# **UNITED STATES DEPARTMENT OF AGRICULTURE**

# **Report to Congress**

National Dairy Promotion and Research Program National Fluid Milk Processor Promotion Program





# U.S. Department of Agriculture Report to Congress

# on the

# National Dairy Promotion and Research Program

# and the

# National Fluid Milk Processor Promotion Program

**2011 Program Activities** 

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Contact Information	ii 1
Chanter 1. The Dairy and Fluid Milk Promotion Programs	1
Chapter 1. The Daily and Fland Mink Fromotion Frograms	
National Dairy Promotion and Research Board	4
National Dairy Council <sup>®</sup>	5
Child Nutrition and Fitness Initiative.	6
Fuel Up to Play 60	6
Let's Move!	7
GenYOUth Foundation	7
Partnerships	7
Domino's	7
McDonald's	
Export and Dry Ingredients	
Innovation Center for U.S. Dairy	
Sustainability	
Food Safety.	
Dairy Research Institute	
Industry and Image Relations	
Qualified Dairy Product Promotion, Research	
or Nutrition Education Programs	
National Fluid Milk Processor Promotion Board	
Medical and Scientific Activities	
National Fluid Milk Programs	
Moms	
Teens	
Refuel with Chocolate Milk	
Hispanic	
Board Research and Development	
Chapter 2: USDA Activities	
National Dairy Promotion and Research Board Oversight	
Nominations and Appointments	
Organic Exemption	
Amendment to the Dairy Act	
Foreign Agricultural Service	
Contracts	
Contractor Audits	
Collections	
Compliance	
Qualified Programs	
National Fluid Milk Processor Promotion Board Oversight	

# Contents

# Contents, continued

Nominations and Appointments	25
Program Development	25
Contractor Audits	25
Compliance	25
-	
Chapter 3: Quantitative Evaluation of the Effectiveness of Marketing and Prom	otion
Activities by the Milk Processor Education Program, Dairy Management, Inc., a	nd
Qualified Programs	26
Objectives of the Evaluation Study	26
Checkoff Expenditures Made by DMI, MilkPEP, and QPs	27
Trends in Domestic Consumption	33
Trends in Dairy Exports	35
Methodology for Analysis of Demand Relationships	37
Demand for Fluid Milk	37
Demand for Cheese	40
Demand for Butter	41
Demand for All Dairy Products	42
U.S. Dairy Commercial Export Demand	43
Impacts of Marketing and Promotion Activities on Demand for	
Dairy Products	43
Benefit Cost Ratios	45
Partnerships with the Dairy Industry and Retailers	47
Concluding Remarks	49

### **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 dairy promotion 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 Dairy and Fluid Milk 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, 2011, of the Dairy Promotion and Research Program and the Fluid Milk Processor Promotion Program.

#### **National Dairy Promotion and Research Program**

Mandatory assessments collected under the Dairy Act totaled \$98.4 million in 2011, including assessments and interest income. The National Dairy Promotion and Research Board (Dairy Board) portion of the revenue from the 15-cent per hundredweight producer assessment was \$97.6 million and the 7.5-cent per hundredweight dairy importer assessment was \$761,000. Qualified Programs revenue was \$184.5 million, for 2011.

On March 17, 2011, USDA announced a final rule that amended the Dairy Order and established a dairy import assessment program as required by the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill) and the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill). Additionally, the term "United States" was amended in the Dairy Act to mean all States, the District of Columbia, and the Commonwealth of Puerto Rico. All provisions of the final rule were effective April 1, 2011, except those regarding dairy importer assessments, which became effective August 1, 2011. Details of the import assessment program are presented in Chapter 1 and Chapter 2.

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.

Focusing on health and wellness, the Dairy Board continued its support for Fuel Up to Play 60, a partnership between the National Dairy Council (NDC), the National Football League (NFL), and in collaboration with the USDA, to combat childhood obesity in schools. Through the Innovation Center for U.S. Dairy, the Dairy Board continued its focus on maintaining consumer confidence in dairy products through food safety workshops that provide education to dairy processors on best practices and techniques for in-plant pathogen control. Through the Dairy Research Institute, the Dairy Board continued its support for nutrition, product, and sustainability

research and launched Dairy Research Insights, an informative monthly e-newsletter for the dairy industry that highlights technical insights related to the priority areas of dairy nutrition research, product research, and sustainability. Details of the activities of the dairy producer and dairy importer 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 2011, the Fluid Milk Board embarked upon the industry's first-ever long range planning project. In doing so, research revealed that a key strategy to reverse the decline in fluid milk consumption was to focus on consumer occasions, and "Breakfast at home" was identified as a key occasion and new focal point for the Fluid Milk Board's activities. Additionally, a stronger emphasis on the Fluid Milk Board's existing work around post-workout chocolate milk consumption, or "Refuel," was also a focal point in 2011.

2011 kicked off with "Pour One More," which encouraged Moms to "pour one more" serving of milk for herself and her family, highlighting that Americans are falling short of the essential nutrients in their diets which milk readily provides. Similarly, the Fluid Milk Board launched Una Mas Cuenta (One More Counts), a parallel program with the goal of educating Hispanic consumers and giving them an actionable message to help improve their family's health and well-being. By emphasizing milk's nutrient density, the campaign encouraged Hispanic moms to pour one more serving of milk for herself and her family to help close the nutrient gap. For teens, the program supported messages to keep future moms drinking milk and "The Power of 9" - a program focused upon milk's nine essential nutrients, showed teen girls that making good food choices and drinking low fat or fat free milk can help them look great on the outside and feel confident and strong on the inside. The Fluid Milk Board's messaging for the "Refuel With Chocolate Milk" campaign continued to stress the importance of muscle recovery and rehydration post-exercise by drinking a glass of low fat or fat free chocolate milk. Additionally, research from the long range planning project revealed that adults, aged 18-34, who exercise regularly and are not chocolate milk rejecters, are the most viable refuel targets – with an estimated audience of 42 million consumers.

Assessments generated \$104.6 million in 2011. 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 2011 assessments was \$9.8 million. The California fluid milk processor promotion program uses the funds to conduct its promotion activities, which include the *got milk?*<sup>®</sup> advertising campaign. The 2011 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 2011 the Secretary of Agriculture appointed 10 members to the Dairy Board and 6 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 Texas A&M University, on the effectiveness of the programs implemented by the Dairy Board and the Fluid Milk Board. It is estimated that the generic fluid milk marketing activities sponsored by the programs have helped mitigate the decline of fluid milk consumption. Due to the dairy promotion programs, fluid milk consumption was 5.8 percent higher than it otherwise would have been over the period of the study. Specifically, gains in revenue at the farm level were greater than the costs of the programs. The benefit cost ratios for fluid milk were calculated to be \$3.95 for every dollar invested; for cheese \$4.43 for every dollar invested; and for butter \$6.26 for every dollar invested. Details of Texas A&M'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 activities 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. The Dairy Board is responsible for administering the Dairy Order, developing plans and programs, approving budgets, and monitoring the results of the programs.

The Secretary of Agriculture (Secretary) appoints 38 members to the Dairy Board, 36 of whom are dairy producers that represent 12 geographic regions within the United States, and 2 of whom represent dairy importers. The appointments are made from nominations submitted by producer organizations, importer organizations, general farm organizations, and qualified dairy product promotion, research, or nutrition education programs. Members serve staggered three-year terms with no member serving more than two consecutive terms.

Total Dairy Board actual revenue for 2011 was \$98.4 million (including assessments and interest). The Dairy Board amended its budget to \$103.9 million by incorporating program development funds not budgeted previously and carry-forward from their 2010 budget. The Dairy Board budget for 2012 projects total revenue of \$100.2 million from domestic and import assessments and interest. The Dairy Board's 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 2011 is provided in Appendix B–1. USDA's oversight and evaluation expenses for 2011 are listed in Appendix B–2. Appendix B–3 displays the Dairy Board's approved budget for 2011. An independent auditor's report for 2011 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 19 of the 66 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<sup>®</sup> and National Dairy Council<sup>®</sup>. The mission of DMI is to drive increased sales of and demand for dairy products and ingredients, on behalf of dairy producers and dairy importers. 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 (38) and all UDIA (45) members. Voting is equalized between the Dairy Board and UDIA.

DMI serves both boards and facilitates the integration of 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 Dairy Board and UDIA Board must separately approve the DMI budget and annual plan before they can be implemented. In September 2010, both boards approved the 2011 unified dairy promotion plan budget and national implementation programs. During 2011, DMI continued to implement a national staffing structure which utilizes personnel throughout DMI and the UDIA federation to plan and execute the national programs.

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. 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 joint Dairy 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 2011, the Dairy and UDIA Board met jointly six times.

In 2011, 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 following information describes Dairy Board and UDIA program activities along with new programs and initiatives implemented in 2011.

#### **National Dairy Council<sup>®</sup>**

The National Dairy Council<sup>®</sup> <u>http://www.nationaldairycouncil.org</u> (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-Every-Day<sup>M</sup> 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-Every-Day<sup>M</sup>. 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 continued its blog, "The Dairy Report" (<u>www.thedairyreport.com</u>). 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.

#### **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 builds on existing 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 achieve daily 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 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 reached more than 38 million students in more than 73,000 schools during the 2011/2012 school year. Students and schools joined the program by signing up at <u>www.fueluptoplay60.com</u>. 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.

In July, FUTP60 recognized students' commitments to making healthy changes by hosting a Student Ambassador Summit in Washington, D.C. Thirty-one student leaders were chosen from thousands of applicants to attend the summit to collaborate on in-school solutions to the childhood obesity epidemic. Student ambassadors, along with their program advisors, participated in leadership training sessions, shared success stories and tips, and provided feedback on the program. The event featured a healthy cooking demonstration by *Top Chef* Carla Hall and an NFL fitness session with St. Louis Rams quarterback Sam Bradford.

#### Let's Move!

In December 2011, First Lady Michelle Obama and FUTP60 announced a collaboration to strengthen each program's efforts and improve the overall health of the nation's youth. *Let's Move!*, First Lady Michelle Obama's initiative, is dedicated to solving childhood obesity in a generation. FUTP60, *Let's Move!*, and the Ad Council produced a public service announcement featuring Dallas Cowboys quarterback Tony Romo, encouraging youth to join the FUTP60 movement. FUTP60 and *Let's Move!* started the 2011/2012 school year with new tools and resources for students to take control of their own health and access fun ways to achieve active lifestyles. FUTP60 and *Let's Move!* also encourage schools to meet USDA's Healthier U.S. School Challenge through participating in FUTP60. Additionally, both programs promote the President's Council on Fitness, Sports and Nutrition's Presidential Active Lifestyle Award, given to students who perform 60 minutes of physical activity 5 days a week for 6 weeks and practice healthy eating habits.

#### Gen YOUth Foundation

The Gen YOUth Foundation (Foundation) was launched in 2011 by NDC as a non-profit organization whose mission is to create a movement that will inspire youth to change their behavior. The Foundation will work with schools, communities, and business partners to develop and support programs that create lasting changes in the child health and wellness arena, including FUTP60.

The Foundation is governed and managed by a board of directors that covers multiple fields of expertise, including agriculture, health and nutrition, sports and fitness, media, education, and the culinary arts. The Foundation Board meets twice a year to identify sustainable solutions to the childhood obesity epidemic.

#### **Partnerships**

#### Domino's

DMI continued its partnership with Domino's Pizza in 2011 through continued collaboration to increase the availability of Smart Slice<sup>TM</sup>. Domino's Smart Slice<sup>TM</sup> is a line of kid-approved pizzas that use light and reduced-sodium mozzarella cheese in addition to other reduced-fat and reduced-sodium ingredients. Domino's Smart Slice<sup>TM</sup> is available in more than 400 U.S. schools.

#### McDonald's

DMI also continued its partnership with McDonald's in 2011. According to DMI, the partnership has led to more than 1.7 billion pounds of additional dairy sales between 2009 and 2011. Through the checkoff, six employees provide technical assistance, support, and dairy expertise to McDonald's.

#### **Export and Dry Ingredients**

DMI's export enhancement program is implemented by the U.S. Dairy Export Council (USDEC), supported through the checkoff program. USDEC receives primary funding from three sources: DMI's checkoff program, USDA's Foreign Agricultural Service (FAS), and membership dues from dairy cooperatives, processors, exporters and suppliers. In 2011, USDEC received \$15.5 million from DMI; \$6 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; \$920,000 from membership dues; and \$658,000 from other sources. USDEC began its 16th year of operation in 2011, and its total annual budget was approximately \$23 million.

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

In 2011, USDEC embarked on a "strategic evolution" to reexamine its focus to ensure that it maximizes resources to align with a shifting global business environment and more committed U.S. dairy exporters. While USDEC's early goal was to help the U.S. industry to familiarize itself with export sales and introduce dairy products to overseas markets, the next level of programming aims to solidify the United States as a consistent global supplier. Getting into markets, staying in them, and providing members the tools to meet and compete for customer needs is the goal of the USDEC 3-year business plan. USDEC will address the evolving business needs of the industry through greater emphasis in market access and regulatory affairs, more actionable strategic insights and research, and shift promotional assistance to markets and segments with better growth and cost/benefit opportunities.

Export data confirms that U.S. dairy product export value reached \$4.8 billion while volume reached 3.2 billion pounds in 2011 (Figure 1–2). In 2011, 13.3 percent of total U.S. milk solids were exported, while imports represented 2.9 percent. For comparison, in 2010, exports represented 12.8 percent of U.S. milk solids production and imports remained the same at 2.9 percent (Figure 1–3).

Exports represented 49 percent of the nonfat dry milk (NDM) and skimmed milk powder (SMP) produced in the United States in 2011, 55 percent of the whey proteins, 69 percent of the lactose,

### Figure 1–1. USDEC Offices



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



Source: USDEC, NMPF, USDA



Figure 1–3. U.S. Dairy Trade Balance, 1996–2011.

7.6 percent of the butter, and 4.7 percent of the cheese. The NDM/SMP and cheese percentages were all-time highs.

Mexico (\$1.1 billion, the first time in which sales exceeded a billion dollars), Southeast Asia (\$963 million) and Canada (\$496 million) remained the largest destinations for U.S. dairy products.

USDEC, with the support of the dairy checkoff, continued working to improve the global (export and U.S.) ingredient capabilities of domestic dairy companies by providing up–to–date information on market conditions, global trade trends, and regulatory requirements for export.

USDEC continued the use of the Web site <u>www.innovatewithdairy.com</u> to help increase demand for U.S. dairy ingredients by promoting how dairy adds the difference in taste, functionality, and convenience. The ingredient program supports dairy product and nutrition research, ingredient applications, development and technical assistance for the dairy, food and beverage industries. Dairy, food, and beverage manufacturers use this program to find know-how, laboratory, and professional resources to help develop or improve foods using dairy ingredients.

Publications that support the innovation and ingredients 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

Source: USDEC, NMPF, USDA

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 that covers dairy industry news, new technologies, business trends, innovation, and research.

#### **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 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; Research and Insights 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 and a common understanding of the challenges, opportunities, and threats posed by increasing globalization to the U.S. dairy industry; Sustainability – to provide consumers with the nutritious dairy products they want in a way that is economically viable, environmentally sound, and socially responsible; and Food Safety – to improve food safety practices and to protect trust in dairy.

#### Sustainability

In 2011, Dairy leaders continued their industry-wide commitment and action plan to reduce the dairy industry'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.

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.

- Farm SMART Provides dairy producers with their farm's environmental footprint. It also allows them to compare energy use, greenhouse gas (GHG) emissions, and water use against regional and national averages compiled by the U.S. dairy industry's Comprehensive Life Cycle Assessment for Fluid Milk.
- 2. Cow of the Future Reduction of enteric methane by accelerating identification and adoption of new practices and technologies.
- 3. Farm Energy Efficiency Online resources for producers to learn how energy audits can add value and reduce costs to dairy producer operations.
- 4. Dairy Power Focused on realizing the significant potential of anaerobic digester systems for U.S. dairy farmers by helping put 1,300 methane digesters on dairy farms by 2020. Working with regional and national programs, the project addresses existing barriers, such as technology and financing.
- 5. Dairy Plant Smart and Next Generation Cleaning Development and testing of the Dairy Plant Smart toolkit to support energy management in fluid milk processing plants.
- 6. Next Generation Processing The use of UV technology as an alternative method to heat–based pasteurization.
- Processing and Packaging Lifecycle Assessment (LCA) Study findings on processing and packaging white and value-added milks and creamers to be published, after peer review, in 2012.
- 8. Dairy Fleet Smart Development and test of tool to support fuel and cost reductions in milk transport and distribution of dairy products.

In 2011, the Innovation Center and Dairy Research Institute launched a new awards program, the U.S. Dairy Sustainability Awards, to recognize dairy farms, businesses and collaborative partnership efforts that deliver economic, environmental, and/or social benefit and help advance the sustainability of the dairy industry. The awards are divided into three categories: dairy farm, dairy processing/manufacturing and energy, and energy conservation/generation. Nominations will be evaluated based on the program's or project's results and by triple bottom-line success – economic, environmental, and social. Judges will also consider the potential for adoption of the

idea by the dairy industry. The judging panel will be comprised of the dairy supply chain, academia, government, media, business, and nongovernmental organizations. Award winners will be announced in 2012 at a special awards ceremony.

#### Food Safety

In 2011, the Food Safety Task Force was chartered as a standing operating committee. The Food Safety Committee was created to improve manufacturing conditions in all dairy processing facilities to prevent food safety recalls that could compromise the reputation of the dairy industry across all plants in the United States. Specifically, the committee focuses on four action platforms: pathogen control, verification via auditing, supply chain, and regulatory.

In July 2011, the Food Safety Committee, through the International Dairy Foods Association (IDFA) and the Innovation Center, offered a new training program to educate dairy processors on best practices and techniques for in-plant pathogen control to better meet food safety regulations. The workshop was developed by food safety experts from 10 dairy processors, cooperatives, manufacturers, and IDFA. Pathogen-control guidelines, principles, techniques and approaches for the dairy plant will be the main focus for the workshop, along with food-safety fundamentals on sanitation, sanitary design, development of standard operating procedures, environmental monitoring techniques, and case studies. Food safety experts from several industry companies will deliver the training, which provides hands-on experience for immediate implementation when participants return to their plants.

#### **Dairy Research Institute**

# DAIRY RESEARCH INSTITUTE

#### The Dairy Research Institute (DRI)

was created by DMI in 2010 to conduct research on behalf of the Innovation Center, the National Dairy Council, and other sponsors, by building on the dairy promotion program's investment in research. The nonprofit organization works with and through industry, academic, government and commercial partners to increase pre-competitive, technical research in nutrition, products and sustainability. DRI is the first organization of its kind to provide an industry wide approach to technical research for the dairy industry.

The Innovation Center board of directors identifies pre-competitive priorities that address industry research issues and opportunities. DRI then defines an industry wide research plan and identifies funding.

DRI research priorities are categorized into four areas. Nutrition Research includes blood pressure, dairy protein, digestive health, milk fat/cheese, obesity, metabolic, health, body composition and performance, and relationship of food and beverage nutrient density to climate impact. Product research includes applications and technical support, cheese, fluid milk/cultured products, milk ingredients/fractions, partnerships, and whey/co-products. Sustainability research projects include greenhouse gas reduction opportunities and lifecycle assessments. Finally, planning/partnership/regulatory research includes business development strategy, planning and partnerships, and regulatory affairs guidance.

During 2011, DRI launched a monthly e-newsletter, *Dairy Research Insights*, to provide updates on recent technical research to dairy industry stakeholders. The e-newsletter features summaries of published research related to DRI's nutrition, product, and sustainability priority areas. The e-newsletter also provides a list of upcoming events, such as conferences, short courses, and workshops.

#### **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 Web site, <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.

DMI continued the social media component of its 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).

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 publicly called into question. 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. The checkoff led three regional crisis drills in 2011 that engaged many sectors of the industry, focusing on hypothetical scenarios ranging from animal disease outbreaks to the international tampering of dairy products. These drills help to maintain the industry's state of readiness and reinforce the critical nature of 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 <u>www.butterisbest.com</u>, 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 Dairy Product Promotion, Research, or Nutrition Education Programs**

The Secretary annually certifies Qualified Programs. 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 2011 was \$184 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.

In 2011, as a part of the final rule that amended the Dairy Order and established a dairy import assessment program, three new Qualified Programs were certified by USDA. The Puerto Rico Milk Industry Development Fund was certified as a qualified producer promotion program, and the Cheese Importers Association of America and Global Dairy Platform were certified as qualified importer promotion programs. Dairy importers may designate 2.5 cents per hundredweight to a Qualified Program. If the importer does not specify a Qualified Program, the entire 7.5 cents per hundredweight will be retained by the Dairy Board for use by the national program.

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, to support the unified marketing plan, UDIA coordinates nationally through DMI the programs and resources of 19 federation members and their affiliated units.

