The actions of the California dairy industry over the past 20-plus years exemplify how an industry’s long term prospects can be dramatically transformed by 1) a well done strategic plan at a critical juncture; 2) solid ensuing marketing strategies and tactics that are creatively and consistently executed over time; and 3) additions to infrastructure (both production capacity and knowledge dissemination programs) that support the strategic plan. The many noteworthy aspects of the Real California Cheese (RCC) program include:

• The research that went into development of the long-term strategy
• How well the tactics implemented the strategy
• The thoroughness of the plans and pervasive attention to detail
• The consistency of execution over an extensive period of time
• The stellar long-term results

The Strategic Plan

In 1982, faced with declining fluid milk consumption and a surplus of milk at the farm level, the California Milk Advisory Board (CMAB), a promotional board that is an instrumentality of the California Department of Food & Agriculture and represents all California dairy families, hired the Stanford Research Institute (SRI) to conduct a comprehensive analysis of the growth options for the California dairy industry. The CMAB executes generic promotional programs for all California dairy products made from cow’s milk through advertising and public relations programs, retail and foodservice promotions, as well as milk quality improvement and research programs. The Board is funded by dairy families through a special assessment of $.10 per hundredweight of milk produced (1 hundredweight = 100 lbs. milk). It develops marketing strategies and materials, and facilitates program execution for the state’s dairy and cheese industries. The CMAB is organized with departments that oversee consumer promotion programs, advertising, public relations, and foodservice and retail sales. (See Exhibit 1)

The cheese production-to-consumption chain starts with farmers who sell their raw milk to cheesemakers which are either cooperatives or private companies. Cheesemakers produce the cheese and in turn sell it either to a distributor or to a cut-and-wrap facility, which then sells to a distributor. Distributors or cheesemakers sell directly to retailers, food processors, and foodservice institutions such as restaurants, hospitals and schools. Food processors create prepared meals such as frozen Italian foods or frozen pizza. These products are then sold to retailers and foodservice institutions which in turn sell to the end consumer. (See Exhibit 2)
At the time the study was commissioned, roughly 17% of California’s milk supply went into the production of cheese and the state produced 10% of the nation’s milk. Between 1970 and 1982, commercial milk production in California increased at an annual average rate of 3.7% while milk available for manufacturing rose 5.5%, resulting in a net surplus of fluid milk. This surplus came about because the primary outlets for California’s milk (fluid milk, cottage cheese, ice cream, butter and milk powder) were growing at a slower rate than the rate of milk production increases.

SRI undertook an extensive study of the long-term growth and profit potential of different milk utilizing product options, including cheese in all its forms. SRI’s task force included agricultural and industrial economists, cheese distributors, brokers, wholesalers, retailers, cheese buyers for foodservice and food manufacturing, the U.S. Department of Agriculture, cheese plant and equipment engineers, and dairy industry marketers. The analysis included growth trends for each dairy product category, capital investment and process manufacturing costs, warehousing and transportation costs to major markets, and projected marketing expenses. The analysis identified California’s competitive advantages and profiled likely threats/strategies/reactions from other leading cheese-producing states.

California’s competitive advantages included the fact that expanded production was highly feasible, with no significant obstacles. The state’s dairies also enjoyed a transportation cost advantage, as it cost Midwestern cheesemakers an extra $.04 - $.045 per lb. to supply California, and Pacific Northwest cheesemakers paid, on average, an extra $.01- $.015 per lb. In terms of perceptions, it seemed California had the potential to be a credible, leading, high quality cheese-producing state, particularly in light of the fine reputation the state’s world-renowned wine industry had achieved.

Another key factor that boded well for an expanded California cheese industry was the consumption growth prospect. Per capita cheese consumption in the state in 1981, at 23.3 lbs. per year, exceeded the national average of 19.7 lbs. California’s population was also projected to grow at a faster rate than the nation as a whole. Lastly, a major portion of California’s population growth was projected to come from the state’s Hispanic population, whose diet includes a significant amount of cheese.

Factors that weighed against pursuing cheese industry expansion were that California had higher cheese plant costs, higher labor costs and higher interest and depreciation costs. From an image standpoint, though it appeared California had the potential to transform itself into a credible leader in cheese production, it was clear it would have to catch up to states like Wisconsin and Vermont that had long been viewed as “dairy states.”

