



CALIFORNIA MILK ADVISORY BOARD

Board of Directors Meeting

March 1-2, 2017

CALIFORNIA MILK PRODUCERS ADVISORY BOARD

CMAB Mission Statement:

“We represent the commitment by all California dairy families to help increase demand for dairy products made from California milk.”

Board of Directors Meeting

Wednesday, March 1, 2017 7:30 a.m. – 5 p.m.
Thursday, March 2, 2017 8 a.m. – 12 noon

DoubleTree Hotel
1150 9th Street
Modesto, California

Agenda

1. Call to Order, Flag Salute, and Invocation – *Chairman Dante Migliazzo*
2. Roll Call – *Secretary Jeff Wilbur*
3. Introduction of Guests – *Chairman Migliazzo*
4. Closed Session
 - A. Pending and/or ongoing litigation (pursuant to California Government Code 1126(e))
 - B. Appointment, employment, evaluation of performance, or dismissal of an employee (pursuant to California Government Code 11126(a))
 - C. Executive Session
5. Reconvene Open Session
6. Minutes of Last Board and Executive Committee Meetings – *Secretary Wilbur*
 - A. Public comments on agenda items
7. Financial Report – *Treasurer Jim Ahlem*
8. Individual District Reports
9. Marketing Branch Report
10. Report from Chairman
11. Election of Board Officers and Executive Committee
12. Report from Chief Executive Officer – *John Talbot*
13. Program Review and Proposals
 - A. Advertising
 - B. Communications
 - C. Business Development
 - D. Processor Relations
 - E. Producer Relations
14. Breakout Sessions: Advertising, Communications, Business Development

15. Guest Speakers
 - Kurt Vanderah – DMI-Community Manager-Dairy Hub
 - Joe Pawlak & Katie Cameron - Technomics
16. Committee/Industry Meetings Update
17. National Dairy Board Update
18. Other Business
 - A. Previously discussed or tabled agenda items for approval
 - B. Discussion of ongoing board activities
 - C. Items to be discussed at next board meeting
 - D. Public comments on non-agenda items (*two minutes per person will be allowed*)
19. Closed Session
 - A. Pending and/or ongoing litigation (pursuant to California Government Code 1126(e))
 - B. Appointment, employment, evaluation of performance, or dismissal of an employee (pursuant to California Government Code 1126(a))
 - C. Executive Session
20. Reconvene Open Session
21. Adjournment

Each of the agenda items above will include discussion and possible action by the Board. All meetings of the California Milk Producers Advisory Board are open to the public and are subject to the Bagley-Keene Open Meeting Act. Time will be allowed for members of the public to make comments on each agenda item. This will be limited to two minutes per person under the agenda item 'Other Business'. Persons with disabilities needing special accommodation should contact the Board at least five days prior to the meeting. This agenda is available on the California Department of Food and Agriculture's website at www.cdffu.ca.gov/mki/mkv/meeting.html. For further information regarding the agenda for this meeting, please contact John Talbot, C.E.O., California Milk Advisory Board at 209-883-6455.

BAGLEY-KEENE OPEN MEETING ACT

SECTIONS 11120 THROUGH 11132 OF THE CALIFORNIA GOVERNMENT CODE

Objective of the Act	<p>When the Legislature enacted the Bagley-Keene Open Meeting Act (Act), it imposed a “value judgment” on the Governmental process. In effect, the Legislature said that when a State body sits down to develop its consensus, there needs to be a seat at the table reserved for the public. By reserving this place for the public, the Legislature provided the public with the ability to monitor and participate in the decision-making process. If the State body were permitted to meet in secret, the public’s role in the decision-making process would be negated. Therefore, absent a specific reason to keep the public out of the meeting the public should be allowed to monitor and participate in the decision-making process.</p> <p>If one accepts the philosophy behind the reservation of a seat at the table for the public, many of the particular rules that exist in the Act become much easier to accept and understand.</p> <p><i>Simply put, some efficiency is sacrificed for the benefits of greater public participation in government.</i></p>
What is a State Body?	<p>A State body is a body consisting of two or more people and includes advisory boards, councils and commissions. Committees appointed by a State body are also considered State bodies if they consist of more than two members.</p>
What Constitutes a Meeting?	<p>A meeting occurs when a quorum of a body convenes, either serially (not permitted) or together in one place to address issues under the body’s jurisdiction. This includes meetings solely for the purpose of presenting information to a body. Even if no actions or decisions are contemplated, a gathering of a quorum of a body to discuss issues under the body’s jurisdiction is considered a meeting under the Act.</p>
What are Serial Meetings?	<p>Serial Meetings occur when a member or staff of a State body communicates by telephone or email individually with a sufficient number of other members to constitute a quorum in order to discuss issues to come before the body. Such serial communications are prohibited by the Act.</p>
Social Gatherings	<p>Social gatherings of a State body are not considered meetings covered by the Act so long as official business is not discussed.</p>
Teleconference Calls	<p>Conference calls are permitted under the Act provided that the physical locations of each participant are included on the meeting notice and that each location is accessible to the public.</p>
Regular Meeting Notice Requirements	<p>A Meeting Notice must be published at least ten (10) days prior to the date of the meeting. To avoid issues, issue notice 11 days before meeting at the latest.</p>
Required Posting	<p>Meeting Notice must be mailed to anyone requesting a copy and must be posted on the Board’s website. The Meeting Notice must also be posted on CDFA’s website.</p>

Special Meetings	In order to provide State bodies with a means of holding a meeting on short notice because of the occurrence of an unforeseen event, the Act allows for “Special Meetings” with a 48-hour notice with copies to all national wire services. The purposes for which a body can call a special meeting are quite limited. Examples include pending litigation, legislation and certain personnel actions.
Notice Content	Meeting notice must include: <ul style="list-style-type: none"> ▪ Date, time and place meeting is to be held ▪ A specific agenda for the meeting ▪ If there will be a Closed Session, must be on the agenda and must cite Code Section and Subsection providing legal authority for Close Session. ▪ Notice that any agenda item will be discussed and that board action may occur on any agenda item. ▪ Must list a contact person for questions concerning the agenda or for needed special accommodations. ▪ See example attached.
Comments from Public	The Agenda should allow opportunity for public comment on each agenda item. Members of the Public should also have opportunity to offer comments on subjects not listed on the agenda (reasonable time limits can be applied)
Closed Sessions	In most cases, there are only two authorized reasons for Closed Sessions for our programs: <ul style="list-style-type: none"> ▪ Personnel Issues ▪ Pending Litigation – Attorney should be present with memo prepared for the board of directors.
Closed Session Process	<ul style="list-style-type: none"> ▪ Chair must announce in open session that the Board is entering into closed session and state the purpose of the closed session ▪ <u>Only board members and people necessary</u> to conduct the business of the closed session should be present ▪ When closed session adjourns, open session must be reconvened and the nature of any actions taken in closed session must reported ▪ Minutes of the closed session must be prepared and kept in confidential file

Rights of the Public:

- To attend meetings free from conditions
- To tape, record or broadcast meetings
- To comment on any agenda item (may post a time limit)
- To make comments regarding non-agenda items (may impose time limit)
- To have access to documents provided to board members
- To receive notice to all meetings of the board or its committees including agenda
- Assurance that the meeting will not begin before the time stated on the notice



California Milk Advisory Board
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Tracy, CA 95377
Telephone: 209-883-6455

- I. Required Continuation Hearing** – A public hearing must be held every five years to consider the CMAB’s continuation. The last continuation hearing was August 19, 2015. The next required continuation hearing will likely occur in the summer of 2020.
- II. Fiscal Year** – January 1 to December 31
- III. Board Composition** – 24 producer members, 24 alternates, and 24 reserve alternates [Public Member is permissive.] There cannot be more than 1 vote from any one dairy production entity. Board seats are allocated in accordance with each district’s production and number of producers. The allocation of seats is reviewed every three years.
- IV. Board Terms of Office** – March 1st through February 28th
The terms are for 3 years and are staggered so that one-third of seats must be filled each year.
- V. Term Limits** – No member or alternate may serve more than four consecutive three-year terms in the same position.
- VI. Vacancies** – Alternate serves in the stead of vacant position and reserve alternate in the stead of the alternate. Vacancy is not filled until the next annual nomination meeting.
- VII. Quorum and Board Procedures** –
 - A quorum is 13 members.
 - Board actions that do not regard expenditures of program funds and do not regard selection or dismissal of management personnel require an affirmative vote of a majority of the total members of the board. **(13 votes)**
 - Board actions related to expenditure of funds for any program requires a **$\frac{2}{3}$ vote** of the voting members present, or **13 votes, whichever is greater.**
 - Board actions related to selection or dismissal of management personnel require a **$\frac{2}{3}$ vote of the full board. (16 votes)** [17 votes if there is a public member appointed.]
- VIII. Maximum Assessment** – *Either 10 cents per hundredweight or 1% of Gross Dollar Value*
- IX. Authorized Activities:**
 - A. Research Authority** – Relating to market milk and dairy products, research studies concerning health, food, nutritional, therapeutic, dietetic or such qualities of other food products, for the development of new food products, or for the development of new uses for milk or dairy products.

B. Education Authority – Programs may include programs designed to acquaint producers, Producer-Handlers, or other interested persons with quality improvement, including sanitation practices, procedures, or methods as applied to such market milk or dairy products, and may also include educational programs designed to make available to producers, producer-handlers, handlers, and the public generally the findings of research programs.

C. Advertising and Sales Promotion and Market Development Authority:

- Milk and Dairy Products Other than Cheese, Ice Cream and Butter - The Board may develop programs of advertising and trade promotion relating to market milk and dairy products, *provided*, that any such plans, with the exception of plans that make incidental references to brands of cheese, ice cream, or butter as described below, shall be directed toward increasing the sale of such milk and dairy products without reference to any private brand or trade name used by any handler or producer-handler of milk or dairy products.
- Cheese, Ice Cream and Butter - The Board may develop advertising and sales promotion plans to allocate funds for promotions of cheese, ice cream, or butter products made with California milk, including promotions in which brand or trade names are used; *provided*, that the use is incidental to the promotion of the California milk product and not in direct promotion of the brand or trade name; and *provided further*, that the allocation of funds is made available on a nondiscriminatory basis to all retailers and manufacturers of butter, ice cream, or cheese utilizing milk produced in California. Permissible private brand or trade name marketing promotions may include advertising, performance allowances, sales promotions, couponing subject to Section 61375 and in-store promotion programs and materials, and other marketing communication tools
- Official Board Brands, Trade Names, Labels and Other Distinctive Designations - The Board is authorized to establish and to regulate the permissive use of official Board brands, trade names and labels, and other distinctive designations of grade, quality or condition, except the grade or quality designations in effect pursuant to State or Federal grade standards, for any product in which market milk or other dairy products are used. Any official Board brand or trade name which is established pursuant to this section shall not be construed as a private brand or trade name with respect to Section 58889 of the Code.

CMAB Glossary of Terms

ACV (All commodity volume) -- Total grocery dollars attributed to individual retail groups in a defined geographic trade area.

Advertising awareness -- One diagnostic tool that companies use to gauge the success of a campaign, advertising awareness studies measure whether or not consumers have knowledge of the ad or recall seeing it.

Advertorial -- An advertisement in a print publication designed to look like a news or feature article.

Brand -- A name or symbol that identifies a company's product as distinct from those of its competitors. A well-developed brand communicates a promise to the consumer about a product's unique benefits.

Broker -- An agent who is authorized to buy or sell products for another organization. Brokers facilitate the movement of dairy products from processors to retail stores.

California Dairy Quality Assurance Program (CDQA) -- An educational program collaboratively offered by the California dairy industry, state and federal regulatory agencies, and the University of California. Its goal is to encourage, through education and voluntary certification, science-based dairying practices which promote the health of the consumer, the environment and dairy livestock.

California Dairy Research Foundation (CDRF) -- The mission of the CDRF is to increase the utilization of milk through investments in research. The scope of this research includes dairy foods, dairy herd health and food safety, nutrition and dairy quality assurance.

California Department of Food & Agriculture (CDFA) -- The CDFA promotes and fosters confidence in California agriculture by implementing and communicating public policy and programs. The CDFA interfaces with the dairy industry in a variety of areas including exports, promotion and research marketing orders, producer milk pricing, pooling and distribution of milk revenue, quality and sanitation, and animal health.

Cable TV -- Television service purchased by consumers that is carried to homes by direct wires (cables).

Centralized Buying -- Under a centralized buying system, the responsibility for product selection and purchase is consolidated in a central market office, rather than with the individual stores.

Clipping Service -- A company that reads newspapers and magazines and clips articles from them to send to its customers. For example, the CMAB contracts with Allen's Clipping Service to clip all news and feature stories on California cheese. This enables the CMAB to track its publicity efforts.

Club Store -- A members-only, large-scale, high-volume store that stocks a large number of products that sell at low prices. Examples include Costco and Sam's Club.

Control Label Products -- A brand developed by a small regional or local wholesaler, as distinguished from a brand bearing the name of a manufacturer or producer. Control label products are typically distributed to a limited number of retailers.

Cost-per-thousand (CPM) -- A means of measuring advertising effectiveness that shows the cost, per 1,000 people reached, of buying advertising space or time in a given media outlet.

Cross-promotion -- A sales promotion that uses one brand to promote another, non-competing brand.

Dairy Management, Inc. (DMI) -- A non-profit organization that conducts integrated programs in marketing communications, promotion and research on behalf of America's dairy farmers. It was formed in 1995 by the National Dairy Board and the United Dairy Industry Association.

Foodservice -- The business of making or serving prepared foods, as in a restaurant.

Gallup -- A market research company that tests television and radio commercials, print ads and Internet ads to measure their effectiveness. Gallup tracks ads after they run to measure how effective they are at reaching a targeted market segment.

Independents -- Food retailers that are one-store operations. Independents are usually small businesses serving local communities.

In-store demos -- Retail store promotions which involve handing out product samples directly to consumers staffed by a trained local product demonstrator.

Integrated Campaign -- A marketing campaign that employs a variety of promotional methods -- advertising, public relations, direct marketing, in-store promotions -- and coordinates them so they work together to reach the greatest number of people.

IRC (Instant Redeemable Coupon)/On-pack IRC -- A coupon placed directly on a product that either gives a price off on that package or a related product in the store immediately at check-out.

IRI (Information Resources, Inc.) -- A company that gathers data on food products sold in supermarkets and grocery stores nationwide, and sells it to subscribers. The data is collected on a weekly basis from the stores' scanners, and IRI analyzes it to provide information on pricing, speed of sales and geographic distribution.

Mat Mail -- A publicity method in which a brief feature story on a product is formatted and typeset so that newspapers can run the story as-is. The mat mail typically includes a visual and is distributed to small suburban daily and weekly newspapers.

Merchandising -- Drawing attention to products inside a store by arranging them in creative, eye-catching displays.

Network TV -- A group of television stations that are linked for the simultaneous broadcast of the same programs. With the network system, advertisers can reach a larger audience at a lower cost-per-person than with a single station.

Nielsen -- Nielsen is a company that collects sales data on products sold in supermarkets, like cheese and dairy products. These data allow manufacturers to track sales of their products.

Publicity -- A form of public relations that takes the form of editorial exposure, such as a news or feature article about a product. Publicity differs from advertising in that the company doesn't pay the newspaper or TV station to run the story.

POS (Point of Sale)/POP (Point of Purchase) -- The in-store promotion of a product to make the product stand out among its competitors. POS can range from a simple ad that is hung on a grocery store shelf to a large, elaborate display.

Private Brand -- A brand developed by a large retailer or wholesaler, as distinguished from a brand bearing the name of a manufacturer or producer. Since manufacturers' brands have large advertising expenditures built into their cost, a private brand can buy the same goods at a lower cost and sell them at a lower price.

Qualitative research -- Advertising research that explores issues deeply to gain insight into how consumers feel about a product and why they buy it. Qualitative research relies on in-depth interviews with open-ended questions like "How do you decide which cheese to buy?"

Quantitative research -- Research that gathers measurable information from a large number of consumers. The surveys use closed-ended questions that require a simple answer.

RAM -- A marketing supervisory organization working with the CMAB. They have staff in seven geographic regions in the U.S. and work with local brokers and retail organizations to supervise CMAB promotions. In addition, they manage CMAB retail store inventory audits.

Rating Points -- The measurement of the actual viewing or listening audience for a program or commercial. If a program has a rating of 10 points, it means that 10 percent of all households in a particular area had their television sets tuned to that program. A program with a high rating will deliver a large audience to advertisers for their commercials.

Retail Authorizations -- Approval by retail chains for their local and regional buyers to purchase merchandise for their organization.

Rotation -- The pattern of how television and radio commercials are aired during the broad time period purchased by the advertiser. If an ad runs in the same time period on different days each week, it is called a horizontal rotation. If the ad runs throughout a particular day, it is a vertical rotation.

Satellite Media Tour -- A publicity method that allows a celebrity or company spokesperson to participate in up to 25 interviews per day with TV reporters. The person being interviewed sits in a television studio and is connected to remote locations via satellite hook-up, increasing the reach of the publicity program at a relatively low cost.

Scale -- The minimum daily wage for an actor that is set by the Screen Actors Guild (SAG), a union for professional actors.

SKU (Stock Keeping Unit) -- A number associated with a retail product for inventory purposes. Retailers use SKUs to identify and track individual products. Each product must have a SKU, and each SKU must be unique; for example, a pint bottle and a quart bottle of the same product have separate SKUs. According to recent research, the average number of SKUs carried in a typical supermarket is 30,580.

Slotting Fees -- Fees that supermarkets charge suppliers and manufacturers to place their products on the shelf.

Spot TV -- Commercial time on local television stations, as distinguished from commercial time on a network.

Talent Fees/Residuals -- Fee paid to actors used in a broadcast commercial.

United Dairy Industry Association (UDIA) -- UDIA coordinates with its members, 18 state and regional dairy promotion organizations, to develop and implement programs and services to support the dairy industry.

Universal Product Code (UPC) -- Grocers use the UPC to identify products and prices, and to track their sale. UPCs are translated into barcodes (a series of vertical parallel bars printed on a product's package) that are read or "scanned" by electronic cash registers.

Video News Release (VNR) -- Information about a product produced in a video newscast format and distributed to the news departments of television stations. If,

after the news director reviews the VNR and he/she decides to use it, the video is typically edited and aired as a news item during a newscast.

Warehouse store (superstore) -- A large-scale, high-volume store that stocks a large number of products that sell at low prices such as Wal-Mart. Can be called a “warehouse club” if the store sells only to members such as Costco or Sam’s Club.

Wire Service (Associated Press) -- A newsgathering organization that that collects stories for newspapers and distributes them electronically to subscribers.

Cheeses

Artisan Cheese -- Refers to cheeses that are handmade in small quantities with respect for the tradition of the cheese. Artisan cheeses can be, but are not necessarily, made from milk obtained from animals located on the farm where the cheese is made.

Commodity Cheese -- Describes popular varieties of cheese typically produced in large quantities with a flavor profile that appeals to the majority of consumers. These cheeses are sold in supermarkets, either as branded products or under private labels, or distributed for foodservice use. In California, Cheddar, Jack and Mozzarella (low-moisture form) are popular commodity cheeses.

Farmstead Cheese -- Refers to cheeses made from milk obtained from animals located on the farm where the cheese is made.

Specialty Cheese -- A broad term that describes non-commodity cheeses. Specialty cheeses are cheese varieties with distinctive flavor profiles catering to a special niche in the market. Specialty cheeses can be unique varieties of cheese (i.e., Camembert, St. George, Teleme) or specialized versions of popular cheeses such as Cheddar, Jack or Mozzarella (i.e., raw milk Cheddar, Dry Jack, high-moisture Mozzarella). This category also includes handmade artisan and farmstead cheeses. Specialty cheeses are typically sold as branded products in specialty food stores and in supermarket gourmet cases.

CALIFORNIA MILK ADVISORY BOARD
 Budget VS Actual For Calendar Year
 January 1, 2016 through December 31, 2016

INCOME

	Budget Original	Budget Revisions	Budget Revised	Revenue	Balance	%
INCOME SOURCE						
ASSESSMENTS	\$41,000,000.00	\$0.00	\$41,000,000.00	\$41,083,196.72	\$83,196.72	100
TRANS. FROM QUALIFIED PROGRAMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0
NON-ASSESSMENT INCOME	\$300,000.00	\$0.00	\$300,000.00	\$545,064.71	\$245,064.71	182
REQUIRED RESERVE CARRYOVER	\$500,000.00	\$0.00	\$500,000.00	\$500,000.00	\$0.00	100
CASH BALANCE CARRYOVER	\$9,500,000.00	\$0.00	\$9,500,000.00	\$6,450,871.50	(\$3,049,128.50)	68
	\$51,300,000.00	\$0.00	\$51,300,000.00	\$48,579,132.93	(\$2,720,867.07)	95

EXPENDITURES

	Budget Original	Budget Revisions	Budget Revised	Expenditures	Balance	%
ADVERTISING, PROMOTION AND RESEARCH PROGRAMS						
ADVERTISING	\$20,500,000.00	\$0.00	\$20,500,000.00	\$19,237,696.04	\$1,262,303.96	94
MARKET ENHANCEMENT	\$8,820,000.00	\$0.00	\$8,820,000.00	\$8,026,844.28	\$793,155.72	91
FOODSERVICE	\$1,380,000.00	\$0.00	\$1,380,000.00	\$1,249,465.31	\$130,534.69	91
CA DAIRY RESEARCH FOUNDATION	\$2,452,974.00	\$0.00	\$2,452,974.00	\$2,502,974.00	(\$50,000.00)	102
EDUCATION & COMMUNITY RELATIONS	\$300,000.00	\$0.00	\$300,000.00	\$213,610.26	\$86,389.74	71
PRODUCER RELATIONS	\$749,000.00	\$0.00	\$749,000.00	\$641,591.12	\$107,408.88	86
COMMUNICATIONS	\$3,975,000.00	\$0.00	\$3,975,000.00	\$3,554,444.67	\$420,555.33	89
INTERNATIONAL INITIATIVE	\$5,580,525.00	\$0.00	\$5,580,525.00	\$4,538,231.62	\$1,042,293.38	81
PROCESSOR RELATIONS	\$335,000.00	\$0.00	\$335,000.00	\$235,392.10	\$99,607.90	70
INDUSTRY INTELLIGENCE	\$500,000.00	\$0.00	\$500,000.00	\$430,440.20	\$69,559.80	86
TRADESHOWS	\$1,220,000.00	\$0.00	\$1,220,000.00	\$1,040,109.32	\$179,890.68	85
KIDS MILK MARKETING & RESEARCH	\$1,851,000.00	\$0.00	\$1,851,000.00	\$1,123,356.63	\$727,643.37	61
	\$47,663,499.00	\$0.00	\$47,663,499.00	\$42,794,155.55	\$4,869,343.45	90
OFFICE OPERATIONS						
OFFICE OPERATIONAL	\$300,000.00	\$0.00	\$300,000.00	\$299,942.95	\$57.05	100
RENT EXPENSE	\$235,500.00	\$0.00	\$235,500.00	\$248,778.14	(\$13,278.14)	106
TRAVEL & AUTOMOBILE	\$45,000.00	\$0.00	\$45,000.00	\$44,944.33	\$55.67	100
LEGAL EXPENSE	\$100,000.00	\$0.00	\$100,000.00	\$34,996.03	\$65,003.97	35
FREIGHT & POSTAGE	\$45,000.00	\$0.00	\$45,000.00	\$37,071.17	\$7,928.83	82
AUTOMOBILE PURCHASES	\$40,000.00	\$0.00	\$40,000.00	\$0.00	\$40,000.00	0
CLERICAL AND OFFICE EQUIPMENT	\$65,000.00	\$0.00	\$65,000.00	\$64,472.29	\$527.71	99
LIABILITY INSURANCE	\$40,000.00	\$0.00	\$40,000.00	\$37,632.00	\$2,368.00	94
	\$870,500.00	\$0.00	\$870,500.00	\$767,836.91	\$102,663.09	88
ADMINISTRATIVE WAGES & BENEFITS						
EMPLOYEE INSURANCE	\$135,000.00	\$0.00	\$135,000.00	\$92,650.86	\$42,349.14	69
MONEY INVESTMENT PLAN	\$40,000.00	\$0.00	\$40,000.00	\$29,575.34	\$10,424.66	74
RETIREMENT PLAN	\$200,000.00	\$0.00	\$200,000.00	\$0.00	\$200,000.00	0
SALARIES & WAGES	\$735,000.00	\$0.00	\$735,000.00	\$611,635.65	\$123,364.35	83
	\$1,110,000.00	\$0.00	\$1,110,000.00	\$733,861.85	\$376,138.15	66
STATE OF CA. DEPARTMENTAL CHARGES						
MARKETING BRANCH	\$110,000.00	\$0.00	\$110,000.00	\$79,902.11	\$30,097.89	73
COMPLIANCE & FISCAL AUDIT	\$40,000.00	\$0.00	\$40,000.00	\$30,000.00	\$10,000.00	75
MILK MARKET ENFORCEMENT	\$7,500.00	\$0.00	\$7,500.00	\$5,000.00	\$2,500.00	67
	\$157,500.00	\$0.00	\$157,500.00	\$114,902.11	\$42,597.89	73
BOARD MEETING EXPENSES						
TRAVEL EXPENSES	\$85,000.00	\$0.00	\$85,000.00	\$83,606.36	\$1,393.64	98
MEETING EXPENSES	\$100,000.00	\$0.00	\$100,000.00	\$100,538.52	(\$538.52)	101
PER DIEM BOARD	\$45,000.00	\$0.00	\$45,000.00	\$37,587.66	\$7,412.34	84
	\$230,000.00	\$0.00	\$230,000.00	\$221,732.54	\$8,267.46	96
TOTALS						
TOTAL ADMINISTRATION & OPERATIONS	\$2,368,000.00	\$0.00	\$2,368,000.00	\$1,838,333.41	\$529,666.59	78
TOTAL EXPENDITURES	\$50,031,499.00	\$0.00	\$50,031,499.00	\$44,632,488.96	\$5,399,010.04	89
REQUIRED RESERVE	\$1,268,501.00	\$0.00	\$1,268,501.00	\$0.00	\$1,268,501.00	0
TOTAL EXPENDITURES & REQUIRED RESERVE	\$51,300,000.00	\$0.00	\$51,300,000.00	\$44,632,488.96	\$6,667,511.04	89

PAYROLL BALANCE \$ 2,753.47

ADMINISTRATIVE AND PROGRAM PAYROLL \$ 2,760,000.00

CALIFORNIA MILK ADVISORY BOARD
Budget VS Actual For Calendar Year
January 1, 2016 through November 30, 2016

INCOME

	Budget Original	Budget Revisions	Budget Revised	Revenue	Balance	%
INCOME SOURCE						
ASSESSMENTS	\$41,000,000.00	\$0.00	\$41,000,000.00	\$37,209,633.91	(\$3,790,366.09)	91
TRANS. FROM QUALIFIED PROGRAMS	\$0.00	\$0.00	\$0.00	\$581,754.80	\$581,754.80	0
NON-ASSESSMENT INCOME	\$300,000.00	\$0.00	\$300,000.00	\$483,709.71	\$183,709.71	161
REQUIRED RESERVE CARRYOVER	\$500,000.00	\$0.00	\$500,000.00	\$500,000.00	\$0.00	100
CASH BALANCE CARRYOVER	\$9,500,000.00	\$0.00	\$9,500,000.00	\$6,450,871.50	(\$3,049,128.50)	68
	\$51,300,000.00	\$0.00	\$51,300,000.00	\$45,225,969.92	(\$6,074,030.08)	88