#### **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 2011.

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 \$104.6 million in 2011. 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 2011 assessments was \$9.8 million. The California fluid milk processor promotion program uses the funds to conduct its promotion activities which include the "got milk?<sup>®</sup>" advertising campaign.

The actual income and expenses for 2010-2011 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 2011 are

detailed in Appendix B–5. Appendix B–6 contains the Fluid Milk Board's approved budget for 2011. Appendix C–2 contains an independent auditor's reports for the period of January 1 through December 31, 2011.

#### **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 2011. The MAB provides guidance to the Fluid Milk Board's development of key nutritional and health messages for consumers and health professionals. As in previous years, the 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 continued to appear 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 continued to increase 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 2011, the fluid milk marketing plans were designed to conduct marketing and promotional activities emphasizing milk's role in building strong families. Additionally, fluid milk continued promoting the importance of refueling after exercise with chocolate milk. 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?<sup>®</sup>/Milk Mustache advertising campaign, continued to provide the basis for advertising activities and other program delivery methods. A description of the 2011 program activities listed by advertising target area follows.

#### Moms

The Fluid Milk Board advertising campaign for the Moms target in 2011 continued to shift its Moms targeted messaging from "mom for herself" to "mom for her kids and family." Pour One More was the initial 2011 campaign, which encouraged moms to pour one more serving of milk for herself and her family,



highlighting that Americans are not getting all of the essential nutrients they need. The Pour One More campaign included television, print and digital advertising, and was bolstered by public relations and retail promotions.

Two new television commercials featuring celebrities Susan Sarandon and Angie Harmon, highlighted the importance of milk in the family diet and the important role moms have in influencing their families' milk drinking behaviors. The print campaign images of Sarandon and Harmon can be viewed in Appendix G.

Additionally, MilkPEP's grassroots public relations activities allowed local processors the opportunity to engage consumers in the Pour One More effort, and incorporated the Fuel Up to Play 60 (FUTP60) messaging and featured National Football League players. FUTP60 is a nationwide in-school fitness and nutrition program aimed at combating childhood obesity.

Partnerships continued to play a role in MilkPEP activities, as the program promoted the Pour One More platform through an integrated program with OREO® cookies/Nabisco. The promotion included on-pack placement of the Pour One More message. MilkPEP also partnered with Feeding America to amplify the Pour One More message at a national and local level.

Appendix G includes thumbnail images of the Fluid Milk Board's promotional activities for moms in 2010.

#### Teens

2011 teen-targeted activities began with the launch of "The Power of 9" – a program featuring celebrity spokesperson Julianne Hough and *Seventeen* Magazine. The program focused on



milk's nine essential nutrients, and showed teen girls that making good food choices and drinking low fat and fat free milk can help them look their best on the outside and feel confident and strong on the inside. During the back-to-school timeframe, the Milk Fits You campaign focused exclusively on tween girls, positioning milk as a must have accessory to complement any personal style, for any occasion. These activities featured popular teen celebrities Victoria Justice and Disney star Brigit Mendler.

The "Be Strong Challenge" also focused on teen girls, but instead began to employ the Refuel message while specifically targeting cheerleaders. The program emphasized how low fat chocolate milk can help cheerleaders refuel and replenish after a tough practice or competition, and help them "Be Strong" for their next practice or competition. Ashley Tisdale, former television cheerleader and singer, partnered with MilkPEP and *American Cheerleader* magazine to launch the campaign. To participate, cheerleading squads across the country submitted videos

that showcased a chocolate milk refuel message. The winning squad received \$5,000 and the opportunity to star in a Milk Mustache advertisement in *American Cheerleader* magazine.

Additionally, the Scholar Athlete Milk Mustache of the Year (SAMMY) program reached its 15<sup>th</sup> and final year, and awarded 25 scholarships of \$7,500 to student athletes all across the country celebrating their athletic and scholastic achievements. As in previous years, 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* magazine.

DC Comics also partnered with MilkPEP, leveraging the Green Lantern movie release with a

print advertisement featuring Ryan Reynolds, who played the Green Lantern in the motion picture. Nine additional advertisements were produced for the teen audience, including Julianne Hough and the cast of Disney's Good Luck Charlie.

#### Refuel with Chocolate Milk

As MilkPEP began to gradually shift its refuel focus away from high-school-aged athletes and towards the adult (18-34) audience, the Refuel with Chocolate Milk mobile tour was developed. The tour visited popular endurance sporting events, which included marathons, triathlons, bicycle races and soccer tournaments, and leveraged the scientific research on the refuel benefits of chocolate milk. Two Refuel with Chocolate Milk trucks traversed the country in 2011, attending 125 events to



engage athletes, sample chocolate milk, and provide recovery tips and tools on the benefits of chocolate milk in exercise recovery. Millions of media impressions were garnered through the Refuel tour and local processors were able to engage and participate in the various tour events.

The Refuel with Chocolate Milk Web site and social media campaign was launched as well in 2011, growing the network of Refuel with chocolate milk advocates with "Team Refuel." "Team Refuel" enabled everyday athletes to compete to receive Refuel gear and sponsorships, which drove Web site traffic and inspired a grassroots movement to spread the word about



chocolate milk's post workout benefits. Low fat chocolate milk offers the right mix of protein and carbohydrates to repair and refuel exhausted muscles, plus fluids and electrolytes to rehydrate and help replenish what is lost in sweat.

#### Hispanic

The national Hispanic advertising campaign continued as part of the industry's outreach to the growing Hispanic population, mirroring the general market programs and activities.

Una Mas Cuenta (One More Counts), similar to the general market Pour One More campaign, educated Hispanic consumers and provided a simple action plan to help improve their family's health and well-being. The campaign also encouraged Hispanic moms to pour one more serving of milk for herself and her family to help close the nutrient gap.

Recognizing cultural differences and to meet the unique needs of this important target audience, MilkPEP launched a new television campaign that used animation to show both the physical and emotional power of adding one more glass of milk to help build a strong family. Former print campaign Milk Mustache celebrity mom Giselle Blondette was featured in a voice-over in the television advertisement.



MilkPEP also sponsored the first-ever Role

Modeling Summit to explore the link between mothers, daughters, food, and health. The summit brought together an esteemed panel of moms, daughters, and health experts, including former First Daughter Jenna Bush Hager and Linda Fears, Editor-in-chief of *Family Circle*.

Throughout the year, the Fluid Milk Board continued with their print advertisement campaign that featured Hispanic celebrities with the famous Milk Mustache. In addition to Victoria Justice, celebrities included Edith González, Marco Antonio Solis, Bárbara Bermudo, Doreen Colondres, and Sofia Vergara.

Appendix G includes thumbnail images of the Fluid Milk Board's promotional activities for Hispanic consumers in 2010.

#### **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. MilkPEP conducted insightful research on breakfast segmentation and Refuel message strategy to lead the new campaign development. Ongoing research initiatives, such as the Consumption Tracker, Attitude and Awareness Tracker, All Channel Tracking, and the Annual School Survey, all help the industry to remain at the forefront of milk consumption trends and market place changes.

MilkPEP continued providing processors access to customizable National Programs and related media materials at <u>www.milkpep.org</u> 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: <u>www.whymilk.com</u>, <u>www.bodybymilk.com</u>, and <u>www.eligeleche.com</u>.

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

As the Long Range Planning project continues to take root, focus on Breakfast at Home and Refuel in the coming years offer hope to reverse the decline of per capita milk consumption.

### Chapter 2 USDA Activities

The USDA's Agricultural Marketing Service's (AMS) Dairy Programs has day-to-day oversight responsibilities for the Dairy Board and the Fluid Milk Board. AMS 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 AMS Dairy Programs. Program materials are monitored for conformance with provisions of the respective Acts and Orders, the U.S. Dietary Guidelines for Americans, and other legislation such as the Nutrition Labeling and Education Act. AMS Dairy Programs also uses the "Guidelines for AMS Oversight of Commodity Research and Promotion Programs" to govern oversight and facilitate the application of legislative and regulatory provisions of the Acts and the Orders.

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

Other AMS Dairy Programs responsibilities relate to nominating and appointing board members, amending the orders, conducting referenda, and conducting periodic management reviews. AMS 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 Board is composed of 38 members, including 36 domestic dairy producers and 2 dairy importers, who administer the program. Board members serve 3-year terms, with no member serving more than two consecutive terms. Board members must be active dairy producers or dairy importers. Dairy producer members are selected by the Secretary from nominations submitted by producer organizations, general farm organizations representing dairy producers, Qualified Programs, or other interested parties. Dairy importer members are selected by the Secretary from nominations submitted by individual importers of dairy products or by organizations representing dairy importers.

A list of Dairy Board members appears in Appendix A–1. Appendix H–1 is a map depicting the 12 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 FR 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 2011, approximately 1,010 dairy producers were granted exemptions, representing approximately 1.6 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 Dairy Board owns the equipment used to conduct the study, 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. AMS Dairy Programs also reviews USDEC contracts to ensure conformance with the Dairy Production Stabilization Act of 1983 (Dairy Act), Dairy Order, and with established USDA policies. AMS Dairy Programs reviewed 52 USDEC contracts during 2011.

#### Contracts

The Dairy Act and Dairy Order require that all contracts expending assessment funds be approved by the Secretary (7 CFR 1150.140). During 2011, Dairy Programs reviewed and approved 283 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

In 2011, DMI retained the certified public accounting firm of Ernst & Young to audit the records of the following contractors: American-Mexican Marketing (export activities), North Carolina State University (product research), Symphony IRI Group, Inc. (market research), Team Services (strategic consulting), and Universal McCann Worldwide, Inc. (lactose free public relations).

#### 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 prescribed by the order, collect an assessment based upon the number of hundredweights of milk for commercial use handled for the 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 2011, 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

In 2011, Dairy Programs reviewed applications for continued qualification from 66 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 2011 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.

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 2011 to audit the records of Draftfcb, Inc., for the periods of January 1 through December 31, 2009; November 2010, March 2011, and August 2011 to determine if the agency had conformed to the financial compliance requirements specified in its agreement with the Board.

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. Additionally, the Board has determined that it will begin to conduct audits of specified periods on all of its primary contractors each year.

#### Compliance

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

### Chapter 3

### Quantitative Evaluation of the Effectiveness of Marketing and Promotion Activities by the Milk Processor Education Program, Dairy Management, Inc., and Qualified Programs

The Dairy Production Stabilization Act of 1983 (Dairy Act) and Fluid Milk Promotion Act of 1990 (Fluid Act) require an annual independent analysis of the advertising and promotion programs that operate to increase consumer awareness and sales of fluid milk and dairy products. Texas A&M University researchers were awarded a competitive contract to complete the study. Chapter 3 summarizes the quantitative evaluation of the effectiveness of the dairy and fluid milk checkoff programs, specifically the marketing and promotion programs.

#### **Objectives of the Evaluation Study**

The effectiveness of dairy promotion is evaluated with the following two key questions in mind:

- 1. Have the demand-enhancing activities conducted by dairy producers, dairy importers, and fluid milk processors actually increased the demand for fluid milk and dairy products?
- 2. Is the dairy industry better off as a result of the marketing and promotion programs initiated by Dairy Management Inc. (DMI), the National Fluid Milk Processor Promotion Program, commonly referred to as the Milk Processor Education Program (MilkPEP) and the Qualified Dairy Product Promotion, Research, or Nutrition Education Programs (QPs)? In other words, have these marketing and promotion programs generated sufficient additional dairy industry revenues to more than cover their associated costs?

Historically, the effectiveness of the dairy promotion programs have been measured through econometric studies focusing on the relationship between the consumption of dairy products and dairy checkoff promotion expenditures, controlling for all other factors (models of demand for dairy products). Economic returns to dairy producers, dairy importers, and fluid milk processors as a result of the changes in consumption generated by marketing and promotion activities are calculated using the parameters obtained from the demand models. The summary indicator of economic returns on investment is a benefit-cost ratio.

This study, similar to previous studies (e.g., Kaiser, 2010), is based on econometric modeling and measures the impact of the checkoff programs with return-on-investment figures. The structural models of consumer demand proceed in a similar direction to prior studies, but are different in several important ways: 1) The structural model of consumption provides detail on individual dairy products as well as the aggregate of fluid milk and dairy products; 2) The effectiveness of promotion expenditures on U.S. dairy exports; and 3) The marketing strategies involving industry partnerships are evaluated in this report.

#### Checkoff Expenditures Made by DMI, MilkPEP, and QPs

Data on nominal checkoff expenditures between 1995 and 2011 were acquired from DMI, MilkPEP, and QPs. While the three entities are administratively distinct, they have similar objectives for enhancing dairy demand. Following other researchers, most notably Schmit and Kaiser (2004), we aggregate the demand-enhancing expenditures from all three entities.

The dairy checkoff programs use a variety of methods to reach consumers. Advertising dollars are directed to media outlets, namely television, outdoor, print, radio, and the internet. Marketing activities other than advertising are directed at the retail level of the marketing channel or at intermediaries. These non-advertising marketing expenditures include health and nutrition education programs, public relations, food service and manufacturing programs, sales promotion programs, school milk programs, school marketing activities, retail programs, child nutrition and fitness initiatives, and single-serve milk promotion. Non-advertising market expenditures not directed at the retail level of the marketing channel include crisis management, trade service communications, and strategic research activities. Programs for export development or promotion are included in the expenditure classifications as demand-enhancing activities. Export promotion was not explicitly considered in previous evaluations.

Finally, a portion of the DMI, MilkPEP, and QP expenditures are classified as non-demandenhancing activities. These expenditures are excluded from the estimation of the impact of marketing and promotion expenditures on consumption. The non-demand-enhancing expenditures are for overhead, technical support, industry relations, and corporate technology.

Annual checkoff expenditures made by DMI, MilkPEP, and QPs over the period 1995 to 2011 are depicted in Table 3-1. A pictorial view of annual checkoff expenditures made by DMI, MilkPEP, and QPs from 1995 to 2011 is presented in Figure 3-1. On average, approximately \$350 million was spent annually by the respective entities. All of these checkoff dollars combined are very large compared to those of other commodities' promotion and research programs.<sup>3</sup> Median DMI expenditures were close to \$90 million, ranging from \$65.3 million to \$99.7 million. Median MilkPEP expenditures were about \$95 million, ranging from \$38.7 million to \$101.9 million. Finally, median expenditures made by QPs were \$170 million, nearly double the expenditures made by DMI and MilkPEP individually.

The data associated with the demand-enhancing activities initiated by DMI and MilkPEP are also available on a quarterly basis. The same is not true for the programmatic activities associated with the QPs. Consequently, to place the marketing and promotion expenditures made by DMI, MilkPEP, and QPs on a quarterly basis, interpolations of the QP data were necessary. The details of this interpolation process are described in the full technical document. The depiction of these data on a quarterly basis is important in allowing for more observations for the econometric analysis of demand for dairy products.

<sup>&</sup>lt;sup>3</sup> To illustrate, expenditures associated with the cotton checkoff program are about \$80 million (Williams *et al.*, 2011) and expenditures associated with the soybean checkoff program are about \$100 million (Williams, 1999; and Williams, Capps, and Bessler, 2009).

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Year	DMI	MilkPEP	QPs	Total
1995	\$88,105	\$43,654	\$160,832	\$292,592
1996	\$99,674	\$38,690	\$159,600	\$297,964
1997	\$93,859	\$101,850	\$160,379	\$356,088
1998	\$97,570	\$100,901	\$158,348	\$356,819
1999	\$90,055	\$97,023	\$161,161	\$348,238
2000	\$88,068	\$95,158	\$169,654	\$352,880
2001	\$96,185	\$95,112	\$169,967	\$361,264
2002	\$92,012	\$93,511	\$174,857	\$360,380
2003	\$87,301	\$95,688	\$165,973	\$348,962
2004	\$82,871	\$97,167	\$173,434	\$353,472
2005	\$76,125	\$83,527	\$175,079	\$334,731
2006	\$65,296	\$92,029	\$182,443	\$339,768
2007	\$74,623	\$101,125	\$190,290	\$366,038
2008	\$99,051	\$97,003	\$182,887	\$378,941
2009	\$94,071	\$95,109	\$182,103	\$371,283
2010	\$87,512	\$98,316	\$204,380	\$390,208
2011	\$88,456	\$91,289	\$180,141 <sup>2</sup>	\$359,886 <sup>2</sup>

Table 3-1. Annual Checkoff Expenditures from DMI, MilkPEP, and QPs, 1995 to 2011<sup>1</sup>

<sup>1</sup>Thousands of dollars spent on demand-enhancing and non-demand enhancing activities. <sup>2</sup>Projected.

Source: DMI, MilkPEP, USDA

Importantly, the QP expenditures are disaggregated into fluid milk, cheese, and butter to allow the impact of these expenditures on the demand for these products. These expenditures include not only advertising and sales promotion but also dairy foods and nutrition research, nutrition education, and market and economic research. With this measure, we obtain a depiction of demand-enhancing activities conducted by QPs. QP expenditures from the unified marketing plan are not included as these go to DMI to fund the national program. In this way, double counting is avoided.

Nominal seasonally-adjusted demand-enhancing expenditures from DMI, MilkPEP, and QPs on a quarterly basis from 1995 to 2011 are exhibited in Figure 3-2. These demand-enhancing expenditures varied from \$51.0 million to \$96.7 million per quarter, averaging \$67.5 million per quarter.

Nominal seasonally-adjusted demand-enhancing expenditures for fluid milk from DMI, MilkPEP, and QPs on a quarterly basis from 1995 to 2011 are exhibited in Figure 3-3. From 1995 to 2006, nominal seasonally-adjusted quarterly marketing and promotion-expenditures for fluid milk ranged from roughly \$24.2 million to \$62.9 million per quarter. After 2006, marketing and promotion expenditures for fluid milk fell noticeably, ranging from \$23.8 million to \$32.1 million per quarter. On average, over the period of 1995-2011, nominal seasonallyadjusted demand enhancing expenditures for fluid milk were \$27.9 million per quarter.

As exhibited in Figure 3-4, nominal seasonally-adjusted demand-enhancing expenditures for cheese ranged from \$12.9 million to \$27.3 million from 1995 to 2004, averaging \$21.5 million



Figure 3-1. Annual Checkoff Expenditures Made by DMI, MilkPEP, and QPs, 1995 to 2011

per quarter. From 2005 to the third quarter of 2008, marketing and promotion expenditures associated with cheese were much smaller compared to the period from 1995 to 2004. On average, expenditures on marketing and cheese promotion were \$12.0 million during the period. Owing to partnerships with the pizza industry, notably Domino's Pizza, expenditures on cheese increased from the fourth quarter of 2008 to the end of 2011.

**Figure 3-2.** Nominal Seasonally-Adjusted Demand Enhancing Expenditures from DMI, MilkPEP, and QPs for All Dairy Products, 1995.1 to 2011.4<sup>1</sup>



<sup>1</sup>Includes expenditures not only for advertising and promotion but also for dairy foods and nutrition research, nutrition education, and market and economic research.

Source: DMI, MilkPEP, USDA

**Figure 3-3.** Nominal Seasonally-Adjusted Demand-Enhancing Expenditures for Fluid Milk from DMI, MilkPEP, and QPs, 1995.1 to 2011.4



Source: DMI, MilkPEP, QPs, and calculations by the authors.

During this latter time frame, nominal quarterly expenditures on marketing and promotion activities were on the order of \$10.5 million to \$19.4 million, averaging \$14.5 million per quarter.

**Figure 3-4.** Nominal Seasonally-Adjusted Demand-Enhancing Expenditures for Cheese from DMI and QPs, 1995.1 to 2011.4



Source: DMI, QPs, and calculations by the authors.
As shown in Figure 3-5, nominal seasonally-adjusted quarterly expenditures on marketing and promotion of butter ranged from \$60,000 to \$6.0 million, averaging close to \$975,000 per quarter over the period 1995 to 2011. Marketing and promotion expenditures for butter were roughly 2.7 percent of comparable expenditures for fluid milk and 5.4 percent of comparable expenditures for cheese.

Beginning in 2006, DMI moved from featuring milk, cheese, and butter in product specific promotions to broader campaigns that relate to a number of dairy products. Examples of broader campaigns include the Child Nutrition and Fitness Initiative, Fuel Up to Play 60, and Action for Healthy Kids.

The U.S. has the potential to compete favorably in global dairy markets owing to its large and efficient production and processing industries. The export promotion programs of the U.S are indicative of determination to maintain and to possibly increase its market share in global dairy markets. As shown in Figure 3-6a, nominal seasonally adjusted DMI expenditures directed to dairy exports on a quarterly basis ranged from just under \$800 to close to \$5 million. The trend in these DMI expenditures has been upward over the period of 1995 to 2011, averaging close to \$1.9 million per quarter over this period. As exhibited in Figure 3-6b, nominal seasonally-adjusted USDA FAS expenditures directed to exports of dairy products on a quarterly basis varied from just under \$310,000 to about \$1.8 million over the period of 1997 to 2011. On average, USDA FAS expenditures were roughly \$985,000 per quarter. As presented in Figure 3-6c, nominal seasonally-adjusted DMI as well as USDA FAS expenditures ranged from \$763 to \$6.1 million per quarter, averaging \$2.76 million on a quarterly basis over the period of 1995 to 2011.