*Strategic Plan Recommendation: Pursue Cheese*

The SRI analysis concluded cheese was the dairy industry segment that offered the greatest profit and growth potential for the state’s dairy farmers. In addition to the competitive advantages mentioned above, cheese production was attractive because it takes approximately 10 lbs. of milk to make 1 lb. of cheese. Thus, it fulfilled the criterion of being a way to relatively quickly use up surplus milk when compared with the other dairy segment options (fluid milk, yogurt, butter, ice cream, cottage cheese and dry milk powder). Cheese had faster historical and projected consumption growth rates. It was also more profitable to produce. Because of the higher price per pound and greater density of cheese versus other dairy forms, it could be exported the farthest economically and, therefore, had the greatest potential geographic area for sales.
In 1983, California was a net importer of cheese. Out-of-state manufacturers supplied 80% of the natural U.S. produced cheese that was consumed in the state, and nearly all of the process cheese consumed in California was sourced from out-of-state. Process cheeses are made by adding other ingredients such as stabilizers to natural cheese and are not considered natural cheese.

The SRI Study recommended that California’s dairies focus on retail (grocery and specialty stores), foodservice (restaurants) and food manufacturing (prepared or frozen foods). From a priority standpoint, it recommended that increased cheese production first aim to replace cheese “imported” into the state from other areas of the U.S., as this would be the easiest target. Once that objective was accomplished, focus could shift to expanding distribution gradually: first to nearby Western states and then eastward. Another priority was to encourage major national cheese marketers, such as Kraft and Land O’Lakes, to establish operations in California. Lastly, it was agreed that volume goals should strive for maximum growth, but should, at the same time, be realistic and achievable.

Portfolio Strategy

In terms of product portfolio, three areas of opportunity were selected:

- Branded Natural American Cheese – Premium cheeses (such as Cheddar and Monterey Jack) with no added preservatives produced for sale to consumers at retail.
- Unbranded Natural American Cheese for Retail, Foodservice and Manufacturing – Commodity cheeses (such as Cheddar and Monterey Jack) with no added preservatives packaged and sold in bulk to retailers, restaurants, delicatessens and food manufacturers.
- Specialty Cheese – Natural cheeses that generally command a higher price than commodity cheeses because of their limited production and value-added production techniques or ingredients. This category can include artisan and farmstead cheeses as well as Hispanic-style cheeses and many Italian-style cheeses.

It is important to note that the CMAB neither brands nor produces cheese. It represents all California dairy families by developing and executing generic promotional programs for the state’s dairy products, including cheese.

Branded Natural American Cheese

New California branded natural cheeses such as Cheddar, Colby, Monterey Jack and Mozzarella were projected to capture 14% of branded natural cheese “imports” to the state, or 20% of the non-Kraft branded imports by 1995. California branded product would be second only to Kraft natural cheeses in the California market.

Unbranded Natural American Cheese for Retail, Foodservice and Manufacturing

This included bulk natural California-produced cheese for retail that would later be packaged as private label (store brand cheese) in solid, fixed weight chunks. It also encompassed bulk, shredded cheese for foodservice (deli departments, pizzerias, and Italian and Mexican restaurants) and for food manufacturing (frozen foods, ready-to-bake pizzas, and ready-to-cook pastas). Pricing was highly competitive in this commodity-oriented segment, with little advertising or promotion and slim margins.
**Specialty Cheese**

This segment was characterized by many small cheesemaker brands with high margins and high freight costs since a large percentage of sales were shipped outside of California. The segment had experienced rapid growth, attributed to increased travel by Americans and a trend toward more adventurous eating. The Specialty Cheese segment nationally was projected to grow five times faster than the national average: from 275 million pounds in 1981 to 400 million in 1986, and was expected to continue growing at an accelerated rate. Due to the fragmented nature of the Specialty Cheese segment, there was a need for a central marketing organization to help smaller manufacturers with distribution, marketing and promotion, and to enable them to compete more effectively through the synergies that cooperation makes possible. The goal for this segment was to capture 25% of California’s specialty cheese market by 1995. Strategically, one of the roles of specialty cheese would be to raise the overall image of California cheese through quality awards and extensive public relations and press coverage.

