

United States Department of Agriculture

REPORT TO CONGRESS

on the

National Dairy Promotion and Research Program

and the

National Fluid Milk Processor Promotion Program

2009 Program Activities

U.S. Department of Agriculture Report to Congress

on the

National Dairy Promotion and Research Program

and the

National Fluid Milk Processor Promotion Program

2009 Program Activities

Volume 26 July 2011

Contact Information

To obtain additional copies of this Report to Congress on the National Dairy Promotion and Research Program and the National Fluid Milk Processor Promotion Program and the complete independent analysis of the programs, please contact:

Promotion and Research Branch
Dairy Programs, Agricultural Marketing Service, USDA
Stop 0233, Room 2958-South
1400 Independence Avenue, SW
Washington, DC 20250-0233
(202) 720-6909
http://www.ams.usda.gov/dairy

To obtain copies of the complete independent analysis report or for questions on Chapter 3, please contact:

Harry M. Kaiser, Ph.D.
Cornell Commodity Promotion Research Program
Department of Agricultural, Resource and Managerial Economics
Cornell University
349 Warren Hall
Ithaca, NY 14853
(607) 255-1598
http://www.cornell.edu

For additional information about the National Dairy Promotion and Research Board and Dairy Management Inc., please contact:

National Dairy Promotion and Research Board Dairy Management Inc. 10255 West Higgins Road, Suite 900 Rosemont, IL 60018-5616 (847) 803-2000 http://www.dairyinfo.com

For additional information about the National Fluid Milk Processor Promotion Board, please contact:

National Fluid Milk Processor Promotion Board 1250 H Street, NW, Suite 950 Washington, DC 20005 (202) 737-0153 http://www.whymilk.com The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Contact Information	ii
Executive Summary	1
Chapter 1: The Dairy and Fluid Milk Promotion Programs	3
National Dairy Promotion and Research Board	3
National Dairy Council®	
Science and Research	
Child Nutrition and Fitness Initiative.	
Fuel Up to Play 60	
Healthy Kids, Healthy Schools Summit	
Domino's Partnership	
Export and Dry Ingredients	
Innovation Center for U.S. Dairy	
Globalization Study	
Sustainability	
Industry and Image Relations	
Qualified State or Regional Dairy Product Promotion, Research	
or Nutrition Education Programs	16
National Fluid Milk Processor Promotion Board	
New MilkPEP CEO	17
Medical and Scientific Activities	18
National Fluid Milk Programs	18
Moms	18
Teens	19
Hispanic	21
Board Research and Development	22
Chapter 2: USDA Activities	24
Chapter 2. Codit rentities	
National Dairy Promotion and Research Board Oversight	24
Nominations and Appointments	24
Organic Exemption	25
Amendment to the Dairy Act	25
Foreign Agricultural Service	26
Contracts	
Contractor Audits	26
Collections	
Compliance	
Qualified Programs	
National Fluid Milk Processor Promotion Board Oversight	
Nominations and Appointments	
Program Development	27

Contents, continued

Contractor Audits	27
Compliance	
Chapter 3: Impact of Generic Fluid Milk and Dairy Advertising and Promon Dairy Markets: An Independent Analysis	
Highlights	30
Analysis of Generic Fluid Milk Marketing	
Fluid Milk Model Estimation	
Fluid Milk Model Simulation	
Fluid Milk Processor Benefit-Cost Analysis	42
Analysis of All-Dairy Product Generic Marketing	
Dairy Model Estimation	
Dairy Farmer Benefit-Cost Analysis	

Executive Summary

The enabling legislation of the dairy producer and fluid milk processor promotion programs requires the Department of Agriculture (USDA) to submit an annual report to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry. The producer and processor programs are conducted under the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4501 *et seq.*) (Dairy Act); the Dairy Promotion and Research Order (7 CFR § 1150) (Dairy Order); the Fluid Milk Promotion Act of 1990 (7 U.S.C. 6401 *et seq.*) (Fluid Milk Act); and the Fluid Milk Promotion Order (7CFR § 1160) (Fluid Milk Order), respectively. This report includes summaries of the activities for the producer and processor programs, including an accounting of funds collected and spent; USDA activities; and an independent analysis of the effectiveness of the advertising campaigns of the two programs. Unless otherwise noted, this report addresses program activities for the fiscal period January 1 through December 31, 2009, of the Dairy Promotion and Research Program and the Fluid Milk Processor Promotion Program.

Producer Dairy Promotion and Research Program

Mandatory assessments collected under the Dairy Act totaled \$283.8 million in 2009. The National Dairy Promotion and Research Board (Dairy Board) portion of the revenue from the 15-cent per hundredweight producer assessment was \$93.8 million for 2009, and Qualified Programs revenue from the producer assessment was \$190 million. Expenditures by the Dairy Board and many of the Qualified Programs are integrated through a joint process of planning and program implementation so that the programs on the national, regional, State, and local level work together. The Dairy Board continued to develop and implement programs to expand the human consumption of dairy products by focusing on partnerships and innovation, product positioning with consumers, and new places for dairy product consumption. One such endeavor was accomplished through a partnership with Domino's Pizza and the creation of the American Legends pizza line. Fuel Up to Play 60, a partnership between the National Dairy Council, the National Football League, and the USDA, was launched to combat childhood obesity in schools. Additionally, the Dairy Board continued its commitment to sustainability through work of the Innovation Center for U.S. Dairy. Details of the 2009 activities of the dairy producer program are presented in Chapter 1.

National Fluid Milk Processor Promotion Program

The National Fluid Milk Processor Promotion Board (Fluid Milk Board) continued to administer a generic fluid milk promotion and consumer education program funded by America's fluid milk processors. The program is designed to educate Americans about the benefits of milk, increase milk consumption, and maintain and expand markets and uses for fluid milk products in the 48 States and the District of Columbia. During 2009, the Fluid Milk Board evolved its messaging to re–introduce fluid milk to America as "Nature's Wellness Drink." Wellness messaging targeted at moms and refueling after exercise for teens served as central themes for the Fluid Milk Board's activities. Specifically, the promotion programs "Drink Well, Live Well" and "Liquid Sunshine" encouraged moms to consume milk because it provides a total package of nutrients. For teens, the Fluid Milk Board continued with its integrated Body By Milk Campaign,

combining advertising, promotion, and public relations components to stress the importance of muscle recovery and rehydration post-exercise by drinking a glass of low–fat or fat–free milk.

Assessments generated \$108.2 million in 2009. The Fluid Milk Order requires the Fluid Milk Board to return 80 percent of the funds received from California processors to the California Milk Processor Board. The amount returned to California from the 2009 assessments was \$10.2 million. The California fluid milk processor promotion program uses the funds to conduct its promotion activities, which include the *got milk?* advertising campaign. The fluid milk marketing programs are research based and message focused. The 2009 activities of the National Fluid Milk Processor Promotion Program are presented in the Fluid Milk Board section in Chapter 1 of this report.

USDA Oversight

USDA has oversight responsibility for the dairy and fluid milk promotion programs. The oversight objectives ensure that the Boards and Qualified Programs properly account for all program funds and that they administer the programs in accordance with the respective Acts and Orders. All advertising, promotional, research, and educational materials are developed under established guidelines. All Board budgets, contracts, and advertising materials are reviewed and approved by USDA. USDA employees attend all Board and Committee meetings, monitor all Board activities, and have responsibility for obtaining an independent evaluation of the programs. Additional USDA responsibilities relate to nominating and appointing Board members, amending the Orders, conducting referenda, assisting with noncompliance cases, and conducting periodic program audits. The Boards reimburse the Secretary, as required by the Acts, for all of USDA's costs of program oversight and for the independent analysis. In 2009 the Secretary of Agriculture appointed 12 members to the Dairy Board and 7 members to the Fluid Milk Board. Chapter 2 details USDA's oversight activities.

Independent Analysis

Chapter 3 presents the results of the independent econometric analysis, conducted by Cornell University (Cornell), of the effectiveness of the dairy and fluid milk promotion programs. It is estimated that the generic fluid milk marketing efforts activities sponsored by fluid milk processors and dairy farmers have helped mitigate the decline of fluid milk consumption. Had there not been a generic fluid milk marketing conducted by the two programs, fluid milk consumption would have been 11.3 percent less than it actually was over the period of 1995–2009. Cornell concluded that these marketing efforts have had a positive and statistically significant impact on per capita fluid milk consumption. Details of Cornell's independent evaluation are presented in Chapter 3.

Chapter 1 The Dairy and Fluid Milk Promotion Programs

The Dairy Board and the Fluid Milk Board continued to develop and implement programs to expand the human consumption of fluid milk and dairy products. This chapter details the activity of each board.

National Dairy Promotion and Research Board

The mission of the Dairy Board is to coordinate a promotion and research program that maintains and expands domestic and foreign markets for fluid milk and dairy products produced in the United States. The Dairy Board is responsible for administering the Dairy Order, developing plans and programs, and approving budgets. Its dairy farmer board of directors administers these plans and monitors the results of the programs.

The Secretary of Agriculture (Secretary) appoints 36 dairy farmers to administer the Dairy Order. The appointments are made from nominations submitted by producer organizations, general farm organizations, qualified State or regional dairy products promotion, research or nutrition education programs (Qualified Programs), and by other means as determined by the Secretary (7 Code of Federal Regulations §1150.133(a)). Dairy Board members serve 3-year terms and represent 1 of 13 regions in the contiguous 48 States. Dairy Board members elect four officers: Chair, Vice Chair, Treasurer, and Secretary. Current Dairy Board members are listed in Appendix A–1. A map of the contiguous 48 States depicting the 13 geographic regions is shown in Appendix H–1.

Total Dairy Board actual revenue for 2009 was \$93.8 million (including assessments and interest). This amount was less than the Dairy Board Budget of \$106.2 million for that period. The Dairy Board amended its budget to \$110.1 million by incorporating program development funds not budgeted previously and carry forward from their 2008 budget. The Dairy Board budget for 2010 projects total revenue of \$91.7 million from domestic assessments and interest. The Dairy Board administrative budget continued to be within the 5-percent-of-revenue limitation required by the Dairy Order. A list of actual income and expenses for 2009 is provided in Appendix B–1. USDA's oversight and evaluation expenses for 2009 are listed in Appendix B–2. Appendix B–3 displays the Dairy Board's approved budget for 2009. An independent auditor's report for 2009 is provided in Appendix C–1.

The Dairy Board has two standing committees: the Finance and Administration (F&A) Committee and the Executive Committee. The F&A Committee is made up of the Dairy Board officers and appointees named by the Dairy Board Chair. The Dairy Board Treasurer is the chair of the F&A Committee, and the full Dairy Board serves as the Executive Committee. The remaining committees for the Dairy Board are joint program committees with the United Dairy Industry Association (UDIA).

Dairy Management Inc. (DMI), a management and staffing corporation, is a joint undertaking between the Dairy Board and UDIA. UDIA is a federation of 18 of the 58 Qualified Programs

under the direction of a board of directors. DMI manages the Dairy Board programs as well as those of the American Dairy Association[®] and National Dairy Council[®] throughout the contiguous 48 States. DMI serves both boards and is structured into product platform and functional areas, as identified in the 2009 unified marketing plan. Platform areas include: Milk, Cheese, Child Nutrition and Fitness, Export, and Ingredients. Functional areas include: Nutrition Affairs, Nutrition Research, Product Innovation, Image and Industry Relations, Retail, and Foodservice. During 2009, DMI continued to implement a national staffing structure which utilizes personnel throughout DMI and the UDIA federation to plan and execute the national programs.

The Dairy Board and UDIA develop their marketing plans and programs through DMI. DMI facilitates the integration of producer promotion funds through a joint process of planning and program implementation so that the programs on the national, regional, State, and local level work together. The mission of DMI is to drive increased sales of and demand for U.S. dairy products and ingredients on behalf of U.S. dairy farmers. DMI works proactively in partnership with leaders and innovators to increase and apply knowledge that leverages opportunities to expand dairy markets. The DMI Board of Directors comprises all Dairy Board (36) and all UDIA (43) members. Voting is equalized between the Dairy Board and UDIA.

DMI funds 1- to 3-year research projects that support marketing efforts. Six Dairy Foods Research Centers and one Nutrition Institute provide much of the research. Their locations and the research objectives are listed in Appendix E–1. Additionally, lists of DMI's dairy foods competitive research activities and nutrition competitive research projects can be found in Appendices E–2 and E–3, respectively. Universities and other industry researchers throughout the United States compete for these research contracts.

The committees for program activities are comprised of board members from both the Dairy and UDIA Boards. The Dairy Board and UDIA Board separately must approve the DMI budget and annual plan before they can be implemented. In September 2008, both boards approved the 2009 unified dairy promotion plan budget and national implementation programs.

DMI again hosted dairy director regional planning forums across the country to review and create marketing strategies for development of the unified dairy promotion plan. These forums are designed to create one unified dairy promotion plan and allow opportunity for grass roots dairy farmers to ask questions, raise concerns, and offer their thinking on the plan's direction and development.

The joint Dairy Board and UDIA Board committee structure provides the framework for DMI program activities. The Dairy Board and UDIA Board Chairs assign their respective board members to the following joint program committees: Research and Insights; Health and Wellness; Export and Ingredients; and Producer Relations and Consumer Confidence. Each committee elects a Chair and Vice-Chair. The joint committees and the DMI staff are responsible for setting program priorities, planning activities and projects, and evaluating results. During 2009, the Dairy Board and UDIA Board met jointly six times.

The following information describes Dairy Board and UDIA program activities along with new programs and initiatives implemented in 2009.

National Dairy Council®

The National Dairy Council[®] http://www.nationaldairycouncil.org (NDC), the nutrition marketing arm of DMI, has been the leader in dairy nutrition research, education, and communication since 1915. NDC provides timely, scientifically sound nutrition information to the media, physicians, dieticians, nurses, educators, consumers, and other health professionals. Additionally, NDC funds independent research to aid in the ongoing discovery of information about dairy foods' important role in a healthy lifestyle. This research provides insights to industry for new dairy product innovation.

Health professional outreach remained a critical component of NDC and the 3-A-Day[™] program. The American Academy of Family Physicians, the American Academy of Pediatrics, the American Dietetic Association, the National Medical Association, the School Nutrition Association, and the National Hispanic Medical Association all continued their support and partnership with DMI and 3-A-Day[™]. By working with key health professional partners like these, DMI continued to provide a clear, practical message to the public on the importance of consuming three daily servings of low–fat and fat–free dairy. Combined, these organizations represent more than 250,000 health professionals nationwide.

As an extension of its online engagement of health professionals, NDC launched its blog, "The Dairy Report" (www.thedairyreport.com). Blog contributors include NDC registered dietitians, Ph.D. nutritionists and communication experts, as well as guest experts. Through the blog, NDC provides the latest news, analysis and opinion on nutrition and health research related to dairy.

NDC continued its active support and participation in the Action For Healthy Kids® (AFHK) initiative. AFHK (www.actionforhealthykids.org) was created in response to the Healthy Schools Summit in 2002 and its mission is to inform, motivate, and mobilize schools, school districts,



and States to chart a healthier course for the Nation's children and adolescents. AFHK is comprised of 51 State teams (including all 50 States and the District of Columbia) and a partnership of more than 40 national organizations and Government agencies spanning education, health, fitness, and nutrition arenas.

The activities of the Nutrient Rich Foods Coalition (Coalition) continued in 2009, with the NDC and other Coalition members from all food groups dedicated to working with scientific researchers to develop an approach to address the complete nutrient package of a food and how to maximize nutrients from the calories consumed. Through research and education, the Coalition aims to shift the way people choose foods and beverages, from focusing on single "nutrients to avoid" to understanding the complete nutrient package as a way to build better diets and improve diet quality.

In March 2009, the Coalition hosted the Achieve Better Health with Nutrient Rich Foods symposium. At the symposium, the Coalition presented a scientifically valid definition of nutrient density, as called for by the advisory committee of the 2005 Dietary Guidelines for Americans, known as the Nutrient Rich Foods Index. Comprehensive education tools, based on the index, were presented to over 120 attendees, including leaders from government organizations, academia, the food industry, and health professional groups. The symposium also included a preview of a consumer–driven nutrition education system called My5 that can help consumers get more nutrition from the calories they eat.

Science and Research

The goal of DMI's science and research program is to be a catalyst for dairy and innovation to deliver new opportunities in product and ingredient usages and nutrition/health positioning. Research focused on a variety of products including fluid milk, cheese, and ingredients. Regarding milk, areas of focus included ultra-high temperature (UHT) milk flavor improvement and non–thermal alternatives to UHT. In the area of cheese, DMI focused on developing nutritionally enhanced cheese and specialty cheeses with a focus on low–fat natural cheese, low–fat processed cheese, low–sodium cheese and Hispanic cheese. In the area of milk ingredients and fractions, research focused on native whey protein, milk protein concentrate quality improvement and isolation of milk fractions to develop processes for the recovery of milk components and improve the quality of existing products. Whey ingredients were researched to improve the quality and performance of whey proteins and develop uses for co–products with specific focus on protein heat stability improvement and co-product utilization.

DMI research also focused on dairy confidence to enhance the image, safety and quality of dairy products with focus on biosafety and security, milk quality improvement, and Queso fresco cheese safety. Research also focused on discovery, which includes evaluation of new technologies for the long—term success of the dairy industry with focus on proof of concept and new technology development.

Each step in the research process leads to another, resulting in new products to meet consumer demands and increase consumption of dairy and dairy ingredients.

Child Nutrition and Fitness Initiative

The Child Nutrition and Fitness Initiative (CNFI) is a platform of health and wellness initiatives designed to improve the health and wellness of the Nation's youth, many of whom are overweight and undernourished. CNFI's initiatives are focused on reaching youth in schools and build on existing producer—funded programs, including New Look of School Milk and Expanding Breakfast. The programs use youth—focused messaging to educate and motivate children to consume a healthy diet that includes milk and dairy products and get physical activity. Additionally, CNFI's priorities align with the strategies of the Health and Wellness Committee of the Innovation Center for U.S. Dairy.

Fuel Up to Play 60

Fuel Up to Play 60 (FUTP60) is the centerpiece of CNFI. This in–school program combines the nutrition expertise of NDC and the fitness expertise and star power of the NFL to combat childhood obesity and provide youth with resources necessary to improve their personal health and school environment. FUTP60 is based on the USDA's 2005 Dietary Guidelines for Americans that



recommend the consumption of more fruits, vegetables, low–fat and fat–free dairy foods, and whole grains, and getting 60 minutes of daily physical activity.

FUTP60 officially launched on October 15, 2009, and reached more than 36 million students in more than 60,000 schools during the 2009/2010 school year. Students and schools joined the program by signing up at www.fueluptoplay60.com. Each enrolled school received a School Wellness Kit that contained in–school promotional materials and a "Playbook" containing healthy eating and physical activity strategies, or "plays." Each of the plays could be tailored to individual school health and wellness needs. Students were encouraged to form teams, with supervision from an adult program advisor, to carry out the plays and generate excitement for making healthy changes throughout the student body.

Through the website, students could earn points for tracking their daily eating and physical activity behaviors. As points were accumulated, students could earn individual prizes and rewards and also help their school move closer towards winning a national competition. Of the 60,000 schools, Enslow Middle School, in Huntington, West Virginia, finished first in the competition. Through FUTP60, Enslow students held taste tests to add healthy lunch options to their cafeteria and started a walking club to add more activity to the school day. As the nationwide winner, Enslow won a HOPS Sports system and a cafeteria makeover.

FUTP60 gained further momentum in December 2009 when representatives from NDC and NFL met with USDA Secretary Thomas Vilsack. The meeting paved the way for the announcement of a USDA, NFL, NDC public—private partnership, through a Memorandum of Understanding (MOU), in February 2010. The MOU identifies five key objectives to promote and expand FUTP60 as well as existing USDA school health and wellness programs. Additional program supporters include Action for Healthy Kids, American Academy of Family Physicians, American Academy of Pediatrics, American Dietetic Association, National Hispanic Medical Association, National Medical Association, and School Nutrition Association. FUTP60 also shares the goals of First Lady Michelle Obama's childhood obesity platform "Let's Move!" which aims to curb child obesity within a generation.

Healthy Kids, Healthy Schools Summit

The Houston Healthy Kids, Healthy Schools Summit (Summit), held in February 2009, in Houston, Texas, is another CNFI initiative. NDC and DairyMAX, a State and regional dairy promotion organization, in partnership with the Houston Independent School District (HISD), hosted the Summit. Nearly 300 attendees, representing 83 different organizations, including

business and industry, public health and healthcare, community and government, along with parents and students used the Appreciative Inquiry method to develop projects that would enhance wellness, short and long term, in HISD.

The summit was a pilot program designed to serve as a model for how to engage large urban school districts in focusing on school wellness. Summit participants identified opportunities and designed initiatives and pilot programs that include: (1) Developing healthy menu items that include dairy products, such as healthy pizza; (2) Developing a food cart to offer new points of availability for healthy foods; (3) Establishing a district-wide communications campaign to engage youth, teachers, and parents; (4) Encouraging the use of FUTP60; and (5) Engaging organizations and businesses to support and participate in the health and wellness of HISD. Pilot programs are being refined for testing and evaluation throughout the 2009/2010 school year.

Domino's Partnership

The pizza industry plays an important role in the dairy industry. Twenty–five percent of all cheese manufactured in the U.S. is used on pizza, and Mozzarella comprises 49 percent of all cheese volume in the foodservice industry. Research showed that negative pizza cheese volume trends were having an impact on the dairy industry. As a result, dairy producers partnered with Domino's to reinvigorate the pizza category and launch American Legends, a line of six specialty pizzas that use up to 40 percent more cheese than a regular Domino's pizza. The American Legends line includes:



- Honolulu Hawaiian sliced ham, smoked bacon, pineapple, and roasted red peppers with Provolone and Mozzarella cheeses on a cheesy Parmesan crust. Customers can add Tabasco® pepper sauce and jalapenos for some extra "fire."
- Cali Chicken Bacon RanchTM chicken breast, white sauce, smoked bacon, tomatoes, and parsley with Provolone and Mozzarella cheeses on a cheesy Parmesan crust.
- Pacific Veggie roasted red peppers, spinach, onions, mushrooms, tomatoes, and black olives with Feta, Provolone and Mozzarella cheeses on a cheesy Parmesan crust.
- Memphis BBQ Chicken chicken breast, barbecue sauce, onions, and parsley with Cheddar, Provolone and Mozzarella cheeses on a cheesy Parmesan crust.
- Buffalo Chicken chicken breast, buffalo hot sauce, onions, and parsley with American and Provolone cheeses on a cheesy Cheddar crust.
- Philly Cheese Steak steak, onions, green peppers, and mushrooms with American and Provolone cheeses on a cheesy Provolone crust.

Promotion of the American Legends line took place in two phases. In February 2009, promotion included TV commercials, radio, print media, coupons, in store signage, and a promotion price for a large pizza. Customers ordering online could find coupons and were provided a link to dairyfarmingtoday.org. At the peak of the first phase, 13 percent of all orders received by

Domino's stores nationally contained one or more American Legends pizza, surpassing the goal of 10 percent.

The second promotional phase took place June 15–July 19, 2009. Based on research, Domino's made some modifications to the TV commercials, putting greater emphasis on the regional pizza ingredients and tastes. Additionally, a seventh pizza was added to the line – a variation of the Honolulu Hawaiian called Fiery Hawaiian, with hot sauce and jalapenos. Social media was utilized in the second promotional phase, and customers could vote for their favorite American Legends pizza through the Domino's website, Facebook, and Twitter. The results of the second promotion phase surpassed the first, with American Legends comprising 16.7 percent of all Domino's orders. The American Legends pizzas are a permanent menu item.

Export and Dry Ingredients

DMI's export enhancement program is implemented by the U.S. Dairy Export Council (USDEC). USDEC receives primary funding from three sources: DMI, USDA's Foreign Agricultural Service (FAS), and membership dues from dairy cooperatives, processors, exporters, and suppliers. In 2009, USDEC received \$11.6 million from DMI; \$5.4 million from USDA's Market Access Program, Foreign Market Development Program, and other FAS programs that support commodity groups in promotion of their commodities in foreign markets; \$830,000 from membership dues; and \$190,000 from other sources. USDEC began its 14th year of operation in 2009, and its total budget was \$18 million.

USDEC has offices in Washington, D.C.; Mexico City, Mexico; Tokyo, Japan; Seoul, South Korea; Hong Kong, Taipei, and Shanghai, China; Bangkok, Thailand; Beirut, Lebanon; London, England; and São Paulo, Brazil (Figure 1–1).

Figure 1–1. USDEC Offices.



Adaptation and perseverance characterized 2009. Extraordinary market conditions brought on by the global recession called for action—a fact USDEC recognized early on. The original strategy of taking the next step in global market development in 2009—moving from primary markets to less developed ones—was placed on hold. Focus shifted to sustaining share in key markets in Mexico and Asia that were made newly vulnerable by declining demand. At the same time, USDEC continued to focus on its long-term vision that world dairy consumption would continue to grow faster than local supply, creating abundant growth opportunities for countries with developed dairy sectors, like the United States.

Export data confirms that U.S. dairy product export value reached \$2.3 billion while volume reached 2.2 billion pounds in 2009 (Figure 1–2). In 2009, 9.3 percent of total U.S. milk solids were exported, while imports represented 3.4 percent. For comparison, in 2008, exports represented 11 percent of U.S. milk solids production and imports were greater at 4.0 percent (Figure 1–3).

Exports represented 32 percent of the nonfat dry milk and skimmed milk powder produced in the United States last year, 50 percent of the whey proteins, 67 percent of the lactose, 4.0 percent of the butter, and 2.4 percent of the cheese.

Mexico, Canada, and Southeast Asia remained the largest destinations for U.S. dairy products. USDEC continued working to improve the export capabilities of domestic dairy companies by providing up—to—date information on market conditions, global trade trends, and regulatory requirements for export.

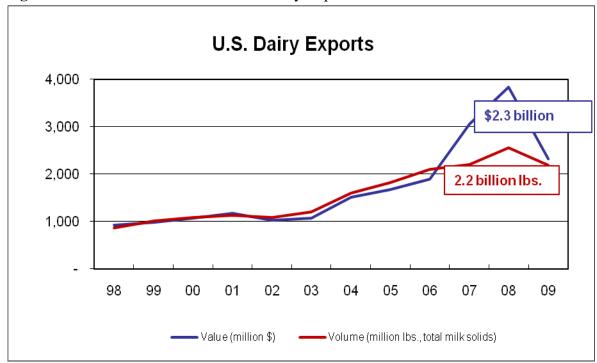


Figure 1–2. Value and Volume of U.S. Dairy Exports.

Source: USDEC, USDA

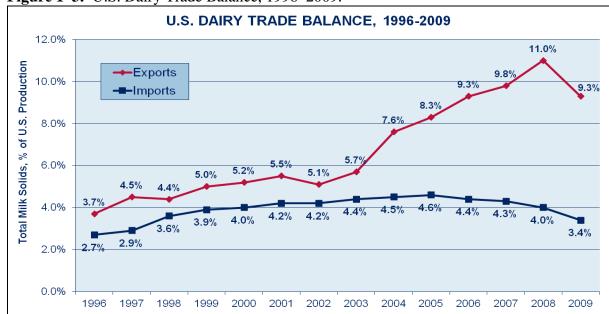


Figure 1–3. U.S. Dairy Trade Balance, 1996–2009.