**Figure 3-5.** Nominal Seasonally-Adjusted Demand-Enhancing Expenditures for Butter from DMI and QPs, 1995.1 to 2011.4



Source: DMI, QPs, and calculations by the authors.





Source: DMI and calculations by the authors.

**Figure 3-6b.** Nominal Seasonally-Adjusted USDA FAS Expenditures Directed to Exports of Dairy Products, 1997.1 to 2011.4<sup>1</sup>



<sup>1</sup>Data were not available prior to 1997. Additionally, only annual data for 1997 and 1998 were available. Quarterly interpolations were made for 1997 and 1998.

Source: USDA, FAS and calculations by the authors.

**Figure 3-6c.** Nominal Seasonally-Adjusted DMI and USDA FAS Expenditures Directed to Exports of Dairy Products, 1995.1 to 2011.4



Source: Calculations by authors.

DMI allocations to export enhancement represented about 70 percent of USDEC export promotion funding. DMI as well as USDA FAS export expenditures for dairy products have been highest in the fourth quarter of each year.

### **Trends in Domestic Consumption**

On average, over the 1995 to 2011 period, quarterly per capita commercial disappearances (consumption) of butter, cheese, and fluid milk were 1.2 pounds, 7.8 pounds, and 48 pounds respectively. The range of quarterly consumption for butter was from 0.9 pounds to 1.7 pounds, for cheese from 6.5 pounds to 9.1 pounds, and for fluid milk from 41.8 pounds to 53.3 pounds.

As exhibited in Figure 3-7, quarterly per capita consumption of fluid milk exhibits a definitive downward trend as well as a definitive seasonal pattern. Over the time period 1995 to 2011, the range of commercial disappearance of fluid milk on a per capita basis was from 42 pounds per quarter to 54 pounds per quarter, averaging roughly 48 pounds. Given the conversion of 8.6 pounds per gallon of for milk, the per capita consumption of fluid milk was about 5.5 gallons per quarter on average.

As depicted in Figure 3-8, quarterly per capita consumption of cheese exhibits a definitive upward trend as well as a definitive seasonal pattern. Over the time period 1995 to 2011, the range of commercial disappearance of cheese on a per capita basis was from 6.5 pounds per quarter to 9.1 pounds per quarter, averaging about 7.8 pounds.

Figure 3-7: Per Capita Consumption of Fluid Milk, 1995.1 to 2011.4



As exhibited in Figure 3-9, quarterly per capita consumption of butter exhibits a definitive upward trend as well as a definitive seasonal pattern. Over the time period 1995 to 2011, the range of commercial disappearance of butter on a per capita basis was from 0.9 pounds per quarter to 1.7 pounds per quarter, averaging close to 1.2 pounds.

Figure 3-8. Per Capita Consumption of Cheese, 1995.1 to 2011.4



Figures 3-10 and 3-11 display the quarterly per capita domestic commercial disappearance of all dairy products since 1995 on a fat basis and on a skim solids basis. The per capita consumption measures yield quite different descriptive statistics. On average, on a fat basis, the commercial disappearance of all dairy products amounted to 148 pounds per quarter, ranging from 136 pounds to 160 pounds per quarter. On a skim solids basis, on average, the commercial disappearance of all dairy products amounted to 138 pounds per quarter, ranging from 131 pounds to 145 pounds per quarter. The correlation of these two measures, although positive, is only 0.34.

### **Trends in Dairy Exports**

To maintain consistency with the data used in the analysis of the consumption of fluid milk and dairy products, data from USDA are used for analysis of dairy exports on a fat basis and on a skim solids basis. These data correspond to estimates of commercial exports. An examination of the dairy export data suggests that the growth in total U.S. dairy exports over the 1995 to 2011 period was the result, in large part, of strong growth in exports of low-fat dairy products like nonfat dry milk. On a milk equivalent skim solids basis, the data show that the growth in U.S. dairy exports has been manifestly exponential from an average 1.6 billion pounds per quarter in 1995 to just over an average of 8.5 billion pounds per quarter in 2011 (Figure 3-12). Over the same period, however, measured on a milk equivalent fat basis, average quarterly U.S. dairy exports followed a positive but more linear and much less robust trend from a quarterly average of 887 million pounds in 1995 to nearly 2.4 billion pounds in 2011 (Figure 3-12).



Figure 3-9. Per Capita Consumption of Butter, 1995.1 to 2011.4

Source: USDA



**Figure 3-10.** Per Capita Consumption of All Dairy Products on a Milk Equivalent Fat Basis,1995.1 to 2011.4

Source: USDA and calculations by the authors.

**Figure 3-11.** Per Capita Consumption of All Dairy Products on a Skim Solids Basis, 1995.1 to 2011.4



Source: USDA and calculations by the authors.



**Figure 3-12.** U.S. Dairy Commercial Exports on a Milk Equivalent Fat Basis and Skim Solids Basis, 1995.1 to 2011.4

### Methodology for Analysis of Demand Relationships

The primary objective of advertising and non-advertising marketing activities conducted by MilkPEP, DMI, and QPs over the years has been to shift out the demand curve for fluid milk and manufactured dairy products. The first relevant question, then, is whether marketing activities actually shift out the demand for fluid milk and manufactured dairy products. If the answer to this question is yes, then the second question is whether or not the rightward shift in the demand for fluid milk and manufactured dairy products, and dairy importers who pay for the program. If the answer to the first question is "no," then the answer to the second question is "no" as well. If the answer to the first question is "yes," the answer to the second question is not necessarily "yes" because any consequent increase in revenues to processors producers may or may not be sufficient to cover the costs of the programmatic activities associated with MilkPEP, DMI, and QPs.

The model concentrates on the retail level of the marketing chain for the following reasons: 1) consumers are the recipients of the advertising and promotion messages, and it is necessary to understand how their behavior changes in response to those messages; 2) data are plentiful and relatively free of major structural changes so as to allow a rigorous analysis of the demand for fluid milk and manufactured dairy products; and 3) this analysis yields a current picture of the impacts of programmatic activities of MilkPEP, DMI, and QPs on the demand for fluid milk and manufactured dairy products.

### **Demand for Fluid Milk**

Dairy checkoff program expenditures take place within a challenging competitive marketplace where consumers choose among a variety of foods and beverages in various purchase locations.

The idea is to control for variables that may affect demand, thereby isolating the impact of marketing efforts alone on fluid milk consumption. The marginal or incremental effects of program expenditures over time on fluid milk consumption are then obtained. Of particular interest is the percentage change in consumption due to unit percentage changes in marketing and promotion expenditures.

All factors must be accounted for in a quantitative analysis of market demand to accurately isolate (or to minimize confounding) the impact of advertising and non-advertising marketing activities. The market demand function of fluid milk incorporates the following factors:

- 1. The retail price of fluid milk
- 2. The retail prices of substitute/complementary products, in particular the prices of other non-alcoholic beverages (bottled water, fruit juice, and soy beverage);
- 3. Disposable personal income
- 4. Inflation
- 5. Population
- 6. Changes in demographics or population dynamics, specifically in regard to proportion of the population of children 0 to 4, 5 to 13, and 14 to 17 years of age
- 7. The generic demand-enhancing expenditures for fluid milk made by MilkPEP and DMI;
- 8. Advertising or promotional expenditures associated with competing beverage manufacturers, notably bottled water, fruit juice, and soy beverage
- 9. food expenditures in the away from home market
- 10. Branded fluid milk advertising expenditures
- 11. Seasonality.

Through this demand specification, we filter out the effects of other factors and directly quantify the net impact of advertising and non-advertising marketing activities in conjunction with the programs of MilkPEP, DMI, and QPs on the retail consumption of fluid milk.

Retail level prices of fluid milk products capture own-price effects of consumption. Holding all factors invariant, as retail prices of fluid milk change, consumption of fluid milk is expected to change in the opposite direction. As economic theory suggests, prices of competing or complementary products as well as disposable personal incomes of consumers also may affect the consumption of fluid milk. In recent times, disposable personal incomes of consumers have been negatively impacted by the downturn or sluggish growth in the economy. Over the past decade, the proportion of pre-school aged children in the population has declined. We also consider the impact of the proportion of the population of children 5 to 13 years of age and 14 to 17 years of age on the demand for fluid milk. In addition, we must address the potential impact of marketing activities of competing beverages. The realization is that MilkPEP, DMI, and QPs are not the only groups engaged in generic marketing programs. Indeed, both dairy farmers and fluid milk processors initiated generic marketing programs to combat marketing activities from other beverage manufacturers. We must account as well for away from home eating and drinking trends given that roughly half of the share of the consumer dollar spent on food and beverages occurs away from home. Fluid milk consumption may be negatively impacted by the lack of varieties of fluid milk products in away from home establishments as well as by the expanding availability of fluid milk alternatives in the away from home market. Finally, generic marketing

and promotion effects of fluid milk processors, dairy producers, dairy importers, and the QPs are expected to increase the consumption of fluid milk, holding all other factors constant. Branded fluid milk advertising expenditures also may positively impact fluid milk consumption.

The generic fluid milk marketing activities, including fluid milk advertising and non-advertising marketing activities, include all media activities such as television, print, radio, outdoor, and Internet advertising by MilkPEP and DMI, as well as health and nutrition educational programs, public relations, school milk programs, food service programs, retail programs, trade service communications, and other miscellaneous activities. The advertising and non-advertising marketing efforts represent demand-enhancing activities of MilkPEP, DMI, and the QPs.

The own-price elasticity for fluid milk was estimated to be -0.0619, meaning that for every 10.0 percent change in the price of fluid milk relative to the price of non-alcoholic beverages, per capita fluid milk consumption changes by 0.619 percent in the opposite direction. The demand for fluid milk is inelastic, that is, relatively unresponsive to price changes. This result is consistent with economic theory and with existing literature. For example, Kaiser (2010) estimated the own-price elasticity of fluid milk to be -0.126 based on quarterly data from 1995 to 2009. Cakir and Balagtas (2010) estimated the own-price elasticity of fluid milk to be much higher (in absolute value) at -0.769.

The cross-price elasticity for fluid milk with respect to cheese was estimated to be positive at 0.0115, in accordance with our expectations. However, this cross-price elasticity is not statistically different from zero. Cakir and Balagtas (2010) also found this substitution relationship between cheese and fluid milk. Additionally, Davis, Dong, Blayney, and Owens (2010) found the existence of substitution relationships among dairy product categories.

The percentages of the population of children of various age classifications were key determinants affecting fluid milk consumption. A 1.0 percent rise in the proportion of children under five years of age results in a 1.15 percent increase in fluid milk consumption. The impact of school-age pre-adolescent children on demand is slightly less. A one percent change in the proportion of children between 5 and 13 years of age results in a 0.95 percent change in fluid milk consumption. The proportion of children between 14 and 17 years of age are likewise positively associated with milk consumption. The percent change in demand is 0.95 percent for a 1.0 percent change in the proportion of children between 14 and 17 years of age, almost precisely the same as for school age pre-adolescent children. Clearly, econometric evidence exists to demonstrate that pre-school, pre-adolescent, and adolescent children are important drivers of fluid milk consumption.

Per capita disposable income was a positive but not a statistically significant factor associated with per capita fluid milk consumption. Income elasticity was estimated to be 0.0469. Thus, we find evidence to support the contention that fluid milk is a necessary good, economically speaking. Kaiser (2010), estimated the income elasticity of demand for fluid milk to be 0.13. Alviola and Capps (2010) estimated the income elasticity of fluid milk to be -0.0136.

Also, we provide evidence that the percentage of total food and beverage expenditures associated with away from home eating was not a statistically significant factor affecting per capita fluid

milk consumption. Kaiser (2010) found that this factor was a notable determinant, with the elasticity estimated to be -0.685. Our elasticity estimate of -0.1911 was not statistically different from zero.

In regard to seasonality, per capita fluid milk consumption was highest in the fourth quarter. Relative to the fourth quarter, per capita consumption of fluid milk was lower by 2.0 percent in the first quarter, 6.0 percent in the second quarter, and 5.0 percent in the third quarter.

The impacts of advertising for fruit juice, soy beverage, and bottled water were negative, as expected, on per capita consumption of fluid milk. The short-run elasticity of advertising for fruit juice was estimated to be -0.00457, while the cumulative or long-run elasticity was estimated to be -0.08371. The optimal cumulative effects of advertising on fruit juice were over a period of eight quarters. Similarly, the short-run elasticity of advertising for soy beverage was calculated to be -0.00080, while the long-run elasticity was calculated to be -0.01469. The optimal cumulative effect of advertising on soy beverage was over a period of eight quarters as well. The short-run elasticity of advertising for bottled water was estimated to be -0.00038, while the long-run elasticity of bottled water was calculated to be -0.00350. The optimal cumulative effect of advertising for bottled water was over a period of five quarters.

### **Demand for Cheese**

The market demand function for cheese incorporates the following factors:

- 1. Retail price of cheese
- 2. Retail prices of substitute/complementary products, in particular, the price of bakery products, the price of wine, and the price of whole milk
- 3. Disposable personal income
- 4. Inflation
- 5. Population
- 6. Demand-enhancing marketing expenditures for cheese from DMI and the QPs
- 7. Seasonality.

The retail price of cheese captures own-price effects of consumption. Holding all factors constant, as the retail price of cheese changes, consumption of cheese is expected to change in the opposite direction. As economic theory suggests, prices of competing or complementary products as well as disposable personal incomes of consumers also may affect the consumption of cheese. Further, generic marketing and non-marketing efforts of cheese are expected to increase the consumption of cheese, holding all factors invariant. The demand-enhancing activities pertaining to cheese from 2009 to 2011 largely have been geared to partnerships in the pizza industry.

The own-price elasticity for cheese is estimated to be -0.1051, meaning that for a 10.0 percent change in the price of cheese, per capita cheese consumption changes by 1.051 percent in the opposite direction. Similar to the case for fluid milk, the demand for cheese is inelastic, that is, relatively unresponsive to price changes. This result is consistent with economic theory and with

existing literature. Cakir and Balagtas (2010) estimated the own-price elasticity of cheese to be -0.426, which is much larger than our estimated figure.

The cross-price elasticity for cheese with respect to bakery products is estimated to be 0.4016, indicating that cheese and bakery products are substitutes. This result is at odds with the expectation of a complementary relationship between bakery products and cheese. The cross-price elasticity of cheese with respect to wine was estimated to be -0.7168, indicating that cheese and wine are complements. This result is in accordance with the expectations. Additionally, these cross-price elasticities are much larger than the own-price elasticity for cheese. Consequently, evidence exists to indicate that cheese consumption is more sensitive to changes in the price of bakery products and to changes in the price of wine than to the price of cheese itself.

Moreover, the cross-price elasticity of cheese with respect to fluid milk is -0.1113, indicating that cheese and fluid milk are complements. This result is at odds with Cakir and Balagtas (2010), who estimated the cross-price elasticity between cheese and fluid milk to be 0.349.

Per capita disposable income was a positive and statistically significant factor on per capita cheese consumption. The income elasticity of demand for cheese was estimated to be 0.5559. Thus, we find evidence to support the contention that cheese is a necessary good in economic parlance.

In regard to seasonality, per capita cheese consumption was highest in the fourth quarter. Relative to the fourth quarter, per capita consumption of cheese was lower by 7.0 percent in the first quarter, 5.0 percent in the second quarter, and 4.0 percent in the third quarter.

### **Demand for Butter**

The market demand function for butter incorporates the following factors:

- 1. Retail price of butter
- 2. Retail prices of substitute/complementary products, in particular the price of margarine and the price of bakery products
- 3. Disposable personal income
- 4. Inflation
- 5. Population
- 6. Food expenditures spent in away-from-home outlets
- 7. Generic expenditures for butter from DMI and the QPs
- 8. Seasonality.

The own-price elasticity for butter was estimated to be -0.0993, meaning that for a 10.0 percent change in the price of butter, per capita butter consumption changes by 0.99 percent in the opposite direction. Similar to the situation for fluid milk and cheese, the demand for butter is inelastic, that is, relatively unresponsive to price changes. This result is consistent with economic theory and with the existing literature. Cakir and Balagtas (2010) estimated the own-price elasticity of butter to be -0.037, which is much smaller than our estimate.

The cross-price elasticity for butter with respect to margarine was estimated to be 0.8663, indicating that butter and margarine, as expected, are substitutes. The cross-price elasticity of butter with respect to bakery products was estimated to be -0.6877, indicating that butter and bakery products, as expected, are complements. These respective cross-price elasticities are 7 to 10 times as large as the own-price elasticity for butter. Hence, evidence exists to indicate that butter consumption is far more responsive to changes in the price of margarine and to changes in the price of bakery products than to changes in the price of butter.

Per capita disposable income was a positive and statistically significant factor on per capita butter consumption. The income elasticity of demand for butter was estimated to be 2.173, indicating that butter is a luxury good in economic parlance. The percentage of total expenditures for food away-from-home was a negative and statistically significant factor on per capita butter consumption. The associated elasticity for this determinant of butter consumption was estimated to be -1.227. Per capita butter consumption is quite sensitive to changes in real per capita income and to changes in the percentage of total food and beverage expenditures in the away-from-home market.

In regard to seasonality, per capita butter consumption was highest in the fourth quarter. Relative to the fourth quarter, per capita consumption of butter was lower by nearly 27 percent in the first quarter, 32 percent in the second quarter, and 20 percent in the third quarter.

### **Demand for All Dairy Products**

Similar to the previous evaluation of the MilkPEP and Dairy Program conducted by Kaiser (2010), we also develop and estimate the aggregate demand function for all dairy products and dairy ingredients. Besides the domestic demand-enhancing expenditures of DMI, MilkPEP, and QPs, factors hypothesized to influence per capita all dairy products demand included seasonality, the CPI for all dairy products, and per capita disposable income. Similar to the aforementioned demand models for fluid milk, cheese, and butter, the all-dairy products models on a skim solids basis and on a fat basis were estimated on a per capita basis to control for the influence of population. To account for the impact of inflation, all variables were deflated by the CPI for all items.

On a skim solids basis, the own-price elasticity of demand was estimated to be between -0.1655, but on a fat basis, the own-price elasticity was estimated to be -0.0553. Our own-price elasticity on a skim solids basis and our own-price elasticity on a fat basis were at odds with Kaiser (2010), who estimated these elasticities to be close to -0.30 on a skim solids basis and -0.22 on a fat basis. Our income elasticities were estimated to be 0.30 on a skim solids basis and 0.42 on a fat basis. However, these income elasticities are quite different from Kaiser (2010). His elasticities ranged from 0.17 on a skim solids basis to 0.95 on a fat basis.

Seasonality was evident in the U.S. per capita consumption of all dairy products on a skim solids basis and on a fat basis. Relative to the fourth quarter, per capita consumption of all dairy products on a skim solids basis was higher in the second quarter by slightly more than 1 percent and higher in the third quarter by 2 percent. No statistically significant differences between the first quarter and the fourth quarter were found for per capita consumption of all dairy products on

a skim solids basis. On a fat basis, relative to the fourth quarter, per capita consumption of all dairy products was lower by nearly 7 percent in the first quarter and lower by nearly 2 percent in the second quarter. No significant differences were evident for the third quarter relative to the fourth quarter for per capita consumption of all dairy products on a fat basis.

### **U.S. Dairy Commercial Export Demand**

To measure the effects of DMI export promotion enhancement expenditures on U.S. dairy exports, we specify and estimate two U.S. dairy export demand models using two different measures of dairy exports: 1) the USDA measure of dairy exports on milk equivalent skim solids basis; and 2) the USDA measure of dairy exports on a milk equivalent fat basis. Drivers of demand included lags of the ratio of the Oceania export butter price to the U.S. butter price on a fat basis; lags of the ratio of the Oceania export price for skim milk powder to the U.S. nonfat dry milk price on a skim solids basis; lags of the measure of world income calculated as the trade weighted, real gross domestic products of major export regions; and inertia or stickiness of dairy exports in world markets. Simply put, when U.S. prices are low (high) relative to Oceania export prices, more (less) is exported. Butter prices are used as proxies for prices of exports on a milk fat basis, and nonfat dry milk and skim milk powder prices are used as proxies for prices on a skim solids basis.

The own-price elasticity of the ratio of the skim milk powder Oceania export price to the price of non-fat dry milk U.S. price lagged one quarter was estimated to be -0.3238. The own-price elasticity of the ratio of the Oceania export butter price to the U.S. price of butter lagged one quarter was estimated to be -0.2030. This set of findings suggests that dairy exports are not very sensitive to changes in the respective ratios of prices. However, dairy exports are sensitive to world income with a one-quarter lag. The elasticity with respect to world income was estimated to be 1.097 on a skim solids basis and 1.024 on a fat basis. Owing to the significance of the one quarter lag of exports on a skim solids basis as well as on a fat basis, inertia of dairy exports in world markets was substantiated.