**Product Line**

California’s dairy industry planned for product growth based on the most popular cheeses then sold in the Western U.S., as well as projected national growth of different cheese types. This included Mozzarella, the most popular and fastest growing cheese type throughout the U.S. (in large part due to the increasing popularity of pizza and other Italian foods), and Hispanic-style soft cheeses, whose rapid growth resulted from California’s increasing Hispanic population.

**Marketing Implementation of the Strategic Plan**

*The Creation of a Certification Mark*

One of the first acts undertaken by the CMAB to implement its new strategic direction was to create a distinct and compelling identity that would be the focal point of an integrated marketing communications program. The challenge facing the CMAB was that it needed to represent a wide range of products from many different cheesemakers, many of whom promoted their own brands. The CMAB created the Real California Cheese seal as a certification mark that could be used to identify natural cheese made in California from California milk. By doing so, the CMAB has been able to consistently and effectively promote many styles and varieties of cheese from California cheesemakers who qualify for and use the seal on their packaging.

The Real California Cheese seal that was created depicts the image of California with a rising sun and rolling plains, on a golden, cheddar cheese-colored background. The seal assures consumers that the cheese they are purchasing is natural and is made from California milk in a California cheese plant. The CMAB maintains an inspection program to certify that cheesemakers using the seal meet its quality and production standards.

The seal has been placed on as many applicable cheese packages as possible (See Exhibit 3), in all advertising forms, on all of the CMAB’s coupons and promotions (See Exhibit 4), in brochures, on point-of-sale materials at retail, and even on restaurant menus and table tents.
Placement of the seal in all of these consumer communications elements reinforces the message and maximizes awareness of the certification mark.

Marketing Budget and Spending Splits

The RCC marketing campaign is supported by a $33 million annual budget. The greatest emphasis goes toward the identity-building ad campaign, followed by a retail promotion program that includes highly effective in-store coupon and sampling programs. Extensive public relations and foodservice programs round out the mix.

![Marketing Budget Split Totals $33 mm*](image)

*Does not include trade discounts.

The Advertising Campaign

The CMAB has effectively used advertising since it began the Real California Cheese campaign. Between 1985 and 1995, it mounted several campaigns in California involving television and radio advertising, as well as newspaper, magazine and outdoor executions that promoted California cheese. These were supported with extensive retail promotional activity. In 1995, the CMAB decided to focus its efforts on promoting Real California Cheese and undertook a highly creative campaign that took a purely emotional approach to consumers.

Creative

The positioning was simply “California cheese is great cheese.” Though consumption of cheese is extremely broad, the CMAB decided to focus RCC ads on the primary purchasers of cheese: women 25-54, who have slightly higher income than the national average and who are likely to be married with kids. The role of advertising was to create a somewhat emotional bond or fondness and distinct affection for California cheese. The tone and manner of the advertising was designed to be human, intelligent and humorous.

Counter to common advertising tradition, the copy strategy specified that the advertising should not make rational, tangible cheese superiority claims. Rather, it wanted consumers’ affinity to the product to be more emotionally based. It was felt that since there was “no supportable, rational reason to believe” the superiority claim, the CMAB would provide an “irrational reason to believe.”

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2 California Milk Advisory Board Sales Materials, 2004
From 1995 through 2000, the CMAB executed a very popular campaign with the tagline, “It’s the Cheese.” This campaign made the humorous exaggerated claim that the real reason why people come to California is because of the cheese. The Real California Cheese seal, with the tagline “It’s the Cheese” next to it, appeared for years in a billboard shown at the end of the television spot. This visual was reinforced at retail, in print and outdoor advertising, on coupons, collateral materials and premiums.

In 2000, the advertising tagline was changed to “Great cheese comes from Happy Cows. Happy Cows come from California.” The “bold, memorable and totally ownable premise” is that happier cows produce great cheese. The ads feature cows that talk and seem to think and process the world as people do. Their dialogue has been described as “being at home in a Woody Allen movie.” Approximately seven different executions of the campaign air in rotation over the course of a year. The spots feature cows talking and enjoying California’s best known features, such as sunny skies, a lack of snow (in contrast to their Midwestern brethren), earthquakes (portrayed in a positive light), and beautiful scenery. The spots put a smile on the viewer’s face and increase awareness of the product. (See Exhibits 5 & 6)

Research has shown that the advertising has generated high awareness (See Exhibit 7) and is very popular with consumers, who report purchasing more California cheese since the campaign began. Retailers also have embraced the campaign and cite it as a reason for increasing the number of California cheeses they carry.