Source: USDEC, USDA

Ongoing reverse trade mission activities provide opportunities for domestic dairy product suppliers to meet potential importers visiting the United States.

DMI's 2009 ingredients program was conducted through DMI's Innovation and Ingredients Program (Innovation Program) and through the Web site www.innovatewithdairy.com. DMI's Innovation Program supports dairy product and nutrition research, ingredient applications development and technical assistance for the dairy, food, and beverage industries. Producerfunded product research and innovation, along with insights into consumer preferences, are tools that DMI provides to U.S. dairy ingredient suppliers to help sell U.S. dairy ingredients to food and beverage manufacturers. Dairy, food, and beverage manufacturers look to DMI as a partner and resource. With food and beverage manufacturers, DMI provides know-how and laboratory and professional resources to help develop or improve foods using dairy ingredients.

DMI's Innovation Program hosted the 2009 Dairy Innovation Forum (Forum) in Scottsdale, Arizona. The invitation—only Forum continued a DMI tradition of bringing together top decision makers in science and marketing to develop ways to increase consumption of dairy products. Participants included industry representatives such as dairy processors and cooperatives, food manufacturers, Government officials, ingredient suppliers, State and regional representatives, and university researchers. Similar to 2008, the Forum continued to focus on innovation—a key to the future of the dairy and dairy ingredient industries. Two new components to the forum included dairy's fit into health and wellness and sustainability as it relates to consumers' food choices. The Forum aimed to allow top industry experts to share the latest dairy product innovations, strategic insights, research, technological advances and trends that can help the dairy industry take advantage of growth opportunities.

DMI publications that support the Innovation Program include: (1) Dairy Council Digest—published six times per year and focuses on the latest dairy nutrition research relevant to dairy, food and beverage manufacturers, and health professionals; (2) Ingredient Specification Sheets—cover technical basics of a variety of dairy ingredients and are updated as new data is available; (3) Dairy Herald—reports periodically on how food formulators and markets can take advantage of taste, cost, functional, and nutritional appeal of dairy ingredients; (4) Application Monographs—published as necessary, provide a comprehensive look at how whey protein and other dairy ingredients can be used in foods and beverages for different functionality needs; (5) Tools for Innovation—a periodic supplement from DMI and Dairy Foods magazine that covers dairy product trends and research; (6) Innovations in Dairy—a technical bulletin, published two to three times a year on specific topics in dairy products, ingredients, processing, and packaging; and (7) Dairy Business View—an e-newsletter published bi-monthly with Dairy Foods magazine and covers dairy industry news, new technologies, business trends, innovation, and research.

In October 2009, the USDEC Board of Directors adopted a proposal from DMI to combine DMI's domestic ingredients program with USDEC to create a single global initiative to increase the sales of U.S. dairy ingredients. The proposal was a result of increased coordination between USDEC and DMI over the last few years. An integration of the two programs will maximize efficiencies and create a strong sales support capability to service the global ingredients market. Additionally, findings from the Bain and Company Globalization study (discussed on page 13) highlighted a need for industry to accommodate an increasingly global market. The integration of the two programs addresses that need.

Innovation Center for U.S. Dairy

Dairy producers, processors, and manufacturers announced an unprecedented agreement in 2008 to collaborate on pre-competitive initiatives through a new Innovation Center for U.S. Dairy (Innovation Center). The goal of the agreement is



to accelerate industry innovation throughout the supply chain to increase sales in an increasingly competitive consumer marketplace.

The Innovation Center was established by dairy farmers through DMI. It is the first organization of its kind to bring together milk producers, processors, and manufacturers under one organization to collaborate on major issues affecting the industry.

The Innovation Center provides a forum for the entire dairy industry to work together to offer consumers the products they want—when and where they want them—and increase dairy sales through pre-competitive collaboration. It combines the collective resources of the industry to provide consumers with nutritious dairy products and foster industry innovation for healthy people, healthy products, and a healthy planet. The Board of Directors for the Innovation Center represents leaders from across the dairy value chain, including producers and chief executives of the Nation's leading processors, manufacturers and brands. The Innovation Center is supported and staffed by DMI. The priorities include: Sustainability, Health and Wellness, Product

Development, Information and Communications, Regulatory Issues (excludes pricing), Consumer Confidence, and Globalization.

The Innovation Center will move forward its priorities through enlisting cross-industry Operational Committees charged with developing action plans. These committees and purposes include: Health and Wellness Committee – to increase category sales and demand for dairy products by identifying and meeting the health and wellness needs and desires of consumers; Product Development and Information Committee – to act as the steward of the pre-competitive innovation assets and resources of the industry; Globalization – to provide a strategic analysis of the global dairy landscape to provide a common understanding of the challenges, opportunities, and threats posed by increasing globalization to the U.S. dairy industry; and Sustainability – to provide consumers with the nutritious dairy products they want in a way that is economically viable, environmentally sound, and socially responsible.

Globalization Study

To support the goal of providing the Innovation Center with an analysis of the global dairy landscape, a study was commissioned, through Bain and Company, a global management consulting firm. The objective of the study was to provide the U.S. dairy industry with an understanding of the impact of globalization on internal and external markets, and to identify strategic options to accommodate that impact. The study concluded that worldwide demand for dairy products will return to growing faster than available supply, and traditional sources of supply will not be able to satisfy growing consumption. The report cited challenges, such as severe pricing volatility, market-distorting pricing mechanisms, and generally, insufficient customer focus that leads to narrow product diversity and inconsistent customer service.

Bain and Company outlined several strategic responses to the current and projected environment, ranging from an industry that focuses exclusively on the domestic market to an industry that focuses primarily on exports. The study also identified maintaining the status quo as an option, but noted that inaction would lead to a less competitive U.S. industry.

Based on the report's findings, the task force adopted a "consistent exporter" strategy to develop an industry—wide work plan. The plan consists of reforming milk pricing systems and price support, development of mechanisms for risk management and the reduction of volatility, redirection of the industry's pre—competitive sales and marketing and capabilities, continued pursuit of trade treaties that provide net export benefits, building on existing food safety assurances and traceability, developing ability to deliver customer product specifications, and product and technology innovation.

Sustainability

In 2009, Dairy leaders continued their industry-wide commitment and action plan to reduce fluid milk's carbon footprint while increasing business value, from farm to consumer. The action plan was an outcome of the industry's June 2008 Sustainability Summit for U.S. Dairy, a gathering of 250 leaders representing producers, processors, non-governmental organizations, university researchers, and government agencies, held in Rogers, Arkansas.

Led by the Innovation Center, the plan focuses on operational efficiencies and innovations to reduce greenhouse gas emissions while ensuring financial viability and industry growth. The dairy industry has committed to a goal to reduce the carbon footprint of fluid milk by 25 percent by the year 2020 — equivalent to taking more than 1.25 million cars off the road every year. The industry will reduce greenhouse gas emissions throughout the entire dairy value chain — from production of feed for dairy cows through retail. Based on goals from the Sustainability Summit, 12 prototype projects are being tested to determine their real—world viability as ways to reduce greenhouse gas emissions.

- 1. Dairy Feed Systems Nutrient management techniques and best practices.
- 2. Farm Energy Audit Program (FEAP Energy audits of dairy operations to find energy saving techniques.
- 3. Cow of the Future Reduction of enteric methane by accelerating identification and adoption of new practices and technologies.
- 4. Dairy Underground Assesses the viability of turning digester-generated methane into salable energy and the reduction of operational costs.
- 5. Dairy Power Explores barriers to methane digester adoption.
- 6. Dairy Processing Carbon through Energy Efficiency (D-CREE) Identification and adoption of energy efficiency best practices in milk processing plants.
- 7. Non-Thermal UV Processing The use of UV technology as an alternative method to heat–based pasteurization.
- 8. Next Generation Clean-In-Place (CIP) Reduced–temperature CIP technologies to reduce costs and greenhouse gas emissions.
- 9. Dairy Delivery Systems Life Cycle Assessment (LCA) Assessment of the environmental impact of fluid milk products.
- 10. Environmentally Sustainable Methods for Achieving Responsible Transportation (E-SMART) Transportation and fuel efficiency best practices.
- 11. Financial Resources Coordination for funding sources for the greenhouse gas reduction projects that fall outside of the scope of the checkoff program.
- 12. Common Voice Supports strategies and awareness of greenhouse gas reduction goals, projects, best practices, and results.

The sustainability initiative gained additional momentum in December 2009 when the USDA and Innovation Center agreed to work jointly in support of the dairy industry's goal to reduce greenhouse gas emissions. Through a Memorandum of Understanding (MOU), the USDA and Innovation Center will increase the number of anaerobic digesters supported by USDA programs. Additionally, the MOU will encourage the research and development of new technologies to help dairies reduce greenhouse gas emissions.

Industry and Image Relations

Each year, fewer consumers are connected to food production and receive mixed messages through the media about the agriculture industry. As part of an effort to help protect the image of dairy producers and the dairy industry among the public, DMI continued its Website,

<u>www.dairyfarmingtoday.org</u>. The site educates the public about how today's dairy producers care for their animals, protect the land, and produce safe, wholesome milk.

To help dairy producers directly communicate with consumers about dairy farming practices, DMI continued its "Telling Your Story" (TYS) program. TYS provides dairy producers with public relations, presentation, and media training to build and maintain consumers' confidence in the dairy industry's production practices and products.

In February 2009, DMI launched a social media component, myDairy, to the TYS program, which utilizes Facebook, YouTube, blogs, and other social media. The goal of myDairy is to develop a network of social media—savvy dairy advocates who use online communication to tell the dairy industry's story, reinforce and build its positive image, and counter inaccurate or uninformed online commentary about dairy farming practices. Dairy producers and industry representatives are provided with an online toolkit of social media and dairy resources that can be used to tell dairy's story through blogs, social networking sites, and positive dairy videos and photos.

DMI also worked to inform dairy farmers about how their assessment dollars were being used. The organization continued to communicate to dairy producers and other industry audiences through the TYS program, publications (such as the annual report, joint newsletters with Qualified Programs, and dairy cooperative check inserts), dairy industry events (including major trade shows and producer meetings), and media relations (including press releases, feature placement, and farm broadcast interviews).

During 2009, DMI continued its Issues Management and Crisis Readiness programs. DMI staff and related dairy industry representatives work to monitor and identify current and potential issues where the safety, benefit, or reputation of dairy producers or dairy products may be called into question publicly. As needed, the network of representatives respond to media requests, train dairy spokespeople, build third–party relationships within the agricultural industry, and distribute media alerts with key messages to maintain consistent industry–wide responses. Primary areas of focus include animal welfare, environment, sustainability, food safety, child nutrition, and modern farming practices.

The Crisis Readiness program continued to develop a strong network of dairy industry and agricultural representatives. Through this coordinated effort, a communication plan was developed to communicate quickly, accurately, and effectively in the event of a crisis, such as disease outbreak, product contamination, or food borne illness. Throughout the year, the program held crisis media drills and training to maintain the industry's state of readiness and to reinforce the critical nature of the steps taken within the first 24 hours of a crisis.

DMI continued its support for butter through cooperation and public relations activities with the American Butter Institute, including the Web site www.butterisbest.com, a consumer resource center with current cooking trends and ideas, butter recipes, and links to other butter-related Web sites. DMI also continued to work with Wisconsin Milk Marketing Board to execute co-funded

retail butter promotion activities. The national effort helped to drive incremental retail butter sales in select markets across the United States.

Qualified State or Regional Dairy Product Promotion, Research, or Nutrition Education Programs

Qualified Programs are certified annually by the Secretary. To receive certification, the Qualified Program must: (1) conduct activities that are intended to increase human consumption of milk and dairy products generally; (2) have been active and ongoing before passage of the Dairy Act, except for programs operated under the laws of the United States or any State; (3) be primarily financed by producers, either individually or through cooperative associations; (4) not use a private brand or trade name in its advertising and promotion of dairy products (unless approved by the Dairy Board and USDA); and (5) not use program funds for the purpose of influencing governmental policy or action (7 CFR §1150.153). A list of the Qualified Programs is provided in Appendix F.

The aggregate revenue from the producers' 15-cent per hundredweight assessment directed to the Qualified Programs in 2009 was \$186 million (approximately 10 cents out of the 15-cent assessment). See Appendix B–7 and Appendix B–8 for aggregate income and expenditure data of the Qualified Programs.

Some of these Qualified Programs participate in cooperative efforts conducted and coordinated by other Qualified Programs and/or other organizations such as DMI, the Dairy Board, and UDIA. Their goal in combining funding and coordinating projects is more effective and efficient management of producers' promotion dollars through larger, broad-based projects. For example, UDIA coordinates nationally through DMI the programs and resources of 18 federation members and their affiliated units to support the unified marketing plan.

National Fluid Milk Processor Promotion Board

The National Fluid Milk Processor Promotion Board (Fluid Milk Board), as authorized in the Fluid Milk Act administers a fluid milk promotion and consumer education program that is funded by fluid milk processors. The program is designed to educate Americans about the benefits of milk, increase fluid milk consumption, and maintain and expand markets and uses for fluid milk products in the contiguous 48 States and the District of Columbia. The fluid milk marketing programs are research based and message focused for the purpose of positively changing the attitudes and purchase behavior of Americans regarding fluid milk.

The Secretary appoints 20 members to the Fluid Milk Board. Fifteen members are fluid milk processors who each represent a separate geographical region, and five are at-large members. Of the five at-large members, at least three must be fluid milk processors and at least one must be from the general public. Four fluid milk processors and one public member serve as at-large members on the current Fluid Milk Board. The members of the Fluid Milk Board serve 3-year terms and are eligible to be appointed to two consecutive terms. The Fluid Milk Promotion Order (Fluid Milk Order) provides that no company shall be represented on the Board by more

than three representatives. Current Fluid Milk Board members are listed in Appendix A–2. A map of the Fluid Milk Board regions is shown in Appendix H–2.

The Fluid Milk Board elects four officers: Chair, Vice-Chair, Secretary, and Treasurer. Fluid Milk Board members are assigned by the Chair to the Fluid Milk Board's target-focused program committees (Moms, Teens, Hispanics, and Business Development and Research) to address the Fluid Milk Board's concern that it provide the best possible oversight of program spending. The program committees are responsible for setting program priorities, planning activities and projects, and evaluating results. The Fluid Milk Board maintained the Finance Committee that reviews all program authorization requests for funding sufficiency, the Fluid Milk Board's independent financial audit, and the work of the Board's accounting firm. The Fluid Milk Board met three times during 2009.

The National Fluid Milk Processor Promotion Program (MilkPEP) is funded by a 20-cent-per-hundredweight assessment on fluid milk products processed and marketed commercially in consumer-type packages in the contiguous 48 States and the District of Columbia. The program exempts from assessment those processors who process and market 3 million pounds or less of fluid milk products each month, excluding fluid milk products delivered to the residence of a consumer. Assessments generated \$108.2 million in 2009. The Fluid Milk Order requires the Fluid Milk Board to return 80 percent of the funds received from California processors to the California Milk Processor Board. The amount returned to California from 2009 assessments was \$10.2 million. The California fluid milk processor promotion program uses the funds to conduct its promotion activities which include the "got milk?" advertising campaign.

The actual income and expenses for 2008–2009 are provided in Appendix B–4. The Fluid Milk Board's administrative expenses continued to be within the 5-percent-of-assessments limitation required by the Fluid Milk Order. USDA's oversight and evaluation expenses for 2009 are detailed in Appendix B–5. Appendix B–6 contains the Fluid Milk Board's approved budget for 2009. Appendix C–2 contains an independent auditor's reports for the period of January 1 through December 31, 2009.

New MilkPEP CEO

In January 2009, the Fluid Milk Board voted to adopt the Search Committee's recommendation of Ms. Vivien Godfrey as the new Chief Executive Officer of MilkPEP. Godfrey assumed her new duties on May 11, 2009.

Ms. Godfrey's résumé includes a vast array of experiences including consulting and marketing analyses in England, France, and Germany; Vice President of Marketing and General Manager of Pillsbury's Green Giant and Häagen Daas brands; and President and CEO of her own company promoting nautical supplies. She was born in London, England; has traveled extensively; and speaks French, German, Spanish, and Japanese. She is based in Washington, D.C., at MilkPEP headquarters.

Medical and Scientific Activities

The Fluid Milk Board's Medical Advisory Board (MAB), comprised of academic, medical, and health care professionals with expertise relevant to the health benefits of fluid milk, met twice in 2009. The MAB provides guidance to the Fluid Milk Board's development of key nutritional and health messages for consumers and health professionals. MAB members assisted the Fluid Milk Board in continuing relationships with health and health professional organizations such as the American Academy of Pediatrics, the American Dietetic Association, and the American Heart Association. They also appeared as medical professionals in the media, providing science-based statements supporting the health benefits of milk.

The medical and scientific activities of the Fluid Milk Board also included preparing press materials and acting as spokespersons on breaking research with relevance to fluid milk. The MAB worked over the past year to inform others in the scientific community of research that showed that consuming milk after exercise can aid in muscle recovery and rehydration. Additionally, the MAB increased awareness about the nutritional benefits of serving both flavored and non-flavored white milk to children in schools. These communications and activities continue to highlight milk's nutritional profile that includes nine essential vitamins and minerals.

National Fluid Milk Programs

In 2009, the fluid milk marketing plans were designed to conduct marketing and promotional activities emphasizing milk's role in refueling after exercise and the benefits of keeping flavored milk in schools. Many communication media were used to accomplish these objectives, including television and print advertising, press releases, promotions, Internet, and others. The program's target audiences included women and moms, teens, and Hispanics. The got milk? Milk Mustache advertising campaign, continued to provide the basis for advertising activities and other program delivery methods. A description of the 2009 program activities listed by advertising target area follows.

Moms

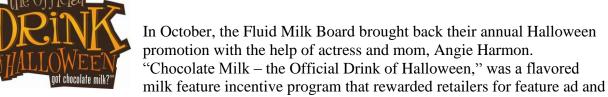
The Fluid Milk Board advertising campaign for the Moms target in 2009 centered on the idea of reintroducing Mom to milk as "Nature's Wellness Drink" in the "Drink Well, Live Well" campaign. The basis of this campaign was modified from the previous year's "Campaign for a Healthy Weight" and encouraged women to include milk in the diet for overall wellness. "Drink Well, Live Well" promoted milk as a naturally nutrient-rich beverage that offered consumers many health benefits in one package.

Drink Well, Live Well kicked off January 16, 2009, with supermodel Christie Brinkley as the new face of the campaign. The "Drink Well, Live Well in Maui" sweepstakes offered moms the chance to win one of four spa retreats in Maui, Hawaii, as well as other prizes. This promotion specifically reminded consumers of the nutritional benefits of milk consumption.

Another campaign geared toward moms was the Liquid Sunshine campaign. Liquid Sunshine focused on the promotion of the benefits of Vitamin D, which research has shown to be a supernutrient responsible for different health benefits in the body.

In the summer of 2009, the Fluid Milk Board reintroduced its Milk Mustache Mobile Tour (Tour). The Tour centered its messaging on the "Drink Well, Live Well" campaign. Residents across the country were invited to visit the Milk Mustache Mobile when it came to their town. Visitors experienced free and interactive activities such as health assessments from a registered dietitian, ice-cold milk sampling, information about the benefits of being a milk drinker (which included a copy of the "New Face of Wellness" report), homemade smoothie samples, and five minute chair massages. Visitors were also informed of the many health and wellness benefits of

consuming milk, as well as the ability for a mom to act as a role model milk drinker for her kids.



display activity. The program promoted flavored milk as a healthy treat for moms to give their kids at Halloween. Retailers were rewarded with prizes based on their level of feature activity. The rewards could be used as in-store giveaways, employee incentives, or other ways to help increase flavored milk sales. Promotional point-of-sale materials including banners, wobblers, and static clings were used to aid retailers in creating exciting in-store displays.

Finally, in December, the Fluid Board teamed up with NBC's "The Biggest Loser" to showcase milk's ability to help build muscle and refuel after a vigorous workout. The promotion featured season winner Michelle Aguilar, and her ad caption read "What helped me finish strong? Milk. It's a great choice after exercise with protein to help build muscle and a unique mix of nutrients to refuel. So drink 3 glasses of low–fat or fat free milk a day. It's a win-win-win."

Appendix G includes thumbnail images of the Fluid Milk Board's promotional activities for moms in 2009.

Teens

The Fluid Milk Board targeted teen milk drinkers through different campaigns that focused on key aspects such as fitness, nutrition, and philanthropy. In February 2009, the Fluid Milk Board teamed up with the NBA to launch a national teen fitness program called Get Fit By Finals (GFBF) to help reverse the trend of inactivity and growing concerns of childhood obesity. The education initiative involved schools and community and online activities to inspire young people to increase their daily physical activity and make healthier food and beverage choices. By involving some of the country's most popular athletes, GFBF challenged and rewarded teens for increasing their daily movement and for choosing low-fat or fat-free milk in place of sugary sodas. Teens who signed up on the GFBF Web site were entered to win prizes, which included a

grand prize VIP trip to the NBA Finals. Additionally, schools that participated in GFBF could win pep rallies with an NBA player and a grand prize gym makeover.

In June 2009, the NBA Chocolate Chill campaign was launched and was geared towards teen athletes to remind them of the importance of refueling with ice cold chocolate milk within two hours of a hard workout. The Fluid Milk Board teamed up with the NBA to create special recovery clinics across the country, hosted by NBA coaches and sports dietitians. These clinics helped coaches decipher the body of science behind muscle recovery and instructed them on post-exercise recovery techniques for their teen athletes. The free clinics took place at team training facilities as well as at national and local conferences in late summer and early fall and



provided coaches with expert insights to help make sure that teen athletes are getting the most out of their 2-hour post-exercise recovery window. Coaches were also able to log onto milkdelivers.org to find out if there was a clinic in their area and to receive a free toolkit with tips and tools from an NBA coach and sports nutritionist.

In September 2009, the Drink Milk for a Change promotion was announced. Singing sensation and American Idol winner Jordin

Sparks and the Fluid Milk Board joined together to inspire teens to make a difference. The two partnered with VH1 Save The Music to launch the Drink Milk for a Change program to benefit school music departments across the country. The campaign kicked off on September 23 in Los Angeles, California. The campaign showed teens simple changes they could make to help make a difference in themselves and the world. Teens were able to make their own Milk Mustache ads on www.bodybymilk.com. With each mustache ad created, \$1 went toward the VH1 Save The Music Foundation to help restore school music programs, up to \$50,000. This campaign helped inform teens that making nutritious choices—like drinking low—fat milk—would affect how they look and feel. Packed with nine essential nutrients, drinking milk could help teens make the changes they wanted to see in themselves—including strong bones, lean muscles, and healthy hair and skin.

Finally, the Fluid Milk Board continued to sponsor the Scholar Athlete Milk Mustache of the Year (SAMMY) program and awarded 25 high school students from various regions across the United States a \$7,500 scholarship. Each applicant was required to list his/her high school achievements and tell why milk is an important beverage to include in his/her daily regimens. In 2009, SAMMY received more than 55,000 applications. In addition to the scholarship award,

each of the 25 winners was inducted into the SAMMY Hall of Fame and featured in a special milk mustache advertisement which appeared in *USA Today*, *Sports Illustrated*, and *ESPN* magazines. Winners were selected by milk mustache celebrity judges, including Andy Roddick, Steven Nash, Mia Hamm, Michelle Kwan, and Tony Hawk. Winners were honored during the awards ceremony at Disney's Milk House.



Appendix G includes thumbnail images of the Fluid Milk Board's promotional activities for teens in 2009.

Hispanic

The national Hispanic advertising campaign continued as part of industry outreach to the growing Hispanic population. Promotions centered on the primary theme of "bienestar," or "wellness."

To kick off the 2009 year, the Fluid Milk Board partnered with fashion designer Carolina Herrera for its first promotion. Geared toward the Hispanic community, consumers could log on to www.eligeleche.com to enter to win a trip to New York City, a dress from Carolina Herrera and a makeover.

While most of the promotions in 2009 geared towards moms also featured a Hispanic component, the Fluid Milk Board introduced a promotion to specifically honor Hispanic Heritage Month. During this time, the major concept was to educate Hispanic moms on the benefits of providing milk to families at the dinner table. Starting in



late summer, the Hispanic Heritage Month promotion was added to remind Hispanic moms of the importance of setting the table with nutrient-rich low-fat or fat-free milk. The promotion also enforced the idea that milk is a real value, due to its containing nine essential nutrients and costing less than 25 cents per 8-ounce glass on a gallon basis. The promotion also provided tips and recipes, as well as a cooking demonstration with celebrity chef and mom Ingrid Hoffmann on www.whymilk.com and www.eligeleche.com.



In October, the Fluid Milk Board continued with the Hispanic-oriented "Dia de los Muertos," or "Day of the Dead" campaign during the Chocolate Milk: The Official Drink of Halloween promotion. This promotion reminded Hispanic consumers of the bone-building nutrients that milk provides.

Throughout the year, the Fluid Milk Board continued with its print advertisement campaign that featured Hispanic celebrities with the famous milk mustache. Celebrities included Carolina Herrera and her daughter Carolina Herrera de Baez, Dayanara Torres, Ingrid Hoffmann, and Julie Stay.

Appendix G includes thumbnail images of the Fluid Milk Board's promotional activities for Hispanic consumers in 2009.

Board Research and Development

The Business Development and Research committee (BDR) is a joint effort of the Fluid Milk Board, processors, and suppliers. This ongoing effort was established to address barriers to fluid milk consumption not targeted by the advertising, promotions, and public relations activities. Over the years, BDR, formerly known as the Fluid Milk Strategic Thinking Initiative (FMSTI), has conducted market tests and studies in various business channels to develop proven ways to increase milk sales and subsequently turned these studies into customer-friendly processor materials which may be found at www.milkpep.org. These materials include reports on milk's opportunities in vending, foodservice, convenience and drug store, supermarket and school foodservice channels. Some of the materials included are brochures focusing on new ways to get kids to drink more milk; vending sales kits containing results from the Multi-Channel Vending Test; and many other reports and studies published in prior years highlighting opportunities for increasing milk sales.

The promotion programs continued to focus on (1) the nutritional benefits of milk; (2) emerging scientific studies that highlight milk's benefits; (3) leveraging the high interest generated by the celebrities and the got milk? Milk Mustache campaign; and (4) preparing for and responding to misinformation and negative news about milk or the educational campaign. A wide variety of initiatives were implemented to reach specific target audiences.

Promotion messaging was shifted to showcase milk's benefits in overall wellness. The 2009 activities included print, radio, online and television advertisements; major nationwide campaign launch events; promotions and contests; celebrity wellness advocates; engaging processors at local events; and Hispanic market outreach.

Research was a major priority in 2009. With concerns over added sugars in children's diets, the Fluid Board looked to study the effects on consumption if flavored milk was removed from schools. Some studies suggest that by removing flavored milk from school meals, consumption would decrease, thus potentially leaving children lacking in the essential nutrients that milk provides in the diet. Additionally, the Fluid Board continued studying the positive recovery benefits of low–fat chocolate milk on the body after strenuous exercise.