### Impacts of Marketing and Promotion Activities on Demand for Dairy Products

The econometric evidence indicates a significant association between consumer demand and checkoff program expenditures, for all dairy products in the aggregate and for individual product categories. Expenditures have a modest effect on demand during the quarter in which it is made. The longer term cumulative impact is measurably larger than the contemporaneous effect. The cumulative effects vary across the specific product type.

The key indicator of the impact of marketing and promotion expenditures on demand, and the elasticity with respect to these demand enhancing activities is reported. This elasticity corresponds to the percentage change in consumption given a 1.0 percent change in marketing and promotion expenditures, while holding all other variables constant.

### Fluid Milk

The checkoff expenditures from milk processors, dairy producers, dairy importers, and QPs indeed boosted per capita consumption of fluid milk. The short-run elasticity of demand with respect to the demand enhancing activities of was estimated to be 0.002, while the long run elasticity was estimated to be 0.058. In other words, for a 10 percent increase in the demand enhancing expenditure, cumulatively the demand for milk rose by 0.58 percent. The cumulative effect of the fluid milk demand enhancing activities was over a period of twelve quarters. Kaiser (2010) estimated the elasticity for generic milk marketing and promotion activities conducted to be 0.037. Schmit and Kaiser (2004) and Cakir and Balagtas (2010) found statistically significant advertising elasticities of 0.040 and 0.093 for fluid milk. Differences in elasticities may be attributed to differences in demand enhancing activities.

### Cheese

The short run elasticity of cheese demand with respect to demand enhancing activities was estimated to be 0.00091, while the long run elasticity was 0.028. Hence a 10 percent change in expenditures on cheese promotion is expected to have an impact on consumption of nearly 0.30 percent. The optimal cumulative effect of these demand enhancing activities was over a period of 11 quarters. Our results are consistent with Schmit and Kaiser (2004), who estimated the advertising elasticity of cheese to be statistically significant and about 0.013. Cakir and Balagtas (2010) estimated this elasticity to be 0.046, albeit not statistically different from zero.

### Butter

The short run demand enhancing elasticity of demand for butter was estimated to be 0.0015, while the long run elasticity was estimated to be 0.013. Thus a 10 percent increase in promotion spending is associated with a cumulative or long-run rise of consumption by 0.13 percent. The optimal cumulative effect of these demand enhancing activities was over a period of six quarters. Our result is lower than that found by Cakir and Balagtas (2010), who estimated the advertising elasticity of butter to be 0.209.

### All Dairy Products

The aggregation of dairy products into a single quantitative model of demand response requires that the unlike goods be measured on a common unit basis. Dairy products can be measured on a skim solids basis or on a fat basis. The estimation results for both measures are similar to each other, but not identical, and both are reported for completeness. With either quantity indicator, checkoff program expenditures have a significant influence on demand in both the short run and the long run. Hence the combined efforts of milk processors, dairy farmers, dairy importers, and QPs boosted per capita consumption of all dairy products.

The short run elasticity associated with demand enhancing activities was estimated to be 0.00040 on a skim solids basis and 0.00252 on a fat basis. The long run elasticity associated with demand enhancing activities was estimated to be 0.02294 on a skim solids basis and 0.02351 on a fat basis. The optimal cumulative effect of demand enhancing activities was over 16 quarters on a

skim solids basis and 5 quarters on a fat basis. Kaiser (2010) provided separate estimates of elasticities for generic dairy advertising expenditures (0.036 on a skim solids basis and 0.056 on a fat basis) and for generic dairy non-advertising marketing expenditures (0.016 on a skim solids basis and 0.017 on a fat basis).

### Dairy Exports

The cumulative impact of USDEC expenditures on dairy exports was statistically significant on a skim solids basis and on a fat basis. The elasticity associated with USDEC export promotion expenditures was estimated to be 0.03112 for dairy exports on a skim solids basis and 0.06075 on a fat basis. The optimal lag of the cumulative impacts of these expenditures was 5 quarters for dairy exports on a skim solids basis and 6 quarters on a fat basis.

### **Benefit-Cost Ratios**

To calculate retail benefit-cost ratios (BCR), similar to Capps, Bessler, and Williams (2004), Williams and Capps (2006), Williams, Capps, and Palma (2008), and Williams, Capps, and Dang (2010), we use the demand enhancing relationships for fluid milk, cheese, butter, and all dairy products attributed to the checkoff program to derive an estimate of the change in consumption. The efforts of the checkoff programs via the demand enhancing advertising and non-advertising marketing activities increased the commercial disappearance, all other factors invariant. Over the period 1995 to 2011, the incremental commercial disappearance was calculated to be 54.3 billion pounds for fluid milk; 4.3 billion pounds for cheese; 0.3 billion pounds for all dairy products on a skim solids basis; and 68.9 billion pounds for all dairy products on a fat basis.

The incremental commercial consumption of fluid milk amounts to 5.8 percent of the total cumulative consumption of fluid milk over the 1995 to 2011 period. Put another way, the efforts of DMI, MilkPEP, and QPs led to a 5.8 percent increase in fluid milk consumption, more than it would have been over the period 1995 to 2011. Similarly, the demand enhancing marketing activities of DMI and QPs resulted in a 2.8 percent incremental increase in cheese consumption and a 1.4 percent incremental increase in butter consumption, all other factors held constant, from 1995 to 2011. Finally, the efforts of DMI, MilkPEP, and QPs led to a 2.3 percent incremental increase in all dairy products on a skim solids basis and a 2.4 percent incremental increase in all dairy products on a fat basis over the period 1995 to 2011.

These benefits are calculated at the retail level. An important question is how much of the increased revenues generated at the retail level actually reaches program funders. To calculate the BCR for milk processors and dairy producers, we multiply USDA estimates of the farm share of the retail dollar for fluid milk, cheese, butter, and all dairy products by the corresponding retail BCRs. On average, the farm share of the retail dollar over the period 2000 to 2010 was 50.27 percent for fluid milk, 30.82 percent for cheese, 41.73 percent for butter; and 29.55 percent for all dairy products. Therefore, the subsequent BCRs at the farm level were calculated to be 3.95 for fluid milk; 4.43 for cheese; 6.26 for butter; 12.81 for all dairy products on a skim solids basis; and 14.14 for all dairy products on a fat basis. A summary of the farm-level benefit-cost ratios is exhibited in Table 3-2.

	Farm Level
All Dairy (skim solids)	12.81
All Dairy (fat basis)	14.14
Fluid milk	3.95
Cheese	4.43
Butter	6.26

#### Table 3-2: Calculated Farm-Level Benefit-Cost Ratios, 1995-2011

Note: The ratios are dollars of revenue generated per checkoff dollar spent on demand enhancing activities.

Our farm level BCR for fluid milk (3.95) was lower than the corresponding BCR of 8.88 calculated by Kaiser (2010). On the other hand, our farm-level BCRs for all dairy products, 14.14 (fat basis) and 12.81 (skim solids basis), were higher than the corresponding BCRs of 6.20 on a skim solids basis and 9.85 on a fat basis calculated by Kaiser (2010). The BCRs calculated by Kaiser (2010) were for the period 1995 to 2009. Kaiser (2010) did not calculate any BCRs for cheese and butter. Importantly, our BCRs are calculated based upon expenditures made only for demand enhancing activities.

The empirical results from the dairy export demand model provides strong statistical evidence that the USDEC promotion enhancement expenditures have shifted out the world demand for U.S. dairy exports. A critical question, however, is whether the benefit of the increase in exports achieved is greater than the cost of the promotion over the years. Of course, not all the benefits from the additional dairy exports generated by the export promotion expenditures have accrued to dairy producers over the years. Others also have benefited including exporters, milk processors, dairy product manufacturers, and others along the supply chain.

When using export data measured on a milk equivalent skim solids basis and a milk equivalent fat basis, the return to producers was calculated to be \$15.90 and \$8.12 per dollar spent on export promotion. Thus, the USDEC dairy export promotion program added more to producer revenues in its effects on low fat dairy product exports than on higher fat content export products.

The relatively high BCRs for export promotion are consistent with those found for other export promotion programs (see, for example, Williams, 2012; Williams, Capps, and Bessler, 2009; Rusmevichientong and Kaiser, 2009; and Rosson, Hammig, and Jones, 1986). In general, the return to export promotion per dollar often is found to be higher than for domestic promotion. Our results support this pattern for dairy exports on a skim solids basis but not on a fat basis.

In the DMI partnership activities funds are provided to firms that use dairy ingredients in their products or to retailing outlets that position and market dairy products. Pizza restaurants have been heavily involved in partnerships in recent years. Because the partnership programs have a short history and quantitative data specifically for the partner firms is not available, a BCR of the type presented previously in this report is not available. However, a related ratio can be estimated. The fact that 25 percent of cheese consumed in the U.S. is on pizza provides relevance for the use of the demand model for cheese as an approach to obtain, albeit indirectly, a benefit-cost of the partnership.

To investigate whether there was an associated change in the BCR, we examined the demand model for cheese over the period 1995-2011 compared to the period 1995-2008. In terms of the responsiveness of the quantity of cheese consumed with respect to DMI expenditures, there was no significant difference in the advertising elasticity of promotion expenditures. Because of the stability in the market structure, it is reasonable to apply the advertising elasticity in a calculation of a BCR to sub-periods, before and after the partnerships. During 2009-2011, the resulting BCR was calculated to be 7.7 to 1, a notable increase compared to a BCR of 3.9 to 1 during 1995-2008 before the partnerships were in place.

### Partnerships with the Dairy Industry and Retailers

Our approach to evaluation is to engage a specific partnership in detail, providing a firm level analysis to the extent possible. Marketing and advertising firms often provide client companies with measures of the impact of a campaign; however those studies are typically confidential and have not been provided to us. Information about sales, volume of dairy products used, and the nature of the promotion messages have been provided and analyzed.

DMI's strategic partner firms operate within the general business environment - a challenge in recent years due to the economic downturn. DMI has undertaken strategic partnerships with retailers and manufacturers, with the retail partners coming from both the restaurant channel and supermarket channel. In each partnership, DMI's expenditure is matched several times over by resources invested by the private sector partner. Specific examples of the partnerships are as follows.

The partnership activities with manufacturers include a strategic partnership in 2009 with H.P. Hood to develop a low fat milk product and to create innovative lactose-free products. With General Mills in 2009, the Yoplait Frozen Smoothies line was developed and launched with the assistance of DMI.

The leading partnership activity involving supermarket retailers was the Dairy Aisle Reinvention. This category management program aimed at increasing overall sales of dairy products; this project was conducted over a four-year period from 2006 to 2009. Although the Reinvention partnership changed assortments and store shelf arrangements for various retailers, the funding originated from manufacturers, notably the Dannon Company, Kraft Foods, Shamrock Farms, and Nestle. This program intended to support the introduction of innovative dairy products, reduce clutter and enhance traffic flow in the supermarket dairy aisle, increase shopper engagement, and as a result, to increase total dairy category sales. More specifically, dairy products were arranged based on meal occasion to increase the time shoppers spent in the dairy section, to enhance purchase frequency and to increase category sales. As a result of this program, space allocated in the aisle was expanded and the benefits of dairy products were communicated to the consumer. Also, different ways to use dairy products were explained and recipes were made available to encourage purchases.

Restaurant businesses involved with the DMI partnerships are mainly quick-serve restaurants and nationally known brands. The Domino's Pizza activity is assessed in depth in this study. Also within the pizza industry, a partnership with Pizza Hut in 2002 led to the "Summer of

Cheese" promotion program. A three-year partnership with McDonald's supported menu development in coffee beverages, Angus cheese burgers, and single-serve milk in resealable plastic containers. Additionally, McDonald's developed McCafe, a specialty coffee line, which uses up to 80 percent milk in the product. A partnership with Starbucks to help develop and launch the line of Vivanno Smoothies featured the use of dairy ingredients, accounting for more than 3.7 million pounds of whey protein annually.

Most of the partnership resources have been targeted at the restaurant channel. The highly competitive quick-serve restaurant companies regularly promote new items and features, so it stands to reason that there is great potential for funds from dairy producers to be leveraged well if they are used in developing an innovation that is promoted on national media and sold in nationwide outlets. When the partnerships began, U.S. national income was growing, along with consumer expenditures on eating away from home. However, the economic downturn of 2008 may have interrupted this trend as income constraints led to households eating out less, thus affecting the restaurant channel more than the rest of the food industry.

Since the aforementioned strategic partnership programs started and ended in a relatively narrow time frame, a case study approach is utilized, with quantitative as well as qualitative dimensions, to shed light on the effectiveness of DMI's strategic partnerships to enhance consumption of fluid milk and manufactured dairy products. For the 2012 evaluation, we have chosen to analyze the Domino's Pizza partnership, and we provide analysis of the impact of the business cycle on the restaurant channel.

Pizza accounts for 25 percent of all cheese consumption in the United States (U.S. Department of Agriculture, 2011). Given the importance of pizza as a vehicle for cheese consumption, it is reasonable to feature this product line in a promotion effort. Since 2009, DMI has engaged in a partnership with Domino's, whose market share of the quick-serve pizza industry is roughly 10 percent. DMI spent over \$35 million over three years in partnership activities with Domino's. The Domino's relationship accounted for nearly three-quarters of DMI's overall promotion expenditures in the cheese category over the 2009 to 2011 period.

### Timeline of the Domino's Partnership Activities

Domino's has partnered with DMI since early 2009 using dairy farmer dollars to develop and to promote Domino's pizza offerings. In February 2009, Domino's launched the American Legends line of pizza. This line featured regional specialties such as the Honolulu Hawaiian, the Cali Chicken Bacon Ranch, the Pacific Veggie, the Buffalo Chicken, the Philly Cheese Steak, and the Memphis BBQ Chicken, and was advertised as having 40 percent more cheese than Domino's typical pizzas. Cheese also was used on the crust.

Later, Domino's expanded the line from six to eight different pizzas, adding the Fiery Hawaiian and the Wisconsin 6 Cheese. According to Patrick Doyle, President and CEO of Domino's Pizza, "DMI support has allowed us to focus some advertising dollars on areas we would not have considered otherwise. The Wisconsin 6 Cheese pizza has twice the cheese of a regular pizza, but we had neither developed nor advertised such a product. DMI helped fund the research and media to launch this product" (Dickrell, 2011).

Soon after the new Legends line was promoted, Domino's featured a reduced price Carry-Out Special for a large extra cheese pizza with one topping. This price-reducing strategy was not part of DMI activities associated with the partnership. In 2010, Domino's overall same-store sales increased noticeably due primarily to the promotion of the new Legends line and the Carry-Out Special feature. In 2010 and later, there was a modest difference in the focus on cheese. The predominant message reflected the newly reformulated ("New and Inspired") pizza, where the sauce and the crust received promotion attention along with cheese. Coinciding with the launch of the newly reformulated pizza, for those ordering a cheese-only pizza, 50 percent more cheese was used. The Carry-Out Special offers were changed to feature large two-topping pizzas, which did not automatically carry extra cheese. However, Domino's reported that customer research indicated that this change ultimately would sell more pizza and therefore more cheese, in line with the objectives of the DMI partnership.

### Domino's Cheese Volume During the DMI Partnership

Volume associated with cheese in the Carry-Out Specials rose by several million additional pounds in 2009. During the fourth quarter of 2009, when the Carry-Out Special was on, the volume of cheese Domino's purchased for its pizza grew at a faster rate than the growth rate of Domino's revenue. In the category of pizza cheese, there was a significant increase in the volume used by Domino's. The first Carry-Out Special increased pizza cheese volume markedly, and the second Carry-Out Special increased pizza cheese volume by double digits. In 2010, the third and fourth Carry-Out Specials increased cheese use even further. Compared even to the growth given by the first two Carry-Out Specials, these increases were significant. The trend of increases continued in 2011 with the advent of more Carry-Out Specials. The gains in cheese volume represented both an increase in total pizzas sold and an increase in the amount of cheese on certain pizzas, resulting in notable growth in total cheese used at Domino's.

In 2010, Domino's added the Wisconsin 6 Cheese pizza to the American Legends line. This recipe contained more cheese than a traditional one-topping pizza. In the five-week promotion period following this pizza's release, coupled with continued momentum from the "New and Inspired" re-launch, Domino's cheese volume was greater than the same period in 2009 by a considerable margin, and the uplift persisted several weeks into the launch. In 2011, Domino's released a new line, Stuffed Cheesy Bread, with three varieties. Containing as much cheese as a medium pizza, this item featured twice the amount of cheese than the previous cheese bread sold by Domino's. With the introduction of the American Legends line of specialty pizzas in 2009, Domino's also began to feature certain new specialty cheeses in addition to pizza cheese. The use of these new cheese varieties was low in volume compared to mozzarella, but may have increased consumer awareness of varieties that they might return to or use as complementary to their current cheese purchases.

### **Concluding Remarks**

This summary provides the independent evaluation of the effectiveness of the dairy industry marketing and promotion programs for 2011. The quantitative analysis covers the period 1995-2011. With regard to methodology, the structural econometric models that are presented in this

report are statistically valid and largely consistent with prior studies in the literature on evaluation of generic commodity promotion. The demand models for cheese and butter and the demand models for dairy exports that were developed for this study as well as the assessment of DMI's strategic partnerships with industry are unique contributions to the research base on the evaluation of generic dairy promotion programs. Some of the key findings of the economic analysis of the dairy product market that are relevant to future demand enhancing promotion efforts are as follows:

- Dairy promotion programs were successful in increasing U.S. consumption of dairy products in aggregate, and specifically for fluid milk, cheese, and butter. The incremental consumption per dollar spent was 2.6 gallons for fluid milk, 3.5 pounds for cheese, and 5.2 pounds for butter. Put another way, due to the dairy promotion programs, fluid milk consumption was 5.8 percent higher than it otherwise would have been over the study period. Similarly, the promotion activities of DMI resulted in 2.8 percent more cheese consumption and 1.4 percent more butter consumption than otherwise would have occurred over the same period.
- The gains in revenue at the farm level were far larger than the costs of the checkoff program. The BCRs for fluid milk were calculated to be \$3.95 for every dollar invested; for cheese \$4.43 for every dollar invested; and for butter \$6.26 for every dollar invested. The BCRs were calculated to be 12.81 on a skims solids basis and 14.14 for all dairy products on a fat basis.
- Own prices of fluid milk, cheese, butter, and all dairy products were significant drivers of consumer demand for the various dairy products.
- Income was a significant driver of the consumption of cheese, butter, and all dairy products, but not for fluid milk. Income is positively associated with the consumption of fluid milk, cheese, butter, and all dairy products.
- Fluid milk consumption was affected negatively by advertising from other beverage manufacturers, namely fruit juice, soy beverages, and bottled water.
- USDEC dairy export promotion expenditures increased foreign demand for U.S. dairy products, both on a fat basis and on a skim solids basis. DMI allocations to export enhancement represented almost 70 percent of USDEC exports promotion funding over the study period. On a skim solids basis, the export promotion programs carried out by the USDEC yielded 3.1 percent more dairy exports, and on a fat basis, 6.1 percent more dairy exports.
- The increase in revenue generated from dairy export promotion was far greater than the promotion expenditures; importantly, the effectiveness was greater for low fat dairy products (on a milk equivalent skim solids basis) than for high fat content dairy products (on a milk equivalent fat basis). The BCR to dairy producers measured in terms of BCRs for exports on a skim solids basis was calculated to 15.90, while the BCR to dairy producers for exports on a fat basis was calculated to be 8.12.

• The BCR for dairy export promotion exceeded that of domestic dairy product promotion on a skim solids basis but not on a fat basis. This finding suggests that reallocation of expenditures to export promotion programs might not necessarily result in net benefits in terms of total industry revenues and dairy producer profits. This finding also suggests that there may be some benefit to shifting resources to promoting exports of low fat dairy products.

The DMI strategic partnership programs have engaged food retailers in the dairy industry checkoff program in a variety of ways. This report provides an overview of the partnership activities with supermarket and restaurant retailers and manufacturers since 2002. A case study of the partnership with Domino's from 2009 to 2011 was the basis for the evaluation of the effectiveness of the partnerships. Findings of the case study were:

- The promotional activities with Domino's included new product lines, use of more cheese than had been provided on similar items in the Domino's chain before the partnership, and the introduction of specialty cheeses into the company's recipes. In short, the assistance of dairy dollars was instrumental in positively affecting the pizza category, a category that is very important to the dairy industry.
- The competitive structure of the quick serve pizza industry led other companies to imitate the product lines that used more cheese, generating positive spillover to the entire category.
- The partner company also undertook a price discounting strategy along with product development, which enhanced the volume of cheese sold because more pizza was sold.
- DMI's expenditures on the Domino's partnership accounted for three-fourths of the promotion expenditure on cheese during 2009-2011. The same period is associated with a higher BCR for cheese promotion than was the case prior to the partnership. It is not possible to conclude that the partnership alone drove the improved effectiveness, but this finding is suggestive of success in promotion of the cheese category.