EXPENDITURES

	Budget Original	Budget Revisions	Budget Revised	Expenditures	Balance	%
ADVERTISING, PROMOTION AND RESEARCH PROGRAMS						
ADVERTISING	\$20,500,000.00	\$0.00	\$20,500,000.00	\$17,395,940.24	\$3,104,059.76	85
MARKET ENHANCEMENT	\$8,820,000.00	\$0.00	\$8,820,000.00	\$7,571,117.67	\$1,248,882.33	86
FOODSERVICE	\$1,380,000.00	\$0.00	\$1,380,000.00	\$805,902.21	\$574,097.79	58
CA DAIRY RESEARCH FOUNDATION	\$2,452,974.00	\$0.00	\$2,452,974.00	\$2,502,974.00	(\$50,000.00)	102
EDUCATION & COMMUNITY RELATIONS	\$300,000.00	\$0.00	\$300,000.00	\$204,020.97	\$95,979.03	68
PRODUCER RELATIONS	\$749,000.00	\$0.00	\$749,000.00	\$603,949.55	\$145,050.45	81
COMMUNICATIONS	\$3,975,000.00	\$0.00	\$3,975,000.00	\$3,212,860.63	\$762,139.37	81
INTERNATIONAL INITIATIVE	\$5,580,525.00	\$0.00	\$5,580,525.00	\$3,980,542.09	\$1,599,982.91	71
PROCESSOR RELATIONS	\$335,000.00	\$0.00	\$335,000.00	\$217,857.44	\$117,142.56	65
INDUSTRY INTELLIGENCE	\$500,000.00	\$0.00	\$500,000.00	\$430,440.20	\$69,559.80	86
TRADESHOWS	\$1,220,000.00	\$0.00	\$1,220,000.00	\$1,024,623.33	\$195,376.67	84
KIDS MILK MARKETING & RESEARCH	\$1,851,000.00	\$0.00	\$1,851,000.00	\$1,076,610.43	\$774,389.57	58
	\$47,663,499.00	\$0.00	\$47,663,499.00	\$39,026,838.76	\$8,636,660.24	82
OFFICE OPERATIONS						
OFFICE OPERATIONAL	\$300,000.00	\$0.00	\$300,000.00	\$288,629.03	\$11,370.97	96
RENT EXPENSE	\$235,500.00	\$0.00	\$235,500.00	\$229,159.94	\$6,340.06	97
TRAVEL & AUTOMOBILE	\$45,000.00	\$0.00	\$45,000.00	\$43,590.59	\$1,409.41	97
LEGAL EXPENSE	\$100,000.00	\$0.00	\$100,000.00	\$34,598.53	\$65,401.47	35
FREIGHT & POSTAGE	\$45,000.00	\$0.00	\$45,000.00	\$24,854.46	\$20,145.54	55
AUTOMOBILE PURCHASES	\$40,000.00	\$0.00	\$40,000.00	\$0.00	\$40,000.00	0
CLERICAL AND OFFICE EQUIPMENT	\$65,000.00	\$0.00	\$65,000.00	\$64,472.29	\$527.71	99
LIABILITY INSURANCE	\$40,000.00	\$0.00	\$40,000.00	\$37,632.00	\$2,368.00	94
	\$870,500.00	\$0.00	\$870,500.00	\$722,936.84	\$147,563.16	83
ADMINISTRATIVE WAGES & BENEFITS						
EMPLOYEE INSURANCE	\$135,000.00	\$0.00	\$135,000.00	\$85,353.85	\$49,646.15	63
MONEY INVESTMENT PLAN	\$40,000.00	\$0.00	\$40,000.00	\$29,575.34	\$10,424.66	74
RETIREMENT PLAN	\$200,000.00	\$0.00	\$200,000.00	\$0.00	\$200,000.00	0
SALARIES & WAGES	\$735,000.00	\$0.00	\$735,000.00	\$557,145.12	\$177,854.88	76
	\$1,110,000.00	\$0.00	\$1,110,000.00	\$672,074.31	\$437,925.69	61
STATE OF CA. DEPARTMENTAL CHARGES						
MARKETING BRANCH	\$110,000.00	\$0.00	\$110,000.00	\$72,316.28	\$37,683.72	66
COMPLIANCE & FISCAL AUDIT	\$40,000.00	\$0.00	\$40,000.00	\$30,000.00	\$10,000.00	75
MILK MARKET ENFORCEMENT	\$7,500.00	\$0.00	\$7,500.00	\$5,000.00	\$2,500.00	67
	\$157,500.00	\$0.00	\$157,500.00	\$107,316.28	\$50,183.72	68
BOARD MEETING EXPENSES						
TRAVEL EXPENSES	\$85,000.00	\$0.00	\$85,000.00	\$69,927.30	\$15,072.70	82
MEETING EXPENSES	\$100,000.00	\$0.00	\$100,000.00	\$78,323.53	\$21,676.47	78
PER DIEM BOARD	\$45,000.00	\$0.00	\$45,000.00	\$32,287.66	\$12,712.34	72
	\$230,000.00	\$0.00	\$230,000.00	\$180,538.49	\$49,461.51	78
TOTALS						
TOTAL ADMINISTRATION & OPERATIONS	\$2,368,000.00	\$0.00	\$2,368,000.00	\$1,682,865.92	\$685,134.08	71
TOTAL EXPENDITURES	\$50,031,499.00	\$0.00	\$50,031,499.00	\$40,709,704.68	\$9,321,794.32	81
REQUIRED RESERVE	\$1,268,501.00	\$0.00	\$1,268,501.00	\$0.00	\$1,268,501.00	0
TOTAL EXPENDITURES & REQUIRED RESERVE	\$51,300,000.00	\$0.00	\$51,300,000.00	\$40,709,704.68	\$10,590,295.32	82

PAYROLL BALANCE \$ 2,877.66

ADMINISTRATIVE AND PROGRAM PAYROLL \$ 2,515,000.00

ADVERTISING

Presentation to the Board of Directors

March 2017

Page Number

CMAB Advertising Update

1



National Television:

National TV is a key driver of awareness of the seals, which continues to be positive. Our campaign, Return to Real, launched in August 2015 and featured four TV commercials that ran throughout the end of 2016. For 2017, we've carried through the Return to Real message with four new TV spots that will run throughout the year and also live on YouTube and RCM.com. The new work is similar to last year, but has more emphasis on relatable, human moments and also features four new farm families. The first two spots launched on January 2. The first spot, titled "Bribe," features a child who has grown bored while working on his science project, but Mom offers him a delicious yogurt parfait as incentive to successfully finish his work. And the second spot, titled "Respect the Tortilla," pays homage to three varieties of Hispanic cheeses that are used to make a mouthwatering enchilada dish. The other two spots, "Dad's Pancakes" (Butter) and "Artisanal" (Ice Cream), will also mix in throughout the year.



2017 National TV Plan:

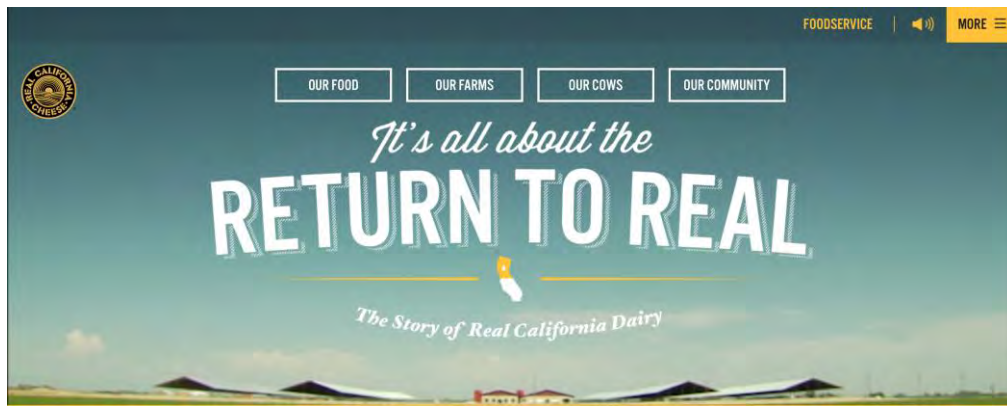
		California Milk Advisor Board																																																															
		2017 Media Plan																																																															
HUT Indx	Month	JAN					FEB					MAR					APR					MAY					JUN					JUL					AUG					SEP					OCT					NOV					DEC					TOTAL	#		
Week #	Monday	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	GRPs	WKS
Target: Women 25-54	Specials																																																																
NATIONAL TELEVISION:																																																																	
- Cable Day, Top Rated	:30s	11	11				10	10	10	10		10	10				10	9				9	9				9	9				9	9				9	9				10	10				9	9				9	9				173	18							
- Cable Prime, Top Rated	:30s	11	11				11	11	11	11		11	11				11	11				11	11				11	11				11	11				11	11				11	11				11	11				198	18												
- Cable Prime, Broad Reach	:30s	11	11				13	13	13	13		12	13				13	13				14	14				14	14				14	14				14	14				12	12				13	13				333	22												
- Network Prime	:30s	4	4				4	4	4	4		4	4				4	4				4	4				4	4				4	4				4	4				4	4				4	4				68	17												
- Network Day	:30s	13	13				12	12	12	12		12	12				12	12				12	12				12	12				12	12				12	12				12	12				12	12				223	18												
- Rose Parade (ABC+NBC)	:90	3																																													3.2	1																	
TOTAL NATL TV	:30s	5	50	50			50	50	50	50		50	50				50	50				50	50				50	50				50	50				50	50				50	50				998.2	23																	
2017	Qtrly GRPs	303.2					250					198					247					998.2																																											
Univ W25.54+60.99	IMP MM	184.9					152.5					120.8					150.6					608.8																																											
																																																						COST: (\$000)		\$ 11,500.0									

2017 Creative Campaign:

In addition to the four new Return to Real TV spots airing in 2017, we will be continuing our “always on” social and search efforts. We will be looking for new ways to tell our real food story as well as continuing to provide a unique look at the farmers who make up CMAB. In 2017 we want to continue to give meaning to the seal and all it stands for. Some of the content from 2016, including the “Growing Up Dairy” videos and Tastemade videos, will continue to run in the first half of the new year. We will be taking a closer look at new media partnerships and content series as the year progresses.

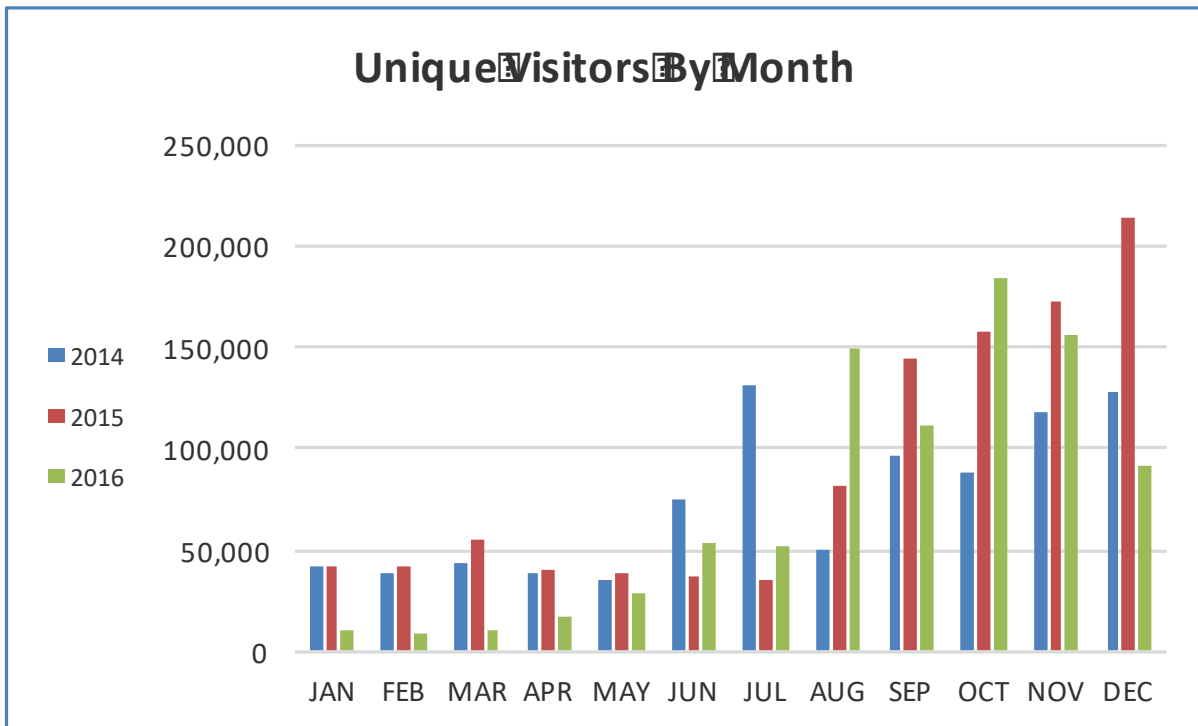
RealCaliforniaMilk.com:

Throughout 2016 we made regular content updates to the site to feature the latest and greatest news and highlight our latest content. We integrated video content into the recipe section of the site and started to do a major overhaul on the Foodservice section. In 2017 we will continue to make regular content updates. We launched the finished revamped Foodservice site in February and will monitor site behavior closely. As consumers continue to engage with our content on our social channels and as our paid search efforts and digital media continue to drive traffic to the site, it’s important that we continue to make regular content updates to the site and create a welcome environment that gives meaning to the Real California Milk seal.



Website Traffic:

In the second half of 2016 we saw web traffic jump to levels comparable with past years. We are continuing our “always on” approach for search and social in 2017. It’s important to note that in 2016 we shifted our content strategy and instead of focusing on growing visitors to the site, we decided to aim for higher engagement across channels where our content appears. We were able to maintain a solid share of visitors as compared to past years, but where we really saw success was engagement on social as well as the equity earned through our digital partnerships. In 2017, we will continue to monitor interaction and engagement across all social channels and through our digital partnerships to ensure we are getting solid engagement with Real California Milk across all channels.



YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
2014	42,266	38,373	44,075	39,060	35,926	74,985	130,301	50,497	97,077	88,089	118,646	126,997	759,295
2015	42,384	41,490	55,251	40,229	37,829	36,349	35,992	81,890	144,966	157,645	172,661	214,202	846,686
2016	10,599	8,192	9,754	17,456	28,350	53,592	51,352	148,482	111,860	183,747	155,249	91,798	778,633

Online Advertising, Digital Partnerships and Apps:



In 2016, we looked for ways to utilize digital media to bring the Return to Real campaign to life. The two main elements in our positioning platform, “Real Food” and “From Real People,” are fueling endless opportunities to connect consumers with our recipes and usage ideas, our nutrition information, our farmer stories and our unique California distinctiveness. Digital media has proven extremely effective and measurable in delivering our TV spots and other video content online in a way that consumers can engage with, including click-through from ads to deeper stories on our website or to video content on YouTube. Our overall plan delivered over 300 million women 25-54 targeted impressions, and almost 80 million completed video views at an efficient \$.03 per view. One element that was especially successful from a reach and impression standpoint in 2016 was our partnership with Tastemade. We were able to create over 20 videos and acquired over 26 million views across both our channels as well as theirs. We will look to build off of these successes and learnings as we begin to construct our digital plan for 2017.

YouTube Marketing:

As in previous years, paid advertising on YouTube supports our TV ads and long-form video. That focus will broaden to support all video content we produce in 2017, including the new TV ads and digital videos. We will repurpose Tastemade videos throughout the year to match the products/initiatives our National partners are messaging on their channels.

YTD Paid YouTube 2016
(Through end of Dec.)

Impressions	Views	Clicks	CPCV
6,524,924	1,551,609	18,689	\$0.04



Return to Real - Brie

Search Engine Marketing:

Our goal in 2017 is to build off the strategy put in place last year – support the Return to Real campaign and overall content strategy by focusing on bringing more highly qualified traffic that will want to stay longer and engage more. We’ve optimized our search efforts to drive quality traffic rather than quantity. We will continue to measure bounce rate, pages per session and time on site, and we will continue to optimize. Additionally, we are focusing our efforts on appearing in more competitive search queries and improving our average position.

YTD Paid Search 2016
(Through End of Dec.)

Impressions	Clicks	CTR	Avg. Position
87,133,906	483,092	0.55%	2.0

COMMUNICATIONS

Presentation to Board of Directors

March 2017

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News Bureau	11
Industry Communications	15
News Releases	18

Public Relations Program

Communications Services Program

REPUTATION MANAGEMENT

Importance

- *Tap real farmers to help share narrative about California dairy farming and meet consumer demand for food transparency*
- *Keep dairy farmers, industry partners and CMAB staff up-to-date on news and trends impacting the dairy business*
- *Align with industry stakeholders on issues messaging and process*

- **Dairy Farmers Social Team**

CMAB mobilized a group of five socially active California dairy farmers to share the positive California dairy story on their social channels using the hashtag #CADairy. The group aims to address consumer concerns about animal welfare, sustainability and more. To help support the group and encourage active participation, CMAB shared weekly content recommendations, as well as hosted a check-in hour to provide individual feedback on social engagement, recommendations for increased engagement, and answer questions.





- Daily Monitoring & Social Listening**
 CMAB monitored traditional and social media daily, tracking Real California Milk proactive coverage, dairy and food industry trends, and issues (food safety, environmental, animal care, drought, etc.). The team provided an analysis and POV on impacts pertaining to the California dairy industry, in addition to recommendations for amplifying positive stories on Real California Milk owned social channels.
- California Dairy Communicators**
 CMAB convened a meeting of the California Dairy Communicators group to exchange information and address issues that are/potentially impacting different industry groups. CMAB also developed a crisis response protocol for this group for the industry to have a unified voice and approach.

CALIFORNIA & NATIONAL INITIATIVES

Importance

- Build awareness of and preference for the Real California Milk seal/product with the seal by sharing authentic dairy farm family legacy stories and dairy nutrition information backed by science*
- Leverage a trusted health advisor to counsel peers about the importance of dairy nutrition, utilizing new scientific research about whole milk and flavored milks*
- Share inventive holiday entertaining serving ideas using dairy foods – created by influencers – to drive awareness and purchase of products carrying the Real California Milk seal*

Dairy Nutrition Education for Families

- **Health Professional Newsletter: “Healthy Eating Guidance about Whole Fats and Flavored Milk”**
CMAB shared new scientific research about the benefits of whole milk dairy fats and flavored milks with 6,750 members of the National Association of Pediatric Nurse Practitioners (NAPNAP) via its e-newsletter. The article shared referenced information around disease prevention and overall diet quality when kids consume dairy foods.
- **Health Professional Presentation: “Setting Families Up for Nutrition Success”**
Nurse Barb Dehn spoke to more than 100 physicians and nurses about dairy nutrition during a symposium held in San Diego. Barb discussed new science based research around whole dairy fats on cardiovascular health, nutrient needs for overall family wellness, and a comparative analysis of dairy and non-dairy beverages.
- **Patient Focused Blog & Social Posts: “Student Athletes in Your Family”**
Nurse Barb Dehn shared scientific information about the importance of milk nutrients for young athletes and milk’s role as a sports recovery drink in the “Student Athletes in Your Family” blog post. Nurse Barb amplified blog content on her Twitter and Facebook pages.
- **Consumer Media Coverage: Healthy Holidays**
Registered Dietitian Patricia Bannan shared ideas for a protein-packed breakfast with dairy on FOXNEWS.com, while her Ricotta, Cranberry and Pear Mini Tarts recipe (created for CMAB) was featured on The Daily Meal. Additionally, Patricia posted recommendations on her social media channels to help followers enjoy a healthy holiday season by entertaining with dairy.

Holidays with Real California Butter

- **Multi-Media News Release: “Holidays Made Easy”**
“Holidays Made Easy: 6 Food Gifts, Recipes and Pro Entertaining Tips Using Kitchen Staples California Butter, Cheese & Milk” offered consumers easy ways to incorporate Real California dairy foods in holiday gifts, recipes and festive décor. Content included ideas for a California Cheese wreath, Squash Butter, California Cheese Board and traditional Milk Jam.
- **Twitter/Pinterest Party: “Fill Your Home with Holiday Cheer”**
Holiday tips enticed 165 moms and other consumers to gather on social media to share ideas and recipes for a memorable season starring Real California butter and other dairy foods as a holiday staple. The event also provided an engagement opportunity between California dairy processors and consumers. More than 3,000 Tweets were logged, with over 50% engagement on each post, reaching 24.9 million impressions; #cadairyholidays was one of the Top 40 trending hashtags during this time period.
- **Food52 Video: Squash Butter**

Followers of Food52 saw a how-to video using Real California butter in a seasonal squash butter recipe. The video was posted to Food 52's Instagram channel followed by 1.4 million consumers.

Rose Parade

CMAB executed several PR tactics to promote the "Legacy of Generations" float in advance of the Rose Parade.

Note: the following covers activities through December 31; the Rose Parade itself and other events on Jan 1 and after will be included in the next board book

- **Media Outreach**

CMAB conducted proactive outreach to media, delivering key messages to drive meaningful impressions and encourage conversations around California dairy. Stories included:

- **Reveal of the Float Design:** "Legacy of Generations" represented more than 1,300 hard-working California dairy farm families, consumers' favorite dairy foods and 1.7 million California dairy cows; the float design was featured in publications including *The Mercury News*, *Modesto Bee*, *Pasadena Now*, *NBC LA*, *Holstein World*, *Cheese Market News*, and through distribution of the press release "Real California Milk Unveils 2017 Rose Parade Float as Celebration of Multi-Generational Dairy Farmers."
- **Float Rider Announcement:** To help tell the story of 200+ years of multi-generational success, CMAB shared the stories behind the 11 multi-generational dairy farm families who served as float riders. Their stories were shared in regional print, online and TV coverage, including *CBS Fresno*, *Petaluma Argus-Courier*, *Our Valley Voice*, *Cheese Market News*, as well as on a national level with the press release "Real California Milk Selects Multi-Generational Dairy Farm Families to Represent California Dairy's Legacy of Success at the 2017 Rose Parade."
- **Amplification via Partnerships:** Through its' partnerships with the Tournament of Roses, California Cut Flower Commission and Fiesta Parade Floats, CMAB and the "Legacy of Generations" float were featured in traditional and social media coverage. Content included the California Grown flowers used to decorate Rose Parade floats and the California Grown Certification, press releases issued the organizations and social media posts seen by more than 80,000 followers.

- **Live Television Segments (Satellite Media Tour)**

Consumers in 24 U.S. markets gained a sneak peek at the "Legacy of Generations" float in live segments hosted by HGTV's Paul James. Paul focused interview messaging on the multi-generational dairy farm families and natural décor materials that reflect sustainable on-farm practices.

- **Float Decoration**

- o Decoration of the “Legacy of Generations” float took place from December 27-31, 2016 at Fiesta Parade Floats. The decorating process allowed dairy producers to engage with other industry members from across California, along with hundreds of volunteers and guests who viewed the float. Float decorating periods also provided opportunistic media coverage that resulted in TV and print coverage, including *KTLA*, *CBS Los Angeles*, *FOX 11*, *Pasadena Star News*, *Reporter Herald* and *San Gabriel Valley Tribune*.

Simoes Dairies

Mario M. Simoes
Joe M. Simoes
743 Kirk Court
Tulare, CA 93274
559.303.1687 office phone
lsandlin@aol.com

January 8, 2017

California Milk Advisory Board
2316 Orchard Parkway, Suite 200
Tracy, CA 95377

To the attention of:

California Milk Advisory Board, Board of Directors
Kris Gomes
Jennifer Giambroni
Lindsey Warriner
Rayanne Zackery

On behalf of my Father, Mario M. Simoes and his identical twin Joe M. Simoes, we'd all like to sincerely thank you for the honor of being selected as riders on the Rose Bowl Parade float. My Father and Uncle both have lived the American Dream, they came here to this Country, without a penny to their name and through hard work, years of saving those hard earned dollars and God's help, accomplished something they never dreamed possible, purchasing their own dairy farm.

Throughout the years they've been recognized for their accomplishments as dairymen, but this recognition was like none other. Kris, Jennifer, Lindsey and Rayanne, you all went over and above to make when it came to accommodations, tickets to watch the parade, being there to greet us (in the pouring down rain) when we'd arrive at the float staging area and taking care of getting both Mario and Joe over (and back) to where they needed to be on the day of the parade. Just today, a few of their siblings along with some of us kids, gathered to watch a recording of the Rose Bowl Parade, the pride in their faces and that of their siblings was priceless.

Again, a heartfelt thank you not only from both Mario and Joe, but from the entire Simoes Clan!

Wishing you all a happy, healthy and prosperous 2017 !

Families of Mario & Joe Simoes

FOODSERVICE CHANNEL INITIATIVES

Importance

- Position REAL California Dairy as the future—the choice of trend-forward, culinary innovators.
- Maintain strong relationships with industry editors to gain the most editorial mentions in the trends that provide third-party credibility and increase brand reach and influence in the channel.

REAL Makers Foodservice Advertising Campaign

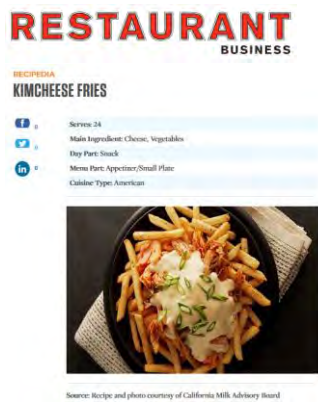
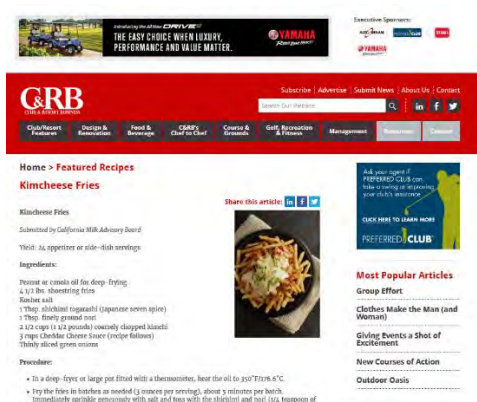
The REAL Makers digital advertising campaign launched across trade publications targeting commercial foodservice, reaching a broad range of restaurant purchasing authorities, with chefs as a bull’s-eye target. This first wave of digital advertising runs through January 2017 and is estimated to deliver 1,351,500 total impressions.

In 2017, the campaign will evolve to expand across both digital and print to further raise awareness among foodservice decision-makers for California dairy, and support national sales efforts in the channel. The team began concept development for print, and produced the first print ad featuring Hen House to launch in *Pizza Today* in February 2017.



Trade News Bureau

The team continued to pitch to leading foodservice trade media, providing recipes, photography and menu trend information for publication. Three recipes were featured in *Club & Resort Business* and *Restaurant Business*, generating 226,000 impressions within the target chef and menu decision makers' audience.



CMAB attended the 2016 International Foodservice Editors Conference (October 26-28, 2016). At the conference, the CMAB team met deskside with key editors in the foodservice segment to place photography, recipes, insights and interviews for the calendar year 2017. Meetings included:



- *Flavor & the Menu*
- *National Culinary Review & Sizzle*
- *FoodService Director*
- *Gold Medal Classroom*
- *FSR Magazine*

Social Media

In 2017 we will continue the “always on” approach introduced in 2016 and will have continual promotion of content throughout the year. Throughout the second half of 2016, we saw positive results and our social channels continue to be one of our most efficient ways of getting fans to interact with CMAB content. For 2016, to great success, we chose to focus more on engagement within the social channel vs clicking out to RCM.com. Engagement with our content has grown exponentially; across both Facebook and Instagram, 368,000 fans have reacted to our posts, 2,800 have left comments and almost 25,000 have shared a CMAB post to their own page or a friend’s page – this is just on our own channels.

One of the highlights in 2016 was partnering with Tastemade for content development and distribution. We now have over 28 recipe videos and have achieved over 26 million views across our channels as well as theirs. Another highlight was the creation of our “Growing Up Dairy” videos. In both cases, we were able to take this content from our social channels and also integrate it into RCM.com, providing visitors new, fresh content.