In 2009, changes to the Supplemental Nutrition Program for Women, Infants, and Children (WIC) guidelines continued to be addressed. Specifically, these changes were more restrictive to consumers with the purchase of full fat milk. MilkPEP's continued to provide educational materials regarding the nutritional equivalency of low-fat and fat-free milk. Posters and brochures were produced and sent to State WIC offices to educate participants. Materials were also made available for order by processors and retailers to use in their local markets.

MilkPEP continued providing processors access to customizable national programs such as the Milk Mustache Mobile and related media materials at www.milkpep.org to use in their own public relations efforts. Brochures, news releases, and other information on milk advertising and promotions were made available to consumers through the following Web sites: www.bodybymilk.com, and www.bodybymilk.com, and www.bodybymilk.com, and www.bodybymilk.com, and www.eligeleche.com.

Complete reports, studies, executive summaries, and press releases for the Fluid Board's ongoing processor initiatives are available for processors on the Web site www.milkpep.org. Customers can also visit www.milkdelivers.org, or call the milk hotline at 1-800-945-MILK (6455) for copies of presentations, videos, and printed materials.

Chapter 2 USDA Activities

The Dairy Programs unit of USDA's Agricultural Marketing Service has day-to-day oversight responsibilities for the Dairy Board and the Fluid Milk Board. Dairy Programs' oversight activities include reviewing and approving the Dairy and Fluid Milk Boards' budgets, budget amendments, contracts, advertising campaigns, and investment plans. Approval of program materials is a major responsibility of Dairy Programs. Program materials are monitored for conformance with provisions of the respective Acts and Orders, USDA's My Pyramid, the U.S. Dietary Guidelines for Americans, and other legislation such as the Nutrition Labeling and Education Act.

Dairy Programs continues to ensure that the collection, accounting, auditing, and expenditure of promotion funds is consistent with the enabling legislation and orders; to certify Qualified Programs and to provide for evaluation of the effectiveness of both promotion programs' advertising campaigns. Dairy Programs assists the Boards in their assessment collection, compliance, and enforcement actions.

Other Dairy Programs responsibilities relate to nominating and appointing Board members, amending the orders, conducting referenda, and conducting periodic management reviews. Dairy Programs representatives attend full Board and committee meetings, and other meetings of consequence to the program.

National Dairy Promotion and Research Board Oversight

Nominations and Appointments

The 36 members of the Dairy Board who administer the program serve 3-year terms, with no member serving more than two consecutive terms. Dairy Board members must be active dairy producers and are selected by the Secretary from nominations submitted by producer organizations, general farm organizations representing dairy producers, Qualified Programs, or other interested parties.

Twenty–seven nominations were received by USDA for the 12 Dairy Board members whose terms expired October 31, 2009. A press release issued on March 12, 2010, announced the appointment of ten new members and two incumbents. Twelve appointees will serve 3-year terms, November 1, 2009 through October 31, 2012: George E. Marsh, Oregon (Region 1); Ray S. Prock, California (Region 2); Arlene J. Vander Eyk, California (Region 2); Brian W. Esplin, Idaho (Region 3); Neil A. Hoff, Texas (Region 4); Paul A. Fritsche, Minnesota (Region 5); Patricia M. Boettcher, Wisconsin (Region 6); Mark E. Erdman, Illinois (Region 7); Susan D. K. Troyer, Indiana (Region 9); and Ronald R. McCormick, New York (Region 12).

Reappointed to serve second terms were: Randy G. Roecker, Wisconsin (Region 6); and Rita P. Kennedy, Pennsylvania (Region 11).

A list of current Dairy Board members appears in Appendix A–1. Appendix H–1 is a map of the contiguous 48 States depicting the 13 geographic regions under the Dairy Promotion and Research Order (Dairy Order).

Organic Exemption

Effective February 14, 2005, any persons producing and marketing solely 100 percent organic products were exempted from paying assessments to any research and promotion program administered by the Agricultural Marketing Service (70 Federal Register 2743, published January 14, 2005). The final rule amended Section 1150.157 of the Dairy Order. In States that have mandatory assessment laws, dairy producers are exempt only from the Federal assessment. Producers are still responsible for remittance of State assessments. In 2009, approximately 956 dairy producers were granted exemptions, representing approximately 1.4 billion pounds of production. The Dairy Order requires producers to re-apply annually to continue to receive the exemption.

Amendment to the Dairy Act

Section 781 of the Dairy Act was amended in 2005 to allow the Dairy Board to obligate and expend funds for any activity to improve the environment and public health, and required the Secretary to review the impact of any such expenditure and include the review in the annual report to Congress.

The Dairy Board authorized the expenditure of up to \$6 million during 2006 to fund a portion of the National Air Emissions Monitoring Study (NAEMS). The NAEMS is a multi—year research effort to collect air emission data and create tools that all dairies can use, whether they are participating in the Environmental Protection Agency Air Quality Compliance Agreement (Consent Agreement) or not, to determine whether their air emission levels are in excess of the Clean Air Act thresholds and Comprehensive Environmental Response, Compensation and Liability Act, and Emergency Planning and Community Right to Know Act reporting requirements. The Consent Agreement was developed to offer protection to operations while research is conducted to determine the size and type of farms that may have regulatory responsibilities. Currently, little air emissions data exists for dairy operations.

Data collection for the study was completed during the first half of 2010, and Purdue University and principal investigators completed an initial summary of the data that was transferred to the Environmental Protection Agency (EPA). The EPA will have up to 18 months to complete its data interpretation. The equipment used to conduct the study is owned by the Dairy Board, and at a May 2010 meeting, the Dairy Board passed a motion to donate the equipment to universities to be used for further research. Additionally, the Dairy Board will use \$100,000 of the remaining NAEMS money to fund an interpretive summary that will compare the NAEMS data with previous studies, identify future research needs, create an outreach document, evaluate the NAEMS data quality in terms of completeness and representativeness, and determine relationships of other measured variables on farm emissions.

Foreign Agricultural Service

The Secretary of Agriculture has delegated oversight responsibility for all foreign market development activities outside the United States to the Foreign Agricultural Service (FAS) (7 CFR 2.43(a)(24)). FAS reviews the USDEC foreign market development plan and related contracts. USDEC contracts also are reviewed by AMS Dairy Programs to ensure conformance with the Dairy Production Stabilization Act of 1983 (Dairy Act), Dairy Order, and with established USDA policies. AMS Dairy Programs reviewed 24 USDEC contracts during 2009.

Contracts

The Dairy Act and Dairy Order require that all contracts expending assessment funds be approved by the Secretary (7 CFR 1150.140). During 2009, Dairy Programs reviewed and approved 393 Dairy Board and Dairy Management Inc. (DMI) agreements, amendments, and annual plans. Appendix D–1 lists the contractors and corresponding Board initiatives approved by USDA.

Contractor Audits

During 2009, DMI retained the certified public accounting firm Ernst & Young to audit the records of the following contractors: Bader Rutter & Associates, Inc. (communications), Blu Skye Sustainability Consulting (sustainability strategy), Media Management Services, Inc. (school marketing), Moskowitz Jacobs, Inc. (sensory research), and PR Consultants, LTD (export). These contractors represented expenditures totaling approximately \$8.4 million. The audits did not reveal any findings.

Collections

The Dairy Act specifies that each person making payments to a producer for milk produced in the United States and purchased from the producer shall, in the manner as prescribed by the order, collect an assessment based upon the number of hundredweights of milk for commercial use handled for account of the producer and remit the assessment to the Dairy Board. The current rate of assessment is 15 cents per hundredweight of milk for commercial use or the equivalent thereof as determined by the Secretary.

The Dairy Act provides that dairy farmers can direct up to 10 cents of their 15-cent per hundredweight assessment to Qualified Programs. During 2009, the Dairy Board received about 5.04 cents per hundredweight of the 15-cent assessment.

Compliance

Compliance by responsible persons in filing reports and remitting assessments continues in a timely manner and at a high rate. No significant differences were discovered when comparing the audit results to what was reported by the responsible persons. The Dairy Board verifies that the credits claimed by responsible persons are actually sent to Qualified Programs. This

verification is done by contract with each Qualified Program. When noncompliance exists, the Dairy Board takes initial action on the matter. If the Dairy Board is unsuccessful in resolving the violation, the matter is referred to USDA for further action.

Qualified Programs

Dairy Programs reviewed applications for continued qualification from 58 Qualified Programs. A list of the active Qualified Programs is provided in Appendix F. Consistent with its responsibility for monitoring the Qualified Programs, Dairy Programs obtained and reviewed income and expenditure data from each of the programs. The data reported from the Qualified Programs are included in aggregate form for 2009 in Appendix B–7 and Appendix B–8.

National Fluid Milk Processor Promotion Board Oversight

Nominations and Appointments

The 20 members of the Fluid Milk Board serve 3-year terms, with no member serving more than two consecutive terms. The Fluid Milk Promotion Order (Fluid Order) provides that no company shall be represented on the board by more than three representatives. Fluid Milk Board members who fill vacancies with a term of 18 months or less are permitted to serve 2 additional 3-year terms. Fluid Milk Board members are selected by the Secretary from nominations submitted by fluid milk processors, interested parties, and eligible organizations.

In a news release issued on February 18, 2009, the Secretary announced five reappointments and two new appointments to the Fluid Milk Board. Reappointed to serve a second term was Ed Mullins, Carlinville, Illinois (Region 9). Reappointed to serve their first terms after filling vacancies lasting less than 18 months were Jay S. Bryant, Reston, Virginia (Region 3); Charles S. Mayfield, Jr., Athens, Tennessee (Region 6); John R. Zuroweste, Dallas, Texas (Region 12); and Janey K. Thornton, Ph.D., (At-Large Public). Newly appointed were: Timothy Kelbel, Cincinnati, Ohio (Region 15); and Miriam E. Brown, Des Moines, Iowa (At–Large Processor). Janey K. Thornton, Ph. D., resigned her position as the Board's public member. As published in a news release dated June 23, 2009, the Secretary appointed Mary A. Hill to fill the At–Large Public vacancy. The reappointed and newly appointed members were officially seated at the July 16-18, 2009, meeting.

A list of current Fluid Milk Board members appears in Appendix A–2. Appendix H–2 shows a map depicting the 15 geographic regions under the Fluid Milk Order.

Program Development

The Fluid Milk Board contracted directly with Deutsch Worldwide; DRAFTFCB; Weber Shandwick; and Siboney, U.S.A., to develop its mom and teen advertising, promotions, consumer education/public relations, and Hispanic advertising/public relations, respectively.

Contractor Audits

The Fluid Milk Board retained the certified public accounting firm of Snyder, Cohn, Collyer, Hamilton & Associates, P.C., in 2009 to audit the records of Weber Shandwick to determine if

the agency had conformed to the financial compliance requirements specified in its agreement with the Board for the period of January 1 through December 31, 2008.

The Board continues to enhance its internal contract control system in order to ensure that the amounts invoiced to the Board are in compliance with established contracts and procedures.

Compliance

Compliance by fluid milk processors in filing reports and remitting assessments continues in a timely manner and at a high rate.

Chapter 3

Impact of Generic Fluid Milk and Dairy Advertising and Promotion on Dairy Markets: An Independent Analysis

The Dairy Production Stabilization Act of 1983 (Dairy Act; 7 U.S.C. 4514) and the Fluid Milk Promotion Act of 1990 (Fluid Milk Act; 7 U.S.C. 6407) require annual independent analyses of the advertising and promotion programs that operate to increase consumer awareness and sales of fluid milk and dairy products. Since 1998, economists from the Department of Applied Economics and Management at Cornell University have conducted the independent analyses of the Dairy Promotion and Research Program (Dairy Program) and the Fluid Milk Processor Promotion Program (Fluid Milk Program). In this chapter, the 2009 evaluation results of the effectiveness of the Dairy and Fluid Milk Programs are presented. The economic evaluation focuses on generic marketing activities by dairy farmers and fluid milk processors that are designed to increase the demand for fluid milk and dairy products. The results of two separate models are presented.

The first is a fluid milk-only demand model used to evaluate the economic impacts of all generic fluid milk marketing activities of both programs on fluid milk demand. The generic fluid milk marketing activities include fluid milk advertising and non-advertising marketing activities used to increase demand. Advertising includes all media activities such as television, print, radio, outdoor, and web advertising by dairy farmers and fluid milk processors. Non-advertising fluid milk marketing includes health and nutrition educational programs and affairs, public relations, promotion programs, school milk programs, food service programs, retail programs, the child nutrition and fitness initiative, single serve milk promotions, value added marketing (issues/crisis, trade service communications, strategic research, real seal), and trade service communications.

The advertising and non-advertising marketing variables represent all demand-enhancing activities by fluid milk processors and dairy farmers that have an impact within one year after being conducted. More recently, Dairy Management, Inc. (DMI), which is the national organization implementing a significant part of the dairy farmer program, has conducted some marketing activities that require longer than one year to have an impact on demand, and these activities are not included in this analysis. These activities include partnership programs with brand firms producing or selling dairy products, and the goal is to increase demand for fluid milk and dairy products. Several examples of such activities include partnerships with H.P. Hood in the promotion of Creamy Milk, a new low—fat milk product that tastes like full fat, to evaluate the impact of this new product on fluid milk sales in a test market; Dairy Aisle Reinvention, which is a category management project aimed at increasing overall sales of dairy products; and Dominos Pizza's American Legends® pizzas, a line of specialty pizzas inspired by regional American tastes, all featuring cheesy crusts and at least 40 percent more cheese than their core pizzas.

Other non-demand enhancing activities are also not part of this analysis, including expenditures on overhead, research, technical support, industry relations, and corporate technology. While the Dairy and Fluid Milk Programs utilize various types of marketing strategies to increase fluid milk consumption, the effects of fluid milk marketing under both programs are combined

because the objectives of both programs are the same and data cannot be satisfactorily segregated to evaluate the two programs separately.

The second model is a combined fluid milk and dairy product demand model (measured in terms of domestic commercial disappearance) used to evaluate the economic impacts of all generic marketing activities for those products. This model, which is hereafter referred to as the "all-dairy-products" model, is included because the Dairy Program now emphasizes an "all-dairy" promotion strategy over product-specific campaigns. As in the first model, marketing activities in the second model include generic advertising and non-advertising marketing activities. Advertising and non-advertising marketing strategies are included as two separate variables in the demand model. Unlike the first model, the marketing activities in the second model include activities for all dairy products (fluid and manufactured dairy products). This model provides a measure of the economic impact of all demand-enhancing, generic marketing activities by processors and farmers.

Highlights

While per capita fluid milk consumption has been declining for decades in the United States at about 1.0 percent per year, generic fluid milk marketing activities sponsored by the Dairy and Fluid Milk Programs have helped mitigate at least some of this decline. It is estimated that these marketing efforts have had a positive and statistically significant impact on per capita fluid milk consumption. Specifically, over the period of 1995 through 2009, it is estimated that a 1.0 percent increase in generic fluid milk advertising expenditures resulted in a 0.037 percent increase in per capita fluid milk consumption when holding all other demand factors constant. Over the same period, it is estimated that a 1.0 percent increase in generic fluid milk non–advertising marketing expenditures resulted in a 0.028 percent increase in per capita fluid milk consumption when holding all other demand factors constant.

In terms of total consumption of fluid milk, generic fluid milk marketing activities increased fluid milk consumption by an average of 6.23 billion pounds per year. Stated differently, had there not been generic fluid milk marketing conducted by the two national programs, fluid milk consumption would have been 11.3 percent less than it actually was over this time period. Hence, the bottom line is that the fluid milk marketing efforts by the Dairy and Fluid Milk Programs combined have had a positive and statistically significant impact that is partially mitigating declines in fluid milk consumption.

An average benefit—cost ratio (BCR) was computed for the Fluid Milk Program based on the period 1999-2009. The BCR was 8.88, implying that, on average over the period 1999-2009, the benefits of the Fluid Milk Program have been 8.88 times greater than the costs, i.e., every dollar invested in Fluid Milk Program marketing yielded an additional \$8.88 in industry net revenue. To make allowance for the error inherent in any statistical estimation, a 90-percent confidence interval was calculated for the average BCR. The estimated lower bound for the average BCR was 1.79. Hence, it is reasonable to conclude that this confidence interval gives credence to the finding that the benefits of the Fluid Milk Program's marketing activities have been considerably greater than the cost of the programs.

In terms of the all-dairy product demand analysis, the average advertising elasticity for this

period in terms of milk equivalents on a nonfat and fat basis was 0.036 and 0.056, respectively; a 1.0-percent increase in media advertising expenditures would increase per capita all-dairy product demand by 0.036 percent (nonfat basis) and 0.056 percent (fat basis). The average non-advertising marketing elasticity for this period was 0.016 (nonfat) and 0.017 (fat); a 1.0 percent increase in media advertising expenditures would increase per capita all-dairy product demand by 0.016 percent (nonfat) and 0.017 percent (fat basis). Thus, the total marketing (advertising and non-advertising) effort by the Dairy and Fluid Milk Programs has had a positive and statistically significant impact on dairy consumption.

A BCR was calculated for the Dairy Program for the period 1999 through 2009. The benefits of the Dairy Program were calculated as the change in dairy farmers' net revenue (producer surplus) due to demand enhancement from all marketing activities under the Dairy Program by way of increased sales and higher prices. The costs of the Dairy Program were calculated as the differences in total assessment revenues before and after the national program was enacted. The results show that the average BCR for the Dairy Program was 6.20 (nonfat solids basis) and 9.85 (milk fat basis) from 1999 through 2009. This means that each dollar invested in generic dairy marketing by dairy farmers during that period would return between \$6.20 and \$9.85, on average, in net revenue to farmers. These BCRs apply to all of the Qualified Program (QP) marketing programs but exclude longer term (programs that have no impact within a year) demand expansion programs operated by DMI. The level of the marketing BCR suggests that the combined marketing programs supported by dairy farmers have been a successful investment. The estimated lower bounds for a 90-percent confidence interval for the average BCR in the nonfat and fat models were 3.84 and 1.18, respectively. Hence, it is reasonable to conclude that these confidence intervals give credence to the finding that the benefits of the Dairy Program's marketing activities have been considerably greater than the cost of the programs.

In addition to computing a BCR for the overall marketing efforts of dairy farmers, an average BCR was calculated for generic advertising and non–advertising activities by dairy farmers. The average BCR for generic advertising in the nonfat model was 8.56 compared with 6.60 for non–advertising marketing activities, and this difference was statistically significant at the 1.0 percent level. The average BCR for generic advertising in the fat model was 15.06 compared with 8.41 for non–advertising marketing activities, and this difference was statistically significant at the 1.0 percent level. Hence, dairy farmers are receiving a higher return from their generic advertising activities than the non–advertising marketing activities.

Analysis of Generic Fluid Milk Marketing

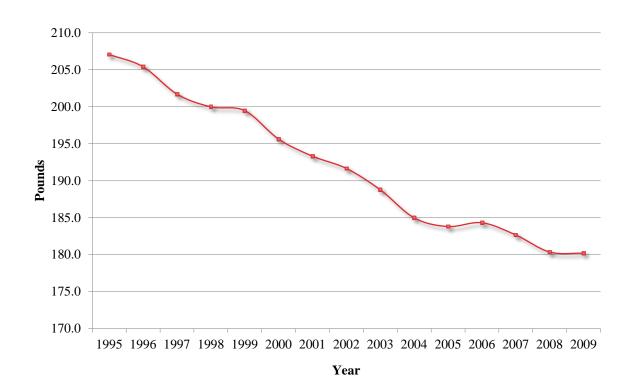
Per capita fluid milk consumption in the United States has been steadily declining for decades. Among the factors behind this decline are changes in U.S. demographics, changes in consumer preferences for fluid milk, how and where people consume food, changes in consumer income, changes in retail fluid milk prices, changes in advertising and marketing by producers of beverages that compete with fluid milk, and changes in generic fluid milk advertising and marketing. The following is a brief graphical overview of changes in per capita fluid milk consumption and factors hypothesized to affect fluid milk consumption from 1995 through 2009. It is important to emphasize, however, that the decline in per capita fluid milk consumption has occurred over a significantly longer period of time than since 1995.

Figure 3–1 illustrates the declining trend in per capita fluid milk consumption ¹ since 1995. From 1995 through 2009, annual per capita consumption declined by 13.0 percent. This translates into an average annual rate of decline of 0.9 percent per year. Annual per capita consumption actually increased slightly from 2005 to 2006, increasing from 183.8 pounds to 184.3 pounds, but declined from 184.3 to 180.2 from 2006 to 2009. From 2008 to 2009, the downward trend in per capita consumption stabilized somewhat with very little change from the previous year.

One potential cause of declining per capita fluid milk consumption over this time period may be the increasing trend in food consumed away from home. As people consume more food away from home, fluid milk consumption may be diminished by the lack of availability of many varieties of fluid milk products at the Nation's eateries as well as the expanding availability of fluid milk substitutes. Many eating establishments carry only one type of fluid milk product, which causes some people who would normally drink fluid milk to consume a different beverage if the preferred fluid milk product is not available.

Figure 3–2 illustrates the trend in expenditures on food consumed away from home as a percentage of total food expenditures. From 1995 through 2009, the annual average percentage of expenditures on food consumed away from home increased by 10.6 percent.





_

¹ All consumption data used in this study were adjusted for leap year.



48.0

47.0

46.0

Figure 3–2. Food Away From Home Expenditures as a Percent of Total Food Expenditures.

While there were some ups and downs in the percentage of food consumed away from home over this period, the general trend is increasing from 1995 through 2006. From 1998 to 1999, there was a small dip in food-away-from-home expenditures as a percent of total food expenditures and the decline in per capita fluid milk consumption lessened considerably. From 2008 to 2009, food-away-from-home expenditures as a percent of total food expenditures decreased by 1.9 percent due to the economic recession. It is evident from Figures 3–1 and 3–2 that per capita fluid milk consumption and eating away from home are negatively correlated. Thus, the increase in food consumed away from home appears to be responsible for some of the decrease in per capita fluid milk consumption.

1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 **Year**

A second factor for declining per capita fluid milk consumption may be changes in U.S. demographics. One important change is the proportion of young children in the population, which is lower than it was in 1995. Since young children are one of the largest fluid milk-consuming cohorts, any decline in that cohort negatively impacts per capita fluid milk consumption. Figure 3–3 shows the percentage of the population that was under 6 years old from 1995 through 2009, a segment of the population that decreased 7.1 percent between 1995 and 2002. Therefore, there is a positive correlation between per capita fluid milk consumption and this age cohort—both have declined since 1995. Note that since 2000, there has actually been a marginal increase in this age cohort, but it is still below levels in the mid-1990s.

Between 1995 and 2008, the retail price of fluid milk products has generally been rising relative to the retail price of other nonalcoholic beverages. This pattern is displayed in Figure 3–4. While there have been some times over this period where retail fluid milk prices declined

Figure 3–3. Percent of Population Under 6 Years of Age.

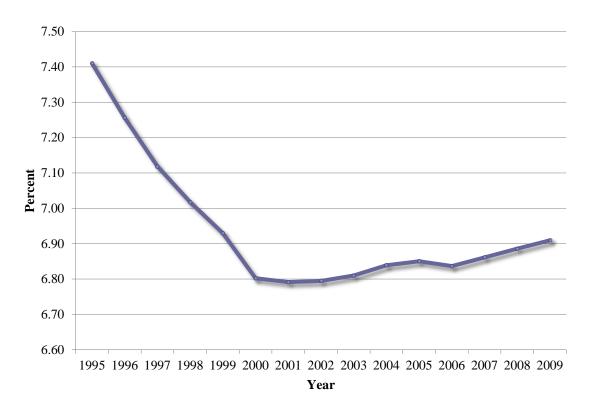
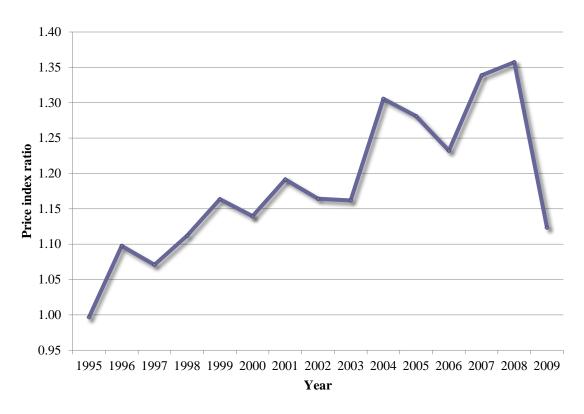


Figure 3–4. Retail Price of Fluid Milk Relative to Other Beverage Retail Prices.



relative to other beverage prices, there is clearly an increasing trend over time, making milk more expensive than other nonalcoholic beverages. However, this pattern significantly reversed itself in 2009, where the relative price ratio decreased 17.2 percent, which, by itself, had a positive effect on consumption. Over the entire period of 1995 through 2009, annual average fluid milk prices rose 12.7 percent relative to other beverages. These retail fluid milk price increases are likely responsible for some of the decline in per capita fluid milk consumption.

Fluid milk's loss of market share to other beverages also may be due to aggressive marketing by competing beverage producers. Indeed, both dairy farmers and fluid milk processors started generic marketing programs to combat competing marketing from other beverage producers. Figure 3–5 displays the combined real (inflation-adjusted) generic and brand fluid milk advertising expenditures divided by real bottled water plus soy beverage advertising, which are major competitors of fluid milk products. The general trend has been an erosion in the ratio of generic fluid milk advertising to competing beverage advertising. For example, in 1995, this ratio was 1.52, indicating that total generic and brand fluid milk advertising was 52 percent higher than the combined total advertising budgets for bottled water plus soy beverages. By 2009, this ratio fell 50 percent to 0.76. In terms of advertising, fluid milk has lost advertising market share to two of its main competitors, which likely had a negative impact on per capita milk consumption over this time period.

Figure 3–5. Generic and Brand Fluid Milk Advertising Divided by Soy Beverage and Bottled Water Advertising.



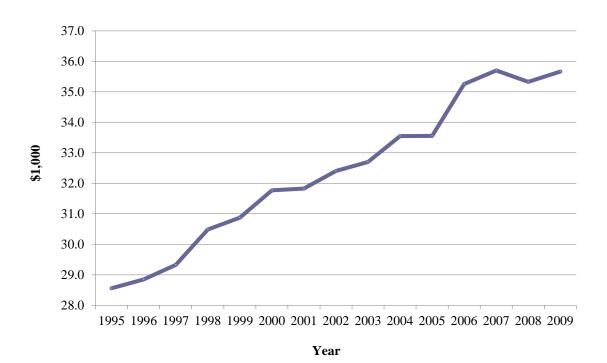
35

One factor that may have diminished some of the decline in per capita fluid milk consumption is the growth in real (inflation-adjusted) income over this period. Fluid milk is considered to be a "normal" good, which means that consumption increases as consumers' disposable incomes increase. Figure 3–6 illustrates the steady positive trend in real per capita income (in 2009 dollars) from 1995 through 2009. Since 1995, real per capita income has increased by 24.9 percent, however, there was no growth from 2007 to 2009.