### National Dairy Promotion and Research Board Member Listing

### **Region 1 (Oregon and Washington)**

George E. Marsh Cornelius, Oregon 1<sup>st</sup> Term Expires 10/31/12

### **Region 2 (California)**

James L. Ahlem Hilmar, California 2<sup>nd</sup> Term Expires 10/31/13

John B. Fiscalini Modesto, California 2<sup>nd</sup> Term Expires 10/31/13

Stephen D. Maddox Riverdale, California 2<sup>nd</sup> Term Expires 10/31/13

Brad J. Scott Moreno Valley, California 2<sup>nd</sup> Term Expires 10/31/13

### Renae A. De Jager Chowchilla, California 1<sup>st</sup> Term Expires 10/31/13

Ronald L. Koetsier Visalia, California 2<sup>nd</sup> Term Expires 10/31/11

Ray S. Prock Denair, California 1<sup>st</sup> Term Expires 10/31/12

Arlene J. Vander Eyk Pixley, California 1<sup>st</sup> Term Expires 10/31/12

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

Brian W. Esplin Shelley, Idaho 1<sup>st</sup> Term Expires 10/31/12

Ronald E. Shelton Greeley, Colorado 1<sup>st</sup> Term Expires 10/31/11 Jeffrey A. Hardy Brigham City, Utah 1<sup>st</sup> Term Expires 10/31/13

Harold A. Wick Austin, Colorado 1<sup>st</sup> Term Expires 10/31/11

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

William R. Anglin Bentonville, Arkansas 2<sup>nd</sup> Term Expires 10/31/11

Neil A. Hoff Windthorst, Texas 1<sup>st</sup> Term Expires 10/31/12 Steven R. Hanson Clovis, New Mexico 1<sup>st</sup> Term Expires 10/31/13

Byron A. Lehman Newton, Kansas 1<sup>st</sup> Term Expires 10/31/11

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

Paul A. Fritsche New Ulm, Minnesota 1<sup>st</sup> Term Expires 10/31/12

#### **Region 6 (Wisconsin)**

Patricia M. Boettcher Bloomer, Wisconsin 1<sup>st</sup> Term Expires 10/31/12

Sharon K. Laubscher Wonewoc, Wisconsin 1<sup>st</sup> Term Expires 10/31/11

Carl F. Van Den Avond Green Bay, Wisconsin 2<sup>nd</sup> Term Expires 10/31/11 Kenton W. Holle Mandan, North Dakota 1<sup>st</sup> Term Expires 10/31/11

Douglas T. Danielson Cadott, Wisconsin 1<sup>st</sup> Term Expires 10/31/13

Randy G. Roecker Loganville, Wisconsin 2<sup>nd</sup> Term Expires 10/31/12

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

Mark E. Erdman Chenoa, Illinois 1<sup>st</sup> Term Expires 10/31/12 Douglas D. Nuttleman Stromsburg, Nebraska 2<sup>nd</sup> Term Expires 10/31/11

### **Region 8 (Alabama, Kentucky, Louisiana, Mississippi, and Tennessee)** Larry B. Jaggers

Glendale, Kentucky 1<sup>st</sup> Term Expires 10/31/11

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

Douglas L. Krickenbarger West Alexandria, Ohio 1<sup>st</sup> Term Expires 10/31/13 Carl A. Schmitz Wadesville, Indiana 2<sup>nd</sup> Term Expires 10/31/11

Susan D. K. Troyer Goshen, Indiana 1<sup>st</sup> Term Expires 10/31/12

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

Zachary H. Myers Jonesville, North Carolina 1<sup>st</sup> Term Expires 10/31/13

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

David P. Crowl Forest Hill, Maryland 1<sup>st</sup> Term Expires 10/31/13 Rita P. Kennedy Butler, Pennsylvania  $2^{nd}$  Term Expires 10/31/12

### **Region 12 (New York)**

Ronald R. McCormick Java Center, New York 1<sup>st</sup> Term Expires 10/31/12 Sanford Stauffer Nicholville, New York 1<sup>st</sup> Term Expires 10/31/13

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

Ellen H. Paradee Grand Isle, Vermont 1<sup>st</sup> Term Expires 10/31/11

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

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

Tunde E. Balazs Upstate Niagara Cooperative, Inc. Buffalo, NY Term Expires 06/30/2013

### 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 06/30/2013

### **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)

Nick Mysoré Dean Foods Dallas, Texas Term Expires 06/30/2013

### 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)

Henry Michon Safeway, Inc. Pleasanton, California Term Expires 06/30/2013

### 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

Brian P. Linney Dairygold, Inc. Seattle, Washington Term Expires 06/30/2013

Teresa E. Webb Farmland Dairies, L.L.C. Wallington, New Jersey Term Expires 06/30/2013

### **Members-At-Large (Public)**

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

## Appendix B–1 National Dairy Promotion and Research Board 2011 and 2010 Actual Income and Expenses (Thousands)

	_ 2011	2010
Income		
Domestic Assessment	\$97,660	\$95,701
Import Assessment <sup>1</sup>	761	0
Interest	5	23
NAEMS <sup>2</sup> Interest	0	221
Total Income	\$98,426	\$95,945
General Expenditures		
General and Administrative	\$4,210	\$3,796
USDA Oversight	<u>858</u>	927
Total General Expenditures	\$5,068	\$4,723
Program Expenditures		
Domestic Marketing and Export Enhancement	\$90,299	\$95,941
Excess of Revenue (Under) Over Expenditures	\$3,059	(\$4,719)
Fund Balance, Beginning of Year	\$17,620	\$22,339
Fund Balance, End of Year	<u>\$20,679</u>	<u>\$17,620</u>

<sup>1</sup>USDA announced the Dairy Import Assessment effective August 1, 2011.

<sup>2</sup>National Air Emissions Monitoring Study.

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

## Appendix B–2 2011 USDA Oversight Costs for the National Dairy Promotion and Research Board (Thousands)

Salaries and Benefits	\$598
Travel	57
Miscellaneous <sup>1</sup>	62
Equipment	7
Total	\$724
Independent Evaluation	\$59
Total <sup>2</sup>	_\$783

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

<sup>2</sup>The 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 1<sup>st</sup> through September 30<sup>th</sup>.

Source: USDA Accounting Reports.

## Appendix B–3 National Dairy Promotion and Research Board 2012 Approved Budget (Thousands)

Revenues	
Domestic Assessments	\$98,024
Import Assessments	2,100
Interest	5
Total Income	\$100,129
Expenses	
General and Administrative	\$4,705
USDA Oversight	945
Subtotal	\$5,650
Program Budget	
Export	18,584
Fuel Up to Play 60	11,057
Industry Communications	700
Industry Image and Relations	3,344
Nutrition Affairs	5,950
Strategic Initiatives	33,357
Strategy and Insights	4,726
Supplemental Regional Programs	7,000
Other <sup>1</sup>	6,521
Subtotal	\$91,239
Dairy Research Institute	\$20,647
Total Budget Expenditures	<u>\$111,886</u>

<sup>1</sup>Other includes fixed commitments, butter promotion, value–added milk, and value–added cheese. \*UDIA Expense share of total is \$30,942.

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

## Appendix B–4 National Fluid Milk Processor Promotion Board 2011 and 2010 Actual Income and Expenses (Thousands)

	2011	2010
Income		
Assessment	\$104,585	\$106,974
Late-Payment Charges	95	80
Interest	68	144
Other	7	8
Total Income	\$104,755	\$107,206
General Expenditures		
California Refund	\$9,804	\$10,001
Administrative	2,506	2,520
USDA Oversight	426	471
USDA Assessment Verification	77	87
Total General Expenditures	\$12,813	\$13,079
Program Expenditures		
Moms Target	\$49,596	\$57,641
Teens Target	20,005	24,365
Hispanic Target	6,939	6,948
Market Research	4,557	4,308
Business Development	10,285	5,009
Program Measurement	22	45
Total Program Expenditures	\$91,405	\$98,316
Excess of Revenue (Under) Over Expenditures	\$537	(\$4,188)
Fund Balance, Beginning of Year	\$15,168	\$19,356
Fund Balance, End of Year	<u>\$15,705</u>	\$15,168

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

## Appendix B–5 USDA 2011 Oversight Costs for the National Fluid Milk Processor Promotion Board (Thousands)

Salaries and Benefits	\$314
Travel	19
Miscellaneous <sup>1</sup>	49
Equipment	1
Total	\$383
Independent Evaluation	\$31
Total <sup>2</sup>	<u></u>

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

 $^{2}$  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.

Source: USDA Accounting Reports.

## Appendix B–6 National Fluid Milk Processor Promotion Board 2012 Approved Budget (Thousands)

Revenues	
Assessments	\$105,000
Interest	100
Total Income	\$105,100
Carryover from Previous Fiscal Year	\$550
Total Available Funds	\$105,650
Expenses	
General and Administrative <sup>1</sup>	\$2,500
USDA Oversight	600
California Refund	9,925
Subtotal	\$13,025
Program Budget	
Moms Target	\$50,400
Hispanic Target	7,500
Teens Target	17,000
Business Development	10,270
Research	4,500
Program Measurement <sup>2</sup>	105
Subtotal	\$89,775
Unallocated	\$2,850
Total Budget Expenditures	<u>\$92,625</u>

<sup>1</sup>Processor Compliance is included in General and Administrative Expenses.

<sup>2</sup>Independent Evaluation costs are included in Program Measurement Expenses.

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

## Appendix B–7 2011 Aggregate Income and Expenditure Data Reported to USDA by the Qualified Programs (Thousands)

Income	
Carryover from Previous Year	\$67,831 <sup>1</sup>
Producer Remittances	184,535
Transfers from Other Qualified Programs <sup>2</sup>	35,919
Transfers to Other Qualified Programs	(54,887)
Other Income <sup>3</sup>	6,501
Total Adjusted Annual Income	\$239,899
Expenditures	
General and Administrative	\$7,074
Advertising and Sales Promotion	66,188
Unified Marketing Plan <sup>4</sup>	58,813
Dairy Foods and Nutrition Research	5,069
Public and Industry Communications	12,593
Nutrition Education	12,605
Market and Economic Research	1,453
Other <sup>5</sup>	2,665
Total Annual Expenditures	\$166,460
Total Available for Future Year Programs	<u>\$73,439</u>

<sup>1</sup> Differences are due to audit adjustments and varying accounting periods.

<sup>2</sup> Payments transferred between Qualified Programs differ due to different accounting methods and accounting periods.

<sup>3</sup> Includes interest, income from processors and handlers, sales of supplies and materials, contributions, and rental income.

<sup>4</sup> 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.

<sup>5</sup> Includes capital expenses.

Source: Data reported by the Qualified Programs.

## Appendix B–8 Aggregate 2011 Advertising Expenditure Data Reported to USDA by the Qualified Programs (Thousands)

### **Advertising Programs**

Fluid Milk	\$19,075
Cheese	32,406
Butter	4,540
Frozen Dairy Products	5,133
Other <sup>1</sup>	5,034
Total	\$66,188

<sup>1</sup> 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, 2011 and 2010 With Report of Independent Auditors

Ernst & Young LLP

## **U ERNST & YOUNG**
# **Financial Statements**

Years Ended December 31, 2011 and 2010

# Contents

1
2
4 5 6



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## 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, 2011 and 2010, 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 and the standards applicable to financial statement 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. 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 at December 31, 2011 and 2010, 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.

In accordance with *Government Auditing Standards*, we also have issued our report dated May 7, 2012, on our consideration of NDB's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report 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 internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

Ernst + Young ILP

May 7, 2012

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# Report on Internal Control over Financial Reporting and on Compliance and Other Matters based on an Audit of the Financial Statements Performed in Accordance with *Government Auditing Standards*

The Board of Directors National Dairy Promotion and Research Board

We have audited the financial statements of National Dairy Promotion and Research Board (NDB) as of and for the year ended December 31, 2011, and have issued our report thereon dated May 7, 2012. We conducted our audit in accordance with auditing standards generally accepted in the United States and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

### **Internal Control over Financial Reporting**

Management of NDB is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audit, we considered NDB'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 NDB's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of NDB'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 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 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.

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether NDB's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters, 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*.

This report is intended solely for the information and use of management, Board of Directors, and others within the entity, and is not intended to be and should not be used by anyone other than these specified parties.

Ernst + Young LLP

May 7, 2012

# Balance Sheets

	December 31		
	2011	2010	
Assets			
Cash and cash equivalents	\$ 22,000,543	\$ 27,232,666	
Domestic assessments receivable, net of allowance for			
doubtful accounts of \$200,000 in 2011 and 2010	11,214,353	8,573,381	
Import assessments receivable	336,963		
Accrued interest receivable	63	120	
Interest receivable from NAEMS investments	21,336	221,336	
Fixed assets, net of accumulated depreciation of			
\$221,644 and \$209,521 in 2011 and 2010, respectively	36,575	33,298	
Total assets	\$ 33,609,833	\$ 36,060,801	
Liabilities and net assets			
Due to related party – Dairy Management Inc. Accounts payable	\$ 11,857,218 20,881	\$ 18,037,196 27,791	
Accrued expenses and other liabilities	1,052,427	375,655	
Total liabilities	12,930,526	18,440,642	
Unrestricted net assets:			
Designated	8,027,917	8,337,286	
Undesignated	12,651,390	9,282,873	
Total unrestricted	20,679,307	17,620,159	
Total liabilities and net assets	\$ 33,609,833	\$ 36,060,801	

See accompanying notes.

# Statements of Activities

	Year Ended December 31		
	2011	2010	
Revenues			
Domestic assessments	\$ 97,659,738	\$ 95,700,787	
Import assessments	761,256	2-5	
Interest income	5,077	23,007	
NAEMS interest	-	221,336	
Total revenues	98,426,071	95,945,130	
Expenses			
Programs:			
Domestic and export marketing	90,299,055	95,941,301	
United States Department of Agriculture	857,503	926,646	
Total programs	91,156,558	96,867,947	
General and administrative:			
DMI general and administrative	3,549,866	3,077,785	
General and administrative	660,499	718,120	
Total general and administrative	4,210,365	3,795,905	
Total expenses	95,366,923	100,663,852	
Increase (decrease) in not exact.	2 0 5 0 1 4 0	(4 710 700)	
Not assots at haginning of year	3,059,148	(4, /18, /22)	
Not assets at ord of year	1/,020,159	<u> </u>	
inclassels at end of year	\$ 20,679,307	<u>\$ 17,620,159</u>	

See accompanying notes.

# Statements of Cash Flows

	Year Ended December 31			
		2011		2010
Operating activities	-			
Change in net assets	\$	3,059,148	\$	(4,718,722)
Adjustments to reconcile change in net assets to				
net cash used in operating activities:				
Depreciation		12,123		14,417
Changes in assets and liabilities:		,		,
Assessments receivable		(2,977,935)		208,140
Accrued interest receivable		57		25
Interest receivable from NAEMS investments		200,000		(221,336)
Due to related party – Dairy Management Inc.		(6,179,978)		2,949,753
Accounts payable		(6,910)		26,094
Accrued expenses and other liabilities		676,772		(147,206)
Net cash used in operating activities		(5,216,723)		(1,888,835)
Investing activities				
Purchases of fixed assets		(15,400)	_	(17,795)
Net decrease in cash and cash equivalents		(5,232,123)		(1,906,630)
Cash and cash equivalents at beginning of year		27,232,666		29,139,296
Cash and cash equivalents at end of year	\$	22,000,543	\$	27,232,666
	-			

See accompanying notes.

# Notes to Financial Statements

December 31, 2011 and 2010

### 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 of DMI employees, travel, Board of Directors, and office operating expenses, are primarily funded by NDB, with UDIA funding one-half of Board of Directors and CEO 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)

#### **Financial Instruments**

The carrying values of cash and cash equivalents, assessments receivable, accrued interest receivable, interest receivable from NAEMS investments, 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.

#### Fair Value Measurements

Accounting Standards Codification (ASC) 820, *Fair Value Measurements and Disclosures*, 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 \$5,299,766 and \$20,399,789 of investments in U.S. federal agency securities, which are included in cash and cash equivalents as of December 31, 2011 and 2010, respectively, as Level 1.

Notes to Financial Statements (continued)

### 2. Summary of Significant Accounting Policies (continued)

#### Assessments

Domestic assessment revenue is generated by a mandatory assessment of \$0.15 per hundredweight on all milk produced and marketed in the 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, 2011 and 2010, the net NDB assessment was approximately \$0.0503 per hundredweight of milk marketed. Assessment revenue is recognized in the month in which milk is marketed. In addition, effective August 2011, the mandatory assessment was extended to dairy importers at \$0.075 per hundredweight. Importers can direct \$0.025 per hundredweight to USDA-qualified generic dairy promotion organizations.

The Dairy Promotion and Research Order allows organic dairy producers, as defined, to be exempt from paying assessments. The amount of exempted assessments in 2011 and 2010 was approximately \$822,000 and \$778,000, respectively.

### **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 USDA and, accordingly, is not subject to federal taxation.

### 3. Cash and Cash Equivalents

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

	2011	 2010
Cash U.S. federal agency securities	\$ 16,700,777 5.299.766	\$ 6,832,877 20,399,789
	\$ 22,000,543	\$ 27,232,666

Notes to Financial Statements (continued)

### 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, 2011 and 2010, \$747,000 and \$651,000, respectively, of cumulative unpaid assessments were at the USDA pending further action. Such amounts are not included in assessments receivable as of December 31, 2011 and 2010, 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.

### 5. Related-Party Transactions

NDB has funded DMI program and core costs as follows:

	 2011	2010
Program costs	\$ 69,788,654	\$ 71,132,891
Core costs	24,060,267	27,886,195
Total funding to DMI	\$ 93,848,922	\$ 99,019,086

Dairy Research Institute (DRI) was incorporated in 2010 for the purpose dairy scientific research and sustainability advancement purposes. Of the program funding that NDB reimbursed DMI, \$12,849,549 and \$8,148,431 for 2011 and 2010, respectively, were reimbursed to DMI for DRI's operations.

The U.S. Dairy Export Council (USDEC) was incorporated 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, \$10,419,714 and \$9,127,677 for 2011 and 2010, respectively, were reimbursed to DMI for USDEC's operations.

### 6. Transactions With Other Industry Organizations

NDB reimburses the USDA for the cost of administrative oversight and compliance audit activities. Expenses incurred under this arrangement amounted to \$857,503 and \$926,646 for 2011 and 2010, respectively.

Notes to Financial Statements (continued)

### 7. Net Assets

During 2011 and 2010, NDB's Board of Directors designated a portion of net assets for cash reserves. Total designations of net assets are as follows:

		2011	2010
Designated net assets:			
Cash reserves	\$	1,800,000	\$ 1,800,000
Subsequent year program activity	-	6,227,917	6,537,286
Total designated net assets		8,027,917	8,337,286
Undesignated net assets		12,651,390	9,282,873
Total net assets	\$	20,679,307	\$ 17,620,159

### 8. 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 amortized the investment over the three-year life of the project, which ended in December 2009.

At December 31, 2011, NDB recorded a receivable of \$21,336 related to interest earned on project funds.

Notes to Financial Statements (continued)

### 9. Line-of-Credit Guarantee

As of April 30, 2010, NDB guaranteed DMI's \$10,000,000 revolving bank line of credit, which expired on April 30, 2011, and was extended to June 30, 2013. Borrowings made, if any, under the line of credit accrue interest, payable monthly, at the prevailing prime interest rate. There were no borrowings on the line of credit as of December 31, 2011.

### **10. Subsequent Events**

NDB evaluated events occurring between January 1, 2012 and May 7, 2012, which is the date when the financial statements were available to be issued. NDB did not have any subsequent events to recognize or disclose.

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# Independent Auditors' Report on Compliance

The Board of Directors National Dairy Promotion and Research Board

We have audited, in accordance with auditing standards generally accepted in the United States and the standards applicable to financial statement audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the balance sheet of National Dairy Promotion and Research Board (NDB) as of December 31, 2011, and the related statements of activities and cash flows for the year then ended, and have issued our report thereon dated May 7, 2012.

In connection with our audit, nothing came to our attention that caused us to believe that NDB failed to comply with the items listed below insofar as they relate to accounting matters. However, our audit was not directed primarily toward obtaining knowledge of such noncompliance.

- Provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of 2011 financial statement amounts, as described below:
  - Dairy Promotion and Research Order, revised as of August 1, 2011, Section 1150.154, which requires that funds shall not be used for the purpose of influencing government policy or action, which is defined in USDA Guidelines for Agricultural Marketing Service (AMS) Oversight of Commodity Research and Promotion Programs, Section VII, Influencing Legislation and/or Government Policy, as any action the principal purpose of which is to bring about a change in existing policy or regulation or affect the outcome of proposed policy or regulation, except those actions that are specifically provided for.
  - Dairy Promotion and Research Order, revised as of August 1, 2011, Section 1150.153(b)(1), which requires that a qualified program must conduct promotion, research and nutrition education activities, as defined in Sections 1150.114, 1150.115, and 1150.116, which are intended to increase consumption of milk and dairy products generally.
  - *NDB Policy Guidelines*, which require the NDB Board to approve capital and operating budgets.

- USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs, Section II, Budget Approval, which requires the U.S. Department of Agriculture (USDA) to review and approve all budgets. When submitting budgets for approval, NDB is required to include detailed information regarding administrative expenses and other costs. Budget submissions are required to include five specific components that are listed in this section.
- USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs, Section II, Budget Approval, which requires NDB's Board to review and approve NDB's annual budget before submitting to AMS for its approval prior to obligating any funds.
- NDB Policy Guidelines, which require that a written contract signed by the Board and contractor and approved by USDA is required for all work performed. No payment is to be authorized until the contract is signed by both parties and approved by the USDA.
- USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs, Section V, Financial, Compliance, and Program Accountability, Subsection D, Annual Financial Audits, which requires NDB's Board to have independent audits performed annually in accordance with Government Auditing Standards. In addition, funds are to be used only for projects and other expenses authorized in a budget approved by the USDA.
- USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs, Section V, Financial, Compliance, and Program Accountability, Subsection F, Independent Evaluation, which requires NDB's Board to conduct an independent evaluation of the effectiveness of the promotion programs every five years and to make the report available to assessment payers and the AMS.
- USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs, Section V, Financial, Compliance, and Program Accountability, Subsection G, Travel Expense Claims, which requires NDB's Board to establish travel policies and procedures, approved by AMS, including the individual(s) designated to approve travel. Policies and procedures are required to address and incorporate 12 specific items that are listed in the subsection.
- USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs, Section V, Financial, Compliance, and Program Accountability, Subsection H, Credit Card Use, which requires NDB's Board to establish procedures for the use of such cards and have internal controls in place and approved by AMS. Credit card procedures established by NDB's Board are required to include ten specific procedures listed in the subsection.
- USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs, Section XI, Administration, Subsection B, Investment of Funds, which

requires NDB's Board to follow AMS' investment policy, as described in Directive 2210.2, *Investment of Public Funds*, dated May 1, 1998, included in Appendix 3 of *USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs*, which requires investments to be short-term, risk-free, and interest-bearing instruments with maturity periods of one year or less; federally insured or fully collateralized; and fully secured.

- USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs, Section XI, Administration, Subsection F, Prohibited Expenditures, which states that NDB's Board may not spend assessment funds for spouse and family expenses, open bars, influencing government policy or action, and personal expenses.
- USDA Guidelines for AMS Oversight of Commodity Research and Promotion Programs, Section XI, Administration, Subsection G, Board Donations, which states that NDB's Board is required to develop a written policy statement regarding donations utilizing funds derived from assessments. In general, the NDB Board is precluded from making financial and gift contributions to any organization. The written policy established by NDB's Board is required to include five specific areas, as listed in the subsection.
- Establishment and maintenance of effective internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the 2011 financial statements would be prevented, detected, and corrected on a timely basis.

This report is intended solely for the information and use of National Dairy Promotion and Research Board and U.S. Department of Agriculture and is not intended to be and should not be used by anyone other than the specified parties.

Ernst + Young LLP

May 7, 2012

Financial Statements and Independent Auditor's Report

Years Ended December 31, 2011 and 2010

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

# Part I

Financial Statements and Independent Auditor's Report for the Years Ended December 31, 2011 and 2010

# 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:	
Statements of Financial Position	3
Statements of Revenues, Expenses and Changes in Net Assets	4
Statements of Cash Flows	5
Notes to Financial Statements	3-15
Supplementary Information:	
Independent Auditor's Report on Supplementary Information	17
Schedules of Actual Compared to Budget:	

Revenues and Expenses (Budget Basis)	18
Program Expenses (Budget Basis)	19
Administrative Expenses (Budget Basis)	20
Schedule of Cash Receipts and Disbursements	21

CPAs and Business Advisors

#### Independent Auditor's Report

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

We have audited the accompanying statements of financial position of the National Fluid Milk Processor Promotion Board as of December 31, 2011 and 2010, and the related statements of revenues, expenses and changes in net assets and cash flows for the years 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 audits.

We conducted our audits 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 audits 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 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 the National Fluid Milk Processor Promotion Board as of December 31, 2011 and 2010, and the results of its operations, changes in its net assets and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

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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 28, 2012 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 audits.

Snyder Cohn, PC

SNYDER COHN, PC North Bethesda, Maryland March 28, 2012

# **Statements of Financial Position**

December 31	2011	2010
Assets		
Current assets:		
Cash and cash equivalents	\$ 11,955,989	\$ 10,156,063
Assessments receivable, net	10,000,058	10,380,634
Future year costs	4,450,832	4,431,877
Prepaid expenses	41,407	71,024
Other receivables	135	8,411_
Total current assets	26,448,421	25,048,009
Property and equipment, net	64,680	93,596
Total assets	\$ 26,513,101	\$ 25,141,605
Liabilities and net assets		
Current liabilities:		
Accounts payable and accrued expenses	\$ 10.790.057	\$ 9.956.170
Deferred compensation, related party	18,299	17,635
Total current liabilities	10,808,356	9,973,805
Commitments		
N-4		
Net assets:	2 500 000	0 500 000
Lindesignated for contingencies	2,500,000	2,500,000
ondesignaled	13,204,743	12,007,800
Total net assets	15,704,745	15,167,800
Total liabilities and net assets	\$ 26,513,101	\$ 25,141,605

See Accompanying Notes

# Statements of Revenues, Expenses and Changes in Net Assets

For the years ended December 31	2011	2010
Revenues:		
Assessments	\$ 104,585,068	\$ 106,973,957
Late payment charges	94.810	79,738
Interest income	67,708	144.257
Other	7,597	8,397
Total revenues	104,755,183	107,206,349
Expenses:		
Program expenses:		
Moms target	49,596,173	57,640,588
Teens target	20,005,104	24,365,284
Hispanic target	6,939,213	6,948,391
Market research	4,557,079	4,307,525
Business development	10,285,632	5,008,835
Program measurement	22,142	45,000
Total program expenses	91,405,343	98,315,623
Other expenses:		
California grant	9,803,525	10,000,947
Administrative	2,506,496	2,519,569
USDA oversight	425,760	470,659
USDA compliance audit	77,114	87,336
Total other expenses	12,812,895	13,078,511
Total expenses	104,218,238	111,394,134
Excess of revenues over expenses		
(expenses over revenues)	536,945	(4,187,785)
Net assets - beginning	15,167,800	19,355,585
Net assets - ending	\$ 15.704.745	\$ 15,167,800

See Accompanying Notes

# **Statements of Cash Flows**

2011	2010
\$ 536,945	\$ (4,187,785)
28,916	55,687
380,576	444,353
(18,955)	73,872
29,617	(35,867)
8,276	23,961
833,887	355,578
664	(1,148)
1,799,926	(3,271,349)
-	(12,758)
-	1.028.288
	1,015,530
1 700 026	(2 255 810)
1,799,920	(2,255,619)
10,156,063	12,411,882
\$ 11,955,989	\$ 10,156,063
	2011 \$ 536,945 28,916 380,576 (18,955) 29,617 8,276 833,887 664 1,799,926 - 1,799,926 10,156,063 \$ 11,955,989

See Accompanying Notes

### Notes to Financial Statements

### December 31, 2011 and 2010

### 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 required 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 state 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.

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 any person who processes and markets commercially 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, 2011 and 2010

### **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 both 2011 and 2010, 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 statements 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 the next budget year's 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 accounts at December 31, 2011 and 2010 was \$280,617 and \$80,693, respectively.

<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>Investments</u> - 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 that mature within one year or less from the date of purchase.

## Notes to Financial Statements

### December 31, 2011 and 2010

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

<u>Fair value measurements</u> - The FASB Accounting Standards Codification (ASC) 820, *Fair Value Measurements and Disclosures*, provides the framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy under FASB ASC 820 are described as follows:

Level 1 - inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Board has the ability to access.

Level 2 - inputs to the valuation methodology include:

- quoted prices for similar assets or liabilities in active markets;
- quoted prices for identical or similar assets or liabilities in inactive markets;
- inputs other than quoted prices that are observable for the asset or liability;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 - inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Board believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

<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.

### Notes to Financial Statements

### December 31, 2011 and 2010

### Note 2: Cash and cash equivalents:

At December 31, 2011 and 2010, 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 at December 31, 2011 and 2010.

### Note 3: Property and equipment:

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

	\$ 64,680	\$ 93,596
Less: accumulated depreciation	(218,868)	(189,952)
	283,548	283,548
Office equipment	119,963	119,963
Leasehold improvements	130,324	130,324
Furniture and fixtures	\$ 33,261	\$ 33,261
	2011	<u>    201</u> 0

Depreciation expense for the years ended December 31, 2011 and 2010 was \$28,916 and \$55,687, respectively.

### Note 4: Line of credit:

During December 2009, the Board obtained a revolving line of credit for up to \$2,500,000. The line provided for advances from time to time, but must have been paid down to \$-0- and remain at \$-0- for 90 consecutive days at least once every 12 months. Interest accrued on outstanding balances at prime minus 0.25% with an interest floor of 3.75%. The line was secured by all the assets of the Board including cash, assessments, furniture, fixtures, equipment and personal property. The Board was also subject to reporting requirements and financial covenants as outlined in the line of credit agreement. The line expired on December 2, 2011. The amount outstanding on the line of credit at December 31, 2010 was \$-0-.

### Notes to Financial Statements

### December 31, 2011 and 2010

#### **Note 4:** Line of credit: (continued)

During December 2011, the Board obtained a revolving line of credit for up to \$2,500,000 with a new lender. The line of credit terms with the new lender remain the same as the previous lender. The line of credit agreement expires in December 2014.

### Note 5: 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 years ended December 31, 2011 and 2010, the Board did not exceed this limitation.

### Note 6: Program administration:

During 2011 and 2010, 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.	Until Terminated	
Deutsch, Inc.	Until Terminated	
Publicidad Siboney Corporation		
d/b/a Siboney USA	Until Terminated	
CMGRP, Inc. d/b/a Weber Shandwick	Until Terminated	

In April 2012, the Board terminated its agreement with Siboney USA to be effective May 11, 2012.

### Notes to Financial Statements

### December 31, 2011 and 2010

#### **Note 6: Program administration:** (continued)

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 other smaller contracts throughout the years ended December 31, 2011 and 2010.

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. On January 1, 2011 the agreement was extended through December 31, 2011. Terms and conditions of an additional extension to be effective until terminated have not yet been approved by the USDA as of the date of the audit report. Under this agreement, IDFA provides 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 years ended December 31, 2011 and 2010, the Board incurred \$83,697 and \$80,470, respectively, under this agreement.

The professional services agreement was renewed during 2009 and became effective January 1, 2010 until December 31, 2010. On January 1, 2011 the agreement was extended and became effective until terminated by either party. 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
- Communications and public relations
- Sales and econometric analysis
- In house legal services
- Specialized IT services
- Other services as requested

Fees for these services are based on hourly rates ranging from \$150 to \$400 plus out-ofpocket costs. Total costs incurred under this agreement were \$166,057 and \$173,306 for the years ended December 31, 2011 and 2010, respectively.

## Notes to Financial Statements

### December 31, 2011 and 2010

#### Note 7: 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 \$70.00 plus any additional out-of-pocket expenses. In February 2010, 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 was paid a weekly consulting fee of \$2,658 plus reasonable and necessary out-of-pocket expenses.

The Board had the option to pay the consultant at \$72.00 per hour as long as written notice was provided to the consultant. The total fees and out-of-pocket expenses paid to the consultant were not to exceed \$168,240 for 2010. The total fees and out-of-pocket expenses paid to the consultant were \$164,457 for the year ended December 31, 2010.

The consulting agreement was renewed and amended for a twelve-month period expiring on December 31, 2011. In exchange for the consultant's professional services, the Board paid \$2,755 per week and necessary out-of-pocket expenses. The Board could have elected to pay the consultant hourly at \$74.60 as long as written notice was provided to the consultant. The total fees and out-of-pocket expenses paid to the consultant were not to exceed \$188,260 for 2011. The total fees and out-of-pocket expenses paid to the consultant were \$184,002 for the year ended December 31, 2011.

Subsequent to year end, the consulting agreement was renewed for the twelve month period expiring on December 31, 2012. In exchange for the consultant's professional services, the Board shall pay \$2,920 per week and necessary out-of-pocket expenses. The Board may elect to pay the consultant hourly at \$79.00 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 \$191,855 for 2012.

In 2009, The Board entered into an employment agreement with the Chief Executive Officer (CEO). The agreement runs from March 1, 2009 to February 28, 2011, extended through February 28, 2014, 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.

### Notes to Financial Statements

### December 31, 2011 and 2010

### Note 7: Commitments: (continued)

In November 2010, the Board entered into a 36-month service agreement with DataLink Interactive, Inc. (DataLink). Under the terms of the agreement, the Board was required to pay \$4,250 per month in exchange for information technology support services. Fees for these services under this contract for the years ending December 31, 2011 and 2010 were \$51,000 and \$8,500, respectively.

Subsequent to year end, the Board terminated this agreement effective March 31, 2012. Additionally, DataLink was replaced with a one-year contract with Phalanx Technology Group. The contract requires monthly payments of \$750 for standard information technology support outlined in the contract. All other work will be billed at predetermined hourly rates.

### Note 8: Operating leases:

In October 2007, the Board entered into a 20-month lease agreement with IDFA, which has been extended through December 31, 2015. Under the terms of the lease, the Board is required to pay escalating 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 Board may terminate the sublease agreement effective June 30 of any year by providing six months advance notice. In the event of termination, monthly rent payments will increase up to the termination date as outlined in the agreement.

The Board incurred \$144,038 and \$163,595 of rental expense during the years ended December 31, 2011 and 2010, respectively.

The future minimum payments under this operating lease for the years ending December 31 are as follows:

2012 2013 2014 2015	\$ 136,680 140,780 145,004 149,358
Total	\$ 571,822

### Notes to Financial Statements

### December 31, 2011 and 2010

### Note 9: 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 \$502,874 and \$557,995 during 2011 and 2010, respectively.

### Note 10: Related party activity:

Accounting services for the Board are performed by Bridgewater Wealth & Financial Management, LLC (Bridgewater). The agreement is effective through December 31, 2013. The cost of these services was \$400,000 during each of 2011 and 2010. A principal of Bridgewater serves as the Chief Financial Officer of the Board and receives compensation for services performed. As of December 31, 2011 and 2010, the amount due to Bridgewater and included in accounts payable totaled \$-0- and \$2,148, respectively.

### Note 11: 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 \$117,923 and \$111,102 for the years ended December 31, 2011 and 2010, respectively.

# Notes to Financial Statements

### December 31, 2011 and 2010

### Note 12: Concentration:

Payments to three agencies represented approximately 80% of total program expenses for the year ended December 31, 2011. Accounts payable to one agency represented approximately 60% of total accounts payable at December 31, 2011.

Payments to two agencies represented approximately 75% of total program expenses for the year ended December 31, 2010. Accounts payable to two agencies represented approximately 47% of total accounts payable at December 31, 2011.

### Note 13: Subsequent events:

In January 2012, the Company entered into a new capital lease for a copier at an effective interest rate of 11.85%. Beginning February 17, 2012, the terms of the lease require 47 monthly payments of \$653, plus additional usage charges as outlined in the agreement. The lease is effective through December 17, 2015.

Future minimum lease payments under the capital lease are as follows:

2012	\$	7,190
2013		7,844
2014		7,844
2015		7,844
Total minimum lease payments		30,722
Less amount representing interest		6,238
Present value of minimum lease pay	vments <u>\$</u>	24,484

Subsequent events have been evaluated through March 28, 2012 which is the date the financial statements were available to be issued.
# SUPPLEMENTARY INFORMATION

-

CPAs and Business Advisors

Independent Auditor's Report on Supplementary Information

# 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 as of and for the years ended December 31, 2011 and 2010, and have issued our report thereon dated March 28, 2012, which contained an unqualified opinion on those financial statements. Our audits were performed for the purpose of forming an opinion on the financial statements as a whole. The supplemental information presented on pages 18 to 21 for the year ended December 31, 2011 is presented for the purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information, other than the budget amounts, has been subjected to the auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole. Budget amounts have not been subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we do not express an opinion or provide any assurance on these amounts.

Snyder Cohn, PC

SNYDER COHN, PC North Bethesda, Maryland March 28, 2012

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17

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

For the year ended December 31, 2011		••••••••••••••••••••••••••••••••••••••				
	l 	Jnexpended/ Amended Budget (Unaudited)		Current Year Actual	0	Actual ver (Under) Budget
Deveeneer						
Revenues:	¢	405 000 000	•	404 505 000	•	(444.000)
Assessments	Þ	105,000,000	\$	104,585,068	\$	(414,932)
Late payment charges		-		94,810		94,810
Other		160,000		07,700		(92,292)
Carryover - prior years		- 1.118.000		7,597		(1,118,000)
Total revenues		106,278,000		104,755,183		(1,522,817)
Expenses:						
Program expenses:						
Program - current year		92,862,137		88,842,705		(4,019,432)
Program - prior years		4,967,707		2,562,638		(2,405,069)
Total program expenses		97,829,844		91,405,343		(6,424,501)
Other expenses:						
California grant		9,975,000		9,803,525		(171,475)
Administrative		2,515,184		2,506,496		(8.688)
USDA oversight		600,000		502,874		(97,126)
Total other expenses		13,090,184		12,812,895		(277,289)
Less: encumbrances - prior years		(4,967,707)		<b>-</b>		4,967,707
Total expenses		105,952,321		104,218,238		(1,734,083)
Unallocated budget		325,679				(325,679)
Excess of revenues over expenses	\$	-	\$	536,945	\$	536,945

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

For the year ended December 31, 2011

	Current Year Amended Budget	Expended Current Year Actual	Actual Over (Under) Budget	Prior Year Unexpended Budget	Expended Prior Year Actual	Actual Over (Under) Budget	Total Program Activity
	(Unaudited)			(Unaudited)			
Moms target	\$ 49,880,000	\$ 48,208,731	\$ (1,671,269)	\$ 1,877,015	\$ 1,387,442	\$ (489,573)	\$ 49,596,173
r eens target Hispanic target	000'000'2	19,000,380 6,833,314	(969,114) (166,686)	183,100	404,718 105,899	(322,191) (77,201)	20,005,104 6,939,213
Market research	4,563,000	4,258,951	(304,049)	1,530,324	298,128	(1,232,196)	4,557,079
Business development	10,571,000	9,941,323	(629,677)	469,730	344,309	(125,421)	10,285,632
Program measurement Unallocated/Opportunistic	105,000 173,637		(105,000) (173,637)	180,629	22,142 -	(158,487)	22,142
lotal program expenses	\$ 32,802,137	\$ 88,842,705	(4,019,432)	\$ 4,901,707	\$ 2,502,038	(800,009,009)	<b>4</b> 81,405,343

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

For the year ended December 31, 2011			
	Current Year Amended Budget (Unaudited)	Current Year Actual	Actual Over (Under) Budget
Board meeting expenses	\$ 320,000	\$ 333,423	<u>\$ 13,423</u>
Staff salaries and henefits			
Staff salaries and benefits	1 730 537	1 715 994	(23 543)
Program management salary	1,700,007	1,710,004	(20,040)
allocation	(1 501 593)	(1 491 375)	10 218
Total staff salaries and benefits	237,944	224,619	(13,325)
Finance and administration.			
	160.000	160.000	
Consultants HP IT strategie	85,000	70 662	(5.229)
Einancial sorvices	400.000	19,002	(0,000)
Total finance and administration	645,000	639,662	(5,338)
Other energing evenences			
Audita	70.000	EG 100	(12.000)
Audits	70,000	20,132	(13,000)
Employee development	50,000	20,910	(0,004)
	30,000	00,770 31,636	0,770
	375,000	375 000	030
Legal	50,000	575,000	-
	157,000	144 028	(12.062)
Office supplies and expense	50,000	144,030	(12,902)
Payroll service and	50,000	40,922	(3,070)
pension administration	7 500	7 906	406
Postage and delivery	20,000	7,000	(12 681)
Staff travel	375,000	355 886	(12,001)
Support and maintenance	53 000	111 178	58 178
Telephone	32,000	30,423	(1,577)
Unallocated administrative	6 740		(6,740)
Total other operating expenses	1,312,240	1,308,792	(3,448)
Total administrative expenses	\$ 2,515,184	\$ 2,506,496	\$ (8,688)

# Schedule of Cash Receipts and Disbursements

# For the year ended December 31, 2011

Cash receipts from operations:	
Assessments	\$ 104,973,921
Late payment charges	94,810
Interest income	67,708
Other	7,597
Cash receipts from operations	105,144,036
Cash disbursements for operations	(103,344,110)
Excess of cash receipts over disbursements	1,799,926
Cash and cash equivalents - beginning	10,156,063
Cash and cash equivalents - ending	<u>\$ 11,955,989</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 years ended December 31, 2011 and 2010, and have issued our report thereon dated March 28, 2012. We conducted our audits 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 audits, 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 significant deficiency is a deficiency or combination of deficiencies in internal control, that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. 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 second 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 significant deficiencies or 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 audits, 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.