During the first half of 2017, we will be posting the remaining Tastemade assets as well as the remaining “Growing Up Dairy” content. We will also be repurposing some of the assets posted in 2016 to align with messaging used from our national partners. For instance, in January we were able to repurpose our Mango Avocado Smoothie Bowl, California Chocolate Chia Seed Pudding and California Overnight Oats videos and pair them with new copy supporting MilkPEP’s My Morning Protein campaign. We will also explore new opportunities to create content in 2017 that will continue to tell the Real Food story and establish a POV with our content that helps give greater meaning to the seal. We will also be exploring new digital media partnerships along the lines of Tastemade as we look to create and amplify new content.

Top-performing Growing Up Dairy post in 2016:

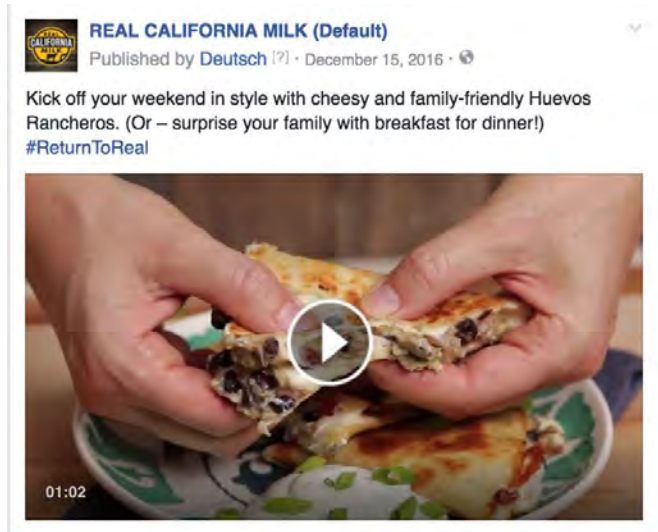
Kaelyn Offinga

- 461,222 impressions
- 121,029 :10 views (\$0.03 cost per view)
 - Industry benchmark: \$.09 for :10
- 1,480 non-video engagements
 - 1,218 reactions
 - 168 shares
 - 94 comments



Top-performing Tastemade post in 2016:
Huevos Rancheros

- 2,252,420 impressions
- 458,852 :10 views (\$0.01 CPV)
- 5,914 non-video engagements
 - 3,926 reactions
 - 1,640 shares
 - 348 comments



News Bureau



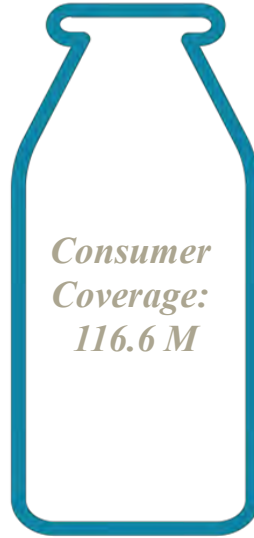
Coverage Objectives

Win with Healthy Snacking, Marginalize Margarine with Butter, Expand Ethnic Foods, Reframe the Dairy Health Story, Activate the Real California Milk Seal

Total Reach: October – December 2016

Approach

- Positioned Real California butter and dairy products at the forefront of holiday entertaining
- Leveraged human interest angle for Rose Parade float, bringing to life the successful legacy of California dairy families and the industry
- Conveyed California dairy’s commitment to sustainable on-farm practices by sharing the story of float construction details
- Health experts spoke to relevant peer and consumer interest around dairy nutrition
- Events with the San Diego Chargers, San Francisco 49ers and Los Angeles Rams celebrated grant funding and furthered the California dairy industry’s commitment to youth health & wellness
- Farm-to-School sharing event paired California educators and dairy farmers for a dialogue around dairy nutrition and farming practices



Online News
25 Stories
85 M



Blog
2 Posts
40 K



Social
3,162 Posts
28.3 M



TV Segments
47 Segments
1.8 M



Coverage:
3 Press Releases
Online News
Social Posts
54.9 M

- Holiday activations featuring Real California butter and other dairy products drove the highest number of impressions
- FUTP 60 Hometown Grants generated the second highest number of impressions
- Activities leading up to the Rose Parade drove the highest quantity of news stories (note, coverage is until Dec 31, so the parade itself will be in next board book)
- Paid tactics, such as a broadcast media tour and Twitter party, supported CMAB’s objectives and furthered visibility
- Health education events and content provided peers and consumers with valued information about dairy health benefits backed by science

CONSUMER COVERAGE HIGHLIGHTS

Reach: October – December 2016: 116.6 M

Key Message Pull-Through

“With protein for power, calcium for strong bones, plus 7 other essential nutrients, dairy provides a perfect nutrient-dense package for all the athletes in your family.” – Nurse Barb Dehn Blog Post

“It [the RCM float] is also educational, in that we city folk learn that the milk does not come from the store, it comes from hard work.” – Gayle Anderson, KTLA

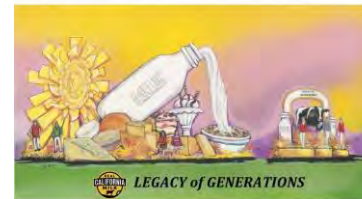
Objective:
Activate the
Real California
Milk Seal

PR activations promoted Real California Milk’s “Legacy of Generations” float in advance of the parade; tactics included 2 press releases, live TV interviews airing across the U.S., print stories, online coverage and social media posts on various channels

PASADENA BUSINESS NOW

Real California Milk Selects Multigenerational Dairy Farm Families for 2017 Rose Parade Float

From STAFF REPORTS
Published: Tuesday, December 20, 2016 | 3:00 PM



Real California Milk “Legacy of Generations” float pays homage to the success that comes from the knowledge passed from generation to generation and the essential partnership between the farmer, the land, the animals and their communities.

Real California Milk today announced the 11 riders who will represent the state’s more than 1,300 dairy families on its “Legacy of Generations” float in the 128th Rose Parade® presented by Honda on Monday, January 2, 2017.



Behind-the-scenes TV segments revealed the inspiration of the float design, float rider stories and information about the materials used to decorate the float with a sustainability message

Total Reach: 46.8 M Impressions

Food.Mic

Christmas-themed party ideas 2016: Get into the holiday spirit with these 13 festive ideas

Cheese wreath



Cheese wreath
Source: Real California Milk/The TomKat Studio

People love cheese. People love wreaths. The plating idea is so obvious, you’ll wonder why you hadn’t thought of it yourself! **Get the instructions here.**

Holiday entertaining with Real California butter and other dairy products provided content for a Multimedia News Release, Twitter/Pinterest party and coverage in consumer lifestyle outlets and social media

Total Reach:
58.6 M Impressions

Objective: Reframe the Dairy Health Story

Nurse Barb's daily dose

Student Athletes in Your Family?

26 Nov 2016
calcium, California Milk Advisory Board, CMAB, healthy bones, nutrients, nutrition, teens
by Barb Dehn

Learn About Recovery Drinks and How to Help Prevent Broken Bones with Nutrition

Patricia Bannan, RDN
@patbannanrdn

Following

For whipped cream w/extra tang & nutrition this holiday, add 1/2 c of plain #yogurt and whip together @realcalifmilk #cadairy #ad

Nurse Barb
@nursebarbdehn

Following

Help teens attain essential nutrients needed for strong bones w/#milk, #yogurt & #cheese
ow.ly/UakQ306S7i4 #cadairy #ad
@RealCalifMilk

Nurse Barb Dehn and Registered Dietitian Patricia Bannan affirmed the benefits of real dairy to consumers via peer education, blog stories and social media posts

Total Reach: 9.2 M Impressions



FUEL UP TO PLAY 60 COVERAGE HIGHLIGHTS

Reach: October 1 – December 31: 54.9 million

Key Message Pull Through

“The \$20,000 will go to support LA’s Best health and fitness programs. We serve over 25,000 kids every day in 193 schools across the city of Los Angeles. One of the programs is dedicated to helping kids learn about making healthier choices.”

- LA’s BEST President and CEO Eric Gurna, LA Rams News and Events

Objectives: Reframe the Dairy Health Story + Activate the Seal (by promoting fluid milk, dairy farming and providing access to healthy foods)

LA’s Best ‘Best Fit Initiative’ will benefit from \$20,000 in financial/in-kind resources, awarded at Limerick Elementary School; Rams Punter Johnny Hekker spoke to kids about the importance of healthy eating and shared his favorite foods, including yogurt and cheese



Total Reach: 4.6M Impressions

San Diego Unified School District plans to purchase a “Rock the Bike”, a stationary bike with blender attached, through their \$20,000 in grant funds; Chargers player Joshua Perry taught students how to make his favorite smoothie, which included milk and yogurt



Total Reach: 28.3 M Impressions



100 6th graders from Ascencion Solorsano Middle School in Gilroy refueled with milk after skills and drills

Total Reach: 21.9M Impressions



Industry Communications

Producer Relations

World Ag Expo, February 14-16, 2017, Tulare, CA

The CMAB hosted a booth at the 2017 World Ag Expo where Dairy Princesses handed out chocolate milk from Producer's Dairy, Rosa Brothers Milk Company, Top Line Milk Company and Top O' the Morn Farms, and promotional materials to attendees. Members of the CMAB Marketing Team also were on hand to answer producer questions and discuss current programs.

We appreciate Board member participation in the booth to promote participation in CMAB programs, i.e. Dairy Princess, committee meetings, Fuel Up to Play 60, etc.

Dairy Princess Program - 2017 Contest Dates

District	Application Deadline	Contest Date	Location
District 1	Thursday, March 23	Friday, May 12	Fortuna
District 3	Friday, March 3	Sat, April 8	Petaluma
District 4	No contest held in 2017, coronation at July District Meeting		
District 5	Thursday, April 20	Weds, June 7	Manteca
District 6	Friday, May 12	Thurs, June 15	Turlock
District 7	Friday, April 14	Friday, June 30	Hanford
District 8	Thursday, March 16	Friday, April 28	Fresno
District 9	Thursday, April 20	Friday, June 9	Tulare
District 10	No program scheduled for 2017-2018 year		

Dairy Princess Training Week is scheduled for Monday-Wednesday, July 10-12 in Turlock. The three-day training will provide the Dairy princesses with presentation and public speaking skills, as well as etiquette training, social media tips and an overview of industry issues.

The CMAB staff provides publicity for all contests via press releases to local media and dairy producers about upcoming events and contest winners.

Education and Community Relations

2017 Guidelines

- Total ECR funding for 2017 is \$36,000
- Each board seat will be allotted \$1,500 for product donations within his/her district; each board member will be responsible to keep track of approved funding; districts with multiple board seats may collaborate with other district board members to combine funds to support any projects.
- Funds can be used for product donation ONLY for events in California
- NOTE: Product donated to events CANNOT be resold for profit
- Product donation requests sent to CMAB will be forwarded to the CMAB Board Member(s) in the district where the event takes place
 - Board members will be responsible for following up with the person sending the request for product donation

- CMAB will not provide CMAB Board Member email or phone number to individual requesting product donation; the board member will need to follow up if interested in providing product donation for requested event
- When a CMAB Board Member approves product donation request for an event, he/she must ensure the following:
 - product being purchased must carry the Real California Cheese or Milk seal
 - the event displays a sign/banner recognizing the product donation
 - artwork will be provided to each board member to share with approved events
- When submitting invoices/receipts for reimbursement of donated product, the CMAB Board Members must provide a list of approved projects along with invoice/receipt. CMAB will provide a form to each board member.
 - Reimbursement to CMAB Board Members will be done twice a year – May and November.
 - CMAB Board Members should submit reimbursement for product donations by May 1 and/or November 6. Reimbursement will be processed within 7-10 days.
 - Reimbursement requests and completed project form must be returned to CMAB via email to promotions@cmab.net or eFax, 209.322.6466.

District Meetings

The 2017 Winter District Meeting Schedule:

Each district followed a No-Host Reception at 6:00 pm and Dinner/Meeting at 7:00 pm except District 11, 5:30 pm Social and 6:30 pm Dinner/Meeting

<u>District</u>	<u>Date</u>	<u>Venue/Address</u>
4	Thursday, January 12	Rolling Hills Casino
5	Tuesday, January 24	Papapavalo's
10	Thursday, January 26	Benji's
7	Monday, January 30	Tachi Palace- Willow Room
9	Tuesday, January 31	Café 225
8	Wednesday, February 1	The Elbow Room
6	Thursday, February 2	Branding Iron
1	Tuesday, February 7	Ridgetop Café
11	Tuesday, February 21	The Mission Inn- Ho-O-Kan Room
3	Thursday, February 23	Washoe House

News Releases



Look for the Seal
California Milk Advisory Board

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**Statewide Effort to Increase Healthy Eating and Physical Activity Resources Awards
\$20,000 to LA's BEST After School Enrichment Program**

LA's BEST to receive financial and in-kind resources from California Dairy Families, Los Angeles Rams and the National Foundation on Fitness, Sports & Nutrition.

LOS ANGELES (November 22, 2016) –LA's BEST After School Enrichment Program, a partnership of the City of Los Angeles, the Los Angeles Unified School District's Beyond the Bell Branch and the private sector is expanding student health and wellness with \$20,000 in financial and in-kind resources from California dairy families, the Los Angeles Rams and the National Foundation on Fitness, Sports & Nutrition (NFFSN) through a special award celebrated November 17th at Limerick Elementary School in Canoga Park. The \$10,000 'Hometown Grant' being awarded to LA's BEST came from a partnership between California dairy families and the Los Angeles Rams through the Fuel Up to Play 60 (FUTP 60) program and was matched by the NFFSN in support of the Presidential Youth Fitness Program's 60th anniversary celebration.

"LA's BEST knows that keeping our kids healthy is a part of their overall well-being," said Eric Gurna, President & CEO of LA's BEST. "This is why, each year we provide the more than 25,000 students we serve with unique opportunities to learn about the importance of healthy eating and exercise. It is an honor to receive this grant through the FUTP 60 program, which will help students be more active, healthier and happier."

The 'Hometown Grant,' and match means students in the LA's BEST program will join the 13 million students who are eating healthier, 16 million students who are being more active and

130,000 adults who are enrolled and empowering youth in the United States through one national program – FUTP 60¹.

“Our California dairy farm families are pleased to ensure LA’s BEST students have access to healthy eating programs and options for physical activity both during and after-school,” said Jennifer Giambroni, Director of Communications for the California Milk Advisory Board/Real California Milk. “Partnering with the Los Angeles Rams to celebrate the awarding of resources, which will be shared across 750 square miles, is a remarkable accomplishment and a reason we activate FUTP 60 throughout the state.”

Developed by FUTP 60 and the National Football League (NFL), the ‘Hometown Grant’ program provides teams and farmer funded dairy organizations like Real California Milk with the opportunity to identify deserving schools and school districts and provide them with funding to help meet their health and wellness goals.

Each of the 32 NFL Clubs are partnering with FUTP 60 and local dairy representatives to provide \$10,000 grants in communities throughout the country totaling a \$320,000 investment in youth health and wellness. For the 2016 season, the National Foundation on Fitness, Sports & Nutrition is matching the NFL’s donation with \$10,000 in resources to celebrate the 60th anniversary of the President’s Council of Fitness, Sports and Nutrition, which is the nation’s youth fitness education and assessment program.

“As the Rams return home to Los Angeles, we are passionate about establishing meaningful school partnerships throughout the region,” said Molly Higgins, Vice President/Community Affairs and Engagement for the Los Angeles Rams. “In our first year back, we are proud to award LA’s BEST with this financial support through the FUTP 60 program and our partnership with the California dairy farm families. We look forward to expanding our partnership and geographic reach in subsequent seasons.”

Created in partnership by the NFL and [National Dairy Council](#), in collaboration with the U.S. Department of Agriculture, [Fuel Up to Play 60](#) is the nation’s largest in-school wellness program creating real transformational change in more than 73,000 schools nationwide. The national in-school nutrition and physical-activity program is activated in California by the state’s more than 1,300 dairy farm families. Since fall 2014, FUTP 60 has helped to award more than \$430,000 in grants to schools throughout California in support of their wellness goals.

About the Los Angeles Rams

The Los Angeles Rams – Los Angeles’ original professional sports team – stand as one of the oldest franchises in the National Football League and since its founding in 1937, have garnered three World Championships and sent 29 of its members to the Pro Football Hall of Fame. As a professional sports team, the organization is committed to being a valuable civic partner and serving the greater Los Angeles area 365 days a year. For more information visit www.therams.com and follow the Rams on Facebook and Twitter, @RamsNFL.

1. <https://www.fueluptoplay60.com/>

About the California Milk Advisory Board (CMAB)

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About Fuel Up to Play 60

Fuel Up to Play 60 is an in-school nutrition and physical activity program launched by National Football League (NFL) and National Dairy Council (NDC), which was founded by America's dairy farmers, in collaboration with the U.S. Department of Agriculture (USDA). Fuel Up to Play 60 is designed to engage and empower youth to take action for their own health by implementing long-term, positive changes for themselves and their schools. The program additionally encourages youth to consume nutrient-rich foods (low-fat and fat-free dairy, fruits, vegetables and whole grains) and achieve at least 60 minutes of physical activity every day. As a result of the program, last year 14 million students made better food choices and are getting more physically active during the school day. Fuel Up to Play 60 is further supported by several health and nutrition organizations: Action for Healthy Kids, American Academy of Family Physicians, American Academy of Pediatrics, Academy of Nutrition and Dietetics Association/Foundation, National Hispanic Medical Association, National Medical Association and School Nutrition Association. Visit FuelUpToPlay60.com to learn more.

About National Foundation on Fitness, Sports & Nutrition

The National Foundation on Fitness, Sports & Nutrition believes that the strongest America is one where every citizen has the opportunity to lead a healthy lifestyle. As the official foundation of the President's Council on Fitness, Sports & Nutrition, the National Foundation is the only congressionally chartered nonprofit with the sole focus to help more Americans be active, play sports & eat healthy. Through private donations and partnerships, the Foundation supports programs and initiatives that educate, engage, and empower Americans of all backgrounds and abilities to adopt a healthy lifestyle. For more information, visit fitness.foundation.

About LA's BEST After School Enrichment Program

LA's BEST After School Enrichment Program was created in 1988 by Los Angeles City Mayor Tom Bradley to address the lack of quality, caring and safe programs for children during the critical after school hours of 3 p.m. to 6 p.m. Today, LA's BEST serves more than 25,000 students at 193 elementary school sites through the Los Angeles Unified School District's Beyond the Bell Branch. For more information, visit www.lasbest.org.

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Look for the Seal
California Milk Advisory Board

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California Dairy Families Showcase Commitment to Youth Health & Wellness with \$20,000 Grant to Gilroy School District in Partnership with the San Francisco 49ers and National Foundation on Fitness, Sports and Nutrition

Through Fuel Up to Play 60, district will have additional access to healthy eating and physical activity resources on campus.

GILROY (December 21, 2016) – Gilroy Unified School District (GUSD) celebrated the award of \$20,000 in financial and in-kind resources to expand nutrition and physical activity programs with a ‘Hometown Grant’ event December 15th at Ascencion Solorsano Middle School. The grant includes \$10,000 from a partnership between California dairy families and the San Francisco 49ers through the Fuel Up to Play 60 (FUTP 60) program, matched by the National Foundation on Fitness, Sports and Nutrition (NFFSN) in support of the Presidential Youth Fitness Program’s 60th anniversary celebration.

"With a district motto of ‘Excellence: It Takes Everyone!’ this grant brings to life a true commitment of organizations investing in the future of our students, faculty and community," said Gilroy Unified School District Superintendent Dr. Deborah Flores. "An additional \$20,000 in resources will support our wellness policy, which promotes the nutrients in dairy, fruits, vegetables and whole grain products, along with physical activity whether it be a dance class or a soccer game."

The ‘Hometown Grant’ and match will help ensure students in the Gilroy Unified School District join the 13 million students who are eating healthier, 16 million students who are more active and 130,000 adults who are enrolled and empowering youth in the United States through one

national program – FUTP 60. A total of \$80,000 in ‘Hometown Grant’ funds and resources have been awarded to California school districts in 2016.

“Supporting healthy kids takes a community. California dairy families are excited to support Gilroy Unified in its continuing commitment to making nutritious foods and physical activity programs available to students so they can live healthy, active lives and perform better in the classroom,” said Jennifer Giambroni, Director of Communications for the CMAB.

Developed by FUTP 60 and the National Football League (NFL), the ‘Hometown Grant’ program provides teams and dairy organizations like Real California Milk with the opportunity to identify deserving schools in their area and provide them with funding to help meet their health and wellness goals. Each of the 32 NFL Clubs, Fuel Up to Play 60 and local dairy representatives are providing \$10,000 grants in communities throughout the country totaling a \$320,000 investment in youth health and wellness. For the 2016 season, the National Foundation on Fitness, Sports & Nutrition is matching the NFL’s donation of \$10,000 in resources to celebrate the 60th anniversary of the President’s Council of Fitness, Sports and Nutrition, the nation’s youth fitness education and assessment program.

“Our organization has partnered with GUSD in the past as a part of our youth football program to promote physical activity and are proud to be expanding our partnership with the community even further to incorporate the importance of nutrition,” said Brent Schoeb, Vice President of Corporate Sponsorships for the San Francisco 49ers. “Having the opportunity to partner with the state’s dairy families allows for a larger conversation to take place around the importance of healthy eating and refueling with simple and real foods such as dairy, a food group we know our organization loves.”

Created in partnership by the NFL and [National Dairy Council](#), in collaboration with the U.S. Department of Agriculture, [Fuel Up to Play 60](#) is the nation’s largest in-school wellness program creating real transformational change in more than 73,000 schools nationwide. The national in-school nutrition and physical-activity program is activated in California by the state’s more than 1,300 dairy farm families. Since fall 2014, FUTP 60 has helped to award more than \$430,000 in grants to schools throughout California in support of their wellness goals.

About the San Francisco 49ers

The San Francisco 49ers, owned by Denise and John York, currently play in the NFC West division and have won five Super Bowl trophies including Super Bowl XVI, XIX, XXIII, XXIV and XXIX. The franchise also has six conference championships and 19 divisional championships and was the first major league professional sports team to be based in San Francisco 70 years ago. Please visit www.49ers.com and follow the 49ers on Facebook and Twitter @49ers.

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Real California Milk Launches REAL Makers Foodservice Campaign
National campaign spotlights culinary innovation with California dairy

TRACY, Calif. (December 12, 2016) — The California Milk Advisory Board (CMAB) recently unveiled a new Foodservice digital advertising campaign spotlighting “REAL Makers”, innovative chefs from throughout the country using California dairy in an interesting way. The campaign rolled out this fall with three digital spots with links to videos of these chefs showcasing California dairy hacks – clever culinary tricks of the trade that include new preparation methods and surprising twists on classic techniques – all using California dairy foods.

“REAL Makers chefs appreciate the values behind California dairy – a commitment to sustainability and animal care as well as consistent quality and freshness,” said Jennifer Giambroni, Director of Communications for the California Milk Advisory Board. “This campaign celebrates these craftspeople who design their culinary creations with the best ingredients and the greatest respect for the food.”

The inaugural campaign features chefs Celeste Cooper and Alexandra Lopez of Hen House and chef Jen Biesty of Shakewell – both in Oakland, Calif. – and chef Nico Delaroque of Nico, San Francisco. Each digital ad links to a video of these chefs demonstrating ideas for using products like California cheese and butter in trend-forward menu concepts:

- [Crispy Mozzarella Cheese Bow](#), featuring Chefs Alex Lopez & Celeste Cooper of Hen House, Oakland, California
- [Makeover Cheese-Rind Mousse](#), featuring Chef Nicolas Delaroque of Nico, San Francisco, California
- [Shake Well Butter Sauce](#), featuring Chef Jen Biesty of Shakewell, Oakland, California

California has led the nation in overall milk production since 1993 and is the country's leading producer of butter, ice cream, nonfat dry milk and whey protein concentrate. The state is the second largest cheese and yogurt producer. California's more than 50 cheesemakers produce more than 250 different varieties and styles of cheese using exclusively California milk. California is the country's leading producer of Hispanic-style cheeses, producing more than 25 varieties and styles of Hispanic-style cheeses and dairy products bearing the Real California Cheese seal. California also produces many other quality dairy products sold into the Foodservice channel, including yogurt, frozen yogurt, ice cream, sour cream, cottage cheese and crème fraîche.

"Operators know that their customers are interested in where their food comes from," said Giambroni, "And that's why adding the halo of Real California dairy can make a difference to their bottom line."

For more information, to watch the videos and to sign up to receive the REAL Makers Foodservice eNewsletter, operators can visit www.RealCaliforniaMilk.com/Foodservice.

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Holidays Made Easy

6 Food Gifts, Recipes and Pro Entertaining Tips Using Kitchen Staples California Butter, Cheese & Milk

Impress your friends, family and co-workers with food gifts and appetizing décor with eye-catching detail. Start with Real California dairy foods and be set for a season of holiday cheer.

BUTTER & MILK CREATE OBJECTS OF GIFTING DESIRE

	
<p>No ‘butter’ gift for the holidays Share the seasonal flavor of winter with a jar of Squash Butter, made in partnership with Food52. Perfect as a host thank-you, gift exchange or party favor for guests.</p>	<p>Be the talk of the cookie exchange Butter Sugar Cookies up their game when topped with this traditional Milk Jam recipe from California dairy farmer Essie Bootsma.</p>

CHEESE MAKES THE MOMENT



Deck the halls with edible décor

This cheese wreath multitasks as a crowd pleasing display and appetizer. Tip: Make the bow from phyllo dough and add candied cranberries for color. Created by TomKat Studios.



How to Make a Stylish Cheese Board

It's easier than it looks. Pair sweet and savory combinations using this [California Cheese Board assembly guide](#) from Real California Milk. Tip: Use Hispanic cheeses for a global influence

DESSERTS THAT ARE MORE THAN THE FOOD



Indulge the health nut

Lighten up holiday sweets without losing flavor with California [Ricotta, Cranberry & Pear Mini Tarts](#), developed by [Patricia Bannan](#), MS, RDN.



Wow guests with the new gingerbread house: snow globes

Craft a memorable dessert that will be talked about well into the new year with a winter wonderland of [snow globes](#), created by TomKat Studios.

Purchase dairy ingredients with the Real California Milk seal to ensure quality products made with 100 percent milk produced by California's dairy farm families. Products with the seal are available in supermarkets and specialty stores across the U.S.

For more creative holiday inspiration visit www.RealCaliforniaMilk.com.

About Real California Milk

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CALIFORNIA DAIRY ON DISPLAY AT THE WINTER FANCY FOOD SHOW IN SAN FRANCISCO

TRACY, Calif. – January 9, 2017 – The California Milk Advisory Board (CMAB) will showcase dairy-inspired culinary trends in San Francisco during the Winter Fancy Food Show, which will be held on January 22-24 at the Moscone Center.

Visitors to Booth #4917 will have a chance to sample dairy products made with 100 percent Real California Milk from California's more than 1300 dairy families, including cheese, frozen yogurt and gelato, butter, chocolate milk and more.