Another factor that may have diminished some of the decline in per capita fluid milk consumption over part of this time period is generic marketing efforts by fluid milk processors and dairy farmers. The Dairy Program is the largest checkoff program in the United States in terms of revenue, and the second largest is the Fluid Milk Program.

Figure 3–7 shows generic fluid milk advertising real expenditures (adjusted for inflation) by the Dairy and Fluid Milk Programs. Over this period, dairy farmers, primarily through DMI, have significantly reduced their investment in generic fluid milk advertising, taking inflation into account. Real fluid milk advertising expenditures by dairy farmers have fallen from \$138 million in 1995 to \$13.7 million in 2009, a 90.1-percent decrease. Since the Fluid Milk Program's first full year of operation in 1997, its inflation-adjusted expenditures on fluid milk advertising have also declined from \$93.3 million (1997) to \$57.1 million in 2009, or 38.8 percent in real terms. Collectively, generic fluid milk advertising by both dairy farmers and fluid milk processors decreased by 69.4 percent in real terms.

Figure 3–6. Real Per Capita Disposable Income, in 2009 Dollars



36

Figure 3–7. Real Fluid Milk Advertising Expenditures by Dairy Farmers and Fluid Milk Processors.

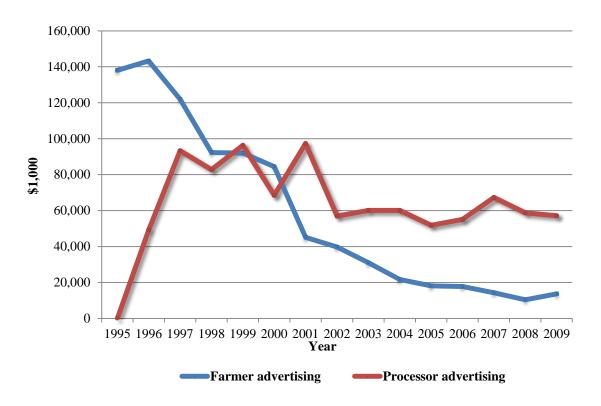


Figure 3–8 shows generic fluid milk non–advertising marketing activities by the Dairy and Fluid Milk Programs. The trend in these expenditures has been the opposite of generic advertising. The Dairy Program increased annual expenditures of non–advertising marketing from almost \$26 million in 1995 to \$55.9 million in 2009, an increase of 116.4 percent in inflation-adjusted terms. The Fluid Milk Program increased expenditures in this category from almost \$17 million in 1997 to \$33.6 million in 2009, a 119-percent increase in real terms. Collectively, generic fluid milk non–advertising marketing expenditures by both dairy farmers and fluid milk processors increased by 109.1 percent in real terms.

Figure 3–9 shows combined generic fluid milk marketing (advertising and non–advertising) activities by dairy farmers and fluid milk processors. The trend has been negative for both farmers and processors. Dairy farmers have decreased their annual expenditures of combined fluid milk marketing from \$163.8 million in 1995 to \$69.6 million in 2009, a decrease of 57.5 percent in real terms. Some of this decline is due to inflation, which has eroded the purchasing power for marketing activities; another reason for this decline has been a decision by dairy farmers to reduce expenditures on fluid milk marketing. Fluid milk processors decreased their combined generic marketing expenditures from \$110.3 million in 1997 to \$90.7 million in 2009, a 17.8-percent decrease in real terms. Almost all decline in fluid milk processor generic milk marketing has been due to inflation eroding the purchasing power of its marketing dollars. Collectively, generic fluid milk marketing expenditures by both the Dairy and Fluid Milk Programs decreased by 41.5 percent in real terms since 1995.

Figure 3–8. Real Fluid Milk Non–Advertising Expenditures by Dairy Farmers and Fluid Milk Processors.

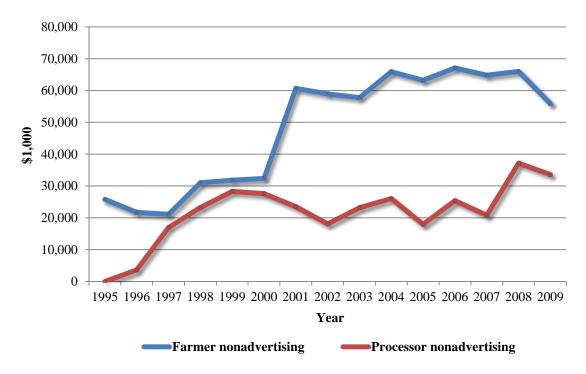
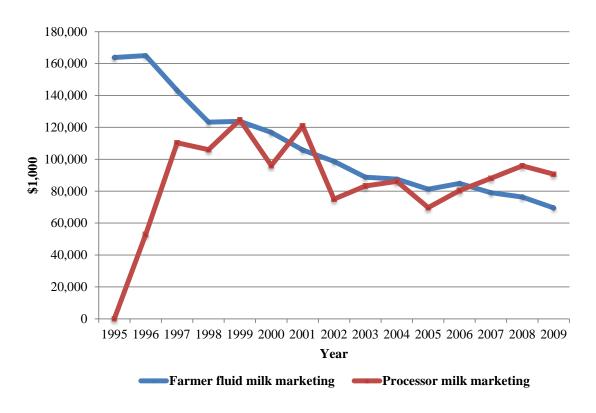


Figure 3–9. Real Generic Fluid Milk Marketing Expenditures by Dairy Farmers and Fluid Milk Processors.



Fluid Milk Model Estimation

To more formally evaluate the relationship between per capita fluid milk consumption and factors hypothesized to influence that consumption, an econometric modeling approach was used. Because there are factors other than generic marketing by dairy farmers and fluid milk processors that influence the demand for fluid milk, the model was used to identify the effects of individual factors affecting demand. The following variables were included as factors influencing per capita fluid milk demand: the consumer price index (CPI) for fluid milk; the CPI for nonalcoholic beverages, which was used as a proxy for fluid milk substitutes; the percentage of the U.S. population less than 6 years old; per capita disposable income; variables to capture seasonality in fluid milk demand; expenditures on food consumed away from home as a percentage of total food expenditures; expenditures on competing beverage advertising (bottled water and soy beverage advertising combined), expenditures on generic fluid milk advertising, and expenditures on generic fluid milk non-advertising marketing activities.²

Since the goals of the Dairy and Fluid Milk Programs are the same with regards to fluid milk, all generic fluid milk advertising by both programs was aggregated into a single advertising variable, and all generic fluid milk non-advertising marketing by both programs was aggregated into a single non-advertising marketing variable.

The model was estimated with national quarterly data from 1995 through 2009. To account for the effects of inflation, prices and income were deflated by the CPI for all items. Generic fluid milk advertising and competing advertising expenditures were deflated by a media cost index computed from annual changes in advertising costs by media type. Generic fluid milk non-advertising marketing expenditures were deflated by the CPI for all items. Because advertising has a carry-over effect on demand, past fluid milk advertising expenditures also were included in the model as explanatory variables using a distributed-lag structure.³ Similar procedures were used to capture this carry-over effect for competing advertising.

The impacts of variables affecting demand can be represented with what economists call "elasticities." Elasticities measure the percentage change in per capita demand given a 1.0 percent change in one of the identified demand factors while holding all other factors constant. Table 3–1 provides average elasticities for the period 1995 through 2009 for model variables, all of which have a statistically significant effect on consumption.⁴ For example, a price elasticity

² As mentioned in the introduction, the advertising expenditures include media expenditures for television, radio, print, and outdoor advertising, while the non-advertising marketing expenditures included funds spent on fluid milk public relations, sales promotions, nutrition education, retail programs, and sponsorships by the national programs. Branded fluid milk advertising expenditures were also included in an earlier specification of the model; however, they and were subsequently omitted since they did not have a statistically significant impact on milk demand.

³ Specifically, a second-degree polynomial lag structure was imposed. The demand model included current advertising expenditures and 11 quarters of lagged advertising expenditures to capture the carry-over effect of advertising. Similarly, competing advertising included current and nine quarters of lagged expenditures. Non-advertising marketing expenditures were lagged six quarters.

⁴ The estimated model fit the data extremely well. Most variables were statistically significant at the 1.0 percent significance level or better. The adjusted goodness-of-fit measure indicated that the explanatory variables explained 98 percent of the variation in per capita fluid milk consumption. Statistical diagnostics were performed, and no statistical problems were found.

Table 3-1. Average Elasticity Values (1995–2009) for Factors Affecting the Per Capita Retail Demand for Fluid Milk.^a

Demand factor	Elasticity
Percent of food away from home expenditures	-0.685**
Percent of population under 6 years of age	0.561**
Per capita income	0.130*
Retail fluid milk price	-0.126**
Bottled water + soy beverage advertising expenditures	-0.013*
Generic fluid milk advertising expenditures	0.037**
Generic fluid milk non-advertising marketing expenditures	0.028*

^a Example: A 1.0 percent increase in the retail price of fluid milk is estimated to reduce per capita sales of fluid milk by 0.126 percent. For more information on the data used, see Appendix Table 3-A1.

of demand for fluid milk equal to -0.126 means that a 1.0 percent increase in the real retail fluid milk price decreases per capita fluid milk quantity demanded by 0.126 percent, holding all other demand factors constant.

The most important factors influencing per capita fluid milk demand are the proportion of food expenditures on food eaten away from home and demographic changes. While not as large in magnitude, retail fluid milk prices, income, expenditures on generic fluid milk advertising and non-advertising marketing efforts, and competing beverage advertising expenditures also impacted per capita fluid milk demand. Each factor is further discussed in detail. The amount of food that is consumed away from home, measured in this model as per capita expenditures on food eaten away from home as a percentage of per capita expenditures on all food, has an elasticity of –0.685. This means that a 1.0 percent increase in the food consumed away from home would result in a 0.685 percent decrease in fluid milk demand when holding all other demand factors constant. As mentioned previously, this negative relationship may be due to the limited availability of fluid milk products and high availability of fluid milk substitutes at many eating establishments, which frequently offer only one or two types of fluid milk beverages. One can hypothesize that because of these limited choices, some people who would ordinarily choose fluid milk choose another beverage instead. This result suggests the need to target the retail food service industry in an effort to increase away-from-home consumption of fluid milk.

The percentage of the population under 6 years of age is also one of the most important factors affecting fluid milk consumption. This factor has an estimated elasticity of 0.561, which means that a 1.0 percent increase in this age cohort measure would result in a 0.561 percent increase in per capita fluid milk demand when holding all other demand factors constant. This result is consistent with previous studies, which show that one of the largest fluid milk-consuming segments of the population is young children. While this age cohort has declined since 1995, it

^{*} Statistically significant at the 10 percent significance level or less.

^{**} Statistically significant at the 5 percent significance level or less.

has been slowly rising in the last several years, which should have a mitigating influence on declining per capita fluid milk consumption.

Per capita disposable income has a positive and statistically significant impact on per capita fluid milk consumption. A 1.0-percent increase in real per capita income would result in a 0.13-percent increase in per capita fluid milk demand, holding all other demand factors constant. Similar to the price elasticity in magnitude, the income elasticity is consistent with the notion of fluid milk products as a staple commodity in the United States. With income up by 24.9 percent since 1995, this has lessened the decline in per capita fluid milk consumption. Holding all other factors constant, this 24.9-percent increase in real income increased per capita fluid milk consumption by 3.2 percent over this period.

Not surprisingly, the retail price of fluid milk has a negative and statistically significant impact on per capita demand. The results indicate that a 1.0-percent increase in the real retail price of fluid milk would result in a 0.126-percent decrease in per capita fluid milk quantity demanded. The magnitude of this elasticity is relatively small, which indicates that U.S. consumers' fluid milk purchasing behavior is relatively insensitive to changes in the retail price. This result, which is consistent with other studies, is likely due to the fact that fluid milk is generally regarded as a staple commodity in the United States.

Combined soy beverage and bottled water advertising also has a negative impact on fluid milk demand during the study period. The estimated fluid milk demand elasticity with respect to soy beverage and bottled-water advertising is -0.013, and statistically significant.

Finally, the generic fluid milk marketing activities conducted by fluid milk processors and dairy farmers have a positive and statistically significant impact on per capita fluid milk demand. The average advertising elasticity is computed to be 0.037 and is statistically significantly different from zero. Thus, a 1.0-percent increase in generic fluid milk advertising would increase per capita fluid milk consumption by 0.037 percent, holding all other demand factors constant. The generic non-advertising marketing elasticity is computed to be 0.028 and is statistically significant. The advertising elasticity is found to be 1.3 times higher than the non-advertising elasticity and is statistically different.

Fluid Milk Model Simulation

To examine the impact of dairy farmer and fluid milk processor marketing on total consumption of fluid milk, the estimated demand equation was simulated for two scenarios for the period from 1999 through 2009: (1) a baseline scenario in which the combined fluid milk marketing (advertising and non–advertising) expenditures were equal to actual marketing expenditures under the two programs, and (2) a no national Dairy Program, no Fluid Milk Processor Program scenario in which there was no fluid milk processor-sponsored marketing, and dairy farmer sponsored fluid milk marketing was reduced to 42 percent of actual levels to reflect the difference in assessment before the national program was enacted. A comparison of these two scenarios provided a measure of the impact of the Dairy and Fluid Milk Programs.

Figure 3–10 displays the simulation results for annual fluid milk consumption for the two

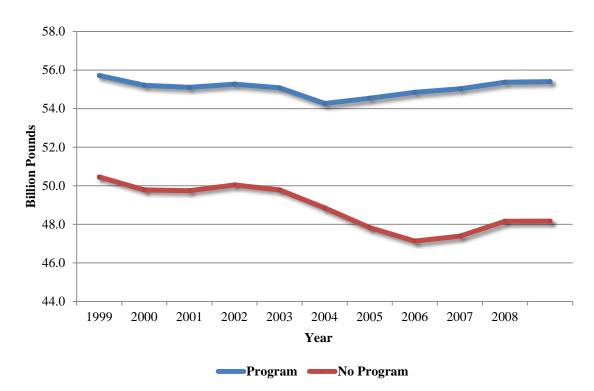


Figure 3–10. Simulated Milk Consumption With and Without Generic Fluid Milk Marketing.

scenarios. These marketing activities were responsible for creating an additional 6.23 billion pounds more milk consumption each year on average. Put differently, had there not been generic fluid milk marketing conducted by the two national programs, fluid milk consumption would have been 11.3 percent less than it actually was over this time period. Hence, the bottom line is that the fluid milk marketing efforts by dairy farmers and fluid milk processors combined have had a positive and statistically significant impact that is partially mitigating declines in per capita fluid milk consumption.

Fluid Milk Processor Benefit-Cost Analysis

One way to measure whether the benefits of a program outweigh the cost is to compute a BCR. A BCR can be computed as the change in net revenue⁵ due to generic dairy marketing divided by the cost of the checkoff program. To compute the BCR for the fluid milk processors' program,⁶ the estimated demand equation was simulated for two scenarios for the period from 1999 through 2009: (1) a baseline scenario in which the combined fluid milk marketing (advertising and non–advertising) expenditures were equal to actual marketing expenditures under the two programs, and (2) a no Fluid Program scenario in which there was no fluid milk processor

⁵ "Net revenue" is defined as the aggregate gain in total fluid milk processor revenue from price and demand enhancements due to generic fluid milk advertising and non-advertising less the increase in supply costs for the additional milk marketed by fluid milk processors. Economists refer to this notion of net revenue as "producer surplus."

⁶ A separate BCR is computed for the dairy farmers' program in the next section.

sponsored marketing, but dairy farmer fluid milk marketing expenditures were set at historical levels. A BCR for the fluid milk processor program can be computed on the basis of the difference in market conditions between these two scenarios.

To estimate the BCR, an estimate of the supply response by fluid milk processors and a retail–processor margin equation are necessary in addition to the fluid milk demand equation. Using quarterly data from 1995 through 2009, a supply function for fluid milk processors was used as a function of fluid milk supply in the previous quarter, inflation–adjusted processor fluid price, inflation–adjusted Class I price, and a trend term. The estimated long–run own price elasticity of supply was computed to be 0.12, i.e., a 1.0-percent increase in the processor price results in a 0.12-percent increase in quantity supplied of fluid milk. In addition, a retail–processor margin equation was estimated by regressing the retail price index on the wholesale processor price and a trend term. The three equations, retail demand equation, processor supply equation, and the margin equation were used to simulate the processor market impacts of the Fluid Milk Program.

Table 3–2 presents the average quarterly impacts and BCRs for the Fluid Milk Program. Fluid Milk Program generic marketing had a positive impact on the price that fluid milk processors received over this period. The average increase in price from 1999 to 2009 was 4.3 percent. In other words, had there not been any marketing by the Fluid Milk Program, the average fluid milk processors' price would have been 4.3 percent lower from 1999 to 2009 than it actually was. The increase in overall milk consumption due to processors (not the dairy farmers' marketing) was 4.8 percent.

Fluid Milk Program marketing efforts had a positive impact on producer surplus over this period as well. The average increase in producer surplus from 1999 to 2009 was \$932 million per year. Had there not been any Fluid Milk Program marketing, average fluid milk processor net revenue would have been \$932 million lower, per year, from 1999 to 2009 than it actually was.

Table 3-2. Average Market Impacts of Fluid Processor Generic Marketing Program, 1999–2009.

Item	
Change in processor price (percent)	4.3
Change in milk consumption	4.8
Change in producer surplus (\$ million per year)	932
Change in marketing costs (\$ million per year)	105
BCR	8.88
Lower bound of 90% confidence interval for BCR	1.79

-

⁷ All the results of the econometric estimation are provided in the following report: Kaiser, Harry M. "Measuring the Impacts of Generic Fluid Milk and Dairy Marketing." NICPRE Research Bulletin, School of Applied Economics and Management, Cornell University, 2010, which is available from the following web URL: http://www.aem.cornell.edu/research/rb.php.

How does the gain in producer surplus compare with the costs of the fluid milk processors' program? To answer the question, an average BCR was computed. A BCR greater than 1.0 implies that the total benefits of the Fluid Milk Program exceed the costs. The average BCR from 1999 to 2009 was 8.88. This implies that, on average over the period 1999-2009, the benefits of Fluid Milk Program marketing programs have been 8.88 times greater than the costs, i.e., every dollar invested in marketing yielded an additional \$8.88 in industry net revenue.

To make allowance for the error inherent in any statistical estimation, a 90-percent confidence interval was calculated for the average BCR, providing a lower bound for the average BCR. One can be 90 percent "confident" that the true average BCR lies within those bounds. The estimated lower bound for the average BCR was 1.79. Since this lower bound is above 1.0, it is reasonable to conclude that these confidence intervals give credence to the finding that the benefits of the Fluid Milk Program's marketing activities have been greater than the cost of the programs

Questions often arise with respect to the accuracy of these BCR estimates. BCRs for commodity promotion programs are generally found to be large because marketing expenditures in relation to product value are small and, as such, only a small demand effect is needed to generate large positive returns. For example, generic milk marketing expenditures by fluid milk processors is a mere 0.8 percent of the recent average annual value of processor milk sales. The marketing activities resulted in modest gains in the quantity of milk products and a positive effect on processor prices, resulting in large positive net revenue from the marketing investment.

Analysis of All-Dairy Products Generic Marketing

The following is a brief graphical overview of changes in per capita domestic commercial disappearance of all dairy products, and factors hypothesized to affect it, from 1995 through 2009. Figures 3–11 and 3–12 display the per capita domestic commercial disappearance of all dairy products since 1995 on a solids nonfat and fat basis, respectively. The trends in per capita consumption are completely different for the fat basis measure compared with the solids nonfat-based measure. On a fat basis, per capita consumption has increased by 8.5 percent over this period, although it actually decreased for the first time in 4 years by 1.9 percent from 2008 to 2009. On a solids nonfat basis, per capita consumption has actually decreased by 1.5 percent since 1995.

An important factor influencing per capita commercial disappearance of all dairy products is the retail price of dairy products. Figure 3–13 displays the CPI for all dairy products relative to the CPI for all items. This figure indicates that there have been both ups and downs for retail dairy prices relative to all prices in the economy. For instance, the price of all dairy products declined in the most recent year by 6 percent. However, the general trend since 1995 has been modestly upwards with dairy product prices increasing by 5.4 percent. The fact that dairy products have become more expensive relative to everything else consumers buy has had a negative impact on dairy consumption.

A factor that had a positive impact on per capita commercial disappearance of all dairy products is the growth in real income over this period. All dairy products are considered to be "normal goods," which means that consumption increases as consumers' disposable incomes increase. Figure 3–6 illustrates the steady positive trend in real per capita income (in 2009 dollars) from

Figure 3–11. Domestic Per Capita Commercial Disappearance of Fluid Milk and Dairy Products (milk solids nonfat basis).

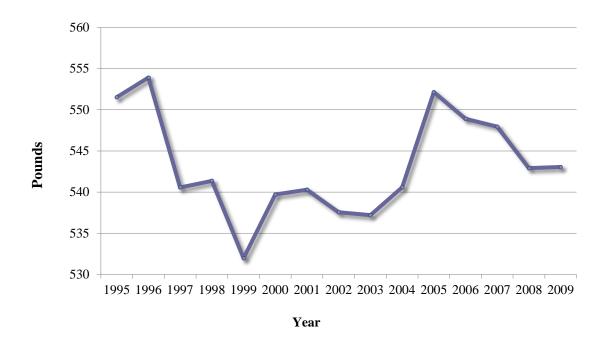


Figure 3–12. Domestic Per Capita Commercial Disappearance of Fluid Milk and Dairy Products (fat basis).

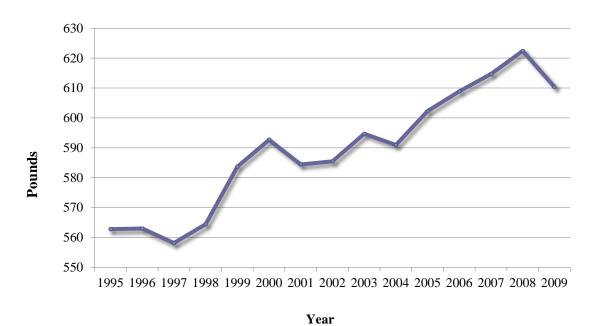
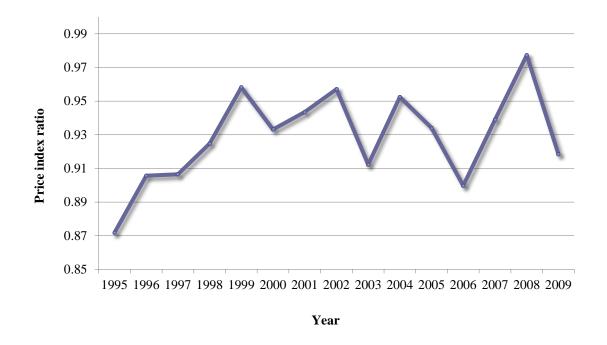


Figure 3–13. Retail Price of Dairy Products Relative to All Other Retail Prices.

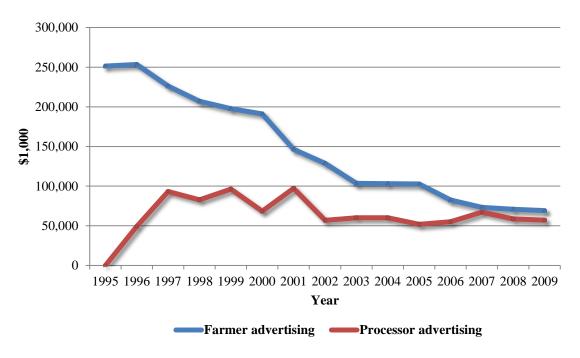


1995 through 2009. Since 1995, real per capita income has increased by 24.9 percent, although it leveled off in 2007, fell in 2008, and showed only weak growth in 2009.

Another factor that may have contributed to increasing per capita domestic commercial disappearance of all dairy products over part of this time period is generic marketing efforts by fluid milk processors and dairy farmers. Figure 3–14 shows generic fluid milk and dairy product advertising real expenditures by dairy farmers and fluid milk processors. Real farmer advertising expenditures have fallen from \$251.4 million in 1995 to \$69.2 million in 2009, a 68.7-percent decrease. Since the first full year of the Fluid Milk Program in 1997, their expenditures on fluid milk advertising have also declined from \$93.3 million (1997) to \$57.1 million in 2009, or 38.8 percent. However, since 2002, spending by fluid milk processors has been relatively stable, averaging \$58.4 million per year. Collectively, generic dairy advertising by both dairy farmers and fluid milk processors decreased by 63.4 percent.

Figure 3–15 shows generic dairy non-advertising marketing activities by dairy farmers and fluid milk processors. The trend in these expenditures has been the opposite of generic advertising. Dairy farmers have increased their annual expenditures of non-advertising dairy marketing from \$72.9 million in 1995 to \$130 million in 2009, an increase of 78.3 percent. Fluid milk processors increased their expenditures in this category from almost \$17 million in 1997 to \$33.6 million in 2009, a 119-percent increase. Collectively, generic fluid milk non-advertising marketing expenditures by both dairy farmers and fluid milk processors increased by 82 percent. Figure 3–16 shows combined generic dairy marketing (advertising and non-advertising) activities (in 2009 dollars) by dairy farmers and fluid milk processors. The trend here has been negative for both farmers and processors. Annual expenditures of combined dairy marketing by dairy farmers decreased from \$324.3 million in 1995 to \$199.1 million in 2009, a decrease of

Figure 3–14. Real Generic Dairy Advertising by Dairy Farmers and Fluid Milk Processors.



37.9 percent. Annual combined generic marketing expenditures by fluid milk processors decreased from \$110.3 million in 1997 to \$90.7 million in 2009, a 17.8-percent decrease. Collectively, generic dairy and fluid milk marketing expenditures by both dairy farmers and fluid milk processors decreased by 41.5 percent.

Figure 3–15. Real Generic Dairy Non–Advertising by Dairy Farmers and Fluid Milk Processors.

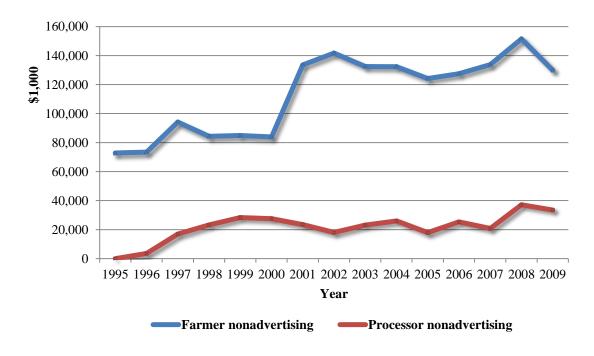
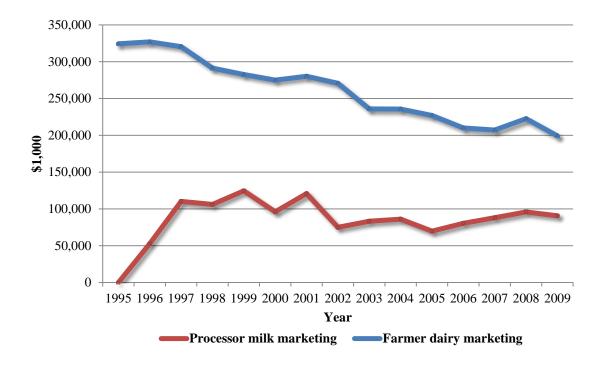


Figure 3–16. Real Generic Dairy Marketing Expenditures by Dairy Farmers and Fluid Milk Processors.