An interesting creative twist appeared in 2004 when the CMAB adapted the broadcast advertising for the Hispanic market and ran television and radio spots in Houston in which the cows and bulls featured in the spots speak in Spanish.

While the ad campaigns have seeded the idea that California makes great cheese, they don’t go into specifics and no cheeses are ever shown. One of the constraints the advertising faces is that it cannot favor one type of cheese over another. The CMAB’s promotional efforts must benefit all RCC cheeses since all dairies contribute to the CMAB’s budget. Because it would not be feasible to show all, none are represented.

Media

Prior to 2004, spot TV advertising was utilized in markets where RCC had a major presence, with the heaviest advertising occurring during the introductory year. The TV spots have been supplemented by outdoor billboards (See Exhibit 8), bus and bus shelter ads, as well as radio executions which feature Janice and Diane (two of the “star cows” from the TV spots). In 2004, national cable advertising was introduced since, by that time, the business started to achieve critical mass in terms of geography. In 2004 and again in 2005, a Real California Cheese spot aired adjacent to the Super Bowl. TV spots generally target women 25-54, with roughly 60% appearing during daytime and 40% during prime. The 2004 advertising budget was $23 million.
Retail Roll-Out Strategy

From 1984 through 1999, the CMAB focused its marketing efforts on thoroughly penetrating the California market. In 1999, it expanded into the Denver, Colorado, market with strong advertising, consumer, and trade promotion programs. In 2000, Phoenix, Arizona, was added with comparable support, followed by Salt Lake City, Utah, in 2001. In 2003, Seattle, Washington, and Portland, Oregon, saw program introductions. Later in 2003, the program entered Dallas-Ft. Worth in Texas, followed by Houston in 2004. In 2004, Real California Cheese achieved national distribution with several accounts such as Costco and Kroger, and expanded regional distribution in accounts such as Wal-Mart, Safeway and Albertson’s. In early 2004, the CMAB expanded advertising, PR, and promotional efforts to a national level. It bought a national schedule of cable and broadcast network television. In addition, the CMAB continued to make spot broadcast buys in several major markets. National programs gave the CMAB credibility as a viable national supplier. This added consumer pull that would result in sufficient retailer confidence to justify new listings. The foodservice business has followed a similar roll-out strategy, but quickly became national in scope.

Pricing

Pricing by California cheese brands has generally been competitive but not excessively aggressive.

Channel Strategy and Promotions

At the time of the SRI study, 53% of all cheese moved through retail outlets. This included 39% through chain or independent warehouses, 9% direct-store delivered, and 5% through non-grocery outlets such as delicatessens. The balance, or 47%, moved through foodservice outlets and food manufacturing operations. Over the two decades that the plan has been in place, all channels have seen significant growth, although foodservice and food manufacturing has increased the fastest. (See Exhibit 9)

Retail

The primary objectives for the mass-market retail channel have been to expand authorizations and distribution and to promote the RCC seal at retail, thereby reinforcing the identity generated by the advertising. The RCC seal has been offered to retailers for their store brands, to all Real California Cheese manufacturers for their branded product, for private label cheese used in dairy departments, and for controlled brands offered by wholesalers and distributors. Retailers have been provided co-op monies for retail newspaper ads and flyers, store banners, or other media they have chosen to support the RCC promotional program. Retailers have been asked to time their ads to support the in-store sampling demos and coupon programs that have been scheduled four times a year in approximately 50-65% of stores in a market.

To capitalize on increased interest in cheese by consumers due to factors such as more prevalent travel, diet fads and increased interest in gourmet foods, retailers have expanded their cheese selections in an effort to differentiate themselves from each other. The CMAB has worked to increase retailers’ awareness of its range of products through tastings, articles in industry publications, national advertising and consumer-directed public relations. The CMAB has historically refrained from promoting cheese in the context of diet fads. Nevertheless, due to

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3 Stanford Research Institute (SRI) Study on California Cheese Industry (1983)
4 California Milk Advisory Board, 2004
its lack of carbohydrates and high protein content, some consumers have found cheese consistent with their diet programs.