The 9 processors showcasing products in the CMAB booth, include:

- **Cable Car Delights** – Variety of gelato flavors: Chocolate Cubed, Vanilla Bean, Caramel Sea Salt, Caramel Chocolate Coffee Crunch, Honey Lavender, Mexican Chocolate, Ginger Pear Sorbet, Salted Caramel Mocha
- **Fosselman's Ice Cream Co.** – All Natural Vanilla and Dutch Chocolate Soft Serve, Dutch Chocolate and Salty Caramel Milkshakes
- **Nicasio Valley Cheese Co.** – Foggy Morning, Foggy Morning with Garlic and Basil, Formagella, Locarno, Tomino, San Geronimo, Nicasio Reserve and Nicasio Square
- **Pavel's Yogurt** – Original Yogurt, Lowfat Plain Yogurt, Lowfat Vanilla Yogurt, Nonfat Plain Yogurt, Lowfat Organic Plain Yogurt
- **Rumiano Cheese Co.** – Variety of cheeses from the Rumiano Family Organic Cheese line.
- **Top Line Milk Co.** – Low & Slow Cream Top Whole and Chocolate Milk
- **Top O' The Morn** – Farmstead Salted Butter, Milk in a variety of flavors

- **Valley Ford Cheese Co.** – Highway 1, Estero Gold, Estero Gold Reserve, Grazin Girl Gorgonzola
- **Vintage Cheese Co.** – Variety of Cheddars, Jacks, Gouda and Curds

CMAB business development consultants and marketing team members also will be on hand to discuss opportunities to feature California dairy products at retail and in foodservice applications as well as where to source products from California processors. All items showcased carry the Real California Milk and/or Cheese seal, which certifies the products are made exclusively from California milk.

California is the nation's leading milk producer. The state is also responsible for more butter, ice cream and nonfat dry milk than any other state. California is the second-largest producer of cheese and yogurt.

###

About the California Milk Advisory Board

The California Milk Advisory Board (CMAB), an instrumentality of the California Department of Food and Agriculture, is funded by the state's more than 1,300 dairy families. With headquarters in Tracy, the CMAB is one of the largest agricultural marketing boards in the United States. The CMAB executes advertising, public relations, research and retail and foodservice promotional programs on behalf of California dairy products, including Real California Milk and Real California Cheese, throughout the U.S. and internationally. For more information and to connect with the CMAB through social media, visit RealCaliforniaMilk.com, like at [Facebook](https://www.facebook.com/RealCaliforniaMilk), view videos at [YouTube](https://www.youtube.com/RealCaliforniaMilk), follow at [Twitter](https://twitter.com/RealCaliforniaMilk) and [Instagram](https://www.instagram.com/RealCaliforniaMilk), and pin at [Pinterest](https://www.pinterest.com/RealCaliforniaMilk).



California Milk Advisory Board
2316 Orchard Parkway
Tracy, CA 95377

209 883-MILK · RealCaliforniaMilk.com

FOR IMMEDIATE RELEASE

CONTACT: Kris Costa
kcosta@cmab.net
(209) 690-8248

SAMPLE: Dairy Princess Contest Announcement
Press Release – Announcement Press Releases
Distributed to Local Media For All Seven Competitions

Corrin Macedo
cmacedo@cmab.net
(209) 690-8240

DAIRY PRODUCERS BEGIN SEARCH FOR ROYALTY

TRACY, Calif. – February 3, 2017 – The local dairy industry is now accepting applications from young women wishing to compete for the District 3 Dairy Princess crown.

The winner will represent the dairy industry in District 3 as a spokeswoman and will also represent the California dairy industry in appearances at schools, fairs, industry meetings, service clubs, parades, and with the media. The newly selected princess will also participate in a week of training that includes industry tours, presentation and etiquette training.

Contestants must meet the following requirements: 1) Be a senior in high school and not over 21 years of age by contest date; 2) Be unmarried; and 3) Family must own a dairy farm, work for the dairy industry or show dairy cattle for a 4-H/FFA organization.

More detailed information about qualifications can be found on the application, which is available at www.californiadairypreressroom.com/ca-dairy-princesses. Applicants are urged to submit their applications as soon as possible. The application deadline is Monday, March 3, 2017.

The contest is sponsored by the District 3 Dairy Princess Committee and the California Milk Advisory Board (CMAB). The gala event will be held Saturday April 8, 2017, at

Veterans Memorial Hall in Petaluma. The evening begins at 6:00 p.m. with a social hour and is followed by the contest and dinner at 7:00 p.m.

During the event, current Dairy Princess Adrianna Begley of Santa Rosa will relinquish her crown to the winner who will represent the dairy industry in Lake, Marin, Mendocino, Napa, Solano and Sonoma counties during the 2017-2018 program year. Scholarships will also be awarded.

Application forms may be accessed online www.californiadairyprincessroom.com/ca-dairy-princesses. Questions regarding the application can be directed to committee chair Judy Buttke at dist3dairyprincess@yahoo.com or CMAB office at cmacedo@cmab.net or (209) 690-8240.

California is the nation's leading milk producer. It also produces more butter and nonfat dry milk than any other state. The state is the second-largest of cheese and yogurt. Dairy products made with Real California milk can be identified by the Real California Milk or Real California Cheese seal, which certifies that the products are made exclusively with milk produced on California dairy farms.

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(209) 690-8240

CALIFORNIA DAIRY DISTRICTS SEEK AMBASSADORS TO SERVE AS 2017 DAIRY PRINCESESSES

Tracy, Calif., February 10, 2017 – Each year, a special group of young women are selected to represent the state’s more than 1,300 dairy farm families who contribute to making California number one for milk production in the U.S. The 2017 contests will be held April through June. Districts select a winner and alternates based on judging criteria, such as knowledge of and enthusiasm for the industry. See below for application details and contest dates.

California Dairy Princesses serve as industry advocates in their home district and the state of California, building a favorable public image for milk and dairy products through appearances at industry and agricultural functions, school groups and in media interviews. Dairy Princesses and alternates participate in a orientation/training in July, in which they receive professional development coaching.

The California Dairy Princess Program has been in effect for many years and is sponsored by California dairy producers through the California Milk Advisory Board. Application forms can be obtained online at www.californiadairyprincepressroom.com/ca-dairy-princesses. Questions can be directed to the CMAB office at cmacedo@cmab.net or 209.690.8240. For more information on becoming a California Dairy Princess, click [here](#).

The 2017-2018 California Dairy Princess application deadlines and contest dates:

Dairy Princess Program - 2017 Contest Dates

District	Application Deadline	Contest Date	Location
District 1	Thursday, March 23	Friday, May 12	Fortuna
District 3	Friday, March 3	Saturday, April 8	Petaluma
District 4	No contest in 2017		
District 5	Thursday, April 20	Wednesday, June 7	Manteca
District 6	Friday, May 12	Thursday, June 15	Turlock
District 7	Friday, April 14	Friday, June 30	Hanford
District 8	Thursday, March 16	Friday, April 28	Fresno
District 9	Thursday, April 20	Friday, June 9	Tulare

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KIDS MILK MARKETING

Presentation to Board of Directors

March 2017

Page Number

Fuel Up to Play 60

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Kids Milk Marketing

FUEL UP TO PLAY 60 (FUTP 60)

Importance

- *Highlight California dairy farmers' commitment to supporting in-school nutrition and physical activity programs*
- *Connect dairy producers and educators to learn from each other and encourage program support*
- *Provide visibility for dairy processors*

Hometown Grants

CMAB, in partnership with the San Diego Chargers, Los Angeles Rams, San Francisco 49ers and the National Foundation on Fitness, Sports & Nutrition, presented three \$20,000 grants to school districts representing NFL team regions. The financial and in-kind resources were awarded to support student health and wellness programs.

San Diego Chargers

On October 25th, a celebration took place at Logan K-8 School within San Diego Unified School District. The school is planning to use a portion of funds to purchase a "Rock the Bike," which is a stationary bike with a pedal-powered blender attached to make smoothies. San Diego Chargers players Joshua Perry, Tyrell Williams and King Dunlap taught students how to make their favorite healthy smoothie, featuring Real California dairy products, on the bike. Representatives from Hollandia Dairy attended the event and provided dairy products. Media coverage included:

- CBS 8
- NBC 7
- Good Morning San Diego
- Chargers social media channels and website

Los Angeles Rams

LA's BEST After School Enrichment Program was the grant recipient on November 17 at Limerick Elementary School in Canoga Park. The celebration took place at an after school program where students were encouraged to fuel up with California milk after being active for 60 minutes a day. Los Angeles Rams players Johnny Hekker, Michael Jordan and Jamon Brown shared their favorite meals, featuring Real California dairy products, which helps keep them strong and ready for games. Following the skills and drills portion of the event, Rams players and California dairy producers distributed Real California milk and yogurt to the students. Media coverage included:

- CBS LA
- LA's BEST social media channels and website
- Rams social media channels and website

San Francisco 49ers

On December 15th, Gilroy Unified School District received their grant at Ascencion Solorsano Middle School in front of 100 6th graders. At the celebration, students participated in indoor skills and drills and were encouraged to fuel up with California milk before heading back to class. Sourdough Sam and the Gold Rush were on-site, along with 49ers alumni Guy McIntyre, to tout the importance of healthy eating and physical activity. Media coverage included:

- NBC 5
- California Dairy Magazine
- National Foundation on Fitness & Sports Nutrition social channels
- 49ers social media channels

Educator/Influencer Outreach

- CMAB partnered with the Oakland Raiders to host a Farm-to-School event for area educators and farmers. Prior to the Raiders vs. Bills game at O.co Stadium, participants were escorted to seats in the field level lounge to discuss ways to promote healthy eating and physical activity at school sites. The event allowed dairy producers to learn more about Fuel Up to Play 60 activations and share the importance of dairy nutrition and on-farm practices.

Additional activities include

- Continued participating with the Local School Wellness Policy Collaborative and Action for Healthy Kids.
- Reviewed and processed grant funding applications from schools for fall funding cycle. A total of four grants were approved, focused on dairy optimization.
- Secured California FUTP 60 students to participate in Play 60 games with the San Francisco 49ers and San Diego Chargers.
- Finalized placement of NFL Flag Football kits at Oakland and San Diego Unified School Districts.
- Facilitated FUTP 60 trainings with Dairy Council Community Nutrition Advisors to review the program, goals, plays and how to work together to align with Smarter Lunchroom goals.
- Coordinating placement of \$40K in unused en español funds with the Madera Unified School District. A total of 15 schools will implement Healthy Foods Everywhere in School play and any Physical Activity play they choose with projects being implemented between January and June 2017. The CMAB is working with Dairy Council of California to coordinate an announcement of the grant/project in cooperation with a demonstration by the Mobile Dairy Classroom.
- Participated in December national school foodservice training in Chicago to learn about National School Food Service Regulations and best practices for Dairy Optimization.

UNIVERSITY of CALIFORNIA
cal fresh Nutrition Education

One Shields Avenue, 1103 Meyer Hall • Davis, CA 95616 • (530) 754-7794 • www.uccalfresh.org

UC CalFresh Weekly Update
February 16, 2016



UC CalFresh in Action!

Congratulations to Lake Tahoe Unified—Sierra House Elementary School, FUTP60 Award, UCCE Central Sierra

Congrats to Lake Tahoe Unified—Sierra House Elementary School who was awarded funds from Fuel Up to Play 60 in order to further implement their fitness and nutrition goals. A staff member from Sierra House Elementary writes, “Funding from Fuel Up to Play 60 provides a unique opportunity to combine the two main focuses of our school—fitness and nutrition. Using our growing domes and school garden to teach garden based nutrition provided by UC CalFresh, has now extended beyond just ‘growing food’. Using the food we grow in the domes to create healthy smoothies for our students to drink after a PE/nutrition lesson links health, fitness and nutrition in a hands on way that we believe will impact our school community in a positive and empowering way. UC CalFresh Nutrition Education Program has been a strong partner in providing guidance and resources for our lunchroom, garden space and garden based nutrition curriculum.”

Up to \$4,000 per year is available to qualified K-12 schools enrolled in Fuel Up to Play 60 to kick start healthy changes. The next round of applications opens in Spring 2016. Check out how you can start preparing your application on the Fuel Up to Play 60 website [here](#).

UC Delivers

This is a friendly reminder that counties should contact **Andra Nicoli** (amnicoli@ucdavis.edu) at the State Office if you are interested in developing a UC Delivers or have recently submitted a UC Delivers without State Office involvement. For those developing a UC Delivers, Andra can assist you in writing/editing/submitting a UC Delivers story. The State Office is also interested in keeping track of UC Delivers that are being submitted directly from counties. For those not requiring writing/editing services from the State Office, please share a copy of your submission with Andra. In this way, we can track the type of stories UC CalFresh is submitting and advocate for your story!

UC CalFresh Nutrition Corners

The UC CalFresh State Office would like to see the creative ways your program and partners have used the Nutrition Corners in your county. Please send photos and a brief description to Lindsay Hamasaki at lmhamasaki@ucdavis.edu.

RETAIL/FOODSERVICE

Presentation to Board of Directors

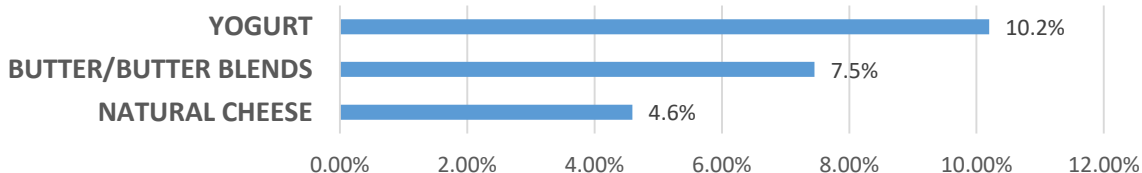
March 2017

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Foodservice Update	4
Trade Shows	5

US Retail

1. Grow RCM cheese, butter and yogurt distribution at least 5%

Total Points of Distribution Total %Change vs YA, RCM, 2016



2. Gain efficiencies in promotions through new vehicle tests & measurement

- ✓ Tracking coupon redemptions & projections by vehicle
- ✓ Tested Ibotta, digital coupons to reach Millennials
- ✓ Tested retailer web marketing, new shelf signage, sweepstakes - Q4

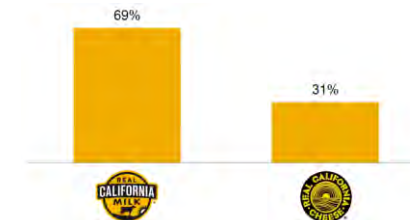
International

1. Conduct consumer research in Mexico, laying the foundation for a test market launch upon validation

- ✓ Shift responsibilities to Janet Arellano brining all intl. together
- ✓ Identify best positioning & RCC vs. RCM validity

2. Conduct consumer research in Asia

- ✓ Identify countries for research
- ✓ Contract and schedule qualitative
- ✓ Conducted research in Korea, Vietnam



3. Consolidator Program: build to monthly FCL shipments for cheese and ice cream in four markets. Establish base line metrics:

of processors

active leads

YTD shipments

US Foodservice

1. Conduct national research, establish baseline for future growth objectives

Aided: State that is the Leading Producer of Dairy Products (By Region)

Leading State	Northeast	South	Midwest	West (Excl. CA)	California
Wisconsin	63%	54%	71%	41%	25%
California	21	34	20	51	71

2. Develop and launch Foodservice digital campaign to address key issues

3. Grow Sysco volume incentive program + 5%

4. **Extend Sysco distributor incentive program to 2-3 smaller distributors:**
- US Foods (in process)

Team / Other

1. Implement Customer Relationship Management System

- ✓ Scope project, develop RFP, decide on vendor
- ✓ Kick off, develop and migrate data
- ✓ Test, phase roll-out of launch, begin training
- Go live across all key functions**

2. Develop a 5 year strategic plan for business development as part of overall CMAB long range plan; assist with leading the overall CMAB process as needed by CEO

3. Develop fact-based selling materials, **including PowerPoint templates, using IRI data and other market research that** quantifies the benefits of California dairy, the seal, **and our advertising and promotional programs**

Retail Update

❖ Texas Promotion

The Hispanic brands Lenten Texas promotion is almost fully in place and ready for launch. Two of our four Hispanic brands are each committing \$50,000 for :30/:30 radio, where the first thirty seconds will be a CMAB spot, followed by their own thirty-second ad where they can talk about specific products and retailers. Other elements of the program include digital coupons embedded in on-line recipes, point of sale materials (to include recipe cards) and grocery cart ads, as well as instant redeemable coupons on relevant products. The theme of the promotion is “Say Hola to Real Mexican Flavor.”



❖ Trial Sample Program

Bob Constantino is developing a new trial program that could dramatically reduce demo sampling costs by replacing some of our costly demos with a more economical version that the cheese manufacturers fill with their own product and ship directly to retailers to be placed on the deli counter. Early feedback from processors is very positive. A sample picture is included below:



❖ **Tony's Fine Foods**

We had our annual meeting to go over food show support (reduced by \$5k this year). Tony's position is intriguing, since as a CA based company, they stock more CA cheese brands than any other distributor in the US. They have access to 33 UNFI distribution centers across the US and theoretically can reach any retailer in the US by inter-company transfer. The best news from this meeting was our discussion encouraging Tony's to take their Gold Rush cheese brand into new markets. This is a complete program for commodity items including chunks, shreds and slices, as well as organic offerings, most which have the Seal. The first major presentation is to Ahold/Giant and we have offered to provide IRC's behind new, out of state placement.

❖ **Scott Brothers**

At the Fancy Food Show we learned the great news of their partnership with Tapatio to produce three retail sizes of sour cream dip (Tapatio, Chipotle and Jalapeno). The launch will be at the IDDBA. Initial retail targets for July/August first ship are Costco, Price Smart, Smart & Final and Hispanic retailers like Cardenas, Mi Pueblo, El Super (all in California). We will probably offer some support with IRC's as the distribution starts.

❖ **Harris Teeter**

Bob Constantino met with Leo Begens, Sr VP of Perishables, in late 2016. Teeter is a major cheese retailer. They have no California cheese in distribution. Leo's response was "I really don't know that much about CA cheeses." They discussed an important California trip to visit our processor plants and Bob will set this up in early 2017.

Foodservice Update

❖ **Sysco**

CMAB will become a Preferred Partner and we (our cheesemakers) will be invited, through European Imports, to participate in the booth at the local Sysco food shows nationally at no additional cost. Sysco would like to visit two large processors in April to discuss innovation and growth opportunities. This summer, ten chefs from the West Coast OPCO's will participate in 2 ½ days of training in CA visiting plants and learning more about CA dairy. Butter will be a big increase in 2017 with Sysco agreeing in principal to buy frozen butter from a CA processor. It could increase purchases by 7MM lbs.

❖ **Restaurant Depot**

We did 225 demos last year, which was a big success. They have decided that in addition to trade flyers, demos move the needle at their warehouses. A demo is six hours and they get real buyers trying the product since they are 100% cash and carry. We will do 235 demos this year, as again, this is the strategic push. They will have five new warehouses in the West this year and will also consider Mexico warehouses in the next 18 months. We discussed adding cream cheese from CDI. The tentative agreement is to put it in five warehouses with our trade flyer support. Rest. Depot NY is now buying pourable yogurts (500,000 lbs.) from Marquez Brothers and we will support.

❖ **Bon Suisse**

They now have over 80 trucks and 250 employees (tripled in five years). Circle K continues to buy Thrifty ice cream and they are rolling it out to additional stores. We are working on more freezers with the Seal. They now distribute dairy and other items to all CVS stores in CA. Their Mexico business is growing and Janet is going to see them in February to discuss how she can help. They report that many border towns are now pushing back on buying any US food products due to Trump's policy stance on Mexico.

❖ **US Foods**

Nancy had a meeting at their Corporate HQ in early February. They are now on board with our distributor volume incentive program. They are set to deliver real numbers on new items for late 2016-2017 and Year End 2016 numbers to build a growth program for 2018.

Trade Shows

International Pizza Expo, March 28-30, 2017, Las Vegas, NV

The CMAB's booth at the International Pizza Expo will showcase California dairy to chain and independent pizza operators. Marketing team members, business development consultants and members of the Executive Committee and Board will be on hand to discuss opportunities for using California cheese and dairy to grow business. Frozen yogurt and gelato, another growing foodservice trend, also will be sampled in the booth during the three-day show.

Northwest Foodservice Show, April 23-24, 2017, Portland, OR

The CMAB booth at the Northwest Foodservice Show will showcase a variety of California dairy products, including specialty and commodity cheeses, frozen yogurt, butter and yogurt, to a multitude of foodservice operators and buyers. Business development consultants and marketing team members will be on hand to discuss opportunities to use California cheese and dairy products to grow business.

National Restaurant Show, May 20-23, 2017, Chicago, IL.

The CMAB will host a booth at the National Restaurant Show. The 30'x 30' sampling booth will include representatives from California processors and CMAB staff promoting California dairy for foodservice customers in both single and multi-unit operators as well as small distributors.

INTERNATIONAL

Presentation to Board of Directors

March 2017

Page Number

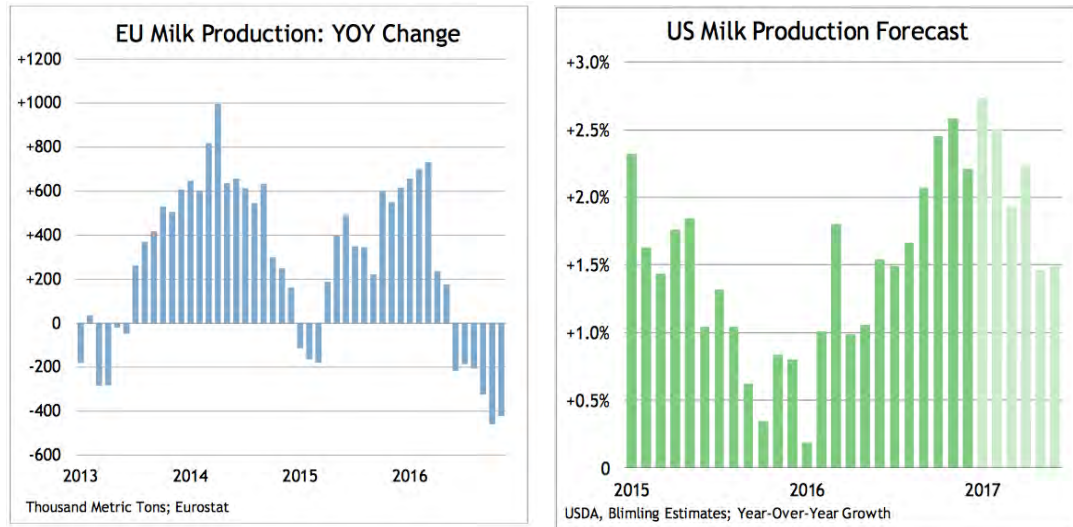
International Update

1 – 2

International Update

❖ Milk Production

European milk production continues to trend downward, down 3.6% versus prior year, while US milk production continues to grow and is projected by Blimling to continue:



❖ January 2017 Planning Meeting - Philippines

In January, all our international representatives met in the Philippines in place of our traditional January meetings in San Francisco. The efficiency of meeting closer to most of our international markets saved approximately 50% of the historic cost and provided an opportunity to have both individual planning meetings and joint sessions. Jen also met individually with each country's team to customize their launch plans for social media using the global platform that Jen has developed. We had a "lessons learned" session from 2016 where each country shared their greatest challenge and success. We discussed e-commerce and other growth platforms of the future. Imalinx, our new Mexico agency, was also present and able to develop contacts and hear best practices from all our Asian country teams.

❖ Mexico

Concerns about US and Mexico trade relations seem to be creating unease. Every month, about 25% of US NDM/SMP production goes to Mexico. Talk about redoing trade agreements, building walls and altering immigration policies don't instill confidence today, even if things don't ultimately become worse tomorrow.

❖ **Vietnam**

GDP growth in Vietnam is still astounding at 6.2%. Lower minimum wages continue to attract foreign direct investment and imported food is becoming more attractive as urban population grows. The US is now the 11th largest trading partner with Vietnam, up from 95th just five years ago. We will be looking at snacking cheese, positioned as “the same cheese you love on pizza” as a growth opportunity in 2017.

❖ **Thailand**

US dairy continues to face steep competitive pressure due to our disadvantage in duties versus other origins, specifically NZ which is at zero percent, versus thirty percent tariffs on US dairy. Growth opportunities are still present in both foodservice and retail, specifically frozen yogurt and fluid milk.

PROCESSOR RELATIONS

Presentation to Board of Directors

March 2017

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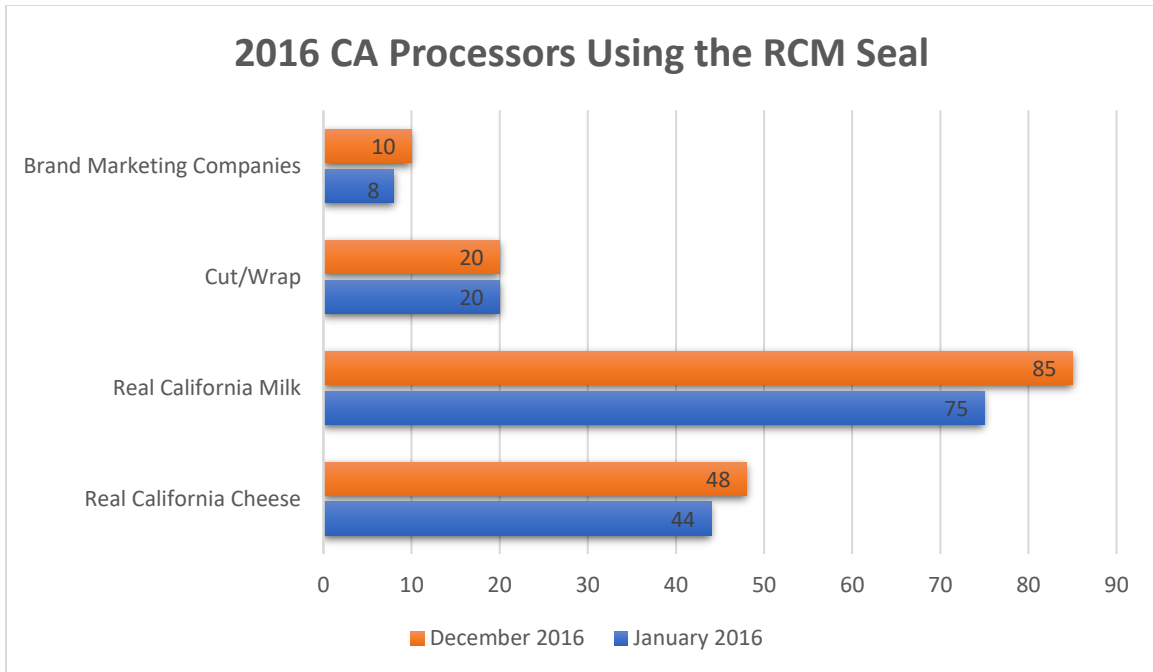
Processor Relations Update

1

Processor Relations

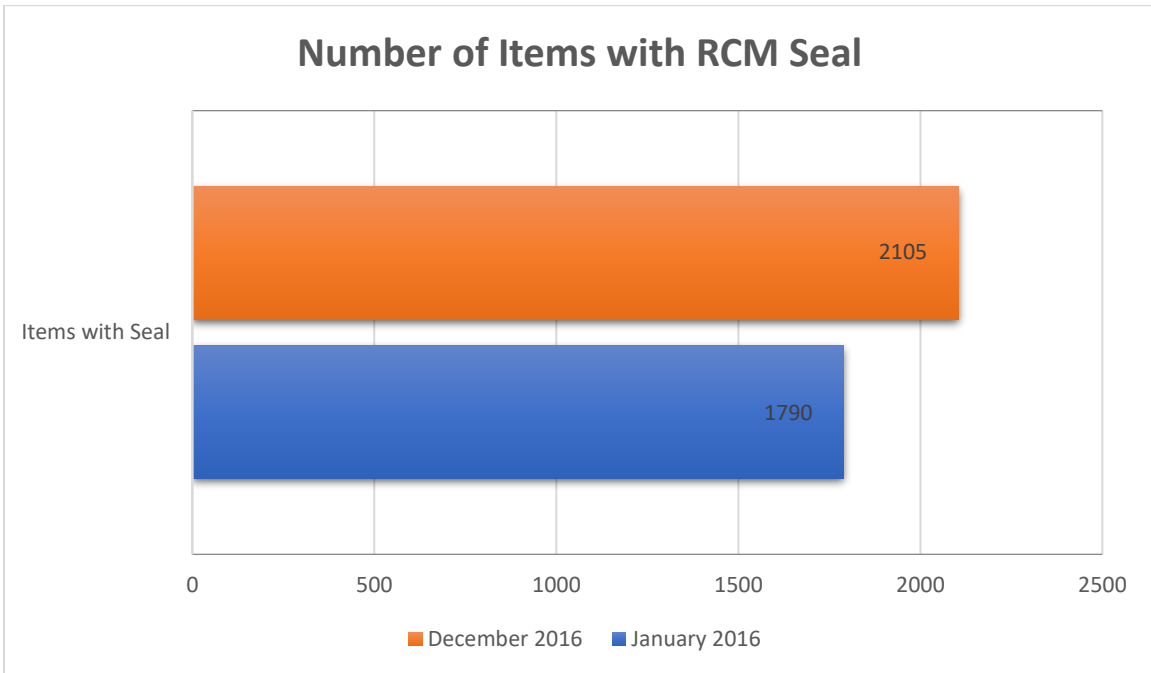
❖ 2016 Number of California Processors Using the RCM Seal

Below is a chart, which illustrates the number of CMAB Processors broken down into categories. Brand Marketing Companies are those who market a brand but use an existing processor to co-pack for them. This group increased by 2 companies in 2016. Cut and Wrap facilities take cheese from blocks and cut/wrap it into retail and foodservice sizes. Real California Milk processors are those who make any dairy product but cheese – this group had the largest increase of 10 new CMAB processors in 2016. Real California Cheese processors increased by 4 in 2016.



