national sodium reduction initiative. The National Milk Producers Federation, based in Arlington, VA, develops and carries out policies that advance the well being of dairy producers and the cooperatives they own. NMPF's 31 member cooperatives produce the majority of the U.S. milk supply, making NMPF the national policy voice of more than 40,000 dairy producers.

The dairy industry has a strong history of producing a variety of good tasting products that meet consumer health demands. This may be best evidenced by, but is not limited to, the wide array of whole, reduced fat, low fat and nonfat options readily available within the dairy category. The nation's dairy farmers pride themselves in their commitment to doing their part in meeting the nutrition needs of today's diverse population.

The New York City Department of Health and Mental Hygiene is requesting that food manufacturers, on a voluntary basis, reduce the amount of sodium in products with the hope that such a reduction will reduce the risk of hypertension and its related effects on a population basis. You have set targets by food category, and you are requesting comment on those targets. Specifically, you are requesting input about reducing the sodium content of cheese and processed cheese.

Jerry Kozak, President/Chief Executive Officer

Randy Mooney, Chairman

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From a technological perspective, reducing sodium is particularly challenging in cheese manufacturing, as it plays significant roles in terms of safety, functionality and quality. Salt helps control fermentation of cheese, and it helps maintain various characteristics associated with cheese (flavor, texture, shelf life) through its control of activities of microorganisms and enzymes critical to the cheese-making process. In natural cheeses, it also is a significant factor in minimizing spoilage and preventing the growth of pathogenic organisms such as *Listeria monocytogenes*. In processed cheeses, both salt and sodium-containing emulsifying salts play critical roles in preventing the growth and toxin production of pathogens such as *Clostridium botulinum*. Because of its contribution to cheese texture and flavor, sodium also plays an important role in consumer acceptance.

Each of these factors is even more pronounced as related to lower fat cheese production, which has been a top priority over the last decade in response to public health recommendations to reduce fat and caloric intake. When fat is removed from cheese, it is replaced with water to maintain texture, and this increase in water also requires an increase in salt to maintain the ratio of salt to moisture. Research in non-aqueous fat-replacers is continuing, but the fact remains that reduced fat cheeses simply pose significant additional challenges to meeting a fixed sodium content target.

Even so, dairy food scientists are exploring various ways to produce good tasting, lower sodium cheeses. In natural cheese, the substitution of potassium chloride (KCl) has had limited success because of the off flavor associated with this compound, although work on various combinations of KCl and NaCl continue to be studied. Other salt compounds considered to date have been unacceptable because of bitter and metallic tastes and negative effects on cheese texture. In processed cheeses, substitutions for both salt and sodium emulsifiers are being sought, although results to date have not been promising.

Consumer acceptance of the low sodium cheeses available in the market has not been good, and this category has failed to grow, despite broader acceptance of the health benefits of lowering dietary sodium. Acceptance is of particular importance when it comes to growing children, for whom cheese is a significant source of calcium and other essential nutrients. A single serving (1.5 oz) of

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Cheddar cheese, for example, provides nearly one-fourth (23%) of the recommended calcium intake of 1,300 mg/day for 9 – 18 year-olds. If young people find this calcium source unacceptable and substitute less nutritious items during the period of bone mass development, the implications for overall health are unknown.

Whether it is possible in the timeframe outlined to produce an array of cheese products that are safe from a microbiological perspective, have an acceptable shelf life, have the mouth feel consumers associate with cheese, are good tasting, and meet your suggested short and longer term sodium targets is unclear today. Producing cheeses that meet these criteria present many challenges, as abbreviated above and as detailed in a recently published review (Johnson ME, et al. Reduction of sodium and fat levels in natural and processed cheeses: scientific and technological aspects. **Comprehensive Reviews In Food Science And Food Safety** 8(3):252-268, 2009). Research conducted through the National Dairy Foods Research Centers, as well as other channels, has been addressing technological challenges for lowering sodium levels in cheese while at the same time maintaining consumer acceptability. The industry is working hard to fund efforts to help overcome these issues, while simultaneously addressing the demand for lower fat and lower calorie products, which some may argue will have at least as great a public health benefit as a focus on sodium alone.

We remain committed to providing consumers with the most nutritious, best tasting and healthiest product selection possible.

Sincerely,

A handwritten signature in blue ink that reads "Jamie S. Jonker". The signature is written in a cursive style with a large initial "J".

Jamie S. Jonker, Ph.D.

Vice President, Scientific and Regulatory Affairs

Jerry Kozak, President/Chief Executive Officer

Randy Mooney, Chairman