Dairy Model Estimation

To examine the overall impact of the Dairy and Fluid Milk Programs on overall dairy demand, we estimated a combined fluid milk/dairy product demand model that included all generic dairy advertising activities as one demand determinant, and all non-advertising dairy marketing activities as another demand determinant. Expenditures for the following advertising activities were aggregated into one variable assumed to impact the all—dairy product demand model: television, radio, print, and outdoor media advertising for fluid milk and manufactured dairy products by dairy farmers and fluid milk processors. Expenditures for the following non—advertising, marketing activities were aggregated into one variable: retail programs, school marketing, food service and manufacturing programs, integrated communications, public relations, sales promotions, nutrition education, retail programs, and sponsorships conducted by fluid milk processors and dairy farmers. In addition, the following variables were included as factors influencing per capita all-dairy products demand: the CPI for all-dairy products, per capita disposable income, and variables to capture seasonality in dairy product demand. Similar to the fluid milk demand model, the all-dairy products demand model was estimated on a per capita basis to control for the influence of population increases on demand.

The model was estimated with national quarterly data for 1995 through 2009. To account for the impact of inflation, all prices and income variables were deflated by the CPI for all items. Generic fluid milk and cheese advertising expenditures were deflated by a weighted average media cost index (television, radio, print, and outdoor). Generic fluid milk and cheese non–advertising marketing expenditures were deflated by the CPI for all items. Generic advertising expenditures were deflated by the media cost index.

Table 3–3 provides elasticities for the all-dairy product demand models on a nonfat and fat solids basis. All variables were statistically significant. The results indicate that a 1.0 percent increase in the real price for dairy products would result in a 0.288 percent and a 0.218 percent decrease in per capita all–dairy product demand on a nonfat and fat basis, respectively, holding all other variables constant. The average income elasticity for 1995 through 2009 was 0.170 (nonfat basis) and 0.952 (fat basis). In other words, a 1.0 percent increase in real per capita income would result in a 0.17 percent (nonfat) and 0.952 percent (fat) increase in per capita demand for all–dairy products holding all other variables constant.

The major interests here are the advertising and non-advertising marketing elasticities. The average advertising elasticity for this period on a nonfat and fat basis was 0.036 and 0.056, respectively. A 1.0 percent increase in media advertising expenditures would increase per capita all-dairy product demand by 0.036 percent (nonfat basis) and 0.056 percent (fat basis). The average non-advertising marketing elasticity for this period was 0.016 (nonfat) and 0.017 (fat), respectively. A 1.0 percent increase in media advertising expenditures would increase per capita all-dairy product demand by 0.016 percent (nonfat) and 0.017 percent (fat). The advertising elasticity in both models was found to be statistically larger than the non-advertising elasticity in both models—2.25 times higher on a nonfat basis, and 3.29 times higher on a fat basis.

Dairy Farmer Benefit-Cost Analysis

It should be pointed out that DMI has made a significant shift in its marketing programs in the past 4 years. Previously, the bulk of DMI's marketing expenditures was allocated primarily to media advertising and, to a lesser extent, non–advertising marketing activities. In 2009, these traditional marketing activities (advertising and non–advertising marketing) accounted for only \$29 million of DMI's marketing budget.

Table 3-3. Average Elasticity Values (1995–2009) for Factors Affecting Per Capita All–Dairy Products Demand.

Demand Factor	Nonfat solids basis Elasticity	Fat basis Elasticity
CPI for all-dairy products	-0.288**	-0.218*
Per capita income	0.170*	0.952**
Generic dairy advertising expenditures Generic dairy non–advertising marketing	0.036**	0.056*
expenditures	0.016**	0.017**

^{*} Statistically significant at the 10% level or better.

^{**} Statistically significant at the 1% level or better.

⁸ The two models are for milk equivalent, calculated on a fat solids basis and nonfat solids basis. Not to be confused with models for nonfat solids and fat solids.

The same is not true for the QPs, which continue to spend the majority of their marketing budgets on advertising and shorter term non–advertising marketing activities. The remaining marketing budget of DMI was spent on their new business plan of strategic business development with dairy processors and manufacturers, which is not included in the analysis that follows. DMI has stated that they do not expect any short–term benefits of these programs for 2009, but rather expect to see these benefits to accrue in the longer term. Hence, it is important to note that the BCRs that follow include only the advertising and shorter term, non–advertising marketing activities by dairy farmers, and do not include DMI's newer business development plan.

A BCR was calculated on both a milk fat and nonfat solids basis by simulating two scenarios: (1) a baseline scenario in which combined marketing (advertising and non-advertising marketing) levels were equal to actual marketing expenditures under the two programs; and (2) a no-national-Dairy-Program scenario in which there was fluid milk-processor-sponsored marketing, but dairy-farmer-sponsored marketing was reduced to 42 percent of actual levels to reflect the difference in assessment before and after the national program was enacted. A comparison of these two scenarios provided a measure of the impact of the Dairy Program. The benefits of the Dairy Program were calculated as the change in dairy farmer producer surplus (i.e., net revenue) due to demand enhancement from all marketing activities under the Dairy Program (the difference in producer surplus between scenarios 1 and 2). The demand enhancement reflects increases in quantity and price as a result of the dairy farmers' marketing program. The costs of the Dairy Program were calculated as the difference in total assessment revenue before and after the national program was enacted (after netting out the expenditures on DMI's new business plan, which was not included in this analysis). These scenarios were run for the time period 1998 through 2009 for the two milk equivalent models: milk fat and nonfat.

As was the case for the Fluid Milk Program, an own–price elasticity of farm supply was necessary to compute the BCR and, consequently, a farm milk supply equation was estimated. Using quarterly data from 1995 through 2009, a supply function for dairy farmers was estimated, and the long run own–price elasticity of supply was computed to be 1.01, i.e., a 1.0 percent increase in the all milk price results in a 1.3 percent increase in quantity supplied of farm milk. This estimate was used as the base case for computing the BCR.

Table 3–4 presents the average quarterly impacts and BCR for the Dairy Program. The average all milk price from 1999 through 2009 was \$14.60 per hundredweight. In the counter factual no–national–Dairy–Program scenario for the nonfat solids model, the average all milk price was \$14.33 per hundredweight, which is 27 cents lower. Thus, had there been no national Dairy Program over this period—the price farmers receive for their milk would have been 1.86 percent lower than it actually was. The total quantity of milk demand was estimated to be 2.05 percent higher on a nonfat solids basis, as a result of the Dairy Program. In the counter factual no–national–Dairy–Program scenario for the milk fat model, the average all milk price was \$14.19 per hundredweight, which is 41 cents lower. Thus, had there been no national Dairy Program over this period, the price farmers received for their milk would have been 2.81 percent lower than it actually was. The total quantity of milk demand was estimated to be 2.86 percent higher on a fat basis, as a result of the Dairy Program.

The results show that the average BCR for the Dairy Program was 6.20 (nonfat solids basis) and

Table 3-4. Average Market Impacts of Dairy Farmer Generic Marketing Program, 1999-2009.

Item	Nonfat basis	Fat basis
Change in all milk price (percent)	1.86 %	2.81 %
Change in total milk marketings	2.05 %	2.86 %
Change in producer surplus (\$ million per year)	940	1,494
Change in marketing costs (\$ million per year)	151.7	151.7
BCR	6.20	9.85
Lower bound of 90 percent confidence interval for BCR	3.84	1.18

9.85 (milk fat basis) from 1999 through 2009. This means that each dollar invested in generic dairy marketing by dairy farmers during the period would return between \$6.20 and \$9.85, on average, in net revenue to farmers. The level of the BCR suggests that dairy farmer expenditures on advertising and non–advertising promotions have been a successful investment.

In another interpretation of the BCR, the increase in real generic dairy marketing expenditures resulting from the Dairy Program costs dairy producers an additional \$151.7 million per year on average from 1999 through 2009. The additional generic dairy marketing resulted in higher demand, prices, and net revenue for dairy producers nationwide. Based on the simulations conducted, it is estimated that the average annual increase in producer surplus (reflecting changes in both revenues and costs) due to the additional generic marketing under the Dairy Program was \$940 million on a nonfat basis and \$1.494 billion on a fat basis. Dividing \$840 (or \$1,494) million by the additional Dairy Program cost of \$151.7 million results in the estimated BCRs of 6.20 (nonfat basis) and 9.85 (fat basis).

To make allowance for the error inherent in any statistical estimation, a 90-percent confidence interval was calculated for the average BCR, providing a lower bound for the average BCR. One can be 90 percent "confident" that the true average BCR lies within those bounds. The estimated lower bound for the average BCR in the nonfat and fat model is 3.84 and 1.18, respectively. Since both lower bounds are above 1.0, it is reasonable to conclude that these confidence intervals give credence to the finding that the benefits of the Dairy Program's marketing activities have been greater than the cost of the programs.

The change in generic dairy marketing expenditures noted previously is a mere 0.60 percent of the recent average annual value of farm milk marketings from 1999 through 2009 (\$24.46 billion). The marketing activities resulted in modest gains in the quantity of dairy products and a positive effect on milk prices, resulting in large positive net revenue from the marketing investment.

In addition to computing a BCR for the overall marketing efforts of dairy farmers, an average BCR was also calculated for generic advertising and non-advertising activities by dairy farmers. Similar to the elasticity results, the average BCR for advertising was significantly higher than for non-advertising. The average BCR for generic advertising in the non-fat model was 8.56 compared with 6.60 for non-advertising marketing activities, and this difference was statistically

significant at the 1.0 percent level. The average BCR for generic advertising in the fat model was 15.06 compared with 8.41 for non-advertising marketing activities, and this difference was statistically significant at the 1.0 percent level. Hence, dairy farmers are receiving a higher return from their generic advertising activities than the non-advertising marketing activities.

Table 3-A1. Description of Variables Used in Econometric Models.^a

Variable	Description	Units	Mean ^b
DEDDC	Consumption Variables	11	102.1
RFDPC	Annual retail fluid demand per capita	lbs	192.1
DDDDGNE	A 1 . 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11	(9.89)
RDDPCNF	Annual retail all-dairy product demand per capita on a non-fat	lbs	554.6
DDDDGE	basis	11	(11.83)
RDDPCF	Annual retail all-dairy product demand per capita on a fat basis	lbs	589.3
			(26.44)
	Price Indices		
RFPCPI	Consumer retail price index for fresh milk and cream deflated by	#	1.18
	consumer price index for nonalcoholic beverages (1982–84=1)		(0.11)
RDPCPI	Consumer retail price index for all-dairy products deflated by	#	0.93
	consumer retail price index for all items (1982–84=1)		(0.03)
RBEVCPI	Consumer retail price index for non-alcoholic beverages	#	141.7
	(1982–84=100)		(10.07)
	Demographic and Income Variables		(====,
INCPC	Annual per capita disposable income, deflated by the consumer	\$	32,410
	retail price index for all items (2007=1)	*	(2,410)
AGE5	Percent of the population under age 6	%	6.94
	IL		(0.18)
FAFH%	Food away from home expenditures as percent of total food	%	50.8
111111/0	expenditures	70	(2.16)
	Marketing Expenditures		(2.10)
GFMA	Annual generic fluid milk advertising expenditures by dairy	\$mil	58.9
011/111	farmers deflated by media cost index (2009 \$)	Ψ	(50.7)
GFMN	Annual generic fluid milk non-advertising marketing expenditures	\$mil	48.3
OI WII V	by dairy farmers deflated by consumer price index (2009 \$)	ΨΠΠ	(29.0)
GFDA	Annual generic milk and dairy advertising expenditures by dairy	\$mil	147.1
OI D/I	farmers, deflated by media cost index (2009 \$)	φιιιι	(75.3)
GFDN	Annual generic milk and dairy non-advertising marketing	\$mil	113.4
OI DIV	expenditures by dairy farmers, deflated by media cost index	фии	(58.8)
	(2009 \$)		(36.6)
GPMA	Annual generic fluid milk advertising expenditures by fluid milk	\$mil	63.7
GriviA	processors, deflated by media cost index (2009 \$)	ФППП	(29.7)
GPMN		\$mil	21.7
Grivin	Annual generic fluid milk non-advertising marketing expenditures by fluid milk processors, deflated by consumer price index	Фиш	
	(2009 \$)		(12.9)
CBA	Annual soy milk + bottled-water advertising expenditures	\$mil	217.4
	deflated by media cost index (2009 \$)		(142.1)
	· · · · · · · · · · · · · · · · · · ·		·

 ^a Quarterly dummy variables are also included in the model to account for seasonality in demand.
 ^b Computed over the period 1995–2009. Standard deviation in parentheses.

Appendix A-1 National Dairy Promotion and Research Board Current Member Listing

Region 1 (Oregon and Washington)

Elizabeth I. Anderson Onalaska, Washington Term expired 10/31/2009

Region 2 (California)

James L. Ahlem Hilmar, California Term expires 10/31/2010

Kimberly K. Clauss Hilmar, California Term expired 10/31/2009

Ronald L. Koetsier Visalia, California Term expires 10/31/2011

Brad J. Scott Moreno Valley, California Term expires 10/31/2010 Mary E. Cameron Hanford, California Term expired 10/31/2009

John B. Fiscalini Modesto, California Term expires 10/31/2010

Stephen D. Maddox Riverdale, California Term expires 10/31/2010

Pauline Tjaarda Shafter, California Term expires 10/31/2010

Region 3 (Arizona, Colorado, Idaho, Montana, Nevada, Utah, and Wyoming)

Grant B. Kohler Ronald E. Shelton
Midway, Utah Greeley, Colorado
Term expires 10/31/2010 Term expires 10/31/2011

William C. Stouder Harold A. Wick
Wendell, Idaho Austin, Colorado
Term expired 10/31/2009 Term expires 10/31/2011

Region 4 (Arkansas, Kansas, New Mexico, Oklahoma, and Texas)

William R. Anglin

Bentonville, Arkansas

Term expires 10/31/2011

Jose L. Gonzalez

Mesquite, New Mexico

Term expires 10/31/2010

Lawrence A. Hancock

Muleshoe, Texas

Newton, Kansas

Term expired 10/31/2009 Term expires 10/31/2011

Appendix A–1, continued

Region 5 (Minnesota, North Dakota, and South Dakota)

Paul L. Kent Kenton W. Holle Mora, Minnesota Mandan, North Dakota Term expired 10/31/2009 Term expires 10/31/2011

Region 6 (Wisconsin)

William J. Herr Peter J. Kappelman
Greenwood, Wisconsin
Term expires 10/31/2010 Term expires 10/31/2009

Sharon K. Laubscher

Wonewoc, Wisconsin
Term expires 10/31/2011

Randy G. Roecker
Loganville, Wisconsin
Term expired 10/31/2009

Carl F. Van Den Avond Green Bay, Wisconsin Term expires 10/31/2011

Region 7 (Illionis, Iowa, Missouri, and Nebraska)

Larry G. Purdom Douglas D. Nuttleman Purdy, Missouri Stromsburg, Nebraska Term expired 10/31/2009 Term expires 10/31/2011

Region 8 (Alabama, Kentucky, Louisiana, Mississippi, and Tennessee)

Larry B. Jaggers Glendale, Kentucky Term expires 10/31/2011

Region 9 (Indiana, Michigan, Ohio, and West Virginia)

Paul L. Broering Donald E. Grutner St. Henry, Ohio Fremont, Indiana

Term expires 10/31/10 Term expired 10/31/2009

Carl A. Schmitz Wadesville, Indiana Term expires 10/31/2011

Region 10 (Florida, Georgia, North Carolina, South Carolina, and Virginia)

John M. Larson Okeechobee, Florida Term expires 10/31/2010

Appendix A-1, continued

Region 11 (Delaware, Maryland, New Jersey, and Pennsylvania)

Rita P. Kennedy Paula A. Meabon

Butler, Pennsylvania Wattsburg, Pennsylvania Term expired 10/31/2009 Term expires 10/31/2010

Region 12 (New York)

Corinne M. Banker Sandford Stauffer
Morrisville, New York
Term expires 10/31/2010 Term expired 10/31/2009

Region 13 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and

Vermont)

Ellen H. Paradee Grand Isle, Vermont Term expires 10/31/2011

Appendix A-2 National Fluid Milk Processor Promotion Board Current Member Listing

Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)

Michael F. Touhey, Jr. Dean Foods Company Franklin, Massachusetts Term expires 06/30/2010

Region 2 (New Jersey and New York)

James F. Walsh H.P. Hood, L.L.C. Lynnefield, Massachusetts Term expires 06/30/2011

Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, and Virginia)

Jay S. Bryant Maryland and Virginia Milk Producer's Cooperative Association, Inc. Reston, Virginia Term expires 06/30/2012

Region 4 (Georgia, North Carolina, and South Carolina)

Charles L. Gaither, Jr. Milkco, Inc. Asheville, North Carolina Term expires 06/30/2010

Region 5 (Florida)

Michael R. Smith Publix Super Markets, Inc. Lakeland, Florida Term expires 06/30/2011

Region 6 (Ohio and West Virginia)

Charles S. Mayfield, Jr.
Mayfield Dairy (a subsidiary of Dean Foods Company)
Athens, Tennessee
Term expires 06/30/2012

Appendix A-2, continued

Region 7 (Michigan, Minnesota, North Dakota, South Dakota, and Wisconsin)

James B. Green

Kemps, L.L.C. (a subsidiary of H.P. Hood, L.L.C.)

St. Paul, Minnesota

Term expires 06/30/2010

Region 8 (Illinois and Indiana)

Brian Haugh

National Dairy Holdings (a subsidiary of Grupo Lala)

Dallas, Texas

Term expires 06/30/2011

Region 9 (Alabama, Kentucky, Louisiana, Mississippi, and Tennessee)

Edward L. Mullins

Prairie Farms Dairy, Inc.

Carlinville, Illinois

Term expires 06/30/2012

Region 10 (Texas)

Robert B. McCullough

H.E. Butt Grocery Company

San Antonio, Texas

Term expires 06/30/2010

Region 11 (Arkansas, Iowa, Kansas, Missouri, Nebraska, and Oklahoma)

Steven M. Turner

Turner Dairy L.L.C. (a subsidiary of Prairie Farms Dairy, Inc.)

Covington, Tennessee

Term Expires 06/30/2011

Region 12 (Arizona, Colorado, Nevada, New Mexico, and Utah)

John R. Zuroweste

Dean Foods Company

Dallas, Texas

Term expires 06/30/2012

Region 13 (Idaho, Montana, Oregon, Washington, and Wyoming)

Jerry N. Tidwell

Safeway, Inc.

Pleasanton, California

Term expires 06/30/2010

Appendix A-2, continued

Region 14 (Northern California)

Jay B. Simon Super Store Industries Stockton, California Term expires 06/30/2011

Region 15 (Southern California)

Timothy Kelbel The Kroger Company, Western Division Cincinnati, Ohio Term expires 06/30/2012

Members-At-Large (Processors)

Miriam E. Brown Anderson Erikson Dairy Des Moines, Iowa Term expires 06/30/2012

Michael A. Krueger Shamrock Foods Company Phoenix, Arizona Term expires 06/30/2011

Randy D. Mooney Hiland Dairy Foods Company, L.L.C. Springfield, Missouri Term expires 06/30/2010

Teresa E. Webb Farmland Dairies, L.L.C. Wallington, New Jersey Term expires 06/30/2010

Members-At-Large (Public)

Mary A. Hill Jackson, Mississippi Term expires 06/30/2012

Appendix B-1 National Dairy Promotion and Research Board 2009 Actual Income and Expenses (Thousands)

Income	
Assessments	\$93,828
Interest	39
Total Income	\$93,867
General Expenditures	
General and Administrative	\$3,991
USDA Oversight	819
Total General Expenditures	\$4,810
Program Expenditures	
Domestic Marketing and Export Enhancement	\$103,592
Amortization of NAEMS ¹ Study	1,833
Total Program Expenditures	\$105,424
Excess of Revenue (Under) Over Expenditures	(\$16,287)
Fund Balance, Beginning of Year	\$38,626
Fund Balance, End of Year	\$22,339

¹National Air Emissions Monitoring Study.

Source: Independent Auditor's Report of the National Dairy Board and USDA records.

Appendix B–2 2009 USDA Oversight Costs for the National Dairy Promotion and Research Board (Thousands)

Salaries and Benefits Travel Miscellaneous Equipment Total	\$565 102 61 3 \$731
Independent Evaluation	\$112
Total ²	\$843

¹Includes overhead, transportation, rent, communications, utilities, postage, contracts, supplies, photocopying, and Office of General Counsel costs.

Source: USDA Accounting Reports.

²The totals for USDA expenses differ slightly from those shown in Appendix B–1 because of end-of-year estimates which are adjusted in the following year and correspond to the Federal fiscal year, which runs from October 1through September 30.

Appendix B-3 National Dairy Promotion and Research Board 2009 Approved Budget (Thousands)

Revenues Assessments Program Development Fund Draw Interest Total Income	\$100,600 21,986 <u>600</u> \$123,185
Expenses General and Administrative	\$4,000
USDA Oversight Subtotal	900 \$4,900
Program Budget	
Milk	\$9,604
Cheese	15,713
Ingredients	4,400
Export Enhancement	12,024
Children's Fitness and Nutrition Initiative	16,990
Product Research	6,000
Nutrition Research	8,078
Nutrition Affairs	10,034
Industry Image and Relations	9,575
Foodservice	759
Retail	2,273
Strategy and Insights	14,264
Other	5,300
Subtotal	\$115,013*
Total Budget Expenditures	\$119,913

¹Other includes fixed commitments, butter promotion, value–added milk, and value–added cheese. *UDIA Expense share of total is \$24,851.

Source: Budgets received and approved by USDA from the National Dairy Board.

Appendix B-4 National Fluid Milk Processor Promotion Board 2009 Actual Income and Expenses (Thousands)

Income	
Assessments	\$107,207
Late-Payment Charges	106
Interest	381
Other	6
Total Income	\$107,700
General Expenditures	
California Refund	10,353
Administrative	2,805
USDA Oversight	412
USDA Assessment Verification	74
Total General Expenditures	\$13,644
Program Expenditures	
Media	\$66,953
Promotions	11,091
Public Relations	15,260
Strategic Thinking	1,170
Research, Local Markets, and Program Management	2,132
Medical Advisory Panel	226
Medical Research	63
Program Measurement	108
Total Program Expenditures	\$97,003
Excess of Revenue (Under) Over Expenditures	(\$2,947)
Fund Balance, Beginning of Year	\$22,304
Fund Balance, End of Year	\$19,356

Source: Independent Auditor's Report of the Fluid Milk Board and USDA Records.

Appendix B–5 USDA 2009 Oversight Costs for the National Fluid Milk Processor Promotion Board (Thousands)

Salaries and Benefits	\$403
Travel	17
Miscellaneous ¹	40
Equipment	5
Printing	1
Total	\$466
Independent Evaluation	\$37
Total ²	\$503

¹ Includes overhead, transportation, rent, communications, utilities, postage, contracts, supplies, photocopying, and Office of General Counsel costs.

Source: USDA Accounting Reports.

² The totals for USDA expenses differ slightly from those shown in Appendix B–4 because of end-of-year estimates which are adjusted in the following year.

Appendix B–6 National Fluid Milk Processor Promotion Board 2009 Approved Budget (Thousands)

Revenues	
Assessments	\$107,000
Interest	240
Total Income	\$107,240
Carryover from Previous Fiscal Year	\$4,325
Total Available Funds	\$111,564
Expenses	
General and Administrative	\$2,855
USDA Oversight	570
California Refund	10,210
Subtotal	\$13,635
Program Budget	
Moms	\$58,869
Teens	25,548
Hispanic	6,573
Business Development	4,048
Research	2,778
Program Measurement	109
Subtotal	\$97,925
Unallocated	4

¹Independent Evaluation costs are included in Program Measurement Expenses.

Total Budget Expenditures

Source: Budgets from the National Fluid Milk Board received and approved by USDA.

\$111,564

²Processor Compliance is included in General and Administrative Expenses.

Appendix B-7 2009 Aggregate Income and Expenditure Data Reported to USDA by the Qualified Programs (Thousands)

	2009
Income	
Carryover from Previous Year	$$64,708^{1}$
Producer Remittances	190,598
Transfers from Other Qualified Programs ²	58,369
Transfers to Other Qualified Programs	-55,387
Other Income	6,607
Total Adjusted Annual Income	\$264,895
Expenditures	
General and Administrative	\$8,496
Advertising and Sales Promotion	69,327
Unified Marketing Plan ⁴	65,239
Dairy Foods and Nutrition Research	5,926
Public and Industry Communications	11,886
Nutrition Education	17,032
Market and Economic Research	1,232
Other ⁵	2,965
Total Annual Expenditures	\$182,103
Total Available for Future Year Programs	\$82,792

Source: Data reported by the Qualified Programs.

Differences are due to audit adjustments and varying accounting periods.
 Payments transferred between Qualified Programs differ due to different accounting methods and accounting

³ Includes interest, income from processors and handlers, sales of supplies and materials, contributions, and rental

⁴ Unified Marketing Plan: Reported local spending by United Dairy Industry Association units participating in the Dairy Management Inc. unified marketing plan to fund national implementation programs.

⁵ Includes capital expenses.

Appendix B–8 Aggregate 2009 Advertising Expenditure Data Reported to USDA by the Qualified Programs (Thousands)

Advertising Programs

Fluid Milk	\$9,557 [13.8%]
Cheese	46,804 [67.5%]
Butter	2,860 [4.1%]
Frozen Dairy Products	442 [0.6%]
Other ¹	<u>9,664</u> [14%]
Total	\$69,327 [100%]

¹ Includes "Real Seal," holiday, multi-product, calcium, foodservice, product donation at State fairs, and other events and contributions for displays or promotional events.

Source: Data reported by the Qualified Programs.

FINANCIAL STATEMENTS

National Dairy Promotion and Research Board Years Ended December 31, 2009 and 2008 With Report of Independent Auditors

Financial Statements

Years Ended December 31, 2009 and 2008

Contents

Report of Independent Auditors	1
Financial Statements	
Balance Sheets	
Statements of Activities	3
Statements of Cash Flows	
Notes to Financial Statements	



Ernst & Young LLP 233 South Wacker Drive Chicago, IL 60606-6301

Tel: +1 312 879 2000 Fax: +1 312 879 4000 www.ey.com

Report of Independent Auditors

The Board of Directors National Dairy Promotion and Research Board

We have audited the accompanying balance sheets of National Dairy Promotion and Research Board (NDB) as of December 31, 2009 and 2008, and the related statements of activities and cash flows for the years then ended. These financial statements are the responsibility of NDB's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of NDB's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of NDB's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of National Dairy Promotion and Research Board as of December 31, 2009 and 2008, and the changes in its net assets and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Signed by Ernst & Young LLP

May 6, 2010

Balance Sheets

	December 31	
	2009	2008
Assets		
Cash and cash equivalents	\$ 29,139,296	\$ 40,847,072
Assessments receivable, net of allowance for doubtful		
accounts of \$200,000 in 2009 and 2008	8,781,521	
Accrued interest receivable	145	8,024
Investment in NAEMS study, net of accumulated		
amortization of \$6,000,000 in 2009 and		
\$4,166,667 in 2008		1,833,333
Fixed assets, net of accumulated depreciation of		20.020
\$195,104 in 2009 and \$179,365 in 2008	29,920	28,838
Total assets	\$ 37,950,882	\$ 53,401,781

Liabilities and net assets		
Liabilities:	\$ 15,087,443	\$ 14,349,713
Due to related party – DMI	1,697	60,185
Accounts payable	522,861	,
Accrued expenses and other liabilities Total liabilities	15,612,001	14,775,444
Total natifices	15,012,001	14,770,111
Unrestricted net assets:		
Designated	16,387,776	27,017,837
Undesignated	5,951,105	11,608,500
Net assets – unrestricted	22,338,881	38,626,337
Total liabilities and net assets	\$ 37,950,882	\$ 53,401,781

See accompanying notes.