❖ **2016 Number of items with the Seal - Summary**

With expansions and new item launches, 2016 was a good year for increasing the number of items with the Real California Milk Seal, ending the year at 2,105 items, and increase of 17.5%! Many of these items are nationally distributed, helping to increase the utilization of our processing facilities using 100% California Milk. With several nationally branded companies now using the Seal, more and more consumers will be looking for it on other items and our advertising has a great impact on this.



❖ **New RCM Partner Cut & Wrap to Open Soon**

Silverdale Cheese is opening a new Cut and Wrap facility in March. Located in Imperial, CA in the former Gossner plant, they will be cutting and repackaging cheese into retail and foodservice sizes. This will include everything from soft cheeses like mozzarella to any type of hard pressed cheese. They have the capability to process chunks, slices and shredded cheese. The CMAB has already connected Silverdale with two high volume operators that will help generate more business for California Cheese

❖ **New ESL Milk Items from Rockview Farms**

Rockview Farms’ new Ninth Avenue Foods processing facility located in Southern California is now processing Lactose Free Extended Shelf Life (ESL) Milk. This milk has 85 days shelf life from date of manufacture and already has inquiries from some of our international clients in Asia. They also process ESL Chocolate Milk for both domestic and international markets and recently added the RCM Seal to their Butter.



❖ **Organic Valley Milk**

Dean Foods has formed a joint venture with CROPP, the organic farmer owned cooperative and owner of the Organic Valley brand. The partnership is designed to bring more processing and strength to the Dean family of brands while making distribution easier and more cost effective for Organic Valley. With Organic Milk flowing again, Organic Valley has added the Real California Milk Seal to their gallons of regular shelf life milk and are also looking at options to use 100% California Milk for their half gallon extended shelf life (ESL) product line not processed by Dean.

Processing and shipping of Organic Valley items is expected to begin in mid-late 2017.



❖ **Expanding to new Categories**

We are working with one of our largest fluid milk processors to assist them in expanding their business to ship frozen cream internationally. This will give us additional clout with international clients in building new business and will help our California processor to add value to their milk and diversify into new items. We continue to look for opportunities where we can increase value and demand for California milk.

❖ **Crystal Creamery wins National Award**

The EPA presented the annual Food Recovery Challenge National Innovation Award to Crystal Creamery for turning waste into electricity and other byproducts. The award is part of a federal effort to reduce food waste, which is estimated to exceed 37 million tons a year. Crystal Creamery was recognized for how it handles post-processing matter remaining after making ice cream, cultured items and other dairy foods. The matter is collected at the main Crystal plant and is taken to Fiscalini Cheese, where it goes into a digester that also handles manure from Fiscalini's dairy cattle. The waste is converted into a gas that is burned to produce power. The digester also produces fertilizer for feed crops and bedding for cattle.



❖ **Glen Oaks Drinkable Yogurt**

Introduced by the Donovan family before drinkable yogurt was popular, this product is packed by SSI in Turlock, CA. We are now working with them to help gain new distribution in major chains in the Southwest and Northeastern U.S. They are also in talks with Harbyrco to establish international sales. All major supermarkets throughout California stock this brand as well.



❖ **Nestle Coffee-Mate Natural Bliss - Milk Based Coffee Beverages**

We have been in talks with Nestle USA for several months about a very exciting new line of milk based coffee beverages under the Coffee-Mate Natural Bliss brand. As a result, these will be made with 100% Real California Milk and Cream and will have the RCM Seal on the front of each package. These use a new cold brew technology and consist of up to 70% milk. We welcome Nestle USA into our family of products using 100% Real California Milk and look forward to reporting on the next phase.



California Dairy Review



Volume 21 Issue 2

February 2017

USDA NASS Dairy Survey Will Help Measure Impact of New Margin Protection Program

Beginning in January, representatives of the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) will visit dairy farms across California and the U.S. as the agency begins collecting data for the final phase of the 2016 Agricultural Resource Management Survey (ARMS).

ARMS is a joint effort between NASS and USDA's Economic Research Service (ERS). The survey is an annual program that gathers in-depth information on production practices, costs, and financial well-being of American farm families. ARMS targets select commodities on a rotational basis. This year, the survey places additional focus on the conventional and organic dairy sectors, along with corn. The last time ARMS focused on the dairy sector was in 2010 and focused only on the conventional dairy sector. This will be the first time ARMS will include additional focus on the organic dairy production.

The results of the 2016 ARMS will help USDA and other policymakers analyze the impacts of the new Dairy Margin Protection Program, introduced in the Agricultural Act of 2014. With operational costs driving structural changes within the dairy industry, this new program aims to help dairy producers when milk prices drop and feed prices remain high. USDA launched the program in 2015, making the current survey crucial to measuring its initial effects.

All dairy farmers selected to participate in the 2016 ARMS will be notified by a mailed postcard. After that, trained enumerators will make appointments and visit the participating farms to gather the information through personal interviews. These visits will begin in late January and will continue through early April.

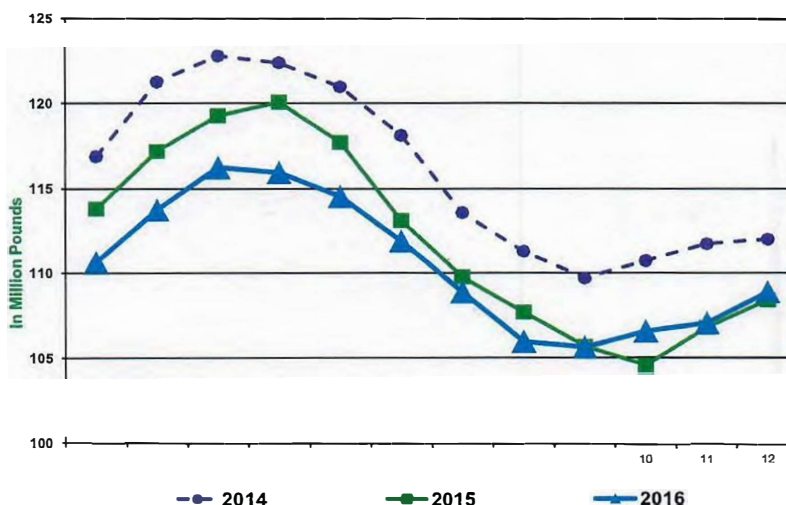
Once all the data are in, NASS and ERS will review and analyze the information. NASS plans on publishing summarized data in the *Farm Production Expenditures* report on August 3, 2017. ERS plans on putting out a report focusing on the ARMS dairy data at a later date.

California Milk Production

Average Daily Basis, 2014 - 2016

California milk production decreased each month through the first three quarters of 2016, compared to the same month in the previous year. However, milk production during the fourth quarter increased each month compared to the same month in 2015.

Total milk production for the year finished at 40.44 billion pounds. This represents a decrease of 1.1 percent, compared to the 40.87 billion pounds produced in 2015.



Total Class 1 Sales in California, by Month ^{1 3} January 2015 - December 2016

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Whole Milk						
January	18,020,300	17,840,206	-1.0%	18,020,300	17,840,206	-1.0%
February	16,046,465	16,779,145	4.6%	34,066,765	34,619,351	1.6%
March	17,585,410	17,937,382	2.0%	51,652,175	52,556,733	1.8%
April	16,676,263	17,434,703	4.5%	68,328,438	69,991,436	2.4%
May	17,185,854	17,722,670	3.1%	85,514,292	87,714,106	2.6%
June	17,049,597	17,497,583	2.6%	102,563,889	105,211,689	2.6%
July	17,770,566	17,893,054	0.7%	120,334,455	123,104,743	2.3%
August	17,638,874	18,562,225	5.2%	137,973,329	141,666,968	2.7%
September	17,143,436	17,680,513	3.1%	155,116,765	159,347,481	2.7%
October	17,980,089	18,045,090	0.4%	173,096,854	177,392,571	2.5%
November	17,761,340	18,070,186	1.7%	190,858,194	195,462,757	2.4%
December	18,777,002	18,963,558	1.0%	209,635,196	214,426,315	2.3%
Reduced Fat Milk						
January	20,864,439	19,424,721	-6.9%	20,864,439	19,424,721	-6.9%
February	18,367,467	17,969,215	-2.2%	39,231,906	37,393,936	-4.7%
March	20,006,149	19,180,563	-4.1%	59,238,055	56,574,499	-4.5%
April	18,957,856	18,414,969	-2.9%	78,195,911	74,989,468	-4.1%
May	19,150,462	18,404,565	-3.9%	97,346,373	93,394,033	-4.1%
June	18,917,851	18,122,487	-4.2%	116,264,224	111,516,520	-4.1%
July	19,831,451	18,608,150	-6.2%	136,095,675	130,124,670	-4.4%
August	19,730,618	19,509,062	-1.1%	155,826,293	149,633,732	-4.0%
September	19,246,398	18,795,981	-2.3%	175,072,691	168,429,713	-3.8%
October	20,078,469	19,065,007	-5.0%	195,151,160	187,494,720	-3.9%
November	19,687,960	18,950,750	-3.7%	214,839,120	206,445,470	-3.9%
December	20,527,309	19,729,868	-3.9%	235,366,429	226,175,338	-3.9%
Lowfat Milk						
January	10,376,274	9,282,600	-10.5%	10,376,274	9,282,600	-10.5%
February	9,440,441	8,854,416	-6.2%	19,816,715	18,137,016	-8.5%
March	10,331,835	9,331,370	-9.7%	30,148,550	27,468,386	-8.9%
April	9,722,786	9,225,328	-5.1%	39,871,336	36,693,714	-8.0%
May	9,783,654	9,251,908	-5.4%	49,654,990	45,945,622	-7.5%
June	8,353,856	7,881,018	-5.7%	58,008,846	53,826,640	-7.2%
July	8,220,860	7,200,912	-12.4%	66,229,706	61,027,552	-7.9%
August	9,129,667	8,676,206	-5.0%	75,359,373	69,703,758	-7.5%
September	9,718,688	8,958,189	-7.8%	85,078,061	78,661,947	-7.5%
October	10,217,669	8,771,354	-14.2%	95,295,730	87,433,301	-8.3%
November	9,233,865	8,421,669	-8.8%	104,529,595	95,854,970	-8.3%
December	9,091,705	7,953,064	-12.5%	113,621,300	103,808,034	-8.6%

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Skim/Nonfat/Fat-Free Milk						
January	7,917,886	7,032,724	-11.2%	7,917,886	7,032,724	-11.2%
February	7,385,621	7,098,094	-3.9%	15,303,507	14,130,818	-7.7%
March	7,927,192	7,130,810	-10.0%	23,230,699	21,261,628	-8.5%
April	7,480,937	7,293,369	-2.5%	30,711,636	28,554,997	-7.0%
May	7,565,764	7,309,462	-3.4%	38,277,400	35,864,459	-6.3%
June	5,604,288	5,180,494	-7.6%	43,881,688	41,044,953	-6.5%
July	5,138,641	4,437,139	-13.7%	49,020,329	45,482,092	-7.2%
August	6,454,239	6,274,163	-2.8%	55,474,568	51,756,255	-6.7%
September	7,612,861	7,177,875	-5.7%	63,087,429	58,934,130	-6.6%
October	7,947,542	7,211,679	-9.3%	71,034,971	66,145,809	-6.9%
November	6,868,129	6,346,380	-7.6%	77,903,100	72,492,189	-6.9%
December	6,559,598	5,936,673	-9.5%	84,462,698	78,428,862	-7.1%
Subtotal All Beverage Milks						
January	57,178,899	53,580,251	-6.3%	57,178,899	53,580,251	-6.3%
February	51,239,994	50,700,870	-1.1%	108,418,893	104,281,121	-3.8%
March	55,850,586	53,580,125	-4.1%	164,269,479	157,861,246	-3.9%
April	52,837,842	52,368,369	-0.9%	217,107,321	210,229,615	-3.2%
May	53,685,734	52,688,605	-1.9%	270,793,055	262,918,220	-2.9%
June	49,925,592	48,681,582	-2.5%	320,718,647	311,599,802	-2.8%
July	50,961,518	48,139,255	-5.5%	371,680,165	359,739,057	-3.2%
August	52,953,398	53,021,656	0.1%	424,633,563	412,760,713	-2.8%
September	53,721,383	52,612,558	-2.1%	478,354,946	465,373,271	-2.7%
October	56,223,769	53,093,130	-5.6%	534,578,715	518,466,401	-3.0%
November	53,551,294	51,788,985	-3.3%	588,130,009	570,255,386	-3.0%
December	54,955,614	52,583,163	-4.3%	643,085,623	622,838,549	-3.1%
Half-and-Half						
January	1,767,888	1,541,948	-12.8%	1,767,888	1,541,948	-12.8%
February	1,601,530	1,617,080	1.0%	3,369,418	3,159,028	-6.2%
March	1,779,474	1,713,403	-3.7%	5,148,892	4,872,431	-5.4%
April	1,552,443	1,606,302	3.5%	6,701,335	6,478,733	-3.3%
May	1,538,880	1,677,291	9.0%	8,240,215	8,156,024	-1.0%
June	1,533,125	1,557,196	1.6%	9,773,340	9,713,220	-0.6%
July	1,601,904	1,534,349	-4.2%	11,375,244	11,247,569	-1.1%
August	1,493,596	1,634,042	9.4%	12,868,840	12,881,611	0.1%
September	1,473,348	1,640,397	11.3%	14,342,188	14,522,008	1.3%
October	1,694,805	1,658,306	-2.2%	16,036,993	16,180,314	0.9%
November	1,822,933	1,798,410	-1.3%	17,859,926	17,978,724	0.7%
December	1,819,528	1,719,652	-5.5%	19,679,454	19,698,376	0.1%

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Total Class 1 Sales						
January	58,946,787	55,122,199	-6.5%	58,946,787	55,122,199	-6.5%
February	52,841,524	52,317,950	-1.0%	111,788,311	107,440,149	-3.9%
March	57,630,060	55,293,528	-4.1%	169,418,371	162,733,677	-3.9%
April	54,390,285	53,974,671	-0.8%	223,808,656	216,708,348	-3.2%
May	55,224,614	54,365,896	-1.6%	279,033,270	271,074,244	-2.9%
June	51,458,717	50,238,778	-2.4%	330,491,987	321,313,022	-2.8%
July	52,563,422	49,673,604	-5.5%	383,055,409	370,986,626	-3.2%
August	54,446,994	54,655,698	0.4%	437,502,403	425,642,324	-2.7%
September	55,194,731	54,252,955	-1.7%	492,697,134	479,895,279	-2.6%
October	57,918,574	54,751,436	-5.5%	550,615,708	534,646,715	-2.9%
November	55,374,227	53,587,395	-3.2%	605,989,935	588,234,110	-2.9%
December	56,775,142	54,302,815	-4.4%	662,765,077	642,536,925	-3.1%
Out-of-State Class 1 Sales ²						
January	2,106,640	1,840,950	-12.6%	2,106,640	1,840,950	-12.6%
February	1,497,172	2,052,114	37.1%	3,603,812	3,893,064	8.0%
March	1,800,258	2,327,127	29.3%	5,404,070	6,220,191	15.1%
April	1,867,883	1,876,811	0.5%	7,271,953	8,097,002	11.3%
May	2,028,958	1,935,799	-4.6%	9,300,911	10,032,801	7.9%
June	1,641,992	1,952,775	18.9%	10,942,903	11,985,576	9.5%
July	1,813,291	2,073,929	14.4%	12,756,194	14,059,505	10.2%
August	2,066,596	2,155,296	4.3%	14,822,790	16,214,801	9.4%
September	2,100,501	2,141,729	2.0%	16,923,291	18,356,530	8.5%
October	2,081,492	1,952,082	-6.2%	19,004,783	20,308,612	6.9%
November	1,764,570	1,962,406	11.2%	20,769,353	22,271,018	7.2%
December	1,885,546	2,055,833	9.0%	22,654,899	24,326,851	7.4%

¹ Reported by California plants only. Includes all Class 1 Northern and Southern California market milk product sales including flavored and organic milk sales.

² Reported by California plants only. Includes all whole, reduced fat, lowfat, and skim market milk product sales sold out of California. The Class 1 Sales Out-of-State sales are not included in the Total Class 1 Sales for California, nor in any other Class 1 Sales tables.

³ For information reported for April 2015 forward, CDFA clarified reporting instructions for packaged product moving plant to plant prior to ultimate distribution. This has improved the accuracy of current numbers, but makes current year to prior years less accurate, and will overstate any year over year decrease in sales.

Class 1 Sales in Northern California, by Month ¹

January 2015 - December 2016

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Whole Milk						
January	7,775,137	7,927,310	2.0%	7,775,137	7,927,310	2.0%
February	7,042,441	7,511,282	6.7%	14,817,578	15,438,592	4.2%
March	7,683,674	8,082,815	5.2%	22,501,252	23,521,407	4.5%
April	7,326,940	7,865,262	7.3%	29,828,192	31,386,669	5.2%
May	7,588,491	8,038,244	5.9%	37,416,683	39,424,913	5.4%
June	7,568,743	7,910,880	4.5%	44,985,426	47,335,793	5.2%
July	7,904,576	8,077,943	2.2%	52,890,002	55,413,736	4.8%
August	7,886,212	8,456,500	7.2%	60,776,214	63,870,236	5.1%
September	7,701,653	8,200,386	6.5%	68,477,867	72,070,622	5.2%
October	8,031,704	8,350,301	4.0%	76,509,571	80,420,923	5.1%
November	7,881,005	8,223,992	4.4%	84,390,576	88,644,915	5.0%
December	8,387,680	8,635,103	2.9%	92,778,256	97,280,018	4.9%
Reduced Fat Milk						
January	9,419,512	8,949,398	-5.0%	9,419,512	8,949,398	-5.0%
February	8,347,953	8,360,724	0.2%	17,767,465	17,310,122	-2.6%
March	9,165,468	8,931,374	-2.6%	26,932,933	26,241,496	-2.6%
April	8,626,620	8,547,358	-0.9%	35,559,553	34,788,854	-2.2%
May	8,755,630	8,571,616	-2.1%	44,315,183	43,360,470	-2.2%
June	8,645,052	8,425,849	-2.5%	52,960,235	51,786,319	-2.2%
July	9,026,783	8,664,353	-4.0%	61,987,018	60,450,672	-2.5%
August	9,007,403	9,106,274	1.1%	70,994,421	69,556,946	-2.0%
September	8,878,452	8,868,655	-0.1%	79,872,873	78,425,601	-1.8%
October	9,178,224	8,987,500	-2.1%	89,051,097	87,413,101	-1.8%
November	8,944,398	8,817,815	-1.4%	97,995,495	96,230,916	-1.8%
December	9,395,250	9,170,916	-2.4%	107,390,745	105,401,832	-1.9%
Lowfat Milk						
January	4,398,029	3,971,818	-9.7%	4,398,029	3,971,818	-9.7%
February	3,967,663	3,744,986	-5.6%	8,365,692	7,716,804	-7.8%
March	4,353,591	3,979,917	-8.6%	12,719,283	11,696,721	-8.0%
April	4,070,322	3,920,197	-3.7%	16,789,605	15,616,918	-7.0%
May	4,075,648	3,910,967	-4.0%	20,865,253	19,527,885	-6.4%
June	3,618,855	3,320,348	-8.2%	24,484,108	22,848,233	-6.7%
July	3,605,358	3,201,112	-11.2%	28,089,466	26,049,345	-7.3%
August	3,938,755	3,764,776	-4.4%	32,028,221	29,814,121	-6.9%
September	4,139,584	3,909,041	-5.6%	36,167,805	33,723,162	-6.8%
October	4,285,885	3,871,129	-9.7%	40,453,690	37,594,291	-7.1%
November	3,879,007	3,620,093	-6.7%	44,332,697	41,214,384	-7.0%
December	3,967,444	3,517,780	-11.3%	48,300,141	44,732,164	-7.4%

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Skim/Nonfat/Fat-Free Milk						
January	3,647,431	3,210,647	-12.0%	3,647,431	3,210,647	-12.0%
February	3,377,871	3,166,783	-6.2%	7,025,302	6,377,430	-9.2%
March	3,640,751	3,188,681	-12.4%	10,666,053	9,566,111	-10.3%
April	3,379,198	3,245,276	-4.0%	14,045,251	12,811,387	-8.8%
May	3,408,516	3,230,475	-5.2%	17,453,767	16,041,862	-8.1%
June	2,614,953	2,296,270	-12.2%	20,068,720	18,338,132	-8.6%
July	2,459,279	2,130,550	-13.4%	22,527,999	20,468,682	-9.1%
August	3,068,421	2,938,880	-4.2%	25,596,420	23,407,562	-8.6%
September	3,452,598	3,264,495	-5.4%	29,049,018	26,672,057	-8.2%
October	3,562,295	3,222,099	-9.5%	32,611,313	29,894,156	-8.3%
November	3,157,736	2,925,185	-7.4%	35,769,049	32,819,341	-8.2%
December	3,072,305	2,800,348	-8.9%	38,841,354	35,619,689	-8.3%
Subtotal All Beverage Milks						
January	25,240,109	24,059,173	-4.7%	25,240,109	24,059,173	-4.7%
February	22,735,928	22,783,775	0.2%	47,976,037	46,842,948	-2.4%
March	24,843,484	24,182,787	-2.7%	72,819,521	71,025,735	-2.5%
April	23,403,080	23,578,093	0.7%	96,222,601	94,603,828	-1.7%
May	23,828,285	23,751,302	-0.3%	120,050,886	118,355,130	-1.4%
June	22,447,603	21,953,347	-2.2%	142,498,489	140,308,477	-1.5%
July	22,995,996	22,073,958	-4.0%	165,494,485	162,382,435	-1.9%
August	23,900,791	24,266,430	1.5%	189,395,276	186,648,865	-1.5%
September	24,172,287	24,242,577	0.3%	213,567,563	210,891,442	-1.3%
October	25,058,108	24,431,029	-2.5%	238,625,671	235,322,471	-1.4%
November	23,862,146	23,587,085	-1.2%	262,487,817	258,909,556	-1.4%
December	24,822,679	24,124,147	-2.8%	287,310,496	283,033,703	-1.5%
Half-and-Half						
January	769,204	765,032	-0.5%	769,204	765,032	-0.5%
February	695,426	808,124	16.2%	1,464,630	1,573,156	7.4%
March	771,130	837,817	8.6%	2,235,760	2,410,973	7.8%
April	748,299	816,837	9.2%	2,984,059	3,227,810	8.2%
May	709,855	818,118	15.3%	3,693,914	4,045,928	9.5%
June	743,466	772,469	3.9%	4,437,380	4,818,397	8.6%
July	739,142	775,876	5.0%	5,176,522	5,594,273	8.1%
August	743,392	863,270	16.1%	5,919,914	6,457,543	9.1%
September	748,119	875,217	17.0%	6,668,033	7,332,760	10.0%
October	825,870	863,133	4.5%	7,493,903	8,195,893	9.4%
November	872,972	934,320	7.0%	8,366,875	9,130,213	9.1%
December	873,518	859,171	-1.6%	9,240,393	9,989,384	8.1%

¹ Reported by California plants only. Includes all Class 1 Northern California market milk product sales including flavored and organic milk sales (except for Class 1 out-of-state sales which are shown in a separate table). Organic and Flavored milk sales are also displayed in separate tables.