Lastly, while technically a consumer promotion, cross-coupons placed on other categories of products such as bread, wines and luncheon meats have served as a form of in-store merchandising and point-of-sale materials throughout the store. Because these cross-coupons have proven so effective, and because RCC point-of-sale that had been made available to retailers was often not utilized, the CMAB has opted in recent years to forego the investment in costly point-of-sale materials. Individual cheese brands have been free to offer periodic discounts at retail as they see fit. This area of marketing has not been influenced by the CMAB.

Trade shows are very important to the food industry and the CMAB has created a meaningful presence at all the important trade events. Most notable was the IDDBA (International Dairy-Deli-Bakery Association) trade show, an event attended by more than 8,000 brokers, wholesalers and supermarket chain reps. The CMAB had the largest cheese display on the showroom floor. It featured a “California Street of Cheese” where many of the state’s cheeses were sampled.

Retailer programs for the state’s specialty cheeses have been similar to the mass-market programs, with the exception that a different portfolio of cheeses has been the focus.

Foodservice

The multi-faceted foodservice program is another highlight of the RCC program’s successful execution. The primary tactics include a strong presence at industry trade shows around the country, articles in key industry publications, strategic meetings with foodservice distributors and national foodservice accounts, and providing co-op funds for programs in which the RCC seal is displayed in foodservice establishments. Tactics have also involved educating dairy processors about the requirements of participation in the foodservice sector, including package sizes, quality, variety and volume needs.

The CMAB regularly attends local, regional and national foodservice trade shows for the restaurant, hotel and hospital industries. Examples include the National Restaurant Association Show, The International Pizza Expo, The Midwest Pizza Show and regional pizza shows. To develop new business, prospective customer meetings take place at these trade shows. Interested accounts are often invited to come and tour California cheese manufacturing operations.

The CMAB advertises Real California Cheese in publications such as *Pizza Today* and *Pizza Marketing Quarterly*. The CMAB developed a newsletter, *California Pizza Talk*, that’s mailed to approximately 50,000 pizza industry participants around the country several times a year.

Today, 43% of California’s cheese production is in Mozzarella cheese. Pizza retail sales nationally are huge at approximately $32 billion annually, so pizza has understandably become a high priority for state cheesemakers. The average U.S. pizza shop uses 500 lbs. of Mozzarella per week, and Mozzarella is the single largest cost item for pizza operators who spend on average $800 per week. The CMAB has even created a “pizza specialist” position.

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5 California Dairy Statistics and Trends 2003, California Department of Food and Agriculture
6 California Milk Advisory Board Update, October 2004
Co-op funds are paid to restaurants that feature the RCC seal on their menus, table tents, menu boards, in-store posters, promotion mailers, TV commercial tags, recipe and menu suggestions, and take-out food boxes. In 2004, Sbarro, the 900-unit, mall-based, national pizza and Italian food chain, adopted RCC nationwide, and Little Caesar’s expanded its purchases throughout its Western region. Sbarro now features the RCC seal on all 28 million take-out pizza boxes distributed each year. (See Exhibits 10, 11 & 12)

Foodservice distributors receive co-op monies for promoting the RCC products by placing the RCC seal on packages, sales flyers and sell sheets. Additional programs are in place, which provide sales incentives to foodservice distributors, buying co-ops and restaurant groups to increase their cheese purchases over prior years.

As with retail, new customer meetings are set up at the major foodservice trade shows and the new account prospects are invited to come and tour the California cheesemaker operations.

From 1982 through 2001, in order to build consumer awareness, the CMAB ran a successful pizza promotion program during October (National Pizza Month) with radio advertising that encouraged Californians to visit local pizza restaurants and request pizza with Real California Cheese. It included a contest for both pizza operators and consumers.

To capture the attention of the industry’s “points of influence,” the CMAB and Pizza Today magazine have for several years co-sponsored the “Pizza of the Year” competition at the Annual Pizza Festiva recipe contest, held in conjunction with the pizza industry’s major trade show, The International Pizza Expo. Contestants were required to use Real California Cheese in the recipes so the nation’s best pizza recipes would be associated with the state’s products. California cheesemakers claimed the preemptive name “America’s Mozzarella Producer” for this foodservice program.