Statements of Activities

	Year Ended December 31 2009 2008	
Revenues		2008
Assessments	\$ 93,827,599	\$ 94,484,051
Interest income	38,925	1,036,239
Total revenues	93,866,524	95,520,290
Expenses		
Programs:		
Domestic and export marketing	103,591,562	105,921,955
United States Department of Agriculture	738,525	818,639
Amortization of NAEMS study	1,833,333	2,000,000
Total programs	106,163,420	108,740,594
General and administrative:		
DMI general and administrative	3,279,161	2,738,782
General and administrative	711,399	549,532
Total general and administrative	3,990,560	3,288,314
Total expenses	110,153,980	112,028,908
Decrease in net assets	(16,287,456)	(16,508,618)
Net assets at beginning of year	38,626,337	55,134,955
Net assets at end of year	\$ 22,338,881	\$ 38,626,337

See accompanying notes.

Statements of Cash Flows

	Year Ended December 31	
	2009	2008
Operating activities	•	
Change in net assets	\$ (16,287,456)	\$ (16,508,618)
Adjustments to reconcile change in net assets to	, , ,	,
net cash used in operating activities:		
Amortization of NAEMS study	1,833,333	2,000,000
Depreciation	15,740	13,841
Changes in assets and liabilities:	,	•
Assessments receivable	1,902,993	(2,698,083)
Accrued interest receivable	7,879	96,800
Due to related party – DMI	737,730	1,577,479
Accounts payable	(58,488)	(74,096)
Accrued expenses and other liabilities	157,315	168,899
Net cash used in operating activities	(11,690,954)	(15,423,778)
Investing activities		
Purchases of fixed assets	(16,822)	(2,162)
Net decrease in cash and cash equivalents	(11,707,776)	(15,425,940)
Cash and cash equivalents at beginning of year	40,847,072	56,273,012
Cash and cash equivalents at end of year	\$ 29,139,296	\$ 40,847,072

See accompanying notes.

Notes to Financial Statements

December 31, 2009 and 2008

1. Organization

The National Dairy Promotion and Research Board (NDB) was established on May 1, 1984, pursuant to The Dairy and Tobacco Adjustment Act of 1983 (Public Law 98-180), as part of a comprehensive strategy to reduce milk surplus supplies in the United States (U.S.) and increase human consumption of U.S.-produced fluid milk and other dairy products. The purpose of NDB is to establish a coordinated program of promotion and research designed to strengthen the U.S. dairy industry's position in the marketplace and to maintain and expand domestic and international markets' usage of U.S.-produced fluid milk and other dairy products.

The United States Department of Agriculture (USDA) approved a joint venture between NDB and the United Dairy Industry Association (UDIA) to form Dairy Management Inc. (DMI) effective January 1, 1995. The purpose of DMI, a related organization, is to promote greater coordination, efficiency, and effectiveness and avoid incompatibility and duplication in the marketing programs and projects undertaken by NDB and UDIA, which jointly plan, develop, and implement their various marketing programs and activities through DMI, subject to the approval of the USDA.

NDB funds DMI on a cost-reimbursement basis. Core costs, which include staff salaries and benefits, travel, Board of Directors, and office operating expenses, are primarily funded by NDB, with UDIA funding one-half of Board of Directors and executive office costs. Marketing program costs, which include expenses associated with implementing the marketing programs of NDB and UDIA, are funded by NDB and UDIA.

2. Summary of Significant Accounting Policies

Basis of Presentation

The financial statements are prepared on the accrual basis of accounting in conformity with generally accepted accounting principles (GAAP) in the United States. These principles require management to make estimates and judgments that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported amounts of revenues and expenses in the reporting period. Actual results could differ from those estimates.

Notes to Financial Statements (continued)

2. Summary of Significant Accounting Policies (continued)

FASB Codification

Effective July 1, 2009, the Financial Accounting Standards Board (FASB) designated the FASB Accounting Standards Codification (ASC or Codification) as the single source of authoritative accounting and reporting standards in the United States applicable to all nongovernmental entities, with the exception of guidance issued by the Securities and Exchange Commission (SEC) and its staff. The Codification is not intended to change U.S. GAAP; instead it reorganizes pronouncements into topics and displays all topics in a consistent structure. The restructuring of U.S. GAAP content has affected how reporting entities reference accounting guidance; consequently all references to accounting standards within these statements comply with the new Codification requirements.

Financial Instruments

The carrying values of cash and cash equivalents, assessments receivable, accrued interest receivable, due to related party, accounts payable, and accrued expenses and other liabilities are reasonable estimates of fair value due to the short-term nature of these financial instruments.

Cash and Cash Equivalents

Cash equivalents include all liquid investments with a maturity of three months or less at the date of acquisition.

Notes to Financial Statements (continued)

2. Summary of Significant Accounting Policies (continued)

Fair Value Measurements

ASC 820 establishes a three-level valuation hierarchy for disclosure of fair value measurements for financial instruments measured at fair value. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are defined as follows:

Level 1 – Inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 – Inputs to the valuation methodology include quoted prices for similar assets or liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instruments.

Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

NDB has classified \$11,549,474 and \$39,634,108 of investments, which are included in cash and cash equivalents as of December 31, 2009 and 2008, respectively, as Level 1. The investments consist of U.S. federal agency securities.

Assessments

Assessment revenue is generated by a mandatory assessment of \$0.15 per hundredweight on all milk produced and marketed in the contiguous United States. Milk producers can direct up to \$0.10 per hundredweight to USDA-qualified state and regional generic dairy promotion organizations. For the years ended December 31, 2009 and 2008, the net NDB assessment was approximately \$0.0504 per hundredweight of milk marketed. Assessment revenue is recognized in the month in which milk is marketed.

During 2005, the Dairy Promotion and Research Order was amended to allow organic dairy producers, as defined, to be exempt from paying assessments. The amount of exempted assessments in 2009 and 2008 was approximately \$660,969 and \$602,435, respectively.

Notes to Financial Statements (continued)

2. Summary of Significant Accounting Policies (continued)

Fixed Assets

Fixed assets consist of computer software and are recorded at cost. Depreciation and amortization are provided in amounts sufficient to charge the costs of depreciable assets to operations over estimated service lives of five years using the straight-line method.

Income Taxes

The Internal Revenue Service has ruled that NDB is an entity engaging in an activity under the oversight of the Department of Agriculture and, accordingly, is not subject to federal taxation.

Employee Costs

NDB's operations are staffed by DMI employees who receive vacation, retirement, health, and other benefits provided by DMI.

3. Cash and Cash Equivalents

Cash and cash equivalents consist of the following as of December 31:

	 2009	2008
Cash	\$ 17,589,822	\$ 1,212,964
U.S. federal agency securities	11,549,474	39,634,108
• •	\$ 29,139,296	\$ 40,847,072

4. Assessments Receivable

Assessments receivable are recorded at the estimated net amounts to be received based on the amount of milk marketed and the average payment per hundredweight. In accordance with Public Law 98-180, NDB forwards unpaid assessments to the USDA for collection and other legal proceedings. As of December 31, 2009 and 2008, approximately \$67,000 of cumulative unpaid assessments were at the USDA pending further action. Such amounts are not included in assessments receivable as of December 31, 2009 and 2008, and will not be recorded as revenue until such amounts are ultimately received. Civil penalties exist for any persons who do not pay the assessment and/or file required milk marketed assessment reports with NDB.

Notes to Financial Statements (continued)

5. Related Party Transactions

NDB has funded DMI program and core costs as follows:

	2009	2008
Program costs	\$ 74,421,171	\$ 81,808,386
Core costs	32,449,552	26,852,351
Total funding to DMI	\$ 106,870,723	\$ 108,660,737

The U.S. Dairy Export Council (USDEC) is a related party that was founded by the boards of both NDB and UDIA and began operations effective January 1, 1996. The purpose of USDEC is to improve the marketing conditions for the U.S. dairy industry with respect to the export of U.S. dairy products by promoting the acceptability, consumption, and purchase of U.S. dairy products in international markets. Of the program funding that NDB reimbursed DMI, \$8,148,823 and \$7,921,080 for 2009 and 2008, respectively, was reimbursed to DMI for USDEC's operations.

NDB reimburses the USDA for the cost of administrative oversight and compliance audit activities. Expenses incurred under this arrangement amounted to \$738,525 and \$818,639 for 2009 and 2008, respectively.

6. Net Assets

During 2009 and 2008, NDB's Board designated a portion of net assets for cash reserves. Total designations of net assets are as follows:

	 2009	2008
Designated net assets:		
Cash reserves	\$ 1,800,000	\$ 1,800,000
NAEMS study		1,833,333
Subsequent-year program activity	14,587,776	23,384,504
Total designated net assets	 16,387,776	27,017,837
Undesignated net assets	5,951,105	11,608,500
Total net assets	\$ 22,338,881	\$ 38,626,337

Notes to Financial Statements (continued)

7. National Air Emissions Monitoring Study (NAEMS)

In 2005, the U.S. Congress approved a one-time waiver in restrictions that limited the use of checkoff dollars to post-harvest research activities. The waiver allowed NDB to use checkoff money to pay for research into the types of air emissions coming from a cross-section of dairy operations.

In January 2006, NDB contracted with National Milk Producers Federation (NMPF) to conduct a research project to study the environmental effects of air emissions from dairy operations. Total investment in the project, which began in December 2006, was \$6.0 million. NMPF placed these funds into an escrow account and released an NDB-approved portion of these funds to the Agricultural Air Research Council (AARC), which conducted the research for a three-year period.

NDB has amortized the investment over the three-year life of the project as follows:

	2009	2008
Investment in NAEMS Air Emissions Study Less: accumulated amortization	\$ 6,000,000 6,000,000	\$ 6,000,000 4,166,667
Net investment		\$ 1,833,333

8. Subsequent Events

As of April 30, 2010, NDB guaranteed DMI's \$10,000,000 revolving bank line of credit, which expires on April 30, 2011. Borrowings made, if any, under the line of credit accrue interest, payable monthly, at the prevailing prime interest rate.

NDB evaluated events occurring between January 1, 2010 and May 6, 2010, which is the date when the financial statements were available to be issued. NDB did not have any subsequent events, except that mentioned in the previous paragraph, to recognize or disclose.

Financial Statements

and Independent Auditor's Report

Year Ended December 31, 2009

1250 H Street, N.W., Suite 950 Washington, D.C. 20005

Part I

Financial Statements and Independent Auditor's Report for the Year Ended December 31, 2009

Part II

Independent Auditor's Report on Internal Control (Combined Report Applicable to Internal Control over Financial Reporting Based on an Audit of Financial Statements and Internal Control over Compliance Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards)

Part III

Independent Auditor's Comments on Compliance with Government Auditing Standards

PART I

Table of Contents

Independent Auditor's Report	. 1-2
Financial Statements:	
Statement of Financial Position	. з
Statement of Revenues, Expenses and Changes in Net Assets	. 4
Statement of Cash Flows	. 5
Notes to Financial Statements	. 6-12
Supplementary Information:	
Independent Auditor's Report on Supplementary Information	. 14
Schedules of Actual Compared to Budget:	
Revenues and Expenses (Budget Basis)	. 15
Program Expenses (Budget Basis)	. 16
Administrative Expenses (Budget Basis)	. 17
Schedule of Cash Receipts and Disbursements	. 18



Independent Auditor's Report

To the Board of Directors National Fluid Milk Processor **Promotion Board** Washington, D.C.

We have audited the accompanying statement of financial position of the National Fluid Milk Processor Promotion Board as of December 31, 2009, and the related statements of revenues, expenses and changes in net assets and cash flows for the year then ended. These financial statements are the responsibility of the National Fluid Milk Processor Promotion Board's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the National Fluid Milk Processor Promotion Board as of December 31, 2009, and the results of its operations, changes in its net assets and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

To the Board of Directors National Fluid Milk Processor Promotion Board Page two

In accordance with *Government Auditing Standards*, we have also issued reports dated March 30, 2010 on our consideration of the National Fluid Milk Processor Promotion Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of those reports is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting or on compliance. Those reports are an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

SNYDER COHN, PC Bethesda, Maryland

Snyder Cohn, PC

March 30, 2010

C-2

National Fluid Milk Processor Promotion Board

Statement of Financial Position

December 31, 2009	
Assets	
Current assets:	
Cash and cash equivalents	\$ 12,411,882
Assessments receivable, net	10,824,987
Investments - held to maturity	1,028,288
Future year costs	4,505,749
Prepaid expenses	35,157
Other receivables	32,372
Total current assets	28,838,435
Property and equipment, net	136,525
Total assets	\$ 28,974,960
Liabilities and net assets	
Current liabilities:	
Accounts payable and accrued expenses	\$ 9,600,592
Deferred compensation, related party	18,783
Total current liabilities	9,619,375
Commitments	
Net assets:	
Designated for contingencies	2,500,000
Undesignated	16,855,585
Total net assets	19,355,585
Total liabilities and net assets	\$ 28,974,960

Statement of Revenues, Expenses and Changes in Net Assets

For the year ended December 31, 2009	
Revenues:	
Assessments	\$ 108,251, 43 5
Late payment charges	67,303
Interest income	234,687
Other	16,419
Total revenues	108,569,844
Expenses:	
Program expenses:	
Moms target	58,886,089
Teens target	23,461,717
Hispanic target	6,441,230
Research	2,214,397
Business development	4,071,752
Program measurement	34,141
Total program expenses	95,109,326
Other expenses:	
California grant	10,236,498
Administrative	2,627,024
USDA oversight	477,931
USDA compliance audit	111,934
Loss on disposal of property and equipment	8,947
Total other expenses	13,462,334
Total expenses	108,571,660
Excess of expenses over revenues	(1,816)
Net assets - beginning	19,357,401
Net assets - ending	\$ 1 <u>9,355,585</u>

C-2

National Fluid Milk Processor Promotion Board

Statement of Cash Flows

For the year ended December 31, 2009		
Cash flows from operating activities:		
Excess of expenses over revenues	\$	(1,816)
Adjustments to reconcile excess of expenses over revenues	·	(-,,
to net cash provided by operating activities:		
Depreciation		76,734
Loss on disposal of property and equipment		8,947
Changes in assets and liabilities:		
Increase in assessments receivable		(198,244)
Decrease in future year costs		2,801,648
Increase in prepaid expenses		(21,499)
Decrease in other receivables		298,944
Decrease in accounts payable and accrued expenses		(1,489,243)
Decrease in deferred compensation		(103,680)
Net cash provided by operating activities		1,371,791
Cash flows from investing activities:		
Proceeds from sale of property and equipment		300
Payments made for property and equipment		(51,234)
Purchase of investments		(1,028,288)
Proceeds from sale of investments		6,100,000
Net cash provided by investing activities	·	5,020,778
Net increase in cash and cash equivalents		6,392,569
Cash and cash equivalents - beginning		6,019,313
Cash and cash equivalents - ending	\$	12,411,882

Notes to Financial Statements

December 31, 2009

Note 1: Summary of significant accounting policies:

The National Fluid Milk Processor Promotion Board (the Board) was established pursuant to the authority of the Fluid Milk Promotion Act (the Act) of 1990, Subtitle H of the Title XIX of the Food, Agriculture, Conservation and Trade Act of 1990. The purpose of the Board is to administer the provisions of the Fluid Milk Promotion Order (the Order) established pursuant to the Act which establishes an orderly procedure for the development, and the financing through an assessment, of a coordinated program of advertising, promotion, and education for fluid milk products.

The Act requires that a referendum be conducted among processors to determine if a majority favored implementing the fluid milk program. In the October 1993 initial referendum, the majority of processors voted to approve the implementation of the fluid milk program. A continuation referendum was held in February-March 1996. Of the processors voting in that referendum, the majority favored continuation of the fluid milk program. In November 1998, another continuation referendum was held at the request of the Board and processors voted to continue the fluid milk program as established by the Order. The Act and Order states that the United States Department of Agriculture (USDA) will hold future referenda upon the request of the Board, processors representing 10% or more of the volume of fluid milk products marketed by those processors voting in the last referendum, or when called by the U.S. Secretary of Agriculture. On March 30, 2004, a Notice of Review and Request was published in the Federal Register. The purpose of the Review was to determine whether the Order should continue without change. No comments were received and the Order will continue without change.

For financial reporting purposes, the Board is considered a quasi-governmental agency of the U.S. government. As such, it is exempt from income taxes under the Internal Revenue Code. The USDA and its affiliated agencies operate in an oversight capacity of the Board.

The financial statements of the Board are prepared in conformity with accounting principles generally accepted in the United States of America. To facilitate the understanding of data included in the financial statements, summarized below are the more significant accounting policies.

<u>Assessments</u> - Assessments are generated from those processors marketing more than 3,000,000 pounds of fluid milk per month by a 20-cent per hundred weight assessment on fluid milk products processed and marketed commercially in consumer-type packages in the 48 contiguous United States and the District of Columbia. Assessment revenue is recognized in the month in which the fluid milk product is processed.

Notes to Financial Statements

December 31, 2009

Note 1: Summary of significant accounting policies: (continued)

Late payment charges are assessed, as provided under the Act, to processors who do not remit monthly assessments within 30 days following the month of assessment. The late payment charge is equal to 1.5% of unpaid assessments and accrues monthly. At no time does the Board stop accruing interest on these assessments. For 2009, an allowance for doubtful accounts of \$-0- has been established for those amounts where the late charges are being appealed.

<u>California grant</u> - In accordance with the Act, the Board is required to provide a grant to a third party equal to 80% of the assessments collected from Regions 14 and 15 to implement a fluid milk promotion campaign. Disbursements under these provisions are recorded as "California Grant" in the accompanying financial statements.

<u>Cash equivalents</u> - For purposes of the statement of cash flows, the Board considers all highly liquid investments with an original maturity of three months or less to be cash equivalents.

<u>Future year costs</u> - Future year costs represent costs incurred for 2010 budget year projects.

<u>Assessments receivable</u> - An allowance for uncollectible accounts has been established for those assessments which management has determined as uncollectible. The total allowance for uncollectible amounts at December 31, 2009 was \$152,448.

<u>Property and equipment</u> - Property and equipment are stated at cost. Depreciation is provided over the estimated useful lives of the related assets on a straight-line basis. Expenditures for repairs and maintenance are charged to expense as incurred.

<u>Use of estimates</u> - The Board has made certain estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the period. Actual results could differ from those estimates.

<u>Fair value</u> — FASB ASC 820 Fair Value Measurement and Disclosure, establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques are required to maximize the use of observable inputs and minimize the use of unobservable inputs. There are three general valuation techniques that may be used to measure fair value, as described below:

Notes to Financial Statements

December 31, 2009

Note 1: Summary of significant accounting policies: (continued)

- A) Market approach Uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. Prices may be indicated by pricing guides, sale transactions, market trades, or other sources;
- B) Cost approach Based on the amount that currently would be required to replace the service capacity of an asset (replacement cost); and
- C) Income approach Uses valuation techniques to convert future amounts to a single present amount based on current market expectations about the future amounts (includes present value techniques and option-pricing models). Net present value is an income approach where a stream of expected cash flows is discounted at an appropriate market interest rate.

<u>Advertising</u> - In accordance with its mission, the Board has approved the development of direct and nondirect response advertising and promotional activities. All costs related to these activities are charged to expense as incurred.

Note 2: Cash and cash equivalents:

At December 31, 2009, the bank balance of the Board's cash deposits was entirely covered by federal depository insurance or was covered by collateral held by the Board's agent in the Board's name. Included in cash and cash equivalents is \$2,500,000 of Board designated cash reserves.

Note 3: Investments:

The Board is required to follow the Agricultural Marketing Service (AMS) investment policy. Accordingly, the Board is authorized to invest in securities consisting of obligations issued or fully insured or guaranteed by the U.S. or any U.S. government agency, including obligations of government-sponsored corporations, and must mature within one year or less from the date of purchase. Investments are carried at cost, which approximates fair value. The Board's investments are covered by collateral and held by the counterparty's trust department or agent in the Board's name.

At December 31, 2009, the Board held one certificate of deposit totaling \$1,028,288. This certificate of deposit has been issued through the Certificate of Deposit Account Registry Service (CDARS) and is entirely covered by federal depository insurance. A summary of the terms for the certificate of deposit and the annual yield are as follows:

Value	Term	Yield	
\$1,028,288	12 months	3.00%	

Notes to Financial Statements

December 31, 2009

Note 4: Property and equipment:

Property and equipment consist of the following as of December 31, 2009:

Furniture and fixtures	\$ 31,119
Leasehold improvements	130,324
Office equipment	 109,347
	 270,790
Less: accumulated depreciation	 (134,265)
	\$ 136,525

Depreciation expense for the year ended December 31, 2009 was \$76,734.

Note 5: Line of credit:

During December 2009, the Board obtained a revolving line of credit for up to \$2,500,000. The line provides for advances from time to time, but must be paid down to zero (\$0) and remain at zero (\$0) for 90 consecutive days at least once every 12 months. Interest accrues on outstanding balances at prime minus .25% with an interest floor of 3.75%. The line is secured by all the assets of the Board including cash, assessments, furniture, fixtures, equipment and personal property. The Board is also subject to reporting requirements and financial covenants as outlined in the line of credit agreement. The line expires on December 2, 2011.

Note 6: Compliance matters:

In accordance with the Act and the Order, effective one year after the date of the establishment of the Board, the Board shall not spend in excess of 5% of the assessments collected for the administration of the Board. For the year ended December 31, 2009, the Board did not exceed this limitation.

Notes to Financial Statements

December 31, 2009

Note 7: Program administration:

At the end of 2008 and during 2009, the Board entered into agreements with various organizations to develop programs for advertising, promotion, consumer education and certain minority initiatives in connection with the national fluid milk campaign. The funding levels vary for the various organizations and are subject to approval. The organizations and the expiration dates of the agreements are as follows:

Agency	Expiration	
DraftFCB, Inc.	June 2011	
Deutsch, Inc.	December 2010	
Publicidad Siboney Corporation		
d/b/a Siboney USA	December 2011	
CMGRP, Inc. d/b/a Weber Shandwick	December 2010	

To assist the above organizations in the development of advertising, promotion, consumer education and certain minority initiatives in connection with the national fluid milk campaign, the Board has also entered into numerous smaller contracts throughout the 2009 year.

In October 2007, the Board entered into two agreements, an office services and a professional services agreement, with the International Dairy Foods Association (IDFA).

The office services agreement was renewed during October 2009 for a fifteen month period expiring on December 31, 2010. Under this agreement, IDFA will provide certain administrative services and resources to the Board. Fees for these services are based on predetermined amounts totaling \$4,370 per month plus out-of-pocket costs and hourly charges for additional services. During the year ended December 31, 2009, the Board incurred \$58,204 under this agreement.

The professional services agreement was renewed during 2009 and becomes effective January 1, 2010 until December 31, 2010. The agreement allows for IDFA to assist the Board in performing general services pursuant to its responsibility under the Fluid Milk Promotion Act of 1990. General services are set forth in greater detail in the agreement, but include areas such as:

- Medical and nutritional
- · Sales and econometric analysis
- In house legal services
- Specialized IT services
- Other services as requested

Notes to Financial Statements

December 31, 2009

Note 7: Program administration: (continued)

Fees for these services are based on hourly rates ranging from \$140 to \$400 plus out-of-pocket costs. Total costs incurred under this agreement were \$151,559 for the year ended December 31, 2009.

Note 8: Commitments:

The Board entered into a consulting agreement with an outside consultant during 2009. The duration of the agreement was from March 1, 2009 through March 31, 2010. The consultant provided program support for the Board's advertising, public relations and promotions programs as requested and directed by the Board. Fees for these services were billed at an hourly rate of \$70 plus any additional out-of-pocket expenses. The total fees and out-of-pocket expenses paid to the consultant were \$143,266 for the year ended December 31, 2009.

Subsequent to year end, the agreement was amended to change the term of the contract to begin on January 1, 2010 and end automatically on December 31, 2010. Additionally, per the amended contract, the consultant is paid a weekly consulting fee of \$2,658 plus reasonable and necessary out-of-pocket expenses. The Board has the option to pay the consultant hourly at \$72.00 per hour as long as written notice is provided to the consultant. The total fees and out-of-pocket expenses paid to the consultant shall not exceed \$168,240 for 2010.

Note 9: Operating lease:

In October 2007, the Board entered into a 20-month lease agreement with IDFA, which expired on May 31, 2009. The board renewed the lease for an additional twelve months beginning June 1, 2009 through May 31, 2010. Under the terms of the lease, the Board is required to pay monthly base rent plus additional monthly charges equal to a pro rata portion of the building's operating expenses and other charges as defined in the lease agreement. The future minimum base rental payment under the agreement for the year ending December 31, 2010 is \$67,379. The Board incurred \$161,320 of rental expense during 2009.

Note 10: Transactions with the United States Department of Agriculture:

Under the provisions of the Act and the Order, the Board is required to pay the United States Department of Agriculture certain fees for oversight and evaluation costs. These costs were \$589,865 during 2009.

Notes to Financial Statements

December 31, 2009

Note 11: Related party activity:

Accounting services for the Board are performed by Bridgewater Wealth & Financial Management, LLC (Bridgewater). The cost of these services was \$390,000 during 2009. A principal of Bridgewater serves as the Chief Financial Officer of the Board and receives compensation for services performed.

The Board has entered into an employment agreement with a new Chief Executive Officer (CEO). The agreement runs from March 1, 2009 to February 28, 2011 and provides for annual compensation, benefits, and increases based upon the CEO's annual performance evaluation. The agreement also includes provisions that would require severance payments upon early termination of the agreement.

Note 12: Retirement plan:

In October 2007, the Board adopted a safe harbor 401(k) plan. An employee is eligible to participate in the plan once the service requirement is completed as defined in the plan document. If an employee was employed by the Board on October 1, 2007, the service requirement was waived and those employees were immediately eligible to participate. Participants may elect to defer a portion of their salary and contribute it to the retirement plan. Additionally, the Board will make a safe harbor matching contribution equal to 100% of deferrals that do not exceed 3% of the employees' compensation plus a 50% match for deferrals between 3% - 5% of employees' compensation. However, for any plan year when the plan is not a "safe harbor" plan, the contribution is at the Board's discretion. The Board's contribution totaled \$158,746 for the year ended December 31, 2009.