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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 Conn, PC

SNYDER COHN, PC North Bethesda, Maryland March 28, 2012

# PART III

# CPAs and Business Advisors

### 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 statements of financial position of the National Fluid Milk Processor Promotion Board as of December 31, 2011 and 2010, and the related statements of revenues, expenses and changes in net assets and cash flows for the years then ended, and have issued our report thereon dated March 28, 2012. The financial statements were prepared in conformity with accounting principles generally accepted in the United States of America.

In connection with our audits, 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 years ended December 31, 2011 and 2010;
- 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;

11200 Rockville Pike, Suite 415, North Bethesda, MD 20852 • Phone 301-652-6700 • Fax 301-986-1028 • www.snydercohn.com

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;
- 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; or
- Failed to comply with USDA guidelines for AMS Oversight of Commodity Research and Promotion Programs other than described below:

During the course of our audits, the following compliance matters came to our attention, insofar as it relates to the USDA guidelines for AMS Oversight of Commodity Research and Promotion Programs. However, our audits were not directed primarily toward obtaining knowledge of such noncompliance.

Annual budget summaries by major category are not posted on the Board's website and are not made available to the public. The Board will begin posting annual summaries and authorized amendments to the website during 2012.

Travel reimbursement forms do not include the claimant's position as required by the guidelines. The Board did not include the claimant's position on travel forms as there are only a small number of employees (12 employees) and all claimants' positions are known amongst management. The position field will be added to the form in 2012.

Business credit cards were used for personal expenses on certain occasions. When this occurs, the Board is reimbursed for the personal expenses by the respective employee within a reasonable time period. The Board believes it is impractical to use two different credit cards to split one bill which includes both business and personal charges. In addition, there is a strict approval and review process of each employee expense report and its supporting receipt documentation to verify there are no personal expenses charged which are not being reimbursed.

Dollar limitations are not set on business credit cards. Moving forward, the Board will set specific dollar limitations for each employee's business card during 2012.

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

The Board pays for spouses' dinners at Board meetings and feels it is reasonable to do so as Board members volunteer their time away from home. Additionally, one situation occurred during the year for which the USDA required that an employee reimburse the Board for payment for a dinner for a Board member's spouse.

Open bars are provided at the Board meeting dinners. All costs incurred are reimbursed by the agencies; however, going forward the Board will issue a credit of monies owed to the agencies to avoid the initial outlay of cash.

This report is intended solely for the information and use 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

SNYDER COHN, PC North Bethesda, Maryland March 28, 2012

# Appendix D–1 National Dairy Promotion and Research Board & Dairy Management Inc. Contracts Reviewed by USDA

# ADVERTISING AND MARKETING SERVICES

Balvor, LLC	Retail Advisory Services
Ceft and Company, LLC	GENYOUth Web Services
Deutsch Inc.	Consumer Advertising and Marketing
DNDC Applications, Research and Training, LLC	Farm Smart Application Development
Florida Dairy Farmers Inc.	Unified Marketing Plan Support; Caribbean Dairy Promotion and Communication
Domino's Pizza Inc.	Cheese Promotion Support
H.P. Hood, LLC	Consumer Awareness and Lactose Free Dairy Product Support
Long Odyssey	Fuel Up To Play 60 Promotion Support
MarkeTek Marketing Consultants	Sustainability Marketing Services
Media Management Services, Inc.	Fuel Up To Play 60 Promotion Support
Natural Marketing Institute	Database Management
New England Dairy Promotion Board	Unified Marketing Plan Support
National Football League Players Incorporated	Fuel Up To Play 60 Promotion Support
Pizza Hut, Inc.	Cheese Promotion Support
RTC Inc.	Meal Solutions Project
Southeast United Dairy Industry Association, Inc.	Unified Marketing Plan Support
The Washington Post Company	Conference sponsorship
Wisconsin Milk Marketing Board, Inc.	National Butter Program

# COMMUNICATIONS, NUTRITION EDUCATION AND PUBLIC RELATIONS

Action for Healthy Kids, Inc.	Fuel Up To Play 60 Promotion Support
ASK-Comm Strategies, LLC	Farm Smart Communications Support
	Innovation Center Communications; Health and
Bader Rutter & Associates	Wellness Nutrition Education; Lactose
	Intolerance Communication Efforts
Baxter Communications	Video and Communication Services
Burson–Marsteller	Dairy Framework Communications
<b>Demeter Communications</b>	Cow of the Future Program Activities
<b>Destination Imagination</b>	Program Sponsorship
Digital Cement Co.	Website Maintenance and Transition Support
Digital Influence	Lactose Intolerance Media Development
Direct Image & Design	Print and Mail Communications

	Fuel Up To Play 60 program; Dairy Image
Edelman Public Relations Worldwide	Services; Health and Wellness Communications;
	Strategic Consulting and Coordination
Fleishman-Hilliard	Communication Planning and Service
	Cheese & Sodium, Lactose Intolerance, Nutrient
FoodMinds, LLC	Rich Foods and Whey Protein Communications;
	Nutrition Program Strategy and Services
Fresh Approach	Commodity Roundtable
I–Site Web Design	Fuel Up To Play 60 program support
McCarron Group	Project Support and Services
National Dairy Shrine	Program Sponsorship
New Earth	Development of Sustainability Assessment Portal
Nutrition Impact, LLC	Nutrition and Protein Intake Project Services
PJH Nutritional Sciences	Project Services
Randolph Associates, Inc.	Producer Relations
<b>Responsibility Matters Inc.</b>	Dairy Sustainability Communications
<b>Results Direct</b>	Dairy Website Support
Richter Studios	Dairy Farming Today Website Support
<b>Ruby–Do Special Projects</b>	Industry Image and Relations
School Nutrition Association	Fuel Up To Play 60 & School Nutrition
School Nutrition Foundation	Fuel Up To Play 60 & School Nutrition
Team Services, LLC	Fuel Up To Play 60 Promotion Support
Wahar Shandwich Inc	Dairy Industry Crisis Readiness Program and
weber Shandwick, Inc.	MyDairy Program
World Wildlife Fund	Strategic Coordination Services

# **EXPORT AND INGREDIENTS**

2020 Company LLC	Document Management Services
3 A Business Consulting	Professional Services
American–Mexican Marketing	Mexican Market Representation & Development
Auch Marketing Finance Inc	Middle East Market Representation &
ATab Warketing Finance, Inc.	Development
Baccigaluppi, Roger	Consulting Services for USDEC
Bain & Company	Global Dairy Market Analysis
Boutin, Robert F.	Consulting Services for USDEC
Bovina Mountain Consulting	Nutrition Market Report
Canadean Limited	Global Dairy Ingredients Database
Contacts International Consulting I td	South American Market Representation &
Contacts International Consulting, Ltd.	Development
Culinary Institute of America	Culinary Research
DH Business Consulting	Professional Services
Domino's Pizza Enterprises	Cheese Export Promotion
Esser, John P.	Consulting services for USDEC
Evans, Allie	Consulting services for USDEC

Fileti, Cecilia Pozo	Consulting services for USDEC
Gerdes, Sharon	Ingredients Consulting Services
H. Randolph Inc.	Consulting services for USDEC
IntNet	Korea Program Activities
Jardine Food Service Ltd	Pacific Rim Cheese Program
JDG Consulting	Consulting services for USDEC
J.E. Sullivan Enterprises, LLC	Consulting services for USDEC
Kentucky Fried Chicken Japan	Pacific Rim Cheese Program
Koski, Shannon	Ingredients Consulting Services
International Dairy Foods Association	International Dairy Trade Shows
LevCom	Professional Services
Little, Porter	Consulting services for USDEC
Locraft, Lauren	Consulting services for USDEC
Loud Group	European Export Program Services
Mathhews Project Services	Consulting services for USDEC
Market Makers Inc.	Japanese Market Representation & Development
Market Tree	Sweetener Research
Midwost Dairy Association	Unified Marketing Plan Support; Ingredient Trade
	Development
NIZO	US Milk Powder Program Activities
Novak Birch	Professional Services
Orrani Consulting Ltd	China, Egypt, Korea and Saudi Arabia Cheese and
	Dairy Ingredient Research
Pacrim Associates	Southeast Asia Program Activities
Pizza Hut Hong Kong	Pacific Rim Cheese Program
Pizza Hut Indonesia	Pacific Rim Cheese Program
Pizza Hut Korea	Pacific Rim Cheese Program
Pizza Hut Philippines	Pacific Rim Cheese Program
Pizza Hut T	Pacific Rim Cheese Program
Pizza Hut Singapore	Pacific Rim Cheese Program
PR Consultants	Chinese Program Activities
Promar Consulting	Market Research for Cheese in China
R. Alexander Associates, Inc.	Anearobic Digester Fiber Value Research
Results Direct	Website Support and Services
Schonrock Consulting	Consulting Services
Shainwright Consulting	Oceana Market Research Services
Stanton Ems & Sia	Foodservice & Bakery Markets for Cheese in Asia
Stiefer Global Marketing Group	Global Consulting Services
Story Consulting	Consulting Services
United States Army Research Institute	Milk and Soy Based Diet Effects on
of Environmental Medicine	Musculoskeletal Health and Glucose Homeostasis
Weppler, Audrey	Consulting services for USDEC
Yano Research	Japanese Market Research
Yum! Consulting	Chinese Cheese Export Program Development

# MARKET AND ECONOMIC RESEARCH, CONSULTING SERVICES

Antler Consulting	Accounting Services
Anex, Robert	Fluid Milk Life Cycle Assessment Research
Anstey, Chris	Sustainability Research
CFE Solutions, Inc.	Dairy Consumption Consulting Services
Concept Green	Sustainability Progress Report
Culinary Sales Support	Dairy Menu Product Development
EAS Consulting Group, LLC	Regulatory Consulting Services
Fox Hollow Consulting, LLC	Enteric Methane Mitigation Research
GFK Custom Research	Future of Dairy Research
Health Focus International	Evaluation of Consumer Health and Wellness
Heller, Martin	Dairy Life Cycle Assessment Consulting
Hellwig, Staphanie	Fluid Milk Life Cycle Assessment Research
Humbert, Sebastian	Packaging Life Cycle Assessment Research
Larson Allen LLP	Accounting Services
Life Cycle Services LLC	Thomas Gloria's Dairy Packaging Life Cycle
Life Cycle Services, LLC	Assessment Research
Leah Goldman	Retail Concepts Research
McBean, Lois	Dairy Council Digest Review Services
Manamat	Sustainability Framework and Environmental
	Metrics
Marketecture	Consumer Confidence Tracking
Marketing Concepts	Research Coordination
McLeod, Watkinson & Miller	Legal Services
National Milk Producers Federation	Animal Health and Wellbeing Services
NPD Group	Consumer Food Consumption Trends
OMP Consulting Inc.	Regulatory Affairs Consulting
Quantis	Carbon Footprint Calculator Development
<b>Resources First Foundation</b>	Dairy Fleet Smart Program Support
Results Direct	Website Support Services
The Revere Group	Information Technology Support
Schenck, Rita	Packaging Life Cycle Assessment Research
Science Applications International	Anegropic Digester Project Support
Corporation	Andarobie Digester Hojeet Support
Strategic Conservation	Consulting Services
Strategy One	Dairy Consumers Research Services
TNS Custom Research, A Kantar Group	Dairy Reverage Usage Development
Company	
Watson Mulhern LLC	Strategic Communications Support
William Blackburn Consulting, Ltd	Sustainability Governance Consulting Services

# Appendix D–2

# National Fluid Milk Processor Promotion Board Contracts Reviewed by USDA

# ADVERTISING, PROMOTION, AND PUBLIC RELATIONS

Brain Juicer Group PLC	Refuel Promotion Program Services
Brodeur Partners	Issues Management Communications
	Public Relations; Strategic Communications;
Deutsch Inc.	Database Management; English and Spanish
	Advertising and Marketing Media
Inland Label and Marketing Services	Storage, Labels and Promotional Giveaways
Ipsos-ASI, LLC	Moms TV; Quantitative Marketing Testing
International Dairy Foods Association	Professional Consulting and Communication
International Dairy Foous Association	Services
National Football League Players	Dromotional Services
Incorporated	Promotional Services
RealMediaValue Company	Database; Media Evaluation Services
Spectrum Group Productions	Communication Services
Team Services, LLC	Promotional Services
Weber Shandwick, Inc.	Refuel Promotion Services

# MARKET RESEARCH AND EVALUATION, AND CONSULTING SERVICES

Applied Thinking, LLC	Marketing Mix Consulting
Artemis Strategy Group	Refuel Promotion Program Services; Breakfast Research; Market Research
<b>Beverage Marketing Corporation</b>	Competitive Strategy Consulting
Food For Thought Consulting	Scientific and Regulatory Research
Fresh Approach	Communications and Roundtable
Guia Brand Planning	Hispanic Teen Market Research
Kaley Warner Klemp	Consulting Services
Interviewing Service of America, Inc.	Dairy Latte Beverage Research
Light Industries	Database Support
Monitor Company	Strategic Planning and Breakfast Strategy
Outloud, LLC	Flavored Milk Marketing and Research
Phoenix Marketing Group	Hispanic Qualitative Market Research
Prime Consulting Group Inc.	Flavored Milk Program Services; Segmentation and Communication Channel Tracking; Surveys; and Consulting Services
Radius Global Market Research	Refuel Promotion Program Services; Serving Size Breakfast Beverage Segmentation Research; Consumer Attitudes, Consumption and Advertising Tracking; Fluid Milk Market Research
School Nutrition Association	Nutrition Communications

Tipton Group	Food Related Checkoff Program Research
Victor Zaborsky	Consulting Services

**OTHER AGREEMENTS** 

Abrams, Dr. Steven	Medical Advisory Board Member Services	
Barr, Dr. Susan	Medical Advisory Board Member Services	
Bridgewater Wealth and Financial Management Services	Management Services	
Dairy Management Inc.	Foot and Mouth Disease Training Exercises	
Economos, Dr. Christina	Medical Advisory Board Member Services	
Godfrey, Vivian	Employment	
Heaney, Dr. Robert	Medical Advisory Board Member Services	
Hill, Dr. James	Medical Advisory Board Member Services	
Johnson, Dr. Rachael	Medical Advisory Board Member Services	
McLeod, Watkinson & Miller	Legal Services	
Rubin, Ronald J.	Employment	
Saunders, Dr. Michael	Medical Advisory Board Member Services	
Snyder, Cohn, Collyer, Hamilton & Associates, P.C.	Accounting Services	

# Appendix E-1 Dairy Foods Research Centers

# CALIFORNIA DAIRY RESEARCH CENTER

The California Dairy Foods Research Center is a comprehensive effort to bring the full capabilities of the Dairy Products Technology Center at California Polytechnic State University at San Luis Obispo and Dairy Research and Information Center at the University of California-Davis, to support the dairy industry from farm to table. Working with the California Dairy Research Foundation, the California Dairy Foods Research Center conducts applied and strategic dairy research and development in the areas of product technology and utilization, ingredient technology and utilization, products for health enhancement, food quality and food safety. Additional information link: <u>California Dairy Research Center</u>.

California Dairy	California Polytechnic State	University of California-Davis
<b>Research Foundation</b>	University–San Luis Obispo	John C. Bruhn, Ph.D.,
Gonca Pasin, Ph.D.,	Phillip S. Tong, Ph.D.,	Director, Dairy Research &
Executive Director	Director of Dairy Products	Information Center
501 G Street, Ste. 203	Technology Center	One Shields Avenue
Davis, CA 95616	San Luis Obispo, CA 93407	Davis, CA 95616-8598

# MIDWEST DAIRY FOODS RESEARCH CENTER

The Midwest Dairy Foods Research Center conducts research to support the dairy industry utilizing resources within the University of Minnesota (St. Paul), South Dakota State University (Brookings) and Iowa State University (Ames). Research focuses on improving and controlling flavor development and functionality in cheese; improving the performance of cheese starter cultures through genetics; adding value to milk-based products with probiotics and nutraceuticals; improving shelf life of flavored milks; reducing undesirable taste attributes of milk; improving functionality and controlling flavor attributes of milk fractionation components; and developing methods for effective and profitable uses of whey. Additional information link: Midwest Dairy Foods Research Center.

**Iowa State University-Ames** Department of Animal Science 1221 Kildee Hall Ames, Iowa 50011-3150 South Dakota State University Lloyd Metzger, Ph.D., Director of Dairy Center, Box: 2104 Brookings, SD 57007 University of Minnesota–St. Paul Peggy Lehtola, Assistant Director of Midwest Dairy Foods Research Center 1334 Eckles Avenue St. Paul, MN 55108

# NORTHEAST DAIRY FOODS RESEARCH CENTER

The Northeast Dairy Foods Research Center located at Cornell University, Ithaca, N.Y., was formed to conduct fluid milk and dairy ingredient research, dairy microbiology and safety, provide applications and technical support for the improvements in milk powder quality, casein and whey protein research, and help establish the next generation of dairy ingredients. Additional information link: <u>Northeast Dairy Foods Research Center</u>.

# **Cornell University**

Department of Food Science Kathryn J. Boor, Ph.D., Dean of Agriculture and Life Sciences David M. Barbano, Ph.D., Director Northeast Dairy Center 118 Stocking Hall Ithaca, NY 14853-7201

# **University of Vermont**

Dairy Center of Excellence 102 Terrill, 570 Main Street Burlington, VT. 05404

# SOUTHEAST DAIRY FOODS RESEARCH CENTER

The Southeast Dairy Foods Research Center, with facilities and support at North Carolina State University (Raleigh) and Mississippi State University (Starkville), has been operating since 1988 and actively participates in national research planning and execution on behalf of the dairy industry. The center also hosts a Food Rheology Laboratory, Nutrition Technical Services Laboratory and a Sensory Applications Laboratory, conducting analytical, qualitative and affective sensory tests and flavor chemistry analyses tailored to meet specific needs of the food industry.

Additional information link: Southeast Dairy Foods Research Center.

### Mississippi State University

Department of Animal & Dairy Sciences 240 Wise Center Drive Starkville, Mississippi, 39762

### North Carolina State University

Todd Klaenhammer, Ph.D., Dairy Center Director, 100 Schaub Hall, Box 7624 Raleigh, NC 27695-7624

# WESTERN DAIRY CENTER

The Western Dairy Center's primary location is Utah State University in Logan, with additional resources available at Oregon State University, Washington State University, and the University of Idaho. The faculty has extensive expertise in dairy processing/production, microbiology, chemistry and sensory analysis. Research focus includes cheese flavor and functionality; cheese technology; fermented products, including cheese and yogurt; ultra-high-temperature and extended-shelf-life fluid milk beverages; milk protein chemistry, including coagulation, denaturation and separation; milk fractionation and use of membrane separation in dairy foods; anaerobic digestion of dairy processing waste; whey protein extrusion; application of genetics, genomics and metabolomics to lactic acid bacteria; whey and milk utilization; and microstructure of dairy.

Additional information link: Western Dairy Council.

# **Utah State University**

Center for Dairy Research Donald J. McMahon, Ph.D., Director of Western Dairy Center 8700 Old Main Hill, 750 N 1200 E Logan, Utah 84322-8700

### WISCONSIN CENTER FOR DAIRY RESEARCH

The Wisconsin Center for Dairy Research is located within a licensed, operating dairy plant on the University of Wisconsin-Madison campus. Building on Wisconsin's tradition as the "Dairy State," the center explores functional, flavor and physical properties of cheese/cheese products and other milk components used as ingredients and as finished products. The center researches cheese making and dairy protein processing/separation procedures, use of dairy ingredients in foods, and technologies for product safety and quality.

Additional information link: Wisconsin Center for Dairy Research.

# University of Wisconsin-Madison

Wisconsin Center for Dairy Research John Lucey, Ph.D., Director of Wisconsin Center for Dairy Research, 1605 Linden Drive Madison, Wisconsin 53706-1565

# Appendix E-2 Dairy Foods Competitive Research Projects Active in 2011

# PRINCIPAL INVESTIGATOR, INSTITUTION AND PROJECT TITLE

**Sanjeev Anand, Ph.D.** (South Dakota State University): Inactivation of Spores in Nonfat Milk and Nonfat Milk Concentrates [continued in 2011]; Modifications of CIP Protocol to prevent and control Biofilms in Dairy Processing Environment [continued in 2011].

**Sanjeev Anand, Ph.D. & Lloyd Metzger, Ph.D.** (South Dakota State University): Role of Thermoduric and Thermophilic Sporeformers and the Biofilms in Cheese Spoilage [continued in 2011].

**Christopher R. Daubert, Ph.D.** (North Carolina State University): Rheological and Tribological Evaluation of Creaminess in Model Dairy Systems[continued in 2011].