Class 1 Sales in Southern California, by Month ¹

January 2015 - December 2016

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Whole Milk						
January	10,245,163	9,912,896	-3.2%	10,245,163	9,912,896	-3.2%
February	9,004,024	9,267,863	2.9%	19,249,187	19,180,759	-0.4%
March	9,901,736	9,854,567	-0.5%	29,150,923	29,035,326	-0.4%
April	9,349,323	9,569,441	2.4%	38,500,246	38,604,767	0.3%
May	9,597,363	9,684,426	0.9%	48,097,609	48,289,193	0.4%
June	9,480,854	9,586,703	1.1%	57,578,463	57,875,896	0.5%
July	9,865,990	9,815,111	-0.5%	67,444,453	67,691,007	0.4%
August	9,752,662	10,105,725	3.6%	77,197,115	77,796,732	0.8%
September	9,441,783	9,480,127	0.4%	86,638,898	87,276,859	0.7%
October	9,948,385	9,694,789	-2.5%	96,587,283	96,971,648	0.4%
November	9,880,335	9,846,194	-0.3%	106,467,618	106,817,842	0.3%
December	10,389,322	10,328,455	-0.6%	116,856,940	117,146,297	0.2%
Reduced Fat Milk						
January	11,444,927	10,475,323	-8.5%	11,444,927	10,475,323	-8.5%
February	10,019,514	9,608,491	-4.1%	21,464,441	20,083,814	-6.4%
March	10,840,681	10,249,189	-5.5%	32,305,122	30,333,003	-6.1%
April	10,331,236	9,867,611	-4.5%	42,636,358	40,200,614	-5.7%
May	10,394,832	9,832,949	-5.4%	53,031,190	50,033,563	-5.7%
June	10,272,799	9,696,638	-5.6%	63,303,989	59,730,201	-5.6%
July	10,804,668	9,943,797	-8.0%	74,108,657	69,673,998	-6.0%
August	10,723,215	10,402,788	-3.0%	84,831,872	80,076,786	-5.6%
September	10,367,946	9,927,326	-4.2%	95,199,818	90,004,112	-5.5%
October	10,900,245	10,077,507	-7.5%	106,100,063	100,081,619	-5.7%
November	10,743,562	10,132,935	-5.7%	116,843,625	110,214,554	-5.7%
December	11,132,059	10,558,952	-5.1%	127,975,684	120,773,506	-5.6%
Lowfat Milk						
January	5,978,245	5,310,782	-11.2%	5,978,245	5,310,782	-11.2%
February	5,472,778	5,109,430	-6.6%	11,451,023	10,420,212	-9.0%
March	5,978,244	5,351,453	-10.5%	17,429,267	15,771,665	-9.5%
April	5,652,464	5,305,131	-6.1%	23,081,731	21,076,796	-8.7%
May	5,708,006	5,340,941	-6.4%	28,789,737	26,417,737	-8.2%
June	4,735,001	4,560,670	-3.7%	33,524,738	30,978,407	-7.6%
July	4,615,502	3,999,800	-13.3%	38,140,240	34,978,207	-8.3%
August	5,190,912	4,911,430	-5.4%	43,331,152	39,889,637	-7.9%
September	5,579,104	5,049,148	-9.5%	48,910,256	44,938,785	-8.1%
October	5,931,784	4,900,225	-17.4%	54,842,040	49,839,010	-9.1%
November	5,354,858	4,801,576	-10.3%	60,196,898	54,640,586	-9.2%
December	5,124,261	4,435,284	-13.4%	65,321,159	59,075,870	-9.6%

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Skim/Nonfat/Fat-Free Milk						
January	4,270,455	3,822,077	-10.5%	4,270,455	3,822,077	-10.5%
February	4,007,750	3,931,311	-1.9%	8,278,205	7,753,388	-6.3%
March	4,286,441	3,942,129	-8.0%	12,564,646	11,695,517	-6.9%
April	4,101,739	4,048,093	-1.3%	16,666,385	15,743,610	-5.5%
May	4,157,248	4,078,987	-1.9%	20,823,633	19,822,597	-4.8%
June	2,989,335	2,884,224	-3.5%	23,812,968	22,706,821	-4.6%
July	2,679,362	2,306,589	-13.9%	26,492,330	25,013,410	-5.6%
August	3,385,818	3,335,283	-1.5%	29,878,148	28,348,693	-5.1%
September	4,160,263	3,913,380	-5.9%	34,038,411	32,262,073	-5.2%
October	4,385,247	3,989,580	-9.0%	38,423,658	36,251,653	-5.7%
November	3,710,393	3,421,195	-7.8%	42,134,051	39,672,848	-5.8%
December	3,487,293	3,136,325	-10.1%	45,621,344	42,809,173	-6.2%
Subtotal All Beverage Milks						
January	31,938,790	29,521,078	-7.6%	31,938,790	29,521,078	-7.6%
February	28,504,066	27,917,095	-2.1%	60,442,856	57,438,173	-5.0%
March	31,007,102	29,397,338	-5.2%	91,449,958	86,835,511	-5.0%
April	29,434,762	28,790,276	-2.2%	120,884,720	115,625,787	-4.4%
May	29,857,449	28,937,303	-3.1%	150,742,169	144,563,090	-4.1%
June	27,477,989	26,728,235	-2.7%	178,220,158	171,291,325	-3.9%
July	27,965,522	26,065,297	-6.8%	206,185,680	197,356,622	-4.3%
August	29,052,607	28,755,226	-1.0%	235,238,287	226,111,848	-3.9%
September	29,549,096	28,369,981	-4.0%	264,787,383	254,481,829	-3.9%
October	31,165,661	28,662,101	-8.0%	295,953,044	283,143,930	-4.3%
November	29,689,148	28,201,900	-5.0%	325,642,192	311,345,830	-4.4%
December	30,132,935	28,459,016	-5.6%	355,775,127	339,804,846	-4.5%
Half-and-Half						
January	998,684	776,916	-22.2%	998,684	776,916	-22.2%
February	906,104	808,956	-10.7%	1,904,788	1,585,872	-16.7%
March	1,008,344	875,586	-13.2%	2,913,132	2,461,458	-15.5%
April	804,144	789,465	-1.8%	3,717,276	3,250,923	-12.5%
May	829,025	859,173	3.6%	4,546,301	4,110,096	-9.6%
June	789,659	784,727	-0.6%	5,335,960	4,894,823	-8.3%
July	862,762	758,473	-12.1%	6,198,722	5,653,296	-8.8%
August	750,204	770,772	2.7%	6,948,926	6,424,068	-7.6%
September	725,229	765,180	5.5%	7,674,155	7,189,248	-6.3%
October	868,935	795,173	-8.5%	8,543,090	7,984,421	-6.5%
November	949,961	864,090	-9.0%	9,493,051	8,848,511	-6.8%
December	946,010	860,481	-9.0%	10,439,061	9,708,992	-7.0%

¹ Reported by California plants only. Includes all Class 1 Southern California market milk product sales including flavored and organic milk sales (except for Class 1 out-of-state sales which are shown in a separate table). Organic and Flavored milk sales are also displayed in separate tables.

Class 1 Sales of Organic Milk, in California, by Month ¹

January 2015 - December 2016

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Whole Milk						
January	1,527,749	1,501,136	-1.7%	1,527,749	1,501,136	-1.7%
February	1,459,403	1,486,194	1.8%	2,987,152	2,987,330	0.0%
March	1,551,475	1,662,848	7.2%	4,538,627	4,650,178	2.5%
April	1,337,815	1,554,343	16.2%	5,876,442	6,204,521	5.6%
May	1,409,659	1,584,549	12.4%	7,286,101	7,789,070	6.9%
June	1,390,712	1,563,673	12.4%	8,676,813	9,352,743	7.8%
July	1,429,519	1,497,979	4.8%	10,106,332	10,850,722	7.4%
August	1,451,710	1,626,183	12.0%	11,558,042	12,476,905	7.9%
September	1,453,994	1,635,197	12.5%	13,012,036	14,112,102	8.5%
October	1,481,175	1,596,453	7.8%	14,493,211	15,708,555	8.4%
November	1,498,102	1,592,180	6.3%	15,991,313	17,300,735	8.2%
December	1,656,646	1,668,225	0.7%	17,647,959	18,968,960	7.5%
Reduced Fat Milk						
January	1,747,757	1,443,128	-17.4%	1,747,757	1,443,128	-17.4%
February	1,651,132	1,394,541	-15.5%	3,398,889	2,837,669	-16.5%
March	1,758,735	1,538,230	-12.5%	5,157,624	4,375,899	-15.2%
April	1,466,688	1,395,089	-4.9%	6,624,312	5,770,988	-12.9%
May	1,484,167	1,437,703	-3.1%	8,108,479	7,208,691	-11.1%
June	1,435,641	1,399,626	-2.5%	9,544,120	8,608,317	-9.8%
July	1,461,337	1,342,596	-8.1%	11,005,457	9,950,913	-9.6%
August	1,430,194	1,455,886	1.8%	12,435,651	11,406,799	-8.3%
September	1,553,196	1,545,390	-0.5%	13,988,847	12,952,189	-7.4%
October	1,488,292	1,388,686	-6.7%	15,477,139	14,340,875	-7.3%
November	1,336,094	1,379,900	3.3%	16,813,233	15,720,775	-6.5%
December	1,530,316	1,443,246	-5.7%	18,343,549	17,164,021	-6.4%
Lowfat Milk						
January	757,410	629,298	-16.9%	757,410	629,298	-16.9%
February	700,797	520,194	-25.8%	1,458,207	1,149,492	-21.2%
March	684,991	663,335	-3.2%	2,143,198	1,812,827	-15.4%
April	566,149	585,943	3.5%	2,709,347	2,398,770	-11.5%
May	550,271	562,304	2.2%	3,259,618	2,961,074	-9.2%
June	536,804	600,512	11.9%	3,796,422	3,561,586	-6.2%
July	560,027	514,374	-8.2%	4,356,449	4,075,960	-6.4%
August	529,524	539,541	1.9%	4,885,973	4,615,501	-5.5%
September	560,605	555,769	-0.9%	5,446,578	5,171,270	-5.1%
October	546,257	535,127	-2.0%	5,992,835	5,706,397	-4.8%
November	614,547	573,239	-6.7%	6,607,382	6,279,636	-5.0%
December	694,287	584,722	-15.8%	7,301,669	6,864,358	-6.0%

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Skim/Nonfat/Fat-Free Milk						
January	520,999	384,593	-26.2%	520,999	384,593	-26.2%
February	512,485	383,867	-25.1%	1,033,484	768,460	-25.6%
March	505,645	419,188	-17.1%	1,539,129	1,187,648	-22.8%
April	414,029	366,431	-11.5%	1,953,158	1,554,079	-20.4%
May	405,989	390,736	-3.8%	2,359,147	1,944,815	-17.6%
June	397,299	392,373	-1.2%	2,756,446	2,337,188	-15.2%
July	407,005	351,874	-13.5%	3,163,451	2,689,062	-15.0%
August	392,031	377,812	-3.6%	3,555,482	3,066,874	-13.7%
September	403,465	371,157	-8.0%	3,958,947	3,438,031	-13.2%
October	390,668	331,815	-15.1%	4,349,615	3,769,846	-13.3%
November	378,398	281,183	-25.7%	4,728,013	4,051,029	-14.3%
December	407,688	337,687	-17.2%	5,135,701	4,388,716	-14.5%
Subtotal Organic Milks						
January	4,553,915	3,958,155	-13.1%	4,553,915	3,958,155	-13.1%
February	4,323,817	3,784,796	-12.5%	8,877,732	7,742,951	-12.8%
March	4,500,846	4,283,601	-4.8%	13,378,578	12,026,552	-10.1%
April	3,784,681	3,901,806	3.1%	17,163,259	15,928,358	-7.2%
May	3,850,086	3,975,292	3.3%	21,013,345	19,903,650	-5.3%
June	3,760,456	3,956,184	5.2%	24,773,801	23,859,834	-3.7%
July	3,857,888	3,706,823	-3.9%	28,631,689	27,566,657	-3.7%
August	3,803,459	3,999,422	5.2%	32,435,148	31,566,079	-2.7%
September	3,971,260	4,107,513	3.4%	36,406,408	35,673,592	-2.0%
October	3,906,392	3,852,081	-1.4%	40,312,800	39,525,673	-2.0%
November	3,827,141	3,826,502	0.0%	44,139,941	43,352,175	-1.8%
December	4,288,937	4,033,880	-5.9%	48,428,878	47,386,055	-2.2%

¹ Reported by California plants only. Organic milk sales included in Northern and Southern California Class 1 sales tables and Class 1 Sales totals.

Class 1 Sales of Flavored Milk, in California, by Month ¹

January 2015 - December 2016

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Whole Milk						
January	67,093	50,540	-24.7%	67,093	50,540	-24.7%
February	61,930	52,952	-14.5%	129,023	103,492	-19.8%
March	72,894	56,746	-22.2%	201,917	160,238	-20.6%
April	49,041	58,364	19.0%	250,958	218,602	-12.9%
May	54,120	58,199	7.5%	305,078	276,801	-9.3%
June	52,433	56,907	8.5%	357,511	333,708	-6.7%
July	48,597	57,026	17.3%	406,108	390,734	-3.8%
August	48,687	65,183	33.9%	454,795	455,917	0.2%
September	50,666	63,535	25.4%	505,461	519,452	2.8%
October	55,904	63,554	13.7%	561,365	583,006	3.9%
November	47,944	59,660	24.4%	609,309	642,666	5.5%
December	53,157	63,557	19.6%	662,466	706,223	6.6%
Reduced Fat Milk						
January	53,944	63,003	16.8%	53,944	63,003	16.8%
February	48,862	64,981	33.0%	102,806	127,984	24.5%
March	52,638	71,438	35.7%	155,444	199,422	28.3%
April	50,915	69,943	37.4%	206,359	269,365	30.5%
May	55,455	69,376	25.1%	261,814	338,741	29.4%
June	56,591	72,327	27.8%	318,405	411,068	29.1%
July	60,020	74,264	23.7%	378,425	485,332	28.3%
August	56,529	74,088	31.1%	434,954	559,420	28.6%
September	59,310	71,647	20.8%	494,264	631,067	27.7%
October	60,273	75,596	25.4%	554,537	706,663	27.4%
November	56,302	68,163	21.1%	610,839	774,826	26.8%
December	61,258	52,295	-14.6%	672,097	827,121	23.1%
Lowfat Milk						
January	572,793	477,454	-16.6%	572,793	477,454	-16.6%
February	538,168	485,791	-9.7%	1,110,961	963,245	-13.3%
March	586,664	511,745	-12.8%	1,697,625	1,474,990	-13.1%
April	486,079	492,026	1.2%	2,183,704	1,967,016	-9.9%
May	439,037	508,648	15.9%	2,622,741	2,475,664	-5.6%
June	453,855	530,599	16.9%	3,076,596	3,006,263	-2.3%
July	481,091	527,126	9.6%	3,557,687	3,533,389	-0.7%
August	500,100	609,111	21.8%	4,057,787	4,142,500	2.1%
September	484,971	567,359	17.0%	4,542,758	4,709,859	3.7%
October	526,046	559,614	6.4%	5,068,804	5,269,473	4.0%
November	535,700	564,881	5.4%	5,604,504	5,834,354	4.1%
December	492,989	501,389	1.7%	6,097,493	6,335,743	3.9%

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Skim/Nonfat/Fat-Free Milk						
January	2,208,544	2,159,062	-2.2%	2,208,544	2,159,062	-2.2%
February	2,236,566	2,305,469	3.1%	4,445,110	4,464,531	0.4%
March	2,417,859	2,168,777	-10.3%	6,862,969	6,633,308	-3.3%
April	2,309,985	2,474,308	7.1%	9,172,954	9,107,616	-0.7%
May	2,428,907	2,521,001	3.8%	11,601,861	11,628,617	0.2%
June	907,800	802,465	-11.6%	12,509,661	12,431,082	-0.6%
July	379,346	303,406	-20.0%	12,889,007	12,734,488	-1.2%
August	1,524,442	1,730,668	13.5%	14,413,449	14,465,156	0.4%
September	2,619,518	2,629,172	0.4%	17,032,967	17,094,328	0.4%
October	2,786,075	2,597,475	-6.8%	19,819,042	19,691,803	-0.6%
November	1,981,384	2,069,508	4.4%	21,800,426	21,761,311	-0.2%
December	1,689,877	1,628,553	-3.6%	23,490,303	23,389,864	-0.4%
Subtotal Flavored Milks						
January	2,902,374	2,750,059	-5.2%	2,902,374	2,750,059	-5.2%
February	2,885,526	2,909,193	0.8%	5,787,900	5,659,252	-2.2%
March	3,130,055	2,808,706	-10.3%	8,917,955	8,467,958	-5.0%
April	2,896,020	3,094,641	6.9%	11,813,975	11,562,599	-2.1%
May	2,977,519	3,157,224	6.0%	14,791,494	14,719,823	-0.5%
June	1,470,679	1,462,298	-0.6%	16,262,173	16,182,121	-0.5%
July	969,054	961,822	-0.7%	17,231,227	17,143,943	-0.5%
August	2,129,758	2,479,050	16.4%	19,360,985	19,622,993	1.4%
September	3,214,465	3,331,713	3.6%	22,575,450	22,954,706	1.7%
October	3,428,298	3,296,239	-3.9%	26,003,748	26,250,945	1.0%
November	2,621,330	2,762,212	5.4%	28,625,078	29,013,157	1.4%
December	2,297,281	2,245,794	-2.2%	30,922,359	31,258,951	1.1%

¹ Reported by California plants only. Flavored milk sales included in Northern and Southern California Class 1 sales tables and Class 1 Sales totals.

Manufacture of Selected Class 2 Products in California, by Month January 2015 - December 2016

Product and Month	By Month			Year-to-Date		
	2015 In Gallons or Pounds	2016 In Gallons or Pounds	% Change	2015 In Gallons or Pounds	2016 In Gallons or Pounds	% Change
Total Cottage Cheese (Pounds)						
January	7,735,136	9,984,471	29.1%	7,735,136	9,984,471	29.1%
February	8,414,939	10,099,918	20.0%	16,150,075	20,084,389	24.4%
March	10,007,183	10,930,430	9.2%	26,157,258	31,014,819	18.6%
April	8,590,964	9,975,765	16.1%	34,748,222	40,990,584	18.0%
May	8,342,681	9,701,231	16.3%	43,090,903	50,691,815	17.6%
June	10,325,653	9,137,279	-11.5%	53,416,556	59,829,094	12.0%
July	10,055,341	9,605,650	-4.5%	63,471,897	69,434,744	9.4%
August	9,627,107	8,741,310	-9.2%	73,099,004	78,176,054	6.9%
September	10,473,285	8,703,805	-16.9%	83,572,289	86,879,859	4.0%
October	9,158,117	9,304,476	1.6%	92,730,406	96,184,335	3.7%
November	8,645,048	8,509,730	-1.6%	101,375,454	104,694,065	3.3%
December	10,370,361	8,092,403	-22.0%	111,745,815	112,786,468	0.9%
Sour Cream & S.C. Dressing (Gallons)						
January	1,722,599	1,949,416	13.2%	1,722,599	1,949,416	13.2%
February	1,615,363	1,872,496	15.9%	3,337,962	3,821,912	14.5%
March	2,109,097	2,038,889	-3.3%	5,447,059	5,860,801	7.6%
April	1,832,633	1,872,580	2.2%	7,279,692	7,733,381	6.2%
May	1,816,124	1,960,061	7.9%	9,095,816	9,693,442	6.6%
June	1,934,552	2,011,894	4.0%	11,030,368	11,705,336	6.1%
July	1,920,163	1,896,788	-1.2%	12,950,531	13,602,124	5.0%
August	1,840,202	1,938,793	5.4%	14,790,733	15,540,917	5.1%
September	2,083,418	1,798,799	-13.7%	16,874,151	17,339,716	2.8%
October	1,972,001	2,030,831	3.0%	18,846,152	19,370,547	2.8%
November	2,141,783	2,077,281	-3.0%	20,987,935	21,447,828	2.2%
December	2,230,120	1,998,523	-10.4%	23,218,055	23,446,351	1.0%
Other Cream (Gallons) ¹						
January	2,354,784	2,687,406	14.1%	2,354,784	2,687,406	14.1%
February	2,725,580	2,553,269	-6.3%	5,080,364	5,240,675	3.2%
March	3,087,097	2,953,967	-4.3%	8,167,461	8,194,642	0.3%
April	2,953,357	2,771,506	-6.2%	11,120,818	10,966,148	-1.4%
May	2,686,827	2,845,365	5.9%	13,807,645	13,811,513	0.0%
June	3,158,916	3,136,201	-0.7%	16,966,561	16,947,714	-0.1%
July	3,154,753	3,099,258	-1.8%	20,121,314	20,046,972	-0.4%
August	2,922,500	3,007,854	2.9%	23,043,814	23,054,826	0.0%
September	2,998,572	2,958,992	-1.3%	26,042,386	26,013,818	-0.1%
October	3,354,007	3,207,132	-4.4%	29,396,393	29,220,950	-0.6%
November	3,247,191	2,919,602	-10.1%	32,643,584	32,140,552	-1.5%
December	3,134,373	3,216,480	2.6%	35,777,957	35,357,032	-1.2%

Product and Month	By Month			Year-to-Date		
	2015 In Gallons or Pounds	2016 In Gallons or Pounds	% Change	2015 In Gallons or Pounds	2016 In Gallons or Pounds	% Change
Buttermilk (Gallons)						
January	1,000,419	943,677	-5.7%	1,000,419	943,677	-5.7%
February	1,139,828	980,140	-14.0%	2,140,247	1,923,817	-10.1%
March	1,079,002	982,627	-8.9%	3,219,249	2,906,444	-9.7%
April	989,299	828,660	-16.2%	4,208,548	3,735,104	-11.2%
May	855,238	845,653	-1.1%	5,063,786	4,580,757	-9.5%
June	910,904	957,351	5.1%	5,974,690	5,538,108	-7.3%
July	870,369	886,853	1.9%	6,845,059	6,424,961	-6.1%
August	837,141	995,774	18.9%	7,682,200	7,420,735	-3.4%
September	899,713	938,207	4.3%	8,581,913	8,358,942	-2.6%
October	854,868	928,704	8.6%	9,436,781	9,287,646	-1.6%
November	892,823	985,401	10.4%	10,329,604	10,273,047	-0.5%
December	1,023,197	952,690	-6.9%	11,352,801	11,225,737	-1.1%
Yogurt (Pounds)						
January	45,492,801	27,837,137	-38.8%	45,492,801	27,837,137	-38.8%
February	45,925,390	29,071,669	-36.7%	91,418,191	56,908,806	-37.7%
March	46,176,670	31,617,039	-31.5%	137,594,861	88,525,845	-35.7%
April	43,796,249	30,402,962	-30.6%	181,391,110	118,928,807	-34.4%
May	37,693,109	29,573,692	-21.5%	219,084,219	148,502,499	-32.2%
June	39,452,795	30,435,189	-22.9%	258,537,014	178,937,688	-30.8%
July	37,402,876	24,442,632	-34.7%	295,939,890	203,380,320	-31.3%
August	37,899,704	44,334,443	17.0%	333,839,594	247,714,763	-25.8%
September	36,669,587	41,114,432	12.1%	370,509,181	288,829,195	-22.0%
October	31,070,378	37,400,353	20.4%	401,579,559	326,229,548	-18.8%
November	39,261,595	33,964,571	-13.5%	440,841,154	360,194,119	-18.3%
December	24,823,461	34,705,257	39.8%	465,664,615	394,899,376	-15.2%
Manufacturing Cream (Gallons)						
January	2,683,089	2,475,645	-7.7%	2,683,089	2,475,645	-7.7%
February	2,670,598	2,311,303	-13.5%	5,353,687	4,786,948	-10.6%
March	3,015,890	2,422,955	-19.7%	8,369,577	7,209,903	-13.9%
April	2,745,187	2,462,531	-10.3%	11,114,764	9,672,434	-13.0%
May	2,631,611	2,628,667	-0.1%	13,746,375	12,301,101	-10.5%
June	2,546,898	2,600,714	2.1%	16,293,273	14,901,815	-8.5%
July	2,818,117	2,722,760	-3.4%	19,111,390	17,624,575	-7.8%
August	2,840,171	2,720,456	-4.2%	21,951,561	20,345,031	-7.3%
September	2,647,530	2,583,022	-2.4%	24,599,091	22,928,053	-6.8%
October	2,512,542	2,780,296	10.7%	27,111,633	25,708,349	-5.2%
November	2,711,786	3,020,500	11.4%	29,823,419	28,728,849	-3.7%
December	2,407,721	2,639,507	9.6%	32,231,140	31,368,356	-2.7%

¹ Other Cream includes Cream, Whipping, Whipped (Cream Topping), Kefir, and Other Cream.

Manufacture of Selected Class 3 Products in California, by Month ¹ January 2015 - December 2016

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Ice Cream						
January	6,023,643	8,371,919	39.0%	6,023,643	8,371,919	39.0%
February	7,155,646	8,975,516	25.4%	13,179,289	17,347,435	31.6%
March	11,471,445	12,450,309	8.5%	24,650,735	29,797,744	20.9%
April	11,856,248	12,755,309	7.6%	36,506,983	42,553,053	16.6%
May	12,744,601	12,262,186	-3.8%	49,251,583	54,815,239	11.3%
June	12,601,040	12,518,992	-0.7%	61,852,624	67,334,231	8.9%
July	13,734,575	10,262,699	-25.3%	75,587,199	77,596,930	2.7%
August	12,562,744	10,436,883	-16.9%	88,149,943	88,033,813	-0.1%
September	11,810,569	9,132,983	-22.7%	99,960,512	97,166,796	-2.8%
October	11,213,775	8,040,132	-28.3%	111,174,287	105,206,927	-5.4%
November	8,275,593	6,655,439	-19.6%	119,449,880	111,862,366	-6.4%
December	6,642,941	6,224,707	-6.3%	126,092,820	118,087,074	-6.3%
Ice Milk ²						
January	1,420,189	1,549,099	9.1%	1,420,189	1,549,099	9.1%
February	1,662,531	2,031,451	22.2%	3,082,720	3,580,550	16.1%
March	2,314,499	2,398,084	3.6%	5,397,219	5,978,634	10.8%
April	2,192,745	2,382,092	8.6%	7,589,964	8,360,726	10.2%
May	1,955,602	2,444,300	25.0%	9,545,566	10,805,026	13.2%
June	2,246,941	2,564,218	14.1%	11,792,508	13,369,243	13.4%
July	2,441,146	2,424,028	-0.7%	14,233,653	15,793,271	11.0%
August	2,308,958	2,617,837	13.4%	16,542,611	18,411,108	11.3%
September	1,973,060	2,021,937	2.5%	18,515,672	20,433,045	10.4%
October	1,865,551	1,692,120	-9.3%	20,381,222	22,125,165	8.6%
November	1,692,686	1,589,363	-6.1%	22,073,908	23,714,528	7.4%
December	1,573,181	1,261,350	-19.8%	23,647,089	24,975,878	5.6%
Sherbert						
January	84,108	165,184	96.4%	84,108	165,184	96.4%
February	262,353	326,862	24.6%	346,461	492,046	42.0%
March	289,974	414,454	42.9%	636,435	906,500	42.4%
April	379,927	325,365	-14.4%	1,016,362	1,231,865	21.2%
May	338,194	466,040	37.8%	1,354,556	1,697,905	25.3%
June	351,387	403,406	14.8%	1,705,943	2,101,311	23.2%
July	399,829	357,897	-10.5%	2,105,772	2,459,208	16.8%
August	330,730	284,988	-13.8%	2,436,502	2,744,196	12.6%
September	445,344	248,398	-44.2%	2,881,846	2,992,594	3.8%
October	302,786	300,678	-0.7%	3,184,632	3,293,272	3.4%
November	280,227	148,880	-46.9%	3,464,859	3,442,152	-0.7%
December	161,098	129,467	-19.6%	3,625,957	3,571,619	-1.5%

Product and Month	By Month			Year-to-Date		
	2015 In Gallons	2016 In Gallons	% Change	2015 In Gallons	2016 In Gallons	% Change
Total Frozen Products						
January	8,342,237	11,223,012	34.5%	8,342,237	11,223,012	34.5%
February	10,234,714	12,744,722	24.5%	18,576,951	23,967,734	29.0%
March	15,626,843	16,733,149	7.1%	34,203,794	40,700,882	19.0%
April	16,077,999	16,733,860	4.1%	50,281,793	57,434,742	14.2%
May	16,431,582	16,561,616	0.8%	66,713,374	73,996,359	10.9%
June	16,824,399	17,127,118	1.8%	83,537,774	91,123,477	9.1%
July	18,373,258	14,112,558	-23.2%	101,911,031	105,236,034	3.3%
August	16,541,192	14,572,406	-11.9%	118,452,223	119,808,439	1.1%
September	15,439,691	12,505,137	-19.0%	133,891,914	132,313,576	-1.2%
October	14,486,939	11,166,195	-22.9%	148,378,852	143,479,771	-3.3%
November	11,182,327	9,306,681	-16.8%	159,561,179	152,786,451	-4.2%
December	9,211,523	8,244,189	-10.5%	168,772,701	161,030,641	-4.6%

¹ Data includes soft serve and shake mixes in appropriate categories as defined by butterfat standards.

² Includes light dairy dessert and nonfat ice cream.