Note 13: Subsequent events:

Subsequent events have been evaluated through March 30, 2010, which is the date the financial statements were available to be issued.

SUPPLEMENTARY INFORMATION



Independent Auditor's Report on Supplementary Information

To the Board of Directors **National Fluid Milk Processor Promotion Board** Washington, D.C.

Our report on our audit of the basic financial statements of the National Fluid Milk Processor Promotion Board for 2009 appears on pages 1 and 2. We conducted our audit for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental information presented on pages 15 to 19 for the year ended December 31, 2009 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information, other than the budget amounts, has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

SNYDER COHN, PC Bethesda, Maryland

Snyder Cohn, PC

March 30, 2010

Schedule of Revenues and Expenses Actual Compared to Budget (Budget Basis)

Unexpended/ Amended Budget	Current Year Actual	, , , , , , , , , , , , , , , , , , , ,	
(Unaudited)			
\$ 107,000,000	\$ 108,251,435	\$ 1,251,435	
		67,303	
240,000		(5,313)	
		16,419	
4,324,500	<u> </u>	(4,324,500)	
111,564,500	108,569,844	(2,994,656)	
97,925,300	93,079,473	(4,845,827)	
3,888,112	2,029,853	(1,858,259)	
101,813,412	95,109,326	(6,704,086)	
10,210,000	10,236,498	26,498	
2,855,346	2,627,024	(228,322)	
570,000	589,865	19,865	
***************************************	8,947	8,947	
13,635,346	13,462,334	(173,012)	
(3,888,112)		3,888,112	
111,560,646	108,571,660	(2,988,986)	
3,854	•	(3,854)	
	Budget (Unaudited) \$ 107,000,000	Budget (Unaudited) \$ 107,000,000 \$ 108,251,435 67,303 240,000 234,687 16,419 16,419 4,324,500 108,569,844 97,925,300 93,079,473 3,888,112 2,029,853 101,813,412 95,109,326 10,210,000 10,236,498 2,855,346 2,627,024 570,000 589,865 - 8,947 13,635,346 13,462,334 (3,888,112) - 111,560,646 108,571,660	

$\frac{7}{2}$

National Fluid Milk Processor Promotion Board

Schedule of Program Expenses Actual Compared to Budget (Budget Basis)

For the year ended December 3	31, 2009						
	Current Year Amended Budget (Unaudited)	Expended Current Year Actual	Actual Over (Under) Budget	Prior Year Unexpended Budget (Unaudited)	Expended Prior Year Actual	Actual Over (Under) Budget	Total Program Activity
Moms target Teens target Hispanic target Research Business development Program measurement	\$ 58,869,000 25,548,500 6,573,000 2,778,000 4,047,800 109,000	\$ 57,992,659 22,926,009 6,438,047 1,731,617 3,990,182 959	\$ (876,341) (2,622,491) (134,953) (1,046,383) (57,618) (108,041)	\$ 1,740,423 681,222 75,914 1,177,396 97,951 115,206	\$ 893,430 535,708 3,183 482,780 81,570 33,182	\$ (846,993) (145,514) (72,731) (694,616) (16,381) (82,024)	\$ 58,886,089 23,461,717 6,441,230 2,214,397 4,071,752 34,141
Total program expenses	\$ 97,925,300	\$ 93,079,473	\$ (4,845,827)	\$ 3,888,112	\$ 2,029,853	\$ (1,858,259)	\$ 95,109,326

Schedule of Administrative Expenses Actual Compared to Budget (Budget Basis)

For the year ended December 31, 2009			·	
	Current Year Amended <u>Budget</u>	Current Year Actual	Actual Over (Under) Budget	
	(Unaudited)			
Board meeting expenses	\$ 300,000	\$ 223,032	\$ (76,968)	
Resource development committee		515	515	
Staff salaries and benefits:				
Staff salaries and benefits	2,179,643	1,971,135	(208,508)	
Program management salary allocation	(1,530,000)		154,887	
Total staff salaries and benefits	649,643	596,022	(53,621)	
Finance and administration:				
Contract staff	160,000	160,000	_	
Consultants - HR, IT	73,200	68,424	(4,776)	
Financial services	390,000	390,000	(1,7.0)	
Total finance and administration	623,200	618,424	(4,776)	
Other operating expenses:				
Legal	475,000	392,590	(82,410)	
Audits	80,000	75,567	(4,433)	
Office facilities	170,000	161,320	(8,680)	
Support and maintenance	90,500	57,194	(33,306)	
Staff travel	275,000	289,482	14,482	
Telephone	25,000	32,518	7,518	
Insurance	40,000	11,686	(28,314)	
Postage and delivery	20,000	17,333	(2,667)	
Payroll service and				
pension administration	6,900	7,495	595	
Office supplies and expense	40,000	43,183	3,183	
Employee development	25,000	3,670	(21,330)	
Miscellaneous	35,000	20,259	(14,741)	
Unallocated administrative	103	- 	(103)	
Amortization and depreciation	4 000 500	76,734	76,734	
Total other operating expenses	1,282,503	1,189,031	(93,472)	
Total administrative expenses	\$ 2,855,346	\$ 2,627,024	\$ (228,322)	

Schedule of Cash Receipts and Disbursements

For the year ended December 31, 2009	
Cash receipts from operations:	
Assessments	\$ 108,332,482
Late payment charges	67,303
Interest income	254,342
Other	<u>16,419</u>
Cash receipts from operations	108,670,546
Cash receipts and disbursements from investing activities:	
Proceeds from sale of property	300
Proceeds from investments	6,100,000
Purchase of investments	(1,028,288)
Purchase of property and equipment	(51,234)
Cash receipts from investing activities	5,020,778
Cash disbursements for operations	(107,298,755)
Excess of cash receipts over disbursements	6,392,569
Cash and cash equivalents - beginning	6,019,313
Cash and cash equivalents - ending	<u>\$ 12,411,882</u>

PART II



Independent Auditor's Report on Internal Control (Combined Report Applicable to Internal Control over Financial Reporting Based on an Audit of Financial Statements and Internal Control over Compliance Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards)

To the Board of Directors National Fluid Milk Processor Promotion Board Washington, D.C.

We have audited the financial statements of the National Fluid Milk Processor Promotion Board (the Board), as of and for the year ended December 31, 2009, and have issued our report thereon dated March 30, 2010. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States.

In planning and performing our audit, we considered the Board's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Board's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Board's internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

As part of obtaining reasonable assurance about whether the Board's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

To the Board of Directors National Fluid Milk Processor Promotion Board Page two

This report is intended solely for the information of the Board of Directors of the National Fluid Milk Processor Promotion Board, management, and the Dairy Programs, Promotion and Research Branch of the Agricultural Marketing Service Agency of the United States Department of Agriculture, and is not intended to be and should not be used by anyone other than these specified parties.

SNYDER COHN, PC Bethesda, Maryland

Snyder Cohn, PC

March 30, 2010

PART III



To the Board of Directors National Fluid Milk Processor **Promotion Board** Washington, D.C.

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial statement audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the statement of financial position of the National Fluid Milk Processor Promotion Board as of December 31. 2009, and the related statements of revenues, expenses, and changes in net assets and cash flows for the year then ended, and have issued our report thereon dated March 30, 2010. The financial statements were prepared in conformity with accounting principles generally accepted in the United States of America.

In connection with our audit, nothing came to our attention, insofar as it relates to accounting matters, that causes us to believe that the National Fluid Milk Processor Promotion Board:

- · Failed to comply with laws and regulations applicable to the National Fluid Milk Processor Promotion Board:
- Failed to comply with Section 1160.212 of the Fluid Milk Promotion Order, relating to the use of assessment funds for the purpose of influencing governmental policy or action;
- Expended assessment funds for purposes other than those authorized by the Fluid Milk Promotion Act and the Fluid Milk Promotion Order;
- Expended or obligated assessment funds on any projects prior to the fiscal year in which those funds were authorized to be expended by the National Fluid Milk Processor Promotion Board's approved Budget and Marketing Plan;
- Did not adhere to the original or amended Budget and Marketing Plan for the year ended December 31, 2009;
- Did not obtain a written contract or agreement with any person or entity providing goods or services to the National Fluid Milk Processor Promotion Board;
- Failed to comply with Section 1999H, paragraph (g) of the Fluid Milk Promotion Order, relating to the limitations on the types of investments which may be purchased by the National Fluid Milk Processor Promotion Board and the insurance or collateral that must be obtained for all National Fluid Milk Processor Promotion Board deposits and investments:

To the Board of Directors National Fluid Milk Processor Promotion Board Page two

- Failed to comply with internal controls;
- Failed to comply with disclosure requirements for lease commitments;
- Failed to comply with standards established requiring signed contracts, USDA approval letters (if necessary), contract term documentation within the file, and CFO's signature on the Board approval letter; or
- Failed to comply with the by-laws of the National Fluid Milk Processor Promotion Board or any other policy of the National Fluid Milk Processor Promotion Board, specifically as they relate to all financial matters, including time and attendance, and travel.

However, our audit was not directed primarily toward obtaining knowledge of such noncompliance.

This report is intended solely for the information and use of the National Fluid Milk Processor Promotion Board, management of the National Fluid Milk Processor Promotion Board, and the Dairy Programs, Promotion and Research Branch of the Agricultural Marketing Service Agency of the United States Department of Agriculture and is not intended to be and should not be used by anyone other than these specified parties.

SNYDER COHN, PC Bethesda, Maryland

Snyder Cohn, PC

March 30, 2010

Appendix D–1

National Dairy Promotion and Research Board and Dairy Management Inc. Contracts Reviewed by USDA

Advertising and Marketing Services

American Dairy Association/Dairy Council, Inc.-Professional Staff Services

American Dairy Association Mid East-Professional Staff Services

Catalina Marketing—Coupon Distribution Program

Dairy Farmers, Inc.—Professional Services

DINI Partners—Cause-Related Campaign Services

Domino's Pizza-Cheese Promotion Activity

G2 Promotional Marketing-Marketing and Retail Support Activities

H.P. Hood-Coupon redemption and distribution

Jefferson Davis Associates—Consumer Acceptance of Shelf-Stable Dairy; Milk Packaging Assessment

Marketing Drive-Marketing and Program Management Services

Media Management Services—Child Nutrition and Fitness Initiative Strategic Support and Planning

Midwest Dairy Association—Professional Services

National Fluid Milk Processor Promotion Board-Chocolate Milk Co-Promotion

National Education Association Health Information Network—Child Nutrition and Fitness Initiative promotion

Novak Birch—Marketing and Creative Services

Perception Research Services-Research on Milk, Cheese and Yogurt Packaging

Prevail! Strategic Marketing and Communications—Hispanic Cheese and Milk Platform support, Lactose Intolerance support

RTC-Dairy Aisle Reinvention Industry Awareness

Satcher Leadership Institute-Cause-Related Marketing

Southeast Dairy Industry Association—Professional Services

Willard Bishop—Market Research on packaging innovation; Strategic Insights Program Services

Wisconsin Milk Marketing Board-National Butter Program

Communications, Public Relations, and Nutrition Education

Action for Healthy Kids, Inc.-Sponsorship

American Dietetic Association-Healthy Weight for Kids Campaign

Bader Rutter & Associates-Sustainability and Marketing Communications

Baxter Communications-Video and Communications Services

Bella Ablava–Russian Marketing Consulting and Services

Blu Skye Sustainability–Dairy Industry Sustainability Initiative Services

Burrelles Luce–Press Clipping Service

Burson-Marsteller-Dairy Ingredient Crisis Preparation

Ceres Connections—Child Nutrition and Fitness Initiative Consulting

Christopher Klose–Editorial Consulting, Communications

Cleveland Dovington Partners, Inc.—Information Technology Services and Consulting;

Contracts Management Enhancements

Appendix D–1, Continued

CMA Consulting –Producer Key Messaging Testing

Dairy Farmers, Inc.—Communication Activities, UMP Implementation

Destination Imagination, Inc.—Sponsorship; Child Nutrition and Fitness Initiative Research

Digital Influence-Social Media Innovation Center Services

Edelman Public Relations Worldwide—Sustainability Initiative, Child Nutrition and Fitness Initiative planning, Fuel Up to Play, Healthy kids/Healthy Schools Communications and strategic planning services, Health Professional Public Relations, Nutrient Rich Foods Marketing and Coalition Services, National Dairy Council News Bureau Public Relations, Website, Newsletter and E-Mail services, Health and Wellness program support, National Dairy Month Services

Exponent—<u>www.dairyfarmingtoday.org</u> Web site services; nutrition education peer support; Low Carbon Diet Review; Sarcopenia and Healthy Aging

FoodMinds L.L.C.—Whey Protein Communications; Health Professional, Nutrition and Scientific Affairs, Nutrient Rich Foods Public Relations; American Society of Nutrition's Spokesperson workshop; Health and Wellness Public Relations

Food, Research, and Action Center-Food Breakfast Expansion

Fresh Approach—Commodity Roundtable Services

Gagen MacDonald L.L.C.—Human Resources Strategic Plan Support; Healthy Kids School Summit Support

The Harman Group-Digestive Health Consumer Immersion and Ideation; Foodservice Pizza research

Health & Nutrition Network–Media Training and Consulting Services

IA Collaborative—Longitudinal Study "Meal Images"

IBM–Network Environment Assessment

I–Site Web Design–School Marketing Web Program

Integer Group—Dairy Producer and Export Communications Program

JDG Consulting-Dairy Issues Management

Kelly Czerwonka-Consulting Services

LevCom-Communications Activity

McDonalds USD-Support for Development, Testing and Commercialization of Products

Mobilization L.L.C.-Video and Production services

National Dairy Shrine-Dairy Scholarship Program

Novak Birch-Website Creative and Design Services

Natural Marketing-Dairy Health and Sustainability Messaging Study

Nutrition Impact L.L.C.—Nutrient Consulting and Project Services

Results Direct-DMI and USDEC Website Activities

Revere Group LTD-IT Services

Richter Studios—www.dairyfarmingtoday.org Web site activities

RTI International–Provide support to Nutrient Rich Foods activities

Ruby-Do Special Projects-Industry Image and Relations Consulting

School Nutrition Foundation—School Marketing and Promotion

Weber Shandwick, Inc.-Consulting and Professional Services; Issues Monitoring and

Response; Crisis Communications Program; on-line dairy advocates program

Appendix D–1, Continued

Export and Ingredients

2020 Company L.L.C.-European Importation Health Certificate Services

American-Mexican Marketing-Mexican Market Representation and Program Activities

Arab Marketing Finance, Inc.-Middle East Market Representation and Program Activities

Bain & Company- Analysis of Global Dairy Market

Canadean Limited-Global Dairy Ingredients Database

Carla Sorenson-Professional Services

Contacts International Consulting, Ltd.—South American Market Representation and Program Activities

Dairy Farmers, Inc.—Caribbean Retail Promotion Activities

DH Business Consulting-Review of the Global Casein Industry and Markets

Howard Valentine- Consulting services

IntNet-Korean Market Representation and Program Activities

Joan C. Parker-Consulting services

JDG Consulting-USDEC Domestic Communications Plan; Capabilities update on Milk

Powder, MPC and milkfat plants

Knowledge Networks-Product Concept and Market Testing and Analysis

Market Makers-Japanese Market Representative and Program Activities

Mistral Group, Ltd.-European Market Representation and Program Activities

National Milk Producers Federation-Global and Domestic Research Activities; Trade

Barriers; Marketing Information and Economic Research Services; Animal Health and Welfare Issues

PR Consultants-Chinese Market Representation and Program Activities

Pacrim Associates—Southeast Asian Market Representation and Program Activities

Results Direct-USDEC Web site Activities www.usdec.org

Schonrock Consulting-Export Guide Analysis and Consulting Services

Stanton, Emms, and Sia-Export and Marketing Research Activities

Steve Calhoun–Consulting services

Story Consulting—Consulting Services

Synovate–Attitudes towards, and usage of, whey proteins among a subset of Japanese consumers

WMC Laboratories—Formulation of nutritional and functional Japanese style and whole grain noodles w/ whey protein concentrates

World Perspective-Korea Cheese Promotion evaluation

Zenith International-Caribbean Cheese and Milk Marketing Services

Market and Economic Research, Consulting Services

Burrelle's Luce-Media Monitoring and Analysis

CFE Solutions, Inc.—Consulting Services

Clift Research-Milk and Cereal Qualitative Research

Culinary Sales Support-Menu Development, Pizza Workshop

Deloitte Consulting L.L.P.—Sustainability Services

Demeter Communication–Industry Image and Relations Services

Digital Cement–Analysis of Health and Audience Strategy

Appendix D-1, Continued

D.L. Peterson and Associates—Qualitative Research on Consumer's Reactions to Fuel Up to Play

Environ—Nutrition Research

Global Dairy Platform, L.L.C.—Development, Maintenance and Dissemination of Specific Market and Consumer Research

GFK Custom Research—Dairy Snacking Concept Screen Testing

Harris Interactive, Inc.—Quantitative Research to assess effectiveness of DMI messaging

Hartman Group- Explore consumer attitudes and behaviors with regard to digestive and immune health

Insight Connection-Milk and Cheese Innovation Quantitative Research

Just Kid, Inc.Pizza-Marketing Research

Kidsay-Trend Tracker Reports

Leah Goldman-Protein Refuel Focus Groups

Market Tools-Milk and Cereal Packaging Report

Marketecture—New product market research; Ala Carte Snack Cheese Test Analysis; Issues Management

Marketing Concepts—Research and Innovation Services; Real Seal Administration

MEE Productions-Research on Development of Nutrient Rich Foods Messaging; School Cart/Cafeteria campaign

Moskowitz—Jacobs-Sensory Research; Attitudinal Research Projects

National Milk Producers Federation—Domestic Research Program Activities/Animal Health and Welfare Issues Activities

NPD Group—Evaluation of Milk and Cheese Concepts, Consumer Reports on Eating Share Trends (CREST)

Pervam & Kroll—Consumer perceptions of astringency in whey protein beverages

PHD Technologies–Trade Mission Activities

Results Direct—Website support services

Shainwright Consulting—Consulting and Research Services

Silliker Inc. –Sodium Analysis in Major Cheese Sold in U.S. Retail Market

Sunflower-Smoothie Sampling

Technomic—Analysis and Tracking of Pizza Market; review of dairy ingredients used in the food industry

TNS Custom Research—Worldpane eSIP Data; Child Nutrition and Fitness Initiative mega pilots qualitative research

Trion Group L.P.—Consulting Services

Valid International—Development, acceptability and effectiveness trial of milk whey protein based ready-to-use therapeutic food in treatment of severe acute malnutrition in under-five children

Video Monitoring Services—Broadcast and Communications Monitoring

Watson Mulhern L.L.C.—Consulting Services

Appendix D-2 National Fluid Milk Processor Promotion Board Contracts Reviewed by USDA

Medical Advisory Board

Steve Abrams, M.D.–Baylor College of Medicine—Medical Advisory Board Member Services Susan Barr, Ph.D.–Medical Advisory Board Member Services Rachel Johnson, Ph.D., R.D.–Medical Advisory Board Member Services Ronald M. Krauss, M.D.–Medical Advisory Board Member Services

Advertising, Promotion, and Public Relations

CMGRP, Inc. d/b/a Weber Shandwick-Direct Marketing and Promotion Services Siboney USA—Hispanic Marketing Program

Market Research and Evaluation, and Consulting Services

Beverage Marketing Corporation—Consulting/Competitive Strategy Development **Data Development World Wide**—Market Research

Dynamic Logic–Advertising Analysis

Greenfield Consulting—Consulting Services

Harris Interactive-Market Research

Information Resources, Inc.—Market Analysis

Just Kid, Inc.-Print Campaign Evaluation

Kelly Fisher-Consulting Services

Marketing Management Analytics–Marketing Mix Analysis

Phoenix Marketing Group-Hispanic Qualitative Market Research

Practica Group L.L.C.—Consulting Services

Prime Consulting Group-Consulting Services, Survey Analyses and Strategic Planning

RealMediaValue Company—Media Evaluation Services

RogenSI-Strategic Planning

Victor Zaborsky–Consulting Services

Other Agreements

Branch Banking & Trust Company-Line of Credit

Bridgewater Management L.L.C.-Financial Services

International Dairy Foods Association–Professional Management Services

L&M Productions-Audiovisual Services

McLeod, Watkinson & Miller-General Counsel

Ronald J. Rubin-Chief Financial Officer

Snyder, Cohn, Collyer, Hamilton & Associates, P.C.-Audit Services

Appendix E-1 Dairy Foods Research Centers

California Dairy Foods Research Center

(University of California–Davis and California Polytechnic State University–San Luis Obispo): Specializes in Product Technology Development, Ingredient Technology, Product Health Enhancement Properties, Food Safety, and Quality Assurance.

Midwest Dairy Foods Research Center

(University of Minnesota–St. Paul, Iowa State University-Ames and South Dakota State University–Brookings): Concentrates on Natural and Processed Cheese Functionality and Flavor, Fluid Milk Flavor and Shelf Life, Genomics of Probiotic Bacteria, and Utilization of Acid and Salt Whey.

Southeast Dairy Foods Research Center

(North Carolina State University–Raleigh and Mississippi State University–Starkville): Specializes in Milk and Whey Ingredient Functionality, Thermal and Biological Processing, Sensory Properties of Cheese and Dairy Ingredients, Dairy Food Safety, and Microbial Technologies for Starter Cultures and Probiotics.

Western Dairy Center

(Utah State University–Logan): Specializes in Cheese Flavor and Functionality, Fluid Milk Processing, Whey and Milk Utilization, and Microbial Genetics and Physiology.

Wisconsin Center for Dairy Research

(University of Wisconsin–Madison): Explores Functional Flavor and Physical Properties of Cheese and Cheese Products, Whey and Whey Components, and Milk Components Used as Ingredients and as Finished Products, Cheese Making and Whey Processing and Separation Procedures, Use of Milkfat, and Food Safety and Quality Technology.

Appendix E-2 Dairy Foods Competitive Research Activities

Principal Investigator, Institution, and Project Title

Allen E. Foegeding, Ph.D. (North Carolina State University): A Broad Survey of Chelating Agents to Enhance Heat Stability of Whey Proteins, in the Presence of Calcium, for Beverage Application [began in 2009]; Developing Whey Proteins Having Less Astringency at Low pH [began in 2009]; Designing Filler Particles to Imitate Fat in Cheddar Cheese [began in 2009]; Developing Whey Proteins Having Less Astringency at Low pH [began in 2009]; Investigating Filled Gel Model for Role of Fat in Cheese [continued in 2009]; Modifying Whey Proteins Having Less Astringency at Low pH [continued in 2009]; and Developing Mixtures of Whey and Casein Proteins for Improved Heat Stability [completed in 2009].

Ashraf Hassan, Ph.D. (South Dakota State University): Development of Novel Functional Ingredients from Whey Containing Exopolysaccharides [completed in 2009]; and Production of 50% Reduced-Fat Cheddar Cheese with Improved Characteristics [completed in 2009].

Christopher R. Daubert, Ph.D. (North Carolina State University): A Modification Process to Expand the Functionality of Whey Ingredients via Carbohydrate Complexing [completed in 2009].

Daniel J. O'Sullivan, Ph.D. (University of Minnesota): De-Lactose Whey Fermentate Food Ingredient with Very Broad-Spectrum Antimicrobial Properties [initiated in 2009]; Factors Effecting Stability of Freeze-Dried Bifidobacteria [initiated in 2009]; and Over-Expression of Stress Genes to Improve Stability of Bifidobacteria in Yogurt [began in 2009].

Devin Peterson, Ph.D. (University of Minnesota): Inhibition of Off-Flavor Development in Non-Refrigerated Milk by Phenolic Chemistry [began in 2009].

Donald McMahon, Ph.D. (Utah State University): Designing Filler Particles to Imitate Fat in Cheddar Cheese [began in 2009]; Influence of Salt-In-Water Content on Flavor of Full-Fat and Low-Fat Cheddar Cheese [began in 2009]; Influence of Starter Culture Growth on the Development of Rosey and Burnt-Brothy Flavors During Aging of Low Fat Cheese [began in 2009]; Flavor Comparison Between UHT Milk Heated by Conventional Methods and Electrical Resistive Heating [continued in 2009]; Improve the Flavor of Low-Fat Cheese by Adding Innovative Cultures and/or Flavoring Systems [continued in 2009]; Innovative Approaches for Improving Low-Fat Mozzarella Cheese [continued in 2009]; Investigating Filled Gel Model for Role of Fat in Cheese [completed in 2009]; and Low Fat Natural Cheese Strategic Platform Study [completed in 2009].

Francisco Diez-Gonzalez, Ph.D. (University of Minnesota): Improving the Safety of Queso Fresco Using GRAS Ingredients [continued in 2009].

Hua Wang, Ph.D. (The Ohio State University Research Foundation): Methods to Maintain Dairy Culture Genotypes [completed in 2009].

James L. Steele, Ph.D. (University of Wisconsin): Evaluation of Compositional Factors of Low-Fat and Low-Sodium Cheddar Cheeses on the Growth of Potential Pathogens in a Model System [began in 2009]; Relationship of Cheese Composition and Non-Starter Lactic Acid Bacteria Flora in Cheddar Cheese [continued in 2009]; Low-Fat Natural Cheese Strategic Platform Study [completed in 2009]; and Selecting Bacterial Cultures to Enhance Low-Fat Cheese Flavor [completed in 2009].

Jeff Broadbent, Ph.D. (Utah State University): Effect of Fat Removal on Cheese Microenvironment and Starter Culture Metabolism in Cheddar Cheese [completed in 2009].

John A. Lucey, Ph.D. (University of Wisconsin): High Pressure Processing of Low-Fat Cheese [began in 2009]; Combined Native Whey and Casein Concentrate Production [continued in 2009]; and Milk Protein Concentrate Functionality Improvement Program [continued in 2009].

Kathleen Glass, Ph.D. (University of Wisconsin-Madison): Isolation and Identification of Microorganisms Responsible for Ropy Milk [completed in 2009].

Lloyd Metzger, Ph.D. (South Dakota State University): Prediction of Process Cheese Instrumental Texture and Melting Characteristics Using Dielectric Spectroscopy and Chemometrics [began in 2009]; Evaluation of NFDM and MPC in Yogurt Manufacture [continued in 2009]; Low-Fat/Fat-Free Process Cheese For Slice-on-Slice Applications [continued in 2009]; and Manufacture of Reduced/Low Sodium SOS Process Cheese [continued in 2009].

MaryAnne Drake, Ph.D. (North Carolina State University): Influence of Starter Culture Growth on the Development of Rosey and Burnt-Brothy Flavors During Aging of Low-Fat Cheese [began in 2009]; Understanding the Role of Beverage Processing Steps on Whey Protein Flavor Contributions [began in 2009]; Identification of Chemical Components Responsible for Specific Flavors in WPC80 and WPI [continued in 2009]; Improving Whey Protein Off-Flavor Prevention Via Alternative Process Step Optimization [continued in 2009]; Low Fat Cheese Platform Study (Part 2): Quantify Compounds for Flavor in LF Cheddar Cheese [continued in 2009]; Quantification and Aroma Quality of the Compounds Responsible for Desirable and Undesirable Flavor in Low-Fat Cheddar Cheese [continued in 2009]; and Low-Fat Natural Cheese Strategic Platform Study [completed in 2009].