**Francisco Diez-Gonzalez, Ph.D.** (University of Minnesota): Improving the Safety of Queso Fresco Using GRAS Ingredients [completed in 2011].

**Brigitte Dragsted** (University of Copenhagan): Additional Analyses for the Copenhagen Cheese Study [continued in 2011].

**MaryAnne Drake, Ph.D.** (North Carolina State University): Application of Milk Proteins for Greek Style Yogurts With Comparable or Superior Sensory and Nutritional Properties to Traditional Strained Greek Yogurts [continued in 2011]; Enhancing the Quality and Utilization of Native Whey Proteins [completed in 2011]; Hydrolysis of Milk Powder Permeate and/or Milk for no Sugar Added Flavored Milk; Source of Salty Taste in Permeate [continued in 2011]; Identification of Chemical Components Responsible for Specific Flavors in WPC 80 and WPI [completed in 2011].

MaryAnne Drake, Ph.D. & Donald McMahon, Ph.D. (North Carolina State University & Utah State University): At What Salt Level Do Consumers Notice Decreasing Salt Concentrations and at What Concentration Is Acceptance Negatively Impacted? [continued in 2011].

**Mark R. Etzel, Ph.D.** (University of Wisconsin-Madison): Charged Ultrafiltration Membranes for Fractionation of Milk Proteins [continued in 2011]; Electrostatic Repulsion Enhancement for Heat Stable, Clear Whey Protein Beverages [continued in 2011]; and Creation of Whey Protein Enhanced Beverages that are Clear and Heat Stable at Acidic pH [continued in 2011].

**Michael Fenech, Ph.D.** (CSIRO Food and Nutritional Sciences – Australia): Bovine Milk's Potential as a Functional Food for DNA Damage Control [continued in 2011].

# **Appendix E-2, continued**

**Arny Ferrando, Ph.D.** (University of Arkansas): Effect of Dietary Protein Intake Pattern on Skeletal Muscle in Older Individuals [continued in 2011].

**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 [completed in 2011].

**Allen E. Foegeding, Ph.D.** (North Carolina State University): A Broad Survey of Chelating Agents with a view to Maximizing the Calcium Content in Whey Protein Beverages [completed in 2011]; Developing Whey Proteins Having Less Astringency at Low pH [continued in 2011]; and Modifying Whey Proteins to improve Thermal Stability and Clarity at Neutral pH [completed in 2011].

Allen E. Foegeding, Ph.D. & Bongkosh Vardhanabhuti, Ph.D. (North Carolina State University & University of Missouri): Functional Whey Protein Ingredients Based on Designed Aggregates [continued in 2011].

**Kathy Glass, Ph.D.** (University of Wisconsin-Madison): Enhancing the Microbiological Safety and Quality of Reduced Sodium Cheese with Natural Preservatives or Adjunct Cultures [continued in 2011]; Inhibition of Clostridium Botulinum in Reduced-Sodium Pasteurized Cheese Products [continued in 2011].

**Selvarani Govindasamy-Lucey, Ph.D.** (Wisconsin Center for Dairy Research): Low Sodium Cheddar Cheese by Controlling Microbial Activity and Enhancing Flavor [continued in 2011]; and Development/Validation of Alternative Methods for Rapid Sodium Testing in Cheese [continued in 2011].

**Richard W. Hartel, Ph.D.** (University of Wisconsin): Effect of Protein Source and Level on Partial Coalescence and Its Impact on Other Textural and Sensory Attributes of Ice Cream [completed in 2011]; Pro-cream and DLP Blends as an Ingredient for Various Food Product Applications [completed in 2011].

**Federico Harte, Ph.D.** (University of Tennessee): Manufacturing of Low Spores, Low-heat Milk Powders for Various Food and Beverage Applications [continued in 2011]; Product Development by the Modification of Casein Micelles Size and Stability [began in 2011].

**Federico Harte, Ph.D. & Juan Luis Jurat-Fuentes, Ph.D.** (University of Tennessee): Nanostructure and Hydrophobic Binding Properties of the Casein Micelle [began in 2011].

**Mathew Hayes Ph.D.** (University of Pennsylvania): Effects of Dairy Macronutrients on Glucogo-like-Peptide-1 Receptor Mediated Suppression of Food Intake and Blood Glucose Regulation [continued in 2011].

# **Appendix E-2, continued**

**James O. Hill, M.D.** (University of Colorado): The Role of FUTP60 in Accelerating and Sustaining Uptake of Healthy Behaviors and Increasing Utilization of School Wellness Resources [continued in 2011].

**Mark Johnson, Ph.D.** (Wisconsin Center for Dairy Research): Development and Removal of Biofilms in a Pasteurizer [continued in 2011].

**Todd Klaenhammer, Ph.D.** (North Carolina State University): Influence of Lactic Acid Bacteria, Milk, Yogurt and Milk Components on Gene Expression in Human Intestinal Epithelia Cells [completed in 2011].

**Carmen Moraru, Ph.D.** (Cornell University): Development of Pulsed Light Based Combination Surface Treatments as a Nonthermal Strategy for Microbial Inactivation on Cheese Surface [continued in 2011].

**Donald McMahon, Ph.D. & Allen E. Foegeding, Ph.D.** (Utah State University & North Carolina State University): Designing Filler Particles to Imitate Fat in Cheddar Cheese; Investigating the Filled Gel Model for the Role of Fat in Cheese [continued in 2011].

**Donald McMahon, Ph.D.**, **Jeff Broadbent, Ph.D.**, **Balasubramanian Ganesan, Ph.D.**, **MaryAnne Drake, Ph.D.**, **James L. Steele, Ph.D.**, **Nana Y. Farkye, Ph.D.** (Utah State University, North Carolina State University, University of Wisconsin-Madison, California Polytechnic State University): A Systematic Study of Cheese Microbiology and Flavor Based on Salt Cation Substitution in Lower Sodium Cheddar Cheese [continued in 2011].

**Lloyd Metzger, Ph.D. & Donald McMahon, Ph.D.** (South Dakota State University &Utah State University): Concentration, Storage Stability and Functionality of Highly Concentrated Micellar Casein [continued in 2011].

**Charles Onwulata, Ph.D.** (USDA Agricultural Research Service): Long-term Shelf Life Studies of Whey Protein Concentrates (WPC 34 and WPC 80) Under Adverse Storage Conditions [began in 2011].

**Daniel J. O'Sullivan, Ph.D.** (University of Minnesota): Over-Expression of Stress Genes to Improve Stability of Bifidobacteria in Yogurt [completed in 2011].

**Devin Peterson, Ph.D.** (University of Minnesota): Inhibition of Off-Flavor Development in Non-Refrigerated Milk by Phenolic Chemistry [completed in 2011]. Identification of Taste Compounds in Cheddar Cheese: Strategies for Flavor Improvement [continued in 2011].

**Helen Raybould, Ph.D.** (University of California-Davis): Effects of Milk Components on Gastrointestinal Signaling Pathways [completed in 2011]; and Host Effects Derived from Milk-Dependent Production of Soluble Signals from Bifidobacteria [completed in 2011].

# Appendix E-2, continued

**Robert F. Roberts, Ph.D**. (Pennsylvania State University): Influence of Delivery System on the Efficacy of a Probiotic Intervention [began in 2011].

**Karen Smith, Ph.D.** (University of Wisconsin): Benchmarking Study to Evaluate Quality and Performance Gaps in U.S. and International NDM/SMP [continued in 2011].

**Gloria Solano-Aguilar, Ph.D. & Todd R. Klaenhammer, Ph.D.** (USDA Agricultural Research Service & North Carolina State University): Effect of Dairy Delivery on Survival and Activity of Probiotic Cultures *in vivo* [completed in 2011].

**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 [completed in 2011].

**Hirofumi Tanaka, Ph.D.** (University of Texas): Hypotensive Effects of Conventional Dairy Products: Role of Arterial Stiffness [began in 2011].

**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 [completed in 2011].

**Phillip S. Tong, Ph.D.** (California Polytechnic State University): Milk Protein Concentrate Functionality Improvement Program [continued in 2011].

**Bongkosh Vardhanabhuti, Ph.D.** (University of Missouri): Improved Cold Gelation Properties of Whey Proteins by Heated Whey Protein and Polysaccharide Soluble Complexes [began in 2011].

Martin Wiedmann, Ph.D., DR. Med. Vet. (Cornell University): Consumer Sensory Perception of Pasteurized Fluid Milk over Shelf-life [continued in 2011]; Survey of Mesophilic and Thermophilic Sporeformers in Dairy Powders and Raw Milk Across the U.S. [continued in 2011].

**Michael B. Zemel, Ph.D.** (University of Tennessee): Effects of Dairy Components on Monocyte-Endothelial Cell Vascular Infiltration and Inflammation [continued in 2011]; Effects of Dairy Consumption on SIRT1 and Metabolic Risk in Humans [continued in 2011]; Modulation of Human Airway Smooth Muscle Function [continued in 2011].

**Qixin Zhong, Ph.D.** (University of Tennessee): Creating Novel Structures to Stabilize Whey Proteins during Heating Nearby Isoelectric Points [continued in 2011].

# **Appendix E-3 Nutrition Competitive Research Activities**

# PRINCIPAL INVESTIGATOR, INSTITUTION AND PROJECT TITLE

**Arne Astrup, M.D., Ph.D.** (University of Copenhagen): Health effects of a high cheese intake – Does maturation and fat content matter? [continued in 2011].

**Daniela Barile, Ph.D.** (University of California-Davis): Effectiveness of Bovine Milk Oligosaccharides in Modifying Gastrointestinal Function in Healthy Individuals [continued in 2011].

**Richard Bruno, Ph.D.** (University of Connecticut): Vasoprotective Activities of Low-fat Milk in Individuals with Metabolic Syndrome [began in 2011].

**Kimberlee Burrington** (Wisconsin Center for Dairy Research): Characterization of Commercial Hydrolyzed Whey Protein and Milk Protein Concentrate Ingredients in Nutrition in Nutrition Bars and Beverages [continued in 2011].

**In-Young Choi, M.D.** (University of Kansas): Dairy Intake and Brain Health in Aging [began in 2011].

**Eric Ding, Ph.D.** (Harvard University): Dairy Consumption and Risk of Type 2 Diabetes: Systematic Review and Dose-response Meta-analysis of Prospective Cohort Studies [completed in 2011].

**Joseph E. Donnelly, Ph.D. & Richard Washburn, Ph.D.** (University of Kansas): Effects of Resistance Training and Milk Supplementation on Body Composition in Middle School Children [completed in 2011].

Adam Drewnowski, Ph.D. (University of Kansas): Meeting U.S. Dietary Guidelines for Calcium: The Role of Dairy Foods [began in 2011].

**Victor L. Fulgoni III, M.D.** (Nutrition Impact LLC): Total Distribution of Protein Intake Throughout the Day in American Diets [completed in 2011]; Protein Intake and Lean Body Mass in Older Americans [completed in 2011]; Short Chain Saturated Fatty Acids and Blood Pressure [completed in 2011]; Milkfat and Carbohydrate Intake Effects on Lipid Levels [completed in 2011]; Dairy at Breakfast and Breakfast Patterns Analysis [completed in 2011]; Dairy and Arthritis [completed in 2011]; Dairy Intake and Cognition [completed in 2011].

**Rachel Johnson, Ph.D., MPH, RD.** (University of Vermont): Evaluating the Acceptance of Reformulated Flavored Milk in Schools [continued in 2011].

# Appendix E-3, continued

**Ronald M. Krauss, Ph.D.** (Children's Hospital Oakland Research Institute): Changes in LDL and HDL With Increased Intake of Saturated Fat from Dairy Foods in Individuals with Atherogenic Dyslipidemia and LDL Subclass Pattern B [completed in 2011]; Effect of a Modified Lower Carbohydrate, High Fat DASH Diet Plan on Plasma Lipids, Lipoprotein Particle Size and Blood Pressure in Healthy Adults [continued in 2011]; Association of Dairy Consumption With Lipoprotein Subfractions and Cardiovascular Disease in the Malmo Diet and Cancer Study [completed in 2011].

**Karl L. Insogna, M.D.** (Yale University): The Impact of a Protein Supplement on Bone Mass in Older Men and Women [continued in 2011].

**Buddhi Lamsal, Ph.D.** (Iowa State University): Milk Protein Concentrates (MPC) Modification and Evaluation for Potential Applications [continued in 2011].

**John A. Lucey, Ph.D.** (University of Wisconsin): High Pressure Processing of Low-Fat Cheese [completed in 2011]; Combined Native Whey and Casein Concentrate Production [completed in 2011]; and Milk Protein Concentrate Functionality Improvement Program [completed in 2011]; Development/validation of alternative methods for rapid sodium testing in cheese [continued in 2011].

Schuichi Machida, Ph.D. (Tokai University, Japan): The Effect of Whey Protein on Sarcopenia in the Elderly [completed in 2011].

**Kevin Maki, Ph.D.** (Biofortis-Provident Clinical Research): A Randomized, Controlled Trial to Assess the Effects of Low-fat Dairy Intake on Endothelial Function and Blood Pressure in Subjects With Pre-hypertension or Stage-1 Hypertension [continued in 2011].

**Lloyd Metzger, Ph.D.** (South Dakota State University): Evaluation of NFDM and MPC in Yogurt Manufacture [completed in 2011]; Manufacture of Modified MPC Utilizing Injection of Carbon Dioxide [continued in 2011]; Manufacture of Reduced-/Low-sodium Slice-on-slice Process Cheese [completed in 2011].

Lloyd Metzger, Ph.D., John A. Lucey, Ph.D. & Allen E. Foegeding, Ph.D. (South Dakota State University, University of Wisconsin & North Carolina State University): Low-fat/Fat-free Process Cheese for Slice-on-slice Application [completed in 2011].

**Lynn L. Moore, Ph.D.** (Boston University): Diet and Clustering of Metabolic Risk in Adolescent Girls [completed in 2011]; Dairy Risk of Hypertension: Framingham Offspring and PREMIER Studies [continued in 2011].

**Theresa Nicklas, Ph.D.** (Baylor University): Healthy Eating and Lifestyle for Total Health (HEALTH) [continued in 2011].

# Appendix E-3, continued

**Stefan M. Pasiakos, Ph.D.** (U.S. Army Research Institute of Environmental Medicine): Comparative Effects of Milk- and Soy-based Diets on Musculoskeletal Health and Glucose Homeostasis during Prolonged Energy Restriction in Rats [began in 2011].

**Stuart Phillips, Ph.D.** (McMaster University): Molecular Events Underpinning Changes in Tissue Metabolism with Whey and Soy Ingestion in Energy Restriction in Overweight/Obese Adults [continued in 2011].

**Anne Raben, Ph.D.** (University of Copenhagen): The Effects of Dairy Intake on Weight Regain and Risk Markers of Diabetes and Cardiovascular Diseases [began in 2011].

**Nancy Rodriguez, Ph.D., RD, FACSM** (University of Connecticut): Novel Approaches to Maintain Muscle Mass with Aging: Benefits of Yoga and Higher-protein Intakes in Middle-aged Men and Women [continued in 2011].

**Karen Schmidt, Ph.D.** (Kansas State University): Radio Frequency Dielectric Heating (RFDH): A Process Lethality Treatment That Impacts Unique Functionality in Dried Dairy Powders [continued in 2011].

**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 [completed in 2011].

**Gloria Solano-Aguilar, Ph.D.** (USDA Agricultural Research Service): Effects of Milk Fat on Obesity-Mediated changes in Gastrointestinal Function and Microflora Composition [began in 2011].

**Brian Timmons, Ph.D.** (McMaster University): Milk for Lean Mass for Overweight Kids: The MILK with Exercise Study [completed in 2011].

**Marta Van Loan, Ph.D.** (USDA Agricultural Research Service): Milk Versus Calcium Citrate and Vitamin D Supplements for Bone Health in Postmenopausal Women [continued in 2011].

**Jeff Volek, Ph.D.** (University of Connecticut): Investigation of Whey Protein Supplementation for Physiological Enhancement to Resistance Training and Dietary Regimes in Young Adults [completed in 2011]. Effect of Incremental Increases in Dietary Carbohydrate on Saturated Fat Levels in Blood Borne Risk Markers for Cardiovascular Disease [began in 2011].

**Robert Ward, Ph.D.** (Utah State University): Effect of Milkfat Globule Membrane on Gut Barrier Protection in Runners [continued in 2011]; Effect of dairy product consumption on cognitive performance among elderly participants of the Cache County Study on Memory Health and Aging [continued in 2011]. **Richard A. Washburn, Ph.D.** (University of Kansas): Whey Protein Supplementation with Resistance Training: Effect on Body Composition of Young Adults [continued in 2011].

**Angela Zivkovic, Ph.D.** (University of California-Davis): Effects of Dairy Fat on Postprandial Inflammation [continued in 2011].

# Appendix E-4 Sustainability Competitive Research Activities

# PRINCIPAL INVESTIGATOR, INSTITUTION AND PROJECT TITLE

**Heber, Albert J., Ph.D.** (Purdue University): Assessment of Carbon Footprint Contributions to Milk Products by U.S. Dairies [continued in 2011]; Greenhouse Gas Emissions at US Dairies [continued in 2011]; Evaluation and Analysis of NAEMS Dairy Barn and Area Source Emissions Data [began in 2011].

**Olivier Jolliet, Ph.D.** (University of Michigan): US Fluid Milk: Beyond Carbon LCA Study [began in 2011].

**Greg Thoma, Ph.D.** (University of Arkansas): Comprehensive Life Cycle Assessment for Cheese and Whey Products [completed in 2011]; Comprehensive Life Cycle Assessment for Fluid Dairy Delivery Systems [continued in 2011].

# Appendix F Qualified State, Regional or Importer 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

**Connecticut Milk Promotion Board** 165 Capital Avenue Hartford, Connecticut 06106

**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

# **Appendix F, continued**

Dairy Food Nutrition Council of the Southeast

5340 West Fayetteville Road Atlanta, GA 30349–5416

### **DairyMAX**

2214 Paddock Way Drive, Suite 600 Grand Prairie, TX 75050

**Dairy Promotion, Inc.** 10220 NW Ambassador Drive Kansas City, MO 64153

Florida Dairy Farmers 166 Lookout Place, Suite 100 Maitland, FL 32751–4496

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

Kansas Dairy Commission 2545 294<sup>th</sup> Rd. Muscotah, KS 66058

# 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 Industry Development Fund of Puerto Rico P.P. Box 360454 San Juan, Puerto Rico 00936-0454

# **Appendix F, continued**

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 Southwest Dairy Museum c/o New Jersey Dept. of Agriculture 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 American Dairy Association and **Dairy Council, Inc.** Interstate Place II, 100 Elwood Road North Syracuse, NY 13212

**St. Louis District Council** 1254 Hanley Industrial Court St. Louis, MO 63144-1912

**Southeast United Dairy Industry Association** 5340 West Fayetteville Road Atlanta, GA 30349-5416

# P.O. Box 936 Sulphur Springs, TX 7548

**Tennessee Dairy Promotion Committee** 5340 West Fayetteville Road 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

### **Cheese Importers Association of America** (Importer Qualified Program)

204 E Street, NE Washington, DC 20002

# **Global Dairy Platform**

(Importer Qualified Program) 10255 West Higgins, Suite 800 Rosemont, IL 60018

# **Wisconsin Milk Marketing Board and Wisconsin Dairy Producers** (Importer Qualified Program) 8418 Excelsior Drive

Madison, WI 53717

Appendix G National Fluid Milk Processor Promotion Board

# Milk Mustache Posters – Moms



- 1 Angie Harmon
- 2 Susan Sarandon
- 3 Felicity Huffman & William H. Macy 4 Maggie Gyllenhaal
- 5 Charlie Brown & Friends
- 6 Modern Family
## Milk Mustache Posters - Moms (cont'd.)













- 1 Heidi Klum 2 Aaron Rogers 3 Shaquille O'Neal & Mom 4 Harrison Ford 5 Kellogg's Icons
- 6 Sofia Vergara

#### **Milk Mustache Posters - Refuel**

- 1 Lindsey Vonn
- 2 Apolo Ohno
- 3 Chris Bosh
- 4 Lindsey Vonn School Poster
- 5 Chris Bosh School Poster









#### Milk Mustache Posters – Teens













- 1 Bridgit Mendler
- 2 Victoria Justice School Poster
- 3 Julianne Hough
- 4 Ryan Reynolds / Green Lantern
- 5 Ashley Tisdale
- 6 The "Nine" Contest Winners

## <u> Milk Mustache Posters – Hispanic</u>





- 1 Edith González
- 2 Marco Antonio Solis
- 3 Bárbara Bermudo
- 4 Doreen Colondres Advertorial
- 5 Sofia Vergara
- 6 Bárbara Bermudo Advertorial











**Regions of the National Fluid Milk Processor Promotion Board Region 2** Region 13 **Region 1 Region 7** Region 3 Region 6 **Region 14 Region 8** Region 11 Region 12 Region 15 **Region 4 Region 9** Region 10 **Region 5** 

Appendix H-2