Manufacture of Selected Class 4A Products in California, by Month January 2015 - December 2016

Product and Month	By Month			Year-to-Date		
	2015 In Pounds	2016 In Pounds	% Change	2015 In Pounds	2016 In Pounds	% Change
Butter						
January	57,421,495	52,775,726	-8.1%	57,421,495	52,775,726	-8.1%
February	50,893,610	50,993,111	0.2%	108,315,105	103,768,837	-4.2%
March	57,003,472	55,449,529	-2.7%	165,318,577	159,218,366	-3.7%
April	56,965,056	51,573,985	-9.5%	222,283,633	210,792,351	-5.2%
May	54,588,714	49,548,856	-9.2%	276,872,347	260,341,207	-6.0%
June	44,899,708	46,035,491	2.5%	321,772,055	306,376,698	-4.8%
July	40,719,451	43,445,385	6.7%	362,491,506	349,822,083	-3.5%
August	40,833,050	38,223,444	-6.4%	403,324,556	388,045,527	-3.8%
September	38,519,552	39,971,458	3.8%	441,844,108	428,016,985	-3.1%
October	41,750,195	42,246,467	1.2%	483,594,303	470,263,452	-2.8%
November	45,514,030	42,373,652	-6.9%	529,108,333	512,637,104	-3.1%
December	51,442,854	50,429,011	-2.0%	580,551,187	563,066,115	-3.0%
Nonfat Dried Milk, Human Consumption						
January	63,823,492	46,948,139	-26.4%	63,823,492	46,948,139	-26.4%
February	59,748,246	52,555,834	-12.0%	123,571,738	99,503,973	-19.5%
March	76,297,211	65,948,141	-13.6%	199,868,949	165,452,114	-17.2%
April	76,689,115	60,262,040	-21.4%	276,558,064	225,714,154	-18.4%
May	69,965,288	50,565,610	-27.7%	346,523,352	276,279,764	-20.3%
June	58,645,930	38,003,851	-35.2%	405,169,282	314,283,615	-22.4%
July	57,045,607	44,664,285	-21.7%	462,214,889	358,947,900	-22.3%
August	44,767,333	30,551,942	-31.8%	506,982,222	389,499,842	-23.2%
September	48,691,283	41,800,951	-14.2%	555,673,505	431,300,793	-22.4%
October	45,530,171	43,891,431	-3.6%	601,203,676	475,192,224	-21.0%
November	47,908,702	38,589,723	-19.5%	649,112,378	513,781,947	-20.8%
December	53,053,064	53,414,945	0.7%	702,165,442	567,196,892	-19.2%
Other Dry Milk Products ¹						
January	29,824,050	37,095,163	24.4%	29,824,050	37,095,163	24.4%
February	28,385,208	29,999,811	5.7%	58,209,258	67,094,974	15.3%
March	23,508,070	28,015,849	19.2%	81,717,328	95,110,823	16.4%
April	21,755,864	35,844,306	64.8%	103,473,192	130,955,129	26.6%
May	25,740,163	39,494,753	53.4%	129,213,355	170,449,882	31.9%
June	24,300,939	44,716,210	84.0%	153,514,294	215,166,092	40.2%
July	20,744,537	35,130,895	69.4%	174,258,831	250,296,987	43.6%
August	28,243,377	36,190,203	28.1%	202,502,208	286,487,190	41.5%
September	18,868,443	29,142,734	54.5%	221,370,651	315,629,924	42.6%
October	24,167,594	29,713,158	22.9%	245,538,245	345,343,082	40.6%
November	28,133,667	34,031,338	21.0%	273,671,912	379,374,420	38.6%
December	30,019,862	35,270,910	17.5%	303,691,774	414,645,330	36.5%

Product and Month	By Month			Year-to-Date		
	2015	2016	%	2015	2016	%
	In Pounds	In Pounds	Change	In Pounds	In Pounds	Change
Condensed & Evaporated Milk ²						
January	76,248,878	74,846,217	-1.8%	76,248,878	74,846,217	-1.8%
February	76,308,237	76,109,628	-0.3%	152,557,115	150,955,845	-1.0%
March	91,607,803	81,234,858	-11.3%	244,164,918	232,190,703	-4.9%
April	89,544,313	74,607,065	-16.7%	333,709,231	306,797,768	-8.1%
May	87,741,228	79,175,339	-9.8%	421,450,459	385,973,107	-8.4%
June	84,378,158	81,907,428	-2.9%	505,828,617	467,880,535	-7.5%
July	83,276,888	77,186,415	-7.3%	589,105,505	545,066,950	-7.5%
August	91,543,753	81,765,788	-10.7%	680,649,258	626,832,738	-7.9%
September	83,051,341	76,293,776	-8.1%	763,700,599	703,126,514	-7.9%
October	81,862,729	78,466,715	-4.1%	845,563,328	781,593,229	-7.6%
November	71,979,463	77,082,886	7.1%	917,542,791	858,676,115	-6.4%
December	71,242,530	49,666,036	-30.3%	988,785,321	908,342,151	-8.1%

¹ Other Dry Milk Products include: Dry Whole Milk; Dry Buttermilk; Skim Milk Powder (30-40% Protein); Skim Milk Powder Blends (Fat-Filled Powder); Milk Protein Concentrate, Dry; Milk Protein Isolate, Dry (90% Protein); Casein, Dry; Caseinates, Dry; Dry Nonfat Milk (Animal Feed); and other Dry Milk Products.

² Includes Condensed Skim Milk and Whole (Sweetened and Unsweetened); Condensed Evaporated Buttermilk; Evaporated Skim and Whole; Condensed Premix Skim and Cream; Other Condensed and Evaporated Milk, Ultrafiltered Milk.

Manufacture of Selected Class 4B Products in California, by Month January 2015 - December 2016

Product and Month	By Month			Year-to-Date		
	2015 In Pounds	2016 In Pounds	% Change	2015 In Pounds	2016 In Pounds	% Change
Monterey Cheese						
January	23,685,777	23,752,182	0.3%	23,685,777	23,752,182	0.3%
February	20,771,343	29,892,381	43.9%	44,457,120	53,644,563	20.7%
March	26,383,609	27,948,040	5.9%	70,840,729	81,592,603	15.2%
April	25,300,830	21,034,918	-16.9%	96,141,559	102,627,521	6.7%
May	26,383,543	25,367,006	-3.9%	122,525,102	127,994,527	4.5%
June	22,391,023	25,742,687	15.0%	144,916,125	153,737,214	6.1%
July	23,583,346	26,293,761	11.5%	168,499,471	180,030,975	6.8%
August	26,985,988	25,341,115	-6.1%	195,485,459	205,372,090	5.1%
September	24,576,477	25,253,477	2.8%	220,061,936	230,625,567	4.8%
October	26,366,536	26,171,686	-0.7%	246,428,472	256,797,253	4.2%
November	23,454,887	24,977,061	6.5%	269,883,359	281,774,314	4.4%
December	23,596,838	23,767,329	0.7%	293,480,197	305,541,643	4.1%
Cheddar Cheese						
January	31,954,824	32,154,270	0.6%	31,954,824	32,154,270	0.6%
February	29,932,387	22,122,788	-26.1%	61,887,211	54,277,058	-12.3%
March	29,777,585	28,590,470	-4.0%	91,664,796	82,867,528	-9.6%
April	30,984,183	30,153,415	-2.7%	122,648,979	113,020,943	-7.9%
May	30,374,905	28,365,534	-6.6%	153,023,884	141,386,477	-7.6%
June	32,245,611	27,549,973	-14.6%	185,269,495	168,936,450	-8.8%
July	31,281,387	27,235,068	-12.9%	216,550,882	196,171,518	-9.4%
August	27,289,744	30,291,873	11.0%	243,840,626	226,463,391	-7.1%
September	28,038,533	27,937,370	-0.4%	271,879,159	254,400,761	-6.4%
October	27,013,329	27,850,789	3.1%	298,892,488	282,251,550	-5.6%
November	28,484,840	28,234,013	-0.9%	327,377,328	310,485,563	-5.2%
December	31,913,541	33,596,474	5.3%	359,290,869	344,082,037	-4.2%
Mozzarella Cheese						
January	125,732,750	128,613,570	2.3%	125,732,750	128,613,570	2.3%
February	111,730,993	118,569,256	6.1%	237,463,743	247,182,826	4.1%
March	122,371,835	128,639,415	5.1%	359,835,578	375,822,241	4.4%
April	119,869,971	119,384,082	-0.4%	479,705,549	495,206,323	3.2%
May	124,956,034	129,100,766	3.3%	604,661,583	624,307,089	3.2%
June	117,554,838	122,209,058	4.0%	722,216,421	746,516,147	3.4%
July	121,994,714	126,735,410	3.9%	844,211,135	873,251,557	3.4%
August	108,267,540	119,181,672	10.1%	952,478,675	992,433,229	4.2%
September	110,257,598	118,325,162	7.3%	1,062,736,273	1,110,758,391	4.5%
October	115,675,147	125,146,408	8.2%	1,178,411,420	1,235,904,799	4.9%
November	118,268,807	125,233,826	5.9%	1,296,680,227	1,361,138,625	5.0%
December	130,139,962	130,476,889	0.3%	1,426,820,189	1,491,615,514	4.5%

Product and Month	By Month			Year-to-Date		
	2015 In Pounds	2016 In Pounds	% Change	2015 In Pounds	2016 In Pounds	% Change
Hispanic Cheese						
January	10,387,987	9,496,038	-8.6%	10,387,987	9,496,038	-8.6%
February	9,942,690	10,447,124	5.1%	20,330,677	19,943,162	-1.9%
March	11,099,114	10,838,792	-2.3%	31,429,791	30,781,954	-2.1%
April	10,159,550	9,376,809	-7.7%	41,589,341	40,158,763	-3.4%
May	10,243,687	10,266,128	0.2%	51,833,028	50,424,891	-2.7%
June	10,223,130	10,835,152	6.0%	62,056,158	61,260,043	-1.3%
July	9,898,647	10,186,710	2.9%	71,954,805	71,446,753	-0.7%
August	10,013,256	10,563,092	5.5%	81,968,061	82,009,845	0.1%
September	10,228,323	11,116,114	8.7%	92,196,384	93,125,959	1.0%
October	9,744,720	10,543,793	8.2%	101,941,104	103,669,752	1.7%
November	9,777,453	11,146,622	14.0%	111,718,557	114,816,374	2.8%
December	10,088,675	10,240,093	1.5%	121,807,232	125,056,467	2.7%
Other Cheeses ¹						
January	18,292,714	21,119,431	15.5%	18,292,714	21,119,431	15.5%
February	17,867,392	18,140,667	1.5%	36,160,106	39,260,098	8.6%
March	22,321,640	18,920,979	-15.2%	58,481,746	58,181,077	-0.5%
April	18,240,643	21,588,919	18.4%	76,722,389	79,769,996	4.0%
May	20,424,672	20,551,640	0.6%	97,147,061	100,321,636	3.3%
June	20,414,593	21,251,538	4.1%	117,561,654	121,573,174	3.4%
July	18,269,822	23,182,120	26.9%	135,831,476	144,755,294	6.6%
August	18,332,662	20,220,610	10.3%	154,164,138	164,975,904	7.0%
September	19,959,481	20,573,224	3.1%	174,123,619	185,549,128	6.6%
October	19,582,057	23,738,551	21.2%	193,705,676	209,287,679	8.0%
November	19,761,367	20,242,778	2.4%	213,467,043	229,530,457	7.5%
December	20,946,332	19,176,945	-8.4%	234,413,375	248,707,402	6.1%
Total Cheese						
January	210,054,052	215,135,491	2.4%	210,054,052	215,135,491	2.4%
February	190,244,805	199,172,216	4.7%	400,298,857	414,307,707	3.5%
March	211,953,783	214,937,696	1.4%	612,252,640	629,245,403	2.8%
April	204,555,177	201,538,143	-1.5%	816,807,817	830,783,546	1.7%
May	212,382,841	213,651,074	0.6%	1,029,190,658	1,044,434,620	1.5%
June	202,829,195	207,588,408	2.3%	1,232,019,853	1,252,023,028	1.6%
July	205,027,916	213,633,069	4.2%	1,437,047,769	1,465,656,097	2.0%
August	190,889,190	205,598,362	7.7%	1,627,936,959	1,671,254,459	2.7%
September	193,060,412	203,205,347	5.3%	1,820,997,371	1,874,459,806	2.9%
October	198,381,789	213,451,227	7.6%	2,019,379,160	2,087,911,033	3.4%
November	199,747,354	209,834,300	5.0%	2,219,126,514	2,297,745,333	3.5%
December	216,685,348	217,257,730	0.3%	2,435,811,862	2,515,003,063	3.3%

Product and Month	By Month			Year-to-Date		
	2015	2016	%	2015	2016	%
	In Pounds	In Pounds	Change	In Pounds	In Pounds	Change
Whey Protein (Human), Concentrates and Isolates						
January	10,575,417	10,519,353	-0.5%	10,575,417	10,519,353	-0.5%
February	9,101,045	9,656,232	6.1%	19,676,462	20,175,585	2.5%
March	10,645,712	10,544,393	-1.0%	30,322,174	30,719,978	1.3%
April	10,288,817	8,595,157	-16.5%	40,610,991	39,315,135	-3.2%
May	10,774,446	9,843,274	-8.6%	51,385,437	49,158,409	-4.3%
June	9,657,293	9,644,723	-0.1%	61,042,730	58,803,132	-3.7%
July	10,484,876	9,150,684	-12.7%	71,527,606	67,953,816	-5.0%
August	9,879,027	9,453,862	-4.3%	81,406,633	77,407,678	-4.9%
September	9,328,680	9,997,651	7.2%	90,735,313	87,405,329	-3.7%
October	9,317,598	10,596,435	13.7%	100,052,911	98,001,764	-2.1%
November	9,621,819	10,952,993	13.8%	109,674,730	108,954,757	-0.7%
December	10,819,828	11,638,541	7.6%	120,494,558	120,593,298	0.1%
Other Dry Whey Products ²						
January	54,863,387	60,691,973	10.6%	54,863,387	60,691,973	10.6%
February	50,271,366	57,184,868	13.8%	105,134,753	117,876,841	12.1%
March	57,139,784	59,032,254	3.3%	162,274,537	176,909,095	9.0%
April	55,881,235	60,180,043	7.7%	218,155,772	237,089,138	8.7%
May	57,006,500	58,442,677	2.5%	275,162,272	295,531,815	7.4%
June	54,546,552	60,033,544	10.1%	329,708,824	355,565,359	7.8%
July	55,989,000	60,731,095	8.5%	385,697,824	416,296,454	7.9%
August	55,759,127	60,534,952	8.6%	441,456,951	476,831,406	8.0%
September	57,253,296	57,668,343	0.7%	498,710,247	534,499,749	7.2%
October	55,832,199	57,026,719	2.1%	554,542,446	591,526,468	6.7%
November	55,992,540	56,233,400	0.4%	610,534,986	647,759,868	6.1%
December	59,536,532	57,511,746	-3.4%	670,071,518	705,271,614	5.3%
Lactose Powder, Human and Animal						
January	29,562,287	28,886,703	-2.3%	29,562,287	28,886,703	-2.3%
February	26,887,675	27,075,263	0.7%	56,449,962	55,961,966	-0.9%
March	30,225,805	30,181,235	-0.1%	86,675,767	86,143,201	-0.6%
April	29,328,373	27,745,309	-5.4%	116,004,140	113,888,510	-1.8%
May	30,525,485	29,785,429	-2.4%	146,529,625	143,673,939	-1.9%
June	28,868,202	27,602,518	-4.4%	175,397,827	171,276,457	-2.3%
July	29,436,966	30,603,601	4.0%	204,834,793	201,880,058	-1.4%
August	28,415,287	29,159,656	2.6%	233,250,080	231,039,714	-0.9%
September	26,934,980	27,655,518	2.7%	260,185,060	258,695,232	-0.6%
October	26,330,417	27,202,563	3.3%	286,515,477	285,897,795	-0.2%
November	25,379,585	27,425,429	8.1%	311,895,062	313,323,224	0.5%
December	29,761,135	26,911,574	-9.6%	341,656,197	340,234,798	-0.4%

¹ Other Cheese includes all cheeses not accounted for in categories listed.

² Includes Whey Protein Fractions; Permeate, On or Off Farm UF or MPC product (Animal & Human); Deproteinized Whey; Delactose Permeate Whey; Permeate, Dry, Finished Product; Reduced Lactose Whey (Animal & Human); Reduced Minerals Whey (Animal & Human); Concentrated Whey (Sweet Type & Acid-Type, Pounds, Solids, Animal & Human); Whey Protein Concentrate (Animal); Dry Whey (Human and Animal).



CALIFORNIA MILK ADVISORY BOARD 2017 Board Meeting Schedule - REVISED

March 1-2

Executive Committee: February 28

DoubleTree, Modesto

1150 9th Street
Modesto
209-526-6000

May 24-25

Executive Committee: May 23

Visalia Marriott

300 South Court Street
Visalia
559-636-1111

September 13-14

Executive Committee: September 12

Visalia Marriott

300 South Court Street
Visalia
559-636-1111

December 6-7

Executive Committee: December 5

Monterey Plaza Hotel

300 Cannery Row
Monterey
831-646-1700



October 17, 2016

Mr. Mariano Lozano
The Dannon Company Inc.
100 Hillside Ave Floor 3
White Plains, New York 10603-2863

Dear Mr. Lozano:

As leaders of major U.S. farm organizations, we are writing to express our deep concern and great dismay with your company's attack on the livelihood and integrity of our farmers that is contained in the recently released "Dannon Pledge." Under the guise of providing consumers more choices, your pledge would force farmers to abandon safe, sustainable farming practices that have enhanced farm productivity over the last 20 years while greatly reducing the carbon footprint of American agriculture.

Though touted with great fanfare as a corporate commitment to sustainability and environmental improvement, in reality the Dannon Pledge amounts to a major step backward in truly sustainable food production. Indeed, the reason the vast majority of American farmers grow crops improved with biotechnology is precisely because these crops are more sustainable than the ones they used to grow.

We doubt that informed consumers want to see an increase in insecticide applications that will be needed to fulfill your pledge. Conventional crops grown before the advent of agricultural biotechnology required extensive and intensive pesticide use, pesticides that your pledge would force farmers to return to using. We also doubt that consumers are clamoring for the increases in water and fossil fuel use, as well as increased soil erosion that would be brought on by more frequent trips across the fields with cultivation equipment to grow the crops to meet your pledge. Nor do we think consumers who care deeply about how their food is grown want to bring more land into cultivation to make up for the loss in crop yields.

In short, the Dannon pledge is the exact opposite of the sustainable agriculture that you claim to be seeking.

In our view your pledge amounts to marketing flimflam, pure and simple. It appears to be an attempt to gain lost sales from your competitors by using fear-based marketing and trendy buzzwords, not through any actual improvement in your products. Such disingenuous tactics and marketing puffery are certainly not becoming a company as well-known and respected as Dannon. Neither farmers nor consumers should be used as pawns in food marketing wars.

We strongly support open, honest and transparent engagement with consumers, and the right of consumers to make informed choices about the products they buy. But we are troubled by the disingenuous approach embodied in the Dannon pledge. We doubt that you would discard years of productivity improvements by returning to 1990s computer technology to run your business, or revert to 20-year old transportation, processing or packaging tools. Why then, when you repeatedly

acknowledge the well-established science affirming the safety of agricultural biotechnology, would you require farmers to go back to old, inefficient and less effective cropping practices?

On behalf of our farmer members, who represent the vast majority of American agriculture, we respectfully request that you revise the Dannon pledge to recognize the sustainability, safety and environmental benefit of food biotechnology. We would welcome the opportunity to discuss this matter with you further and to offer our assistance in developing truly meaningful measurements of agricultural sustainability that will honestly and accurately characterize your products' ingredients.

Sincerely,



Zippy Duvall
President
American Farm Bureau Federation



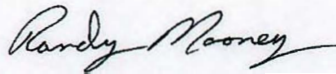
Richard Wilkins
President
American Soybean Association



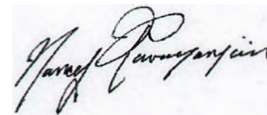
Galen Lee
President
American Sugarbeet Growers Association



Wesley Spurlock
President
National Corn Growers Association



Randy Mooney
Chairman
National Milk Producers Federation



Nancy Kavazanjian
Chairperson
U.S. Farmers and Ranchers Alliance



News Release

2107 Wilson Blvd., Suite 600, Arlington, VA 22201
703.243.6111 • www.nmpf.org

"Connecting Cows, Cooperatives, Capitol Hill, and Consumers"

FOR IMMEDIATE RELEASE
Tuesday, January 31, 2017

Christopher Galen
(703) 243-6111 ext. 356
CGalen@nmpf.org

NMPF Lauds New House Bill Calling for Enforcement of Dairy Labeling Standards

ARLINGTON, VA – The National Milk Producers Federation today endorsed new legislation introduced in the House of Representatives that would prompt the enforcement of dairy labeling terms, which are increasingly being used to market imitation products containing no real dairy ingredients.

Introduced by Reps. Peter Welch (D-VT), Sean Duffy (R-WI), Mike Simpson (R-ID), Joe Courtney (D-CT), David Valadao (R-CA) and Suzan DelBene (D-WA), the House bill would compel the Food and Drug Administration (FDA) to take action against misbranded, plant-based beverages that are inappropriately using dairy terms, especially "milk." The measure requires the FDA to issue guidance for nationwide enforcement of these definitions within 90 days. It would also require FDA to report to Congress two years after the bill's enactment to hold the agency to its obligations.

The House bill mirrors Sen. Tammy Baldwin's (D-WI) DAIRY PRIDE Act, introduced two weeks ago in the Senate.

"Real milk has been recognized for decades for its important nutritional benefits," said NMPF President and CEO Jim Mulhern. "These imposter products almost always use dairy imagery, similar packaging and names – but they never match the nutritional benefits found in milk. This House legislation sends a clear message that plant-based foods should not be able to create and use nomenclature that is in conflict with existing federal standards of identity requiring the presence of real milk."

FDA regulations (CFR 131.110) define "milk" as a product of a cow, with similar definitions for yogurt and cheese products. Though existing federal policy is clear on this subject, FDA has not challenged the labeling practices of imitators made out of nuts, beans, seeds and grains, which have been branding themselves using dairy-specific terms for the past two decades, according to NMPF.

The lack of enforcement of proper dairy terms in the United States market differs from to how the matter is handled in similar nations, which actually police the matter closely. While the term "almond milk" is seen on products sold in the United States, it is absent from the same brand of almond beverage sold in Canada and the United Kingdom.

In December, Reps. Mike Simpson (R-ID), Peter Welch (D-VT) and a bipartisan coalition of 32 House members sent a letter to FDA urging the agency to more aggressively police the improper use of dairy terminology. NMPF also supported that effort.

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The National Milk Producers Federation (NMPF), based in Arlington, VA, develops and carries out policies that advance the well-being of dairy producers and the cooperatives they own. The members of NMPF's cooperatives produce the majority of the U.S. milk supply, making NMPF the voice of dairy producers on Capitol Hill and with government agencies. For more on NMPF's activities, visit our website at www.nmpf.org.



Whole and Reduced-fat Dairy Foods and Cardiovascular Risk

New science supports reassessing the role of dairy foods in healthy eating patterns

Overview

The Dietary Guidelines for Americans (DGA) recommends choosing low-fat and fat-free milk, cheese or yogurt to support healthy eating patterns that are lower in saturated fat and calories. Dairy foods such as milk, cheese and yogurt make significant nutrient contributions to DGA eating patterns. These include nutrients under consumed by most Americans—calcium, vitamin D and potassium—as well as high-quality protein, phosphorus, magnesium, zinc, vitamin B-12, vitamin A, riboflavin and choline. Dairy foods also contribute to saturated fat intakes of Americans, mainly from whole and reduced-fat versions of milk and cheese. Recommendations to reduce saturated fat consumption are intended to lower rates of cardiovascular disease (CVD), including coronary heart disease (CHD or heart attack) and cerebrovascular disease (stroke). However, in recent years, emerging research has shown that saturated fat consumption may not be directly linked to CVD risk, indicating saturated fat on its own may be a poor metric for identifying healthy foods or diets. In addition, in observational studies, dairy food consumption—regardless of fat content—is not associated with increased risk for CVD, and a randomized controlled trial showed regular (full-fat) dairy food consumption improved lipid biomarkers related to risk for CVD. The findings from this trial support the observational evidence that regular dairy food consumption may be linked to lower CVD risk. In light of the findings from a growing number of studies, the evidence supports reassessing the role of whole and reduced-fat dairy foods in eating patterns so that future nutrition guidance can best promote health and reduce chronic disease, especially CVD.

Current guidance to reduce CVD risk advises decreasing saturated fat consumption

Cardiovascular disease is the leading cause of mortality in the U.S. (1), and recommendations to decrease saturated fat consumption in order to decrease risk for CVD have been part of the DGA for many years. These recommendations are based on a body of evidence that links higher saturated fat consumption to higher blood levels of LDL-C, a biomarker associated with increased risk for CVD. Consequently, recommendations to “avoid too much fat, saturated fat and cholesterol” were part of the 1980 Dietary Guidelines for Americans (DGA), and in 1985, recommendations were added to “use skim or low-fat milk or milk products” to help meet this DGA guidance (2, 3). Additionally, in 1990, consistent with the American Heart Association (AHA) recommendations, the DGA specified upper limits on total fat of 30% of calories, and on saturated fat of 10% of calories (4, 5). Following the release of the Institute of Medicine’s Acceptable Macronutrient Distribution Range (AMDR) report (6), first the 2005 DGA, and later the 2010 DGA, recommended a range of 20-35% of calories from total fat for adults, and maintained recommendations to consume no more than 10% of calories from saturated fat and to consume low-fat or fat-free dairy foods (7, 8).

The 2015 DGA notes “Intake of saturated fats should be limited to less than 10 percent of calories per day by replacing them with unsaturated fats and while keeping total dietary fats within the age appropriate AMDR” (9). The 2015 DGA removed the quantitative limit on cholesterol; however, it also specified that eating patterns that meet DGA saturated fat guidance would also be low in cholesterol (9). The 2015 DGA recommendation to limit intake of calories from saturated fats to less than 10 percent per day “is a target based on evidence that replacing saturated fats with unsaturated fats is associated with reduced risk of cardiovascular disease.” The DGA states, in addition, that the limit on calories from saturated fats is not an Upper Limit (UL) set by the Institute of Medicine (IOM). To meet

saturated fat guidelines in the context of dairy consumption, the DGA recommends choosing low-fat or fat-free dairy foods, more milk and yogurt in place of cheese, and choosing lower fat cheese in place of regular cheese.

On the other hand, the American Heart Association (AHA), in their dietary recommendations for CVD, have been more aggressive regarding saturated fat recommendations than the DGA. In 2006 the American Heart Association recommended limiting intake of saturated fat to 7% of energy and choosing low-fat or fat-free dairy products to help meet these recommendations (10). The 2013 AHA/ American College of Cardiology (ACC) Guideline on Lifestyle Management to Reduce Cardiovascular Risk recommends, for adults who would benefit from lower LDL-cholesterol (LDL-C or “bad” cholesterol), “Aim for a dietary pattern that achieves 5-6% of calories from saturated fat” as part of a healthy dietary pattern (11). Like the DGA, they did not include a quantitative cholesterol guideline, noting “there is insufficient evidence to determine whether lowering dietary cholesterol reduces LDL-C” (11). To provide guidance about how to meet saturated fat recommendations, AHA and others have developed communications aimed at consumers that identified saturated fat, in addition to *trans* fat, as “bad fat,” to be reduced or avoided (12, 13).

Healthy eating patterns are also linked to reduced chronic disease risk

The 2015 DGA states that “Previous editions of the *Dietary Guidelines* relied on the evidence on relationships between individual nutrients, foods, and food groups and health outcomes”; however, they also note that “dietary components of an eating pattern can have interactive, synergistic, and potentially cumulative relationships, such that the eating pattern may be more predictive of overall health status and disease risk than individual foods or nutrients” (9). Overall, the 2015 DGA recommendations “are ultimately intended to help individuals improve and maintain overall health and reduce the risk of chronic disease. Its focus is disease prevention, not treatment.”

The 2015 DGA found that “Strong evidence shows that healthy eating patterns are associated with a reduced risk of cardiovascular disease (CVD),” which was the strongest grade for any chronic disease or health condition they reviewed (9). Healthy eating patterns were defined, in general, as including low-fat or fat-free dairy foods, vegetables from all subgroups, fruits (mostly whole), grains (half of them whole), a variety of protein foods, and oils. They also recommended specific eating patterns to exemplify the general recommendations, including the Healthy U.S.-Style Pattern, which is unchanged from 2010, and two variations, the Healthy Vegetarian and Healthy Mediterranean-Style Patterns.