Cheese Manufacturing

The CMAB has regularly engaged in talks with major cheese manufacturers around the country and in Europe, encouraging them to open plants in California and providing any needed information. Manufacturers such as Leprino and Land O'Lakes have opened new plants in the state since the inception of the program.

Consumer Promotion

The objectives of the $7 million consumer retail promotion program have been to generate trial, repeat purchase, and top-of-mind awareness of all cheeses bearing the Real California Cheese seal. Three primary tactics have been effectively employed: Cross-promotions in-store that utilize instant redeemable coupons, product sampling, and self-liquidating offers (premiums consumers pay for that reinforce the ad campaign). One of the stipulations for CMAB is that all programs benefit any RCC cheese since all California cow’s milk dairies contribute annually to the organization.

The CMAB entered into cross-promotional partnership arrangements with products that are frequently consumed with cheese such as bread, crackers, tortillas, pizza crust, wine, champagne, luncheon meats and turkey. (See Exhibit 4) In addition, cross-brand coupons have been placed on RCC-identified cheeses. This program has been highly successful, with redemption rates of up to 21% in some markets. 7 It’s a smart strategy because it stimulates awareness and purchase

7 California Milk Advisory Board Update, December 2004
interest in RCC cheeses throughout the grocery store and thus has become a form of in-store merchandising. It also increases the likelihood of purchase since cheese complements the partners’ foods. The entire coupon program is funded by the CMAB.

The second strategy the CMAB has pursued extensively is in-store product sampling to showcase the quality and variety of the cheeses. Four times a year, in 50-65% of a particular market’s grocery stores, the CMAB samples five different cheeses on a rotating basis. While only five cheeses are sampled at each demo event, a sample from every cheese manufacturer carrying the RCC seal in the store is placed on the sampling table so consumers can see all the varieties. The samples are accompanied by cents-off coupons, good on any Real California Cheese product.

The third leg of the consumer promotion plan is a series of self-liquidating offers that reinforce the advertising campaign. The CMAB has created a “Happy Cow Merchandise” catalog. Examples include “Happy Cow” talking plush cows (the two cows Janice and Diane that appear in the radio ads), “Happy Cow” T-shirts with phrases from the commercials, and high quality coffee table books about cheese. The items are fun and provide reminders of RCC cheese in consumers’ homes.

Collateral Material

RCC informational materials have been created for consumers and influential about the cheeses and cheesemakers. Examples include Entertaining with Real California Cheese (Easy Ways to Serve Real California Cheese at Home); Real California Cheese Country (A map listing cheese producers that tourists can visit); The Story of Real California Cheese (A Guide to California Cheesemaking History and Varieties, with Recipes and Serving Tips).

Trade and Industry Communications

Press releases are periodically sent to trade publications, and California dairy families regularly receive a newsletter highlighting Real California Cheese promotional activities and successes.

Website

The Real California Cheese website is completely consistent with the campaign’s mission, personality and look. The home page carries the RCC seal and has as its background a wall of Cheddar cheese. There are links to the “Happy Cows” TV ads and merchandise, links to cheese recipes, a state map with links to different cheese producers, nutritional information, interactive games for kids, links to a section for pizza restaurant operators and a professionals guide with information such as cheese handling, merchandising, and wine and cheese pairings, and a link to press releases and articles that have appeared. (See Exhibit 13)

Public Relations

The objective of the $1.7 million PR program is to enhance the image of California cheeses with all of the CMAB’s constituent groups: consumers, culinary professionals, “food influentials,” the trade, and fellow industry members through a variety of PR programs.
As an example of the public relations campaign’s success and appeal, in 2004 the Real California Cheese publicity efforts reported the following results, on a national basis:

- 1,279 newspaper articles
- 2 hours and 45 minutes of national and major market TV coverage
- 91.9 million print impressions (based on circulation)
- 10.2 million TV viewers

In addition to farmer success stories, articles include cheese contest award results, recipes and usage ideas, and cheese tasting tours in travel sections (akin to California wine tasting tours). Features have appeared in prestigious publications such as *The New York Times, Saveur, The Los Angeles Times, Business Week, Food & Wine, The Chicago Sun-