Mark R. Etzel, Ph.D. (University of Wisconsin-Madison): Charged Ultrafiltration Membranes for Fractionation of Milk Proteins [began in 2009]; Electrostatic Repulsion Enhancement for Heat Stable, Clear Whey Protein Beverages [began in 2009]; and Creation of Whey Protein Enhanced Beverages that are Clear and Heat Stable at Acidic pH [continued in 2009].

Mark Johnson, Ph.D. (Wisconsin Center for Dairy Research): Influence of Starter Culture Growth on the Development of Rosey and Burnt-Brothy Flavors During Aging of Low-Fat Cheese [began in 2009]; and Low-Fat Natural Cheese Strategic Platform Study [completed in 2009].

Marie K. Walsh, Ph.D. (Utah State University): Production of High Protein Cheddar Cheese With an Improved Extrusion-Modified Texture [continued in 2009]; and Synthesis, Characterization, and Bioactivity of Lactose Lauryl Esters [completed in 2009].

Nana Farkye, Ph.D. (California Polytechnic State University): Natural Mold Inhibition in Cheese by Lactic Acid Bacteria [initiated in 2009]; Influence of Starter Culture Growth on the Development of Rosey and Burnt-Brothy Flavors During Aging of Low-Fat Cheese [began in 2009]; Improving Texture and Lubricity of Low-Fat Cheddar Cheese with Selected Surfactants and Gums [continued in 2009]; and Low- and Reduced-Sodium Cheese with Enhanced Flavor [continued in 2009].

Peggy M. Tomasula, Ph.D. (USDA Agricultural Research Service): Development and Validation of the Effect of Interventions and Processes on Persistence of Listeria monocytogenes on Queso Fresco Cheese [continued in 2009].

Phillip S. Tong, Ph.D. (California Polytechnic State University): Evaluation of Properties of Vacuum Packaged Dry Dairy Powders [continued in 2009]; Improving Whey Protein Off-Flavor Prevention Via Alternative Process Step Optimization [continued in 2009]; and Milk Protein Concentrate Functionality Improvement Program [continued in 2009].

Qixin Zhong, Ph.D (The University of Tennessee): Magnetic Nanotubes to Purify High Value Peptides/Proteins from Unclarified Whey [continued in 2009].

Richard W. Hartel, Ph.D. (University of Wisconsin): Pro-Cream and DLP Blends as an Ingredient for Various Food Product Applications [began in 2009]; and Methods to Aid Drying of Delactose Permeate [continued in 2009].

Roger Ruan, Ph.D. (University of Minnesota): Concentrated High Intensity Electric Field (CHIEF) Pasteurization of Milk [began in 2009]; and Non-Thermal Plasma and Electric Field Treatment of Milk [continued in 2009].

Rafael Jimenez-Flores, Ph.D. (California Polytechnic State University): Survey, Detection and Identification of Bacteria Causing Ropy Milk and Defect in Raw and Pasteurized Milk [completed in 2009].

Ramakrishna Nannapaneni, Ph.D. (Mississippi State University): Enhancing Microbial Safety of Fresh Soft Queso Fresco Cheese by GRAS Lauric Arginate Application [completed in 2009].

Selvarani Govindasamy-Lucey, Ph.D. (Wisconsin Center for Dairy Research): Low Sodium Cheddar Cheese by Controlling Microbial Activity and Enhancing Flavor [began in 2009]; and Manufacture of High Protein Cheddar Cheese Using Cold Extrusion [continued in 2009].

Silvana Martini, Ph.D. (Utah State University): Effect of High Intensity Ultrasound (HIU) on Functional Properties of Whey Proteins [completed in 2009].

Tonya Schoenfuss, Ph.D. (University of Minnesota): Production of Low Sodium Cheddar Cheese; Improving Flavor Through the Use of Flavor Enhancers, Salt Replacers and Cheese Making Procedures [began in 2009].

Zeta M. Vickers, Ph.D. (University of Minnesota): Proof of Concept: The Mechanism of Astringency of Acidic Whey Protein Products is a Direct Result of Acid, Not Whey Proteins [completed in 2009].

Appendix E-3 Nutrition Competitive Research Activities

Principal Investigator, Institution, and Project Title

Sean H. Adams, Ph.D. (USDA-Agricultural Research Service-Western Human Nutrition Research Center): Evaluation of the Anti-Inflammatory Effects of Calcium and Dairy in a Polygenic Obese Mouse Model [completed in 2009].

David J. Baer, Ph.D. (USDA-Agricultural Research Service-Beltsville Human Nutrition Research Center): Effects of Trans-Fatty Acids from Ruminant Sources on Risk Factor for Cardiovascular Disease [continued in 2009]; and Dietary Protein Sources and Their Effects on Risk Factors Associated with Cardiovascular Disease [continued in 2009].

Leann L. Birch, Ph.D. (The Pennsylvania State University): Mother-Daughter Patterns of Beverage and Dairy Consumption at Home and Away From Home in Girls 5 to 15 [completed in 2009].

Wayne Campbell, Ph.D. (Purdue University): Influence of Whey Protein on Body Composition, Glucose Metabolism, and Appetite in Middle-Aged Adults at Risk for Metabolic Syndrome [continued in 2009].

David Cameron-Smith, Ph.D. (Deakin University): Optimal Whey Protein Concentrate 80 (WPC 80) Dose to Combat Sarcopenia [completed in 2009].

Joseph E. Donnelly, Ph.D. (University of Kansas): Effects of Visible Cheese on Consumption of Food Groups to Encourage [completed in 2009].

Joseph E. Donnelly, Ph.D., and Richard Washburn, Ph.D. (University of Kansas): Effects of Resistance Training and Milk Supplementation on Body Composition in Middle School Children [began in 2009].

Ellen M. Evans, Ph.D. (University of Illinois): Higher Protein Diet and Exercise for Optimal Weight Loss in Elderly Women [completed in 2009].

Roger Fielding, Ph.D. (Tufts University): Efficacy of Whey Protein Supplementation on Resistance Exercise Induced Changes in Muscle Strength, Fat Free Mass, and Function in Mobility-Limited Older Adults [continued in 2009].

Ellen B. Fung, Ph.D., RD (Children's Hospital Oakland Research Institute): Evaluation of a Pilot Project to Add Yogurt to the WIC Food Package for Women [continued in 2009].

Bruce German, Ph.D. (University of California-Davis): Dairy Fat and the Functionality of High Density Lipoprotein: Composition of HDL Subclasses [completed in 2009]; and Milk Glycolipids: Capturing the Value of a Novel Class of Complex Molecular Conjugates [continued in 2009].

M. Eric Gershwin, M.D. (University of California-Davis): The Effect of Milk Components on the Immune Response to the Pneumovax: A Randomized Placebo-Controlled Clinical Trial [completed in 2009].

Korry Hintze, Ph.D. (Utah State University): Effect of Milk Fat Globular Membrane (MFGM) in Providing Protection Against Gastrointestinal Stress [completed in 2009].

Michael Holick, Ph.D., M.D. (Boston University School of Medicine): The Effect of Dietary Calcium and Vitamin D on Prostate Cancer [continued in 2009].

Robert Hutkins, Ph.D. (University of Nebraska): Anti-adherence Activity of Prebiotic Galactooligosaccharides Against Enteric Pathogens [completed in 2009].

Jasminka Ilich-Ernst, Ph.D. (Florida State University): Calcium and Dairy-Derived Bioactive Compounds as Stem Cell Mediators of Bone and Fat Metabolism [completed in 2009].

Karl L. Insogna, M.D. (Yale University) The Impact of a Protein Supplement on Bone Mass in Older Men and Women [began in 2009].

John L. Ivy, Ph.D. (The University of Texas at Austin): The Effect of Chocolate Milk (CM) on Exercise Recovery and Training Adaptation [continued in 2009].

Rachel Johnson, Ph.D., MPH, RD (University of Vermont): Evaluating the Acceptance of Reformulated Flavored Milk in Schools [began in 2009].

Nancy L. Keim, Ph.D. (USDA-Agricultural Research Service-Western Human Nutrition Research Center): The Effect of Dairy Foods in Normalizing the Hypothalamic-Pituitary-Adrenal Axis in Overweight/Obese Adults Following Diet-Induced Weight Loss [continued in 2009].

Todd Klaenhammer, Ph.D. (North Carolina State University): Identification of Probiotic Features of Lactobacillus acidophilus Affected by Dairy Delivery [continued in 2009]; and Influence of Lactic Acid Bacteria, Milk, Yogurt and Milk Components on Gene Expression in Human Intestinal Epithelia Cells [continued in 2009].

Ronald M. Krauss, Ph.D. (Children's Hospital Oakland Research Institute): Dietary Protein and Saturated Fat Effects on Insulin Resistance [continued in 2009]; Changes in LDL and HDL With Increased Intake of Saturated Fat from Dairy Foods in Individuals with Atherogenic Dyslipidemia and LDL Subclass Pattern B [continued in 2009]; and Association of Dairy Consumption with Lipoprotein Subfractions and Cardiovascular Disease in the Malmo Diet and Cancer Study [began in 2009].

Marlena C. Kruger, Ph.D. (Massey University): The Effect of Whey Protein Concentrate Supplementation on Body Composition, Physical Performance and Nutritional Status in Older Adults; A Pilot Study [began in 2009].

Carlito Lebrilla, Ph.D. (University of California-Davis): Milk Glycopeptides: A New Class of Bioactive Ingredients from Milk [completed in 2009].

Adam L. Lock, Ph.D. and Andre-Denis Wright, Ph.D. (University of Vermont): Influence of Maternal Intake of Conjugated Linoleic Acid on Hormone Responses by the Mammary Glands of Female Progeny [continued in 2009]; and The Impact of Natural and Industrial Sources of Trans Fatty Acids on the Development of Atherosclerosis in the ApoE*3 Leiden Mouse Model [continued in 2009].

Mark A. McGuire, Ph.D. (University of Idaho): The Use of Milk Fat as a Possible Antibacterial Agent [completed in 2009].

Schuichi Machida, Ph.D. (Tokai University, Japan): The Effect of Whey Protein on Sarcopenia in the Elderly [continued in 2009].

Juan Medrano, Ph.D. (University of California-Davis): Genomic Approach to Optimize the Content of Beneficial Oligosaccharides in the Milk Supply [continued in 2009].

David Mills, Ph.D. (University of California-Davis): Isolation and Characterization of Lactic Acid Bacteria that Selectively Grow on the Unique Set of Oligosaccharides Found in Milk [continued in 2009].

Lynn L. Moore, Ph.D. (Boston University School of Medicine): Development of a Food Pyramid Database in the Framingham Heart Study Offspring [completed in 2009]; and Dairy Intake and Metabolic Risk in Adolescent Girls [completed in 2009].

Theresa Nicklas, Ph.D. (Baylor College of Medicine): Understanding Perceived Lactose Intolerance in White, Black and Hispanic Adults; and Healthy Eating and Lifestyle for Total Health (HEALTH) [continued in 2009].

Stuart Phillips, Ph.D. (McMaster University): Responses of Muscle and Whole-Body Protein Turnover to Ingestion of Differing Doses of Whey and Soy Protein With and Without Resistance Exercise in Elderly Men [continued in 2009]; and The Impact of Higher Dairy and Dietary Protein on the "Quality" of Hypoenergetic Diet and Exercise Induced Weight Loss in Pre-Menopausal, Overweight, and Obese Young Women [continued in 2009].

Karen Rafferty, M.S., RD, Robert Heaney, M.D. (Creighton University): A Project to Advance a Research Data Infrastructure by Creating a Master Data Bank [continued in 2009].

Helen Raybould, Ph.D. (University of California-Davis): Effects of Milk Components on Gastrointestinal Signaling Pathways [continued in 2009]; and Host Effects Derived from Milk-Dependent Production of Soluble Signals from Bifidobacteria [began in 2009].

Nancy Rodriguez, Ph.D. (University of Connecticut): Milk's Impact on Protein Turnover-Specific Intracellular Signaling Protein in Human Skeletal Muscle During Recovery from Endurance Exercise [completed in 2009].

Michael J. Saunders, Ph.D. (James Madison University): Effects of Chocolate Milk Consumption on Markers of Muscle Recovery and Performance During Intensified Training in Competitive Soccer Players [completed in 2009].

Dale Schoeller, Ph.D. (University of Wisconsin-Madison): A Novel Stable Isotope Measurement to Monitor Macronutrient Intake for Future Use in the Study of Interactions of Diet and Dairy on BMI and Bone Health [completed in 2009].

Gloria Solano-Aguilar, Ph.D., and Todd R. Klaenhammer, Ph.D. (USDA Agricultural Research Service-Beltsville Human Nutrition Research Center and North Carolina State University): Effect of Dairy Delivery on Survival and Activity of Probiotic Cultures *in vivo* [continued in 2009].

Debra Sullivan, Ph.D. (University of Kansas Medical Center): A Qualitative Study of Children's Perceptions of Dairy Foods [completed in 2009].

Brian Timmons, Ph.D. (McMaster University): Milk for Lean Mass for Overweight Kids: The MILK with Exercise Study [began in 2009]

Angelo Tremblay, Ph.D. (Hopital Laval Research Centre in Quebec, Canada): Effect of Milk Supplementation on Appetite Control in Obese Women Following a Weight Loss Program [completed in 2009].

Marta Van Loan, Ph.D. (USDA-Agricultural Research Service-Western Human Nutrition Research Center): The Role of Dairy Foods in Enhancing Central Fat Loss and Weight Loss with Moderate Energy Restriction in Overweight and Obese Adults [completed in 2009].

Jeff Volek, Ph.D. (University of Connecticut): Investigation of Whey Protein Supplementation for Physiological Enhancement to Resistance Training and Dietary Regimes in Young Adults [continued in 2009].

Rosemary Walzem, Ph.D. (Texas A&M University): Can Dairy Calcium Modulate Bodyweight Through Changes in Fecal Microbial Diversity? [continued in 2009]

Youfa Wang, M.D., Ph.D. (Johns Hopkins University Bloomberg School of Public Health): The Influences of Dairy Consumption and Related Nutrients on Obesity, Metabolic Syndrome, and Type 2 Diabetes and the Ethnic Differences [continued in 2009].

Eva Warensjo, Ph.D. (Uppsala University, Sweden): Milkfat Biomarkers and the Risk of a First Ever Acute Myocardial Infarction (AMI) - A Prospective Nested Case-Control Study [completed in 2009].

Richard A. Washburn, Ph.D. (University of Kansas): Whey Protein Supplementation with Resistance Training: Effect on Body Composition of Young Adults [continued in 2009].

Connie Weaver, Ph.D. (Purdue University): Influence of Dairy on Bone Mass Accrual, Bone Size and Fat and Lean Body Mass in Early Pubertal Overweight vs. Healthy Weight Girls [continued in 2009].

Michael B. Zemel, Ph.D. (University of Tennessee): Dairy Attenuation of Oxidative and Inflammatory Stress in Metabolic Syndrome [completed in 2009]; and Effects of Dairy Components on Monocyte-Endothelial Cell Vascular Infiltration and Inflammation [began in 2009].

Appendix E-4 Sustainability Competitive Research Activities

Greg Thoma, Ph.D. (University Of Arkansas): Life Cycle Assessment of the Fluid Milk Supply Chain: Dairy Products [completed in 2009]

Heber, Albert J., Ph.D. (Purdue University): Assessment of Carbon Footprint Contributions to Milk Products by U.S. Dairies; and Greenhouse Gas Emissions at US Dairies [continued in 2009].

Appendix F Qualified State or Regional Dairy Product Promotion, **Research, or Nutrition Education Programs**

Allied Milk Producers' Cooperative

495 Blough Road

Hooversville, PA 15936-8207

American Dairy Association Mid East

5950 Sharon Woods Blvd. Columbus, OH 43229

American Dairy Association and Dairy

Council, Inc.

Interstate Place II, 100 Elwood Road North Syracuse, NY 13212

American Dairy Association of Alabama

5340 West Fayetteville Road Atlanta, GA 30349-5416

American Dairy Association of Georgia

5340 West Fayetteville Road Atlanta, GA 30349-5416

American Dairy Association of Kentucky

5340 West Fayetteville Road Atlanta, GA 30349-5416

American Dairy Association of Michigan

2163 Jolly Road Okemos, MI 48864

American Dairy Association of Mississippi

5340 West Fayetteville Road Atlanta, GA 30349-5416

American Dairy Association of Nebraska

8205 F Street

Omaha, NE 68127–1779

American Dairy Association of

North Carolina

5340 West Fayetteville Road Atlanta, GA 30349-5416

American Dairy Association of

South Carolina

5340 West Fayetteville Road Atlanta, GA 30349-5416

American Dairy Association of

South Dakota

2015 Rice Street St. Paul, MN 55113

American Dairy Association of Virginia

5340 West Fayetteville Road Atlanta, GA 30349-5416

California Manufacturing Milk Producers

Advisory Board

3800 Cornucopia Way, Suite D Modesto, CA 95358-9492

California Milk Producers Advisory Board

3800 Cornucopia Way, Suite D Modesto, CA 95358-9492

Dairy Council of California

1101 National Drive, Suite B Sacramento, CA 95834-1945

Dairy Council of Michigan

2163 Jolly Road Okemos, MI 48864

Dairy Council of Nebraska

8205 F Street

Omaha, NE 68127-1779

Dairy Farmers, Inc.

166 Lookout Place, Suite 100 Maitland, FL 32751-4496

DairyMAX

2214 Paddock Way Drive, Suite 600

Grand Prairie, TX 75050

Dairy Promotion, Inc.

10220 NW Ambassador Drive Kansas City, MO 64153

Georgia Agricultural Commodity

Commission for Milk

19 Martin Luther King Jr., Dr., SW, Room 328

Atlanta, GA 30334

Granite State Dairy Promotion

c/o New Hampshire Department of Agriculture

25 Capitol Street, Box 2042

Concord, NH 03302-2042

Idaho Dairy Products Commission

10221 West Emerald, Suite 180

Boise, ID 83704

Illinois Milk Promotion Board

1701 Towanda Avenue

Bloomington, IL 61701

Indiana Dairy Industry Development Board

9360 Castlegate Drive

Indianapolis, IN 46256

Louisiana Dairy Industry Promotion Board

c/o Louisiana Department of Agriculture

and Forestry

47076 North Morrison Street

Hammond, LA 70401

Maine Dairy and Nutrition Council

333 Cony Road

Augusta, ME 04330

Maine Dairy Promotion Board

333 Cony Road

Augusta, ME 04330

Massachusetts Dairy Promotion Board

Suite 500, 251 Causeway Street

Boston, MA 02114

Michigan Dairy Market Program

P.O. Box 8002

Novi, MI 48376-8002

Mid-Atlantic Dairy Association

325 Chestnut Street, Suite 600

Philadelphia, PA 19106

Midwest Dairy Association

2015 Rice Street

St. Paul, MN 55113

Midwest Dairy Council

2015 Rice Street

St. Paul, MN 55113

Milk for Health on the Niagara Frontier, Inc.

4185 Seneca Street

West Seneca, NY 14224

Milk Promotion Services of Indiana, Inc.

9360 Castlegate Drive

Indianapolis, IN 46256

Minnesota Dairy Research and Promotion

Council

2015 Rice Street

St. Paul, MN 55113

Nebraska Dairy Industry Development

Board

8205 F Street

Omaha, NE 68127-1779

Nevada Farm Bureau Dairy Producers

Committee

2165 Green Vista Drive, Suite 205

Sparks, NV 89431

New England Dairy and Food Council, Inc.

1034 Commonwealth Avenue Boston, MA 02215

New England Dairy Promotion Board

1034 Commonwealth Avenue Boston, MA 02215

New Jersey Dairy Industry Advisory Council c/o New Jersey Dept. of Agriculture 5340 West Fayetteville Road

PO Box 330 Trenton, NJ 08625-0330

New York State Dept. of Agriculture and **Markets**

Division of Milk Control and Dairy Services 10 B Airline Drive Albany, NY 12235-0001

North Dakota Dairy Promotion Commission

2015 Rice Street St. Paul, MN 55113

Oregon Dairy Products Commission

10505 Southwest Barbur Boulevard Portland, OR 97219

Pennsylvania Dairy Promotion Program

c/o Pennsylvania Department of Agriculture 2301 North Cameron Street Harrisburg, PA 17110-9408

Promotion Services, Inc.

5340 West Fayetteville Road Atlanta, GA 30349-5416

Rochester Health Foundation, Inc. c/o ADADC, Inc.

Interstate Place II, 100 Elwood Road North Syracuse, NY 13212

Southeast United Dairy Industry Association

5340 West Fayetteville Road Atlanta, GA 30349-5416

Southwest Dairy Museum

P.O. Box 936 Sulphur Springs, TX 7548

Tennessee Dairy Promotion Committee

Atlanta, GA 30349-5416

United Dairymen of Arizona

2008 S. Hardy Drive Tempe, AZ 85282

Utah Dairy Commission

1213 East 2100 South Salt Lake City, UT 84106

Vermont Dairy Promotion Council

116 State Street, Drawer 20 Montpelier, VT 05620-2901

Washington State Dairy Council

4201 198th Street, SW, Suite 102 Lynnwood, WA 98036-6751

Washington State Dairy Products Commission

4201 198th Street, SW, Suite 101 Lynnwood, WA 98036

Western Dairy Association

12000 North Washington Street, Suite 200 Thornton, CO 80241

Wisconsin Milk Marketing Board, Inc.

8418 Excelsior Drive Madison, WI 53717

Appendix G National Fluid Milk Processor Promotion Board

Promotional Materials-Teens

Drink Milk for a Change



Welcome Page



Create-Your-Own Milk Mustache



Personalized Webpage



Jordin Sparks



Chauncey Billups



Cling



Banner

Get Fit by Finals



Chris Paul and Diana Taurasi



Web Ryan Sheckler



Web Ryan Sheckler

Refuel with Chocolate Milk



Refuel Banner



Refuel Banner Flag

Body By Milk-School Banners



Refuel.

Milk is a great choice after exercise, with protein to help build muscle and a unique mix of nutrients to refuel. So train hard and drink lowfat or fat free milk.

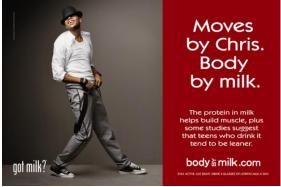
body is milk.com

Taylor Swift

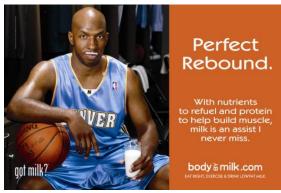
Danica Patrick



Chris Paul & Diana Taurasi



Chris Brown



Chauncey Billups



Jordan Sparks



Ryan Sheckler

Milk Mustache Posters



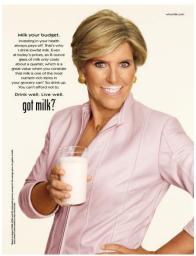
Heidi Klum



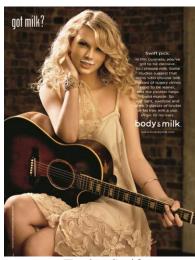
Dwight Howard



Martha Stewart



Suze Orman



Taylor Swift



Chris Brown



Christie Brinkley



Laila Ali



Chris Paul

Milk Mustache Posters



Diana Taurasi



Ellie Krieger



Ben Roethlisberger

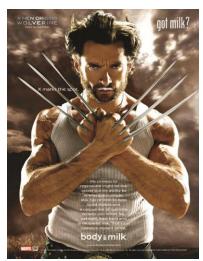




Danica Patrick



Dara Torres



Hugh Jackman



Helen Phillips

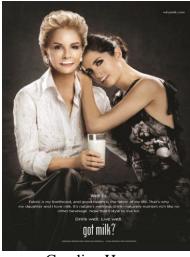


Ingrid Hoffmann

Milk Mustache Posters



Angie Harmon



Carolina Herrera



Jordan Sparks



Ryan Sheckler



Chauncey Billups



Demi Lovato



Danny Cahill



Brooke Shields

Milk Mustache Posters



Kurt Warner & Ben Roethlisberger

Promotional Materials-Moms and Hispanic

Milk's Value



Summer Cling-Recipe



Summer Wobbler– Frozen



r–



Summer Wobbler– Summer Cling–Value Chocolate



Summer Banner-Value



Summer Cling-Suze Orman



Summer Wobbler–Value

Milk's Value-Hispanic



Summer Cling-Hispanic



Summer Wobbler-Hispanic

Halloween



Halloween Cling-Skeleton



Halloween Banner– Flag



Halloween Cling-Bottle



Halloween Cling– Jug

Dia de los Muertos-Hispanic



Halloween Cling-Hispanic



Halloween Wobbler-Hispanic

Liquid Sunshine





Cling

Liquid Sunshine-Hispanic





Hispanic Wobbler

Hispanic Cling

September Family Traditions



Family Traditions



Tear Pad Recipe



Family Traditions Cling

September Family Traditions-Hispanic







Tear Pad-Hispanic



Family Traditions Cling-Hispanic

Drink Well, Live Well



Website



Cling



Cling



Website

Drink Well, Live Well-Hispanic



Cling-Hispanic



Wobbler-Hispanic

Sources:

Deutsch, Inc.

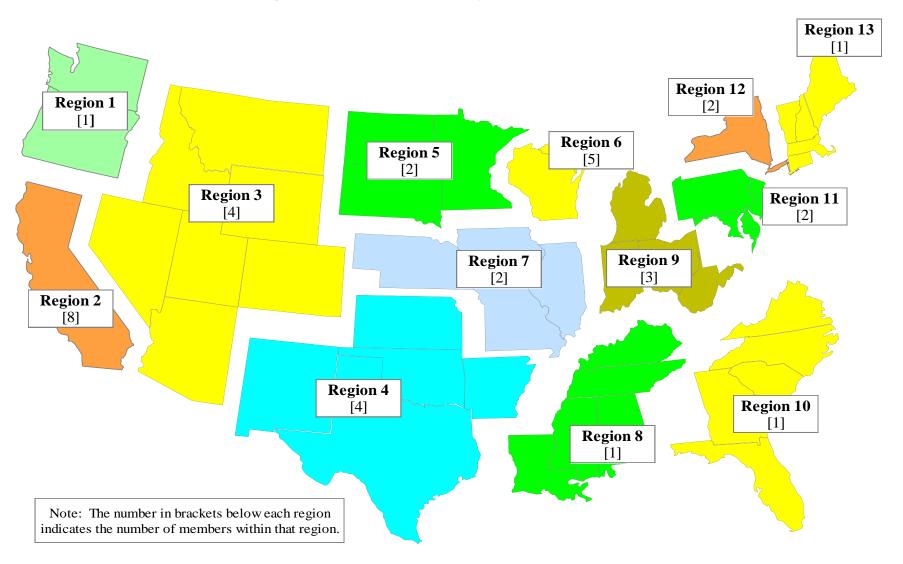
DraftFCB

Milk Processor Education Program (MilkPEP)

Siboney USA

Weber Shandwick

Appendix H-1
Regions of the National Dairy Promotion and Research Board



Appendix H-2 Regions of the National Fluid Milk Processor Promotion Board