Characteristics of these eating patterns are similar to recommendations in the 2013 AHA/ACC lifestyle guidelines for adults who would benefit from blood pressure lowering or LDL-C lowering (11). The AHA/ACC recommend a dietary pattern that emphasizes consumption of vegetables, fruits, and whole grains; includes low-fat dairy products, poultry, fish, legumes, nontropical vegetable oils, and nuts; and limits intake of sweets, sugar-sweetened beverages, and red meats (11).

In the U.S., current guidance from the DGA and AHA/ACC have recommendations in common for food-based eating patterns, as well as nutrient-based guidance to reduce saturated fat. Ultimately, dietary guidance may benefit from better integrating food-based guidance by acknowledging that individual foods may have unique effects beyond their nutrient composition, and that guidance regarding individual nutrients may be more meaningful if presented in the context of the foods that contain them.

Emerging evidence indicates saturated fat consumption may not be linked to CVD risk

While authoritative guidance continues to recommend reducing saturated fat consumption to reduce risk for CVD, over the past ten years, emerging research examining saturated fat consumption and cardiovascular disease endpoints indicates that saturated fat per se may not be directly associated with CVD risk. Several publications have found that populations consuming higher amounts of saturated fat do not have higher risk for CVD than those who

consume lower amounts (14-16). One of these, for example, conducted for the World Health Organization and published in 2015, found “no clear association between higher intake of saturated fats and all-cause mortality, CHD, CHD mortality, ischemic stroke, or type 2 diabetes among apparently healthy adults” (16). On the other hand, consumption of industrially-produced *trans* fats was associated with all-cause mortality, CHD and CHD mortality (16). In summary, this emerging scientific evidence examining disease endpoints, rather than LDL-C, indicates that the biomarker broadly used as a primary parameter to predict risk for CVD risk might not be the most appropriate in all cases.

Emerging evidence indicates dairy food consumption is linked to lower risk for CVD

During the same timeframe that the new evidence on saturated fat and CVD was emerging, another growing body of evidence has shown that consumption of dairy foods, including whole, reduced-fat, low-fat and fat-free, has either neutral or inverse associations with risk for CVD. The 2010 Dietary Guidelines Advisory Committee (DGAC) reviewed evidence about the health effects of foods and food groups to inform recommendations to build healthy eating patterns (17). For dairy foods, the 2010 DGAC reviewed evidence published through mid-2009 about the relationship between milk and milk product consumption and selected health outcomes. Based on that review, the 2010 DGA stated: “Moderate evidence...indicates that intake of milk and milk products is associated with a reduced risk of cardiovascular disease and type 2 diabetes and with lower blood pressure in adults” (8).

Since 2009, the evidence about dairy food consumption and beneficial or neutral outcomes for CVD continues to grow. Between 2009 and 2015, three meta-analyses and 15 cohort studies have been published (18-35). Overall, this body of evidence indicates that higher consumption of milk, cheese and yogurt is not linked to higher risk for CVD, CHD or stroke, and in some cases, consumption is linked to lower risk. Neutral or inverse associations with risk for CVD have been observed with consumption of all fat levels of dairy foods, not only with low-fat or fat-free. These studies, therefore, have found that dairy food consumption, regardless of fat content, has neutral or beneficial associations with risk for CVD. The selected studies below have contributed to a better understanding of dairy food consumption and risk for CVD.

- Dairy food consumption and risk for stroke, CVD and CHD has been investigated in four large adult European cohorts followed for at least 10 years. Findings include: low-fat dairy food consumption was associated with reduced risk for stroke, while other dairy foods did not change stroke risk (18); total dairy foods and total cheese were associated with reduced risk for heart attack (19); fermented milk was associated with decreased risk for incident CVD, and cheese intake was associated with decreased risk for CVD risk in women but not in men (20); and dairy food intake was not associated with risk for CHD or stroke (21).
- A dose-response meta-analysis of 17 prospective cohort studies on milk and dairy products including more than 600,000 adults found a moderate benefit of total milk consumption on CVD risk based on four of these studies (22). The relative risk was reduced by 6% with each 200 ml per day increase in milk consumption (one 8 ounce cup = 240 ml). There was no association between milk consumption and total mortality, stroke or CHD.
- A meta-analysis of 15 prospective cohort studies in adults found total dairy products, low-fat dairy products, milk and cheese were associated with a lower risk for stroke (23).
- A meta-analysis of 22 prospective cohort studies in adults found total dairy food consumption was associated with lower risk for CVD and lower risk for stroke but not CHD (24). Consumption of low-fat dairy products was associated with a lower risk for stroke, while cheese was associated with a lower risk for stroke and CHD.

Because the majority of evidence on these dairy health outcomes is observational, and the heterogeneity of dairy foods in observational studies can make it difficult to tease out the effects of specific high-fat or low-fat dairy foods, randomized controlled trials are needed to better understand the dairy components and potential mechanisms underlying these observations.

In the context of the emerging evidence indicating that saturated fat per se may not be associated with higher risk for CVD, and that dairy food consumption—including whole, reduced-fat, low-fat and fat-free versions—is neutral or linked to lower risk for CVD, what evidence can help explain these findings? Three areas of investigation may help address this question, including dairy fat composition, the effect of replacement nutrients when reducing saturated fat, and the food matrix of dairy foods.

Dairy fat is unique and complex

The phrase “saturated fat” is a useful description of the chemical structure of a fatty acid, but it does not help illustrate the variety of fatty acids found in dairy fat. Whole milk contains about 3-4% dairy fat by weight, and dairy fat is made up of more than 400 different types of fatty acids, making it the most complex fat naturally occurring in a food (36). In the U.S., about two-thirds of the fatty acids in milk are saturated, and one third are unsaturated (including monounsaturated and polyunsaturated fatty acids) (37), though the types and proportions of fatty acids in milk can vary (36, 38).

Differential biological effects of saturated fatty acids in dairy foods may also contribute to the complexity of dairy fat. Among the saturated fatty acids, dairy fat contains short-, medium- and long-chain fatty acids from four to 18 carbons in length. The four most common saturated fatty acids in dairy fat, containing 12, 14, 16 or 18 carbons, have different effects on blood levels of LDL-C, HDL-cholesterol (HDL-C) or “good” cholesterol, and triglycerides (39). Stearic acid, containing 18 carbons, has no effect on LDL-C, while the other three raise blood levels of LDL-C, but also raise blood levels of HDL-C and lower triglycerides, a pattern associated with reduced risk for CVD (39, 40). Dairy fat also contains small amounts of saturated fatty acids produced by rumen bacteria that contain 15 and 17 carbons. These fatty acids have been studied as a way to accurately measure dairy fat intake. One study found a saturated fat marker of dairy food intake was associated with lower risk for CVD and CHD (41), and another found intake of cheese, and 15 and 17 carbon fatty acids, were associated with lower risk for first heart attack in women (42).

Though scientists have more to learn about the health implications of dairy fat, the fatty acid profile of this unique fat may contribute to the observed associations between dairy foods and reduced chronic disease risk, and it may help explain why the link between consuming dairy foods on CVD risk is not easily predicted by saturated fat content.

Replacing saturated fat with other macronutrients may modulate CVD risk

As a way to understand the findings of no association between saturated fat and CVD outcomes, another emerging area of research has examined changes in risk associated with different replacement nutrients. Both observational studies and trials have evaluated how replacing dietary saturated fat with macronutrients such as unsaturated fat or carbohydrates influences risk for CVD. In general, in large prospective studies and a meta-analysis, replacing saturated fat with polyunsaturated fat has been linked to reduced risk for CVD, while replacing saturated fat with carbohydrates has little or no benefit (14-16, 43-46). A Cochrane review of intervention trials assessed the effect of reducing saturated fat consumption and replacing it with carbohydrate, polyunsaturated fat or monounsaturated fat on mortality and cardiovascular morbidity (47). The review found no effect of reducing saturated fat, compared to usual diet, on risk for all-cause mortality or cardiovascular mortality (47). Compared to usual diet, however, lowering saturated fat consumption reduced the risk for cardiovascular events (heart attacks and stroke, combined). In subgroup analyses, the reduction in cardiovascular events was seen in studies that replaced saturated fat with polyunsaturated fat, but not with monounsaturated fat, carbohydrates, or protein (47).

This research acknowledges the nutrient trade-offs that inevitably occur with recommendations to reduce individual dietary components. In general, replacement of saturated fat with polyunsaturated fat appears to reduce risk, but

replacement with simple or refined carbohydrates does not, in both observational and trial data (16, 47). One interpretation of these results is that saturated fat may be more of a neutral participant, with the effects of reduction due to the effects of the replacement nutrients. In the context of overall eating patterns, however, this approach may overstate the importance of macronutrient replacements. That's because people eat foods that contain these types of fat, not only the fat itself. Different food sources of fat contribute additional nutrients and bioactive compounds to the diet that may impact disease risk, and studying individual nutrients may not account for the total food effects (48).

Food source matters when it comes to the link between fat consumption and CVD risk

The food matrix has been defined as "The nutrient and non-nutrient components of foods and their molecular relationships, i.e. chemical bonds, to each other" (49). It refers to the physical form of a food, and how its components, including nutrients, interact with each other. It is a helpful concept when examining the different effects of food sources of saturated fat on biological or health outcomes. Research indicates that the food matrix of dairy foods may modulate the effects of dairy fat on CVD biomarkers and associated risk.

Cheese consumption has effects that differ from what would be expected based only on saturated fat content. A meta-analysis of five clinical trials on cheese consumption and blood lipids found that hard cheese lowers blood levels of total cholesterol, LDL-C and HDL-C in trials that compare cheese consumption to the equivalent amount of dairy fat (as butter) (50). The authors noted that "the results consistently showed that the effects of cheese on lipids and lipoproteins were different than expected from the fat content." They also concluded that more research is needed to help determine the characteristics of cheese that may contribute to these findings, indicating the calcium content, specific types of fatty acids, and effects of the food matrix in cheese warrant further study (50).

Beef, cheese and milk are among the top food sources of dietary saturated fat in the U.S. (51), and most studies combine food sources of saturated fat when evaluating links to CVD risk. In the Multi Ethnic Study of Atherosclerosis (MESA) adult cohort, researchers compared risk for CVD associated with consumption of saturated fat from meat or dairy (33). Consumption of saturated fat from meat was associated with a higher risk for CVD, while consumption of saturated fat from dairy foods was associated with lower risk for CVD. Each 5 gram increase in dairy saturated fat per day was associated with 21% lower risk for CVD, and each 5% increase in energy from dairy saturated fat was associated with 38% lower risk (33). Though more research is needed to determine what is driving this difference, the authors point out that "health effects of the entire food rather than the content of any single nutrient might be most relevant to understanding associations between dietary consumption and health outcomes." The authors also note that the observed differences between food-specific saturated fat and CVD may explain why "overall saturated fat consumption, summed from all sources, has not been significantly associated with incident CVD..." (33). Thus, specifying the food source of saturated fat may be helpful information in nutrition guidance.

A prospective study conducted in a large Dutch adult population found that higher saturated fat consumption was associated with lower risk for ischemic heart disease (IHD) (52). Researchers modeled replacing saturated fat with other macronutrients, and they also separated out dairy fatty acids from other sources of saturated fat. They concluded that lower IHD risk "did not depend on the substituting macronutrient" but rather depended on the fatty acids found in dairy foods, specifying "the chain length and food source of saturated fatty acids" that were associated with lower risk. These included a slightly lower risk of IHD associated with the sum of short chain fatty acids (four to 10 carbons) and odd-chain fatty acids (15 and 17 carbons) commonly found in dairy fat, as well as the saturated fatty acids from specific dairy foods, including butter, cheese, and milk and milk products. They found no associations between intakes of saturated fat from other food sources and IHD risk. Unlike previous studies, they found replacing saturated fat with carbohydrates, polyunsaturated fat or animal protein was associated with a higher risk for IHD compared to saturated fatty acids. These results are of special interest because this Dutch population had a fairly

high intake of saturated fat from dairy, with cheese, milk and milk products, and butter contributing 41% of saturated fat intake.

The Dutch study and the MESA study, above, are the only two observational studies to date that have examined contributions of dairy saturated fat separately from other contributors. Both found a lower risk associated with consumption of saturated fat from dairy foods; however, neither was able to determine whether the result was due to the dairy fat alone or the characteristics of the dairy food with which the fat was consumed, or both.

A modified DASH diet containing whole milk dairy foods maintains DASH benefits

While the majority of the studies described in this brief are observational, a controlled trial published in 2015 contributed valuable information about the health effects of including higher fat dairy foods in a modified DASH diet. The standard DASH eating pattern is a reduced-fat plan containing, daily, eight-10 servings of fruits and vegetables, two-three servings of dairy, whole grains, poultry, fish and nuts (53). Characteristics of the DASH eating plan are consistent with the DGA (8, 9). Study participants consumed each of three diets for three weeks, separated by two-week washout periods: a control diet, the standard DASH diet, and a modified high-fat DASH diet in which low-fat or fat-free dairy foods were replaced with regular (full-fat) versions and carbohydrates were reduced to maintain calories (54). Compared to the standard DASH diet, the modified DASH diet increased saturated fat from 8% to 14% of calories, increased total fat from 27% to 40% of calories, and reduced carbohydrates from 55% to 43% of calories. Researchers measured the effects on blood pressure and blood lipid markers. Compared to the standard DASH diet, the modified DASH diet had the same effect on blood pressure lowering, reduced blood levels of triglycerides, and did not increase total or LDL-C or HDL-C (54). This study demonstrates that whole milk dairy foods can be incorporated into a healthy dietary pattern that is calorie-balanced and improves standard biomarkers related to heart disease. More randomized controlled trials that incorporate whole and reduced-fat dairy foods into balanced eating patterns are needed to help understand the mechanisms underlying these effects, as well as the impact of such diets longer term.

What is the role of whole and reduced-fat dairy foods in dietary guidance?

Because the link between saturated fat consumption and LDL-C has been a main rationale for recommending low-fat or fat-free dairy foods in nutrition guidance, research summarized in this brief that finds dairy food consumption is not linked to increased risk for CVD, and is in some cases beneficial, plus the trial that found a modified DASH diet containing whole milk dairy foods resulted in beneficial changes to CVD risk factors, together point to the need for a holistic perspective on dairy foods in healthy eating patterns.

The evolution of the science on saturated fat and CVD outcomes has been accompanied by calls to reassess dietary recommendations for saturated fat, including dairy foods, by various researchers in the field during the last five years (45, 55-57). For example, Lamarche proposed a re-evaluation in a paper published in 2014:

“Dietary recommendations have changed little over the years and the early focus on SFA [saturated fatty acids] remains omnipresent in most guidelines. Based on recent controversial and inconsistent evidence from epidemiological and intervention studies, it seems reasonable to revisit this SFA–CVD scheme. We believe that evidence regarding the impact of dietary SFA on CVD risk factors other than LDL-cholesterol and evidence regarding whole foods rather than just SFA, both from clinical as well as epidemiological perspectives, need to be considered in the future (55).”

In a comprehensive authoritative review, published in 2016, entitled *Dietary and Policy Priorities for Cardiovascular Disease, Diabetes, and Obesity: A Comprehensive Review*, Mozaffarian summarized current research on dairy foods this way, calling for “substantial further investment in research on cardiometabolic effects of dairy foods”:

“No long-term studies support harms, and emerging evidence suggests some potential benefits, of dairy fat or high-fat dairy foods such as cheese. Together these findings provide little support for the prevailing recommendations for dairy intake that are based largely on calcium and vitamin D contents, rather than complete cardiometabolic effects; that emphasize low-fat dairy based on theorized influences on obesity and CHD, rather than empirical evidence; or that consider dairy as a single category, rather than separately evaluating different dairy foods (56).”

The 2015 DGA embodies the idea that “a healthy eating pattern is not a rigid prescription, but rather, an adaptable framework in which individuals can enjoy foods that meet their personal, cultural, and traditional preferences and fit within their budget” (58). To develop the 2015 DGA eating pattern recommendations, studies linking health outcomes with eating patterns such as DASH, Mediterranean and vegetarian diets were evaluated, and the 2015 DGA stated that the evidence on food groups and various health outcomes reflected in the 2015 DGA “complements and builds on the evidence of the previous 2010 edition.” The 2015 DGAC did not review evidence about the health effects associated with any *individual* foods or food groups, including dairy foods (58), so research studies about the associations between dairy foods and risk for CVD published after 2009 were not included in the 2015 DGAC evidence review.

The DGA recommends increasing daily consumption of dairy foods, vegetables, fruits, and whole grains to increase intakes of calcium, vitamin D potassium, and dietary fiber (9); to meet saturated fat recommendations, the DGA recommends shifting away from choosing whole and reduced-fat milk, cheese and yogurt, in favor of low-fat or fat-free versions, among other strategies. Most Americans 9 years and older do not meet dairy recommendations for three daily servings of low-fat or fat-free dairy foods as outlined in the Healthy U.S-Style Eating Pattern of the DGA (9). Average intakes are about two servings per day for Americans 2 years and older (59), and despite the wide availability of low-fat and fat-free milk and authoritative recommendations to choose it, the majority of milk consumed in the U.S. is whole or reduced-fat (60). To help meet dairy recommendations and help reduce risks for chronic disease, it may be that nutrient-rich whole and reduced-fat milk, cheese and yogurt are not the foods that consumers should focus on when attempting to decrease dietary saturated fat levels.

While whole and reduced-fat dairy foods contain more calories than low-fat and fat-free versions, a systematic review concluded that the observational evidence does not support an association between dairy fat or high-fat dairy foods and obesity or cardiometabolic risk (61), and a study of three prospective cohorts found no link between the consumption of most dairy foods and long-term weight gain (62). In a Women’s Health Study cohort of more than 18,000 women followed for 17 years, among women who were normal weight at baseline, higher intake of high-fat dairy products, but not of low-fat dairy products, was associated with less weight gain (63). Consumption of high-fat dairy was also associated with lower risk for overweight and obesity, but total dairy, low-fat dairy, specific dairy products except yogurt, and calcium or vitamin D were not (63). The trial that compared a modified DASH diet containing whole milk dairy foods to the standard DASH diet provides an example of a calorie-balanced, healthy eating pattern that accommodated the additional calories from dairy foods by reducing carbohydrate content, mainly sugars (54). Standard advice to manage calories and saturated fat intakes by choosing only low-fat or fat-free dairy foods may not be the only way to build a healthy eating pattern for weight management or heart health.

Conclusion

Multiple characteristics of dairy foods may contribute to the overall effect of dairy food consumption on cardiovascular health. The current body of evidence supports the need for a systematic and integrated evaluation of dairy foods and cardiovascular health, including the effects of the following: the nutrient package of milk, the unique fatty acid profile of dairy fat, the dairy food “matrix,” including calcium and protein, and the impact of dairy foods containing a range of fat levels in healthy, calorie-balanced eating patterns on CVD biomarkers and associated risk. To provide further insight, determining the effects of dairy food consumption on a variety of complex factors involved with CVD risk, such as vascular function, insulin resistance, inflammation and blood lipid atherogenicity, is warranted (40, 54).

Taken together, the evidence supports a comprehensive assessment of the multiple pathways that link dairy food consumption and cardiovascular health to determine if there is value in allowing more flexibility for consumers to choose low-fat or fat-free dairy options, as well as whole or reduced-fat varieties, in calorie-balanced eating patterns. The 2015 DGA recognizes that healthy eating patterns “are adaptable” and that people “have more than one way to achieve a healthy eating pattern,” so that patterns “can be tailored to the individual’s sociocultural and personal preferences.” This emphasis on building healthy, flexible, adaptable eating patterns is consistent with an assessment of the potential role of whole and reduced-fat dairy foods in these patterns.

NOTE: This science summary has reviewed the evidence available through March, 2016.

Fat finds favor on U.S. tables again

By Tara Duggan, San Francisco Chronicle
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Photo: John Storey

The Avocado Toast at Nourish in San Francisco.

Attitudes about fat are experiencing a sea change in the country, but the transformation is only very slowly reflected in official government advice. Take avocado toast, one of the biggest wholesome-food trends of the decade. It took until last month for the Food and Drug Administration to say that avocados can be labeled “healthy.” The fruit previously didn’t qualify — because it had too much fat.

In recent years, many prominent scientists, journalists and diet gurus have been sounding the alarm that our decades-long obsession with choosing carbs over fat is only making America more unhealthy, and that the government has overplayed the role of dietary fat in heart disease and obesity, among other chronic illnesses. Like almost everything in nutrition science, the issues are far from settled, but the new ideas about fat are taking root in grocery shopping.

“Avoidance of traditional health-related attributes like fat or cholesterol are waning,” says David Portalatin, vice president and industry analyst of the market research company NPD Group.

The percentage of adults who checked food labels for total fat decreased from 46 percent to 31 percent between 2006 and 2015, Portalatin found. The percentage who checked for

calories and sodium also dropped, while the percentage who checked labels for sugar held steady at 41 percent.

Petaluma dairy producer Clover Stornetta Farms saw that trend play out in sales of organic full-fat milk, yogurt and other dairy products, which saw double-digit increases in 2015 and 2016. Because organic products are typically bought by more health-conscious shoppers, the attraction to these products is probably due to the fact that they are less processed, director of marketing Kristel Corson says.

For example, nonfat milk often contains milk powder in addition to liquid milk, and low-fat yogurt is frequently thickened with pectin, which gives it more of a gelatinous quality, rather than the naturally creamy texture of regular yogurt.

In response to consumer interest in richer dairy products, the company has a new line of Greek yogurts and will soon introduce a European-style butter, which has a higher percentage of fat than the standard kind.



Photo: Paul Chinn, The Chronicle

A selection of cheeses displayed at the Cheese Board Collective in Berkeley. Nina Teicholz, author of “The Big Fat Surprise,” has concluded that saturated fats, including cheese, actually leads to better health.

Another reason many people are returning to full-fat products is their increased satiety, in ways we often don’t even fully realize. As Bay Area food scientist Ali Bouzari writes in his new book, “Ingredient: Unveiling the Essential Elements of Food,” it’s actually aroma — the building block of flavor — that is carried by fat more than flavor itself.

“Food without lipids is usually bland and lacking fragrance because aroma can’t stick around long enough for us to enjoy it,” Bouzari writes. That’s why fat-free cream cheese is terrible, he writes, even though it’s close in texture to the real thing.

When Nina Teicholz was growing up in North Berkeley, she ate low-fat dairy products while avoiding red meat, eggs and the Gouda and chevre filling cases at the nearby Cheese Board Collective. She even rejected her mother’s invitations to celebrate birthdays at Chez Panisse, since the fixed-price menu was always full of lamb and tripe.

At the time, Teicholz was, in essence, a follower of the low-fat diet enshrined in the federal government’s Dietary Guidelines for Americans, which influence school lunch menus, food labels and doctors’ advice. Little did she know she would become one of that diet’s most vocal critics as author of “The Big Fat Surprise: Why Butter, Meat & Cheese Belong in a Healthy Diet.”

“The basic contention of my book and my work is that the guidelines were launched based on weak science,” said Teicholz, who was recently visiting family in Berkeley from her home in New York.

The most recent version of the federal guidelines, [2015-2020 Dietary Guidelines for Americans](#), did remove a previous limit on total fat, as well as cholesterol. But they still recommend a limit on saturated fat to 10 percent of calories per day.



Photo: Paul Chinn, The Chronicle

Nina Teicholz, above, at the cheese counter at the Cheese Board Collective in Berkeley, is the author of "The Big Fat Surprise," which concludes that saturated fats, including cheese, left, actually lead to better health.

That's despite ongoing science showing weak links between heart disease and diets high in fat. For example, a 2014 scientific review in the *Annals of Internal Medicine* determined: "Current evidence does not clearly support cardiovascular guidelines that encourage high consumption of polyunsaturated fatty acids and low consumption of total saturated fats."

In the fall, a UCSF professor unleashed a nutrition bombshell when he uncovered documents showing that three Harvard scientists were paid handsomely by the sugar industry in the 1960s to downplay the role of sugar in heart disease and to shift the focus to saturated fat.

Meanwhile, food labeling continues to be confusing and slow to catch up to the times. Similar to avocados' previous plight, eggs still cannot be labeled healthy because of their levels of fat and cholesterol, even though increasing evidence shows little connection between dietary cholesterol and blood cholesterol. In 2015, the FDA told the makers of Kind bars, the nut-heavy snack, that they couldn't use the word "healthy" on labels because of the bars' saturated fat. Last year, the FDA reversed its stance.

What troubles Teicholz is that even when Americans have followed the government's low-fat recommendations, obesity and diabetes continue to rise.

"The dominant narrative that's promoted by the public health community is it's because Americans fail to follow the guidelines," she says. "That is just totally not supported by the evidence."

Between 1970 and 2014, the U.S. Department of Agriculture estimates that the annual per capita consumption of red meat dropped by 28 percent, and whole milk by almost 80 percent, from 6 ounces to 1 ounce per day. Meanwhile, we increased our consumption of grains by 23 percent.

But Teicholz and others who criticize traditional low-fat wisdom get a lot of pushback. When Teicholz **argued** in the BMJ, formerly the British Medical Journal, that the committee assigned to develop the recent dietary guidelines “abandoned established methods for most of its analyses,” the nutrition advocacy group Center for Science in the Public Interest called her article a “discredited and opinionated attack” and demanded a retraction. (After the BMJ had two scientists review Teicholz’s original article, it recently announced it would stand by the article.)

The question remains whether it’s better to stick to a low-fat or a low-carb diet to lose weight and stay healthy. For Christopher Gardner, professor of medicine at Stanford Prevention Research Center, it depends on a lot of complex factors.

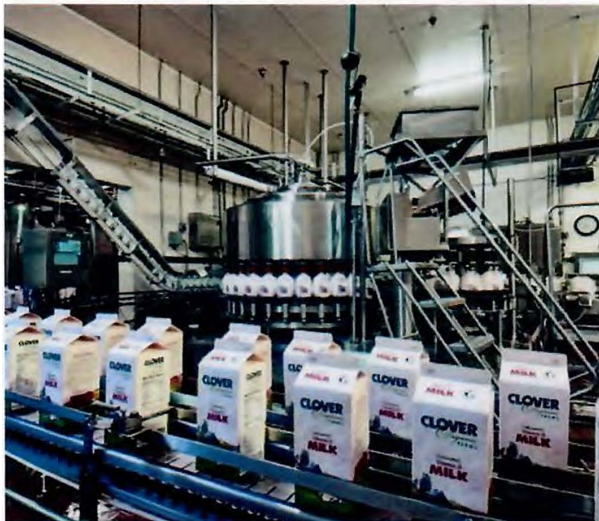


Photo: Courtesy Clover

Organic Whole Milk at Clover

Gardner is wrapping up a five-year study that included putting 600 overweight and obese adults on either a low-fat diet or low-carb diet for a year, depending on which one they thought would be most successful based on each subject’s insulin resistance. They weren’t given a specific guidance on calorie restrictions, but the average reduction was 500 calories per day.

Overall, the weight-loss results of each diet were almost identical, says Gardner. What surprised him most was how different people responded within each diet. In one group,

one individual lost 60 pounds while another gained 20 pounds. Another subject lost 10 pounds of fat but gained 10 pounds of muscle.

Gardner will publish the full results of the study in March. He hopes that one day it will be possible for a patient to have their blood drawn to find out which kind of diet might be better for them.

For now, he suggests experimenting.

“For some of you it’s going to be a higher dairy-fat, a higher animal-fat diet. For others it’s going to be more whole grains, more beans and less dairy,” Gardner says.

Overall, he encourages moving away from a focus on specific nutrients and instead emphasizing whole foods and deliciousness, whether in a pork chop or a bowl of quinoa with roasted vegetables.

“Quite a few whole-food diets can be healthy and environmentally sustainable and be delicious. If we can bring those back, you can be healthier longer, because you can stick with it longer.”

That’s been true for Teicholz, who says she is 15 pounds lighter than she was in college, even though she now happily partakes of the Gouda at the Cheese Board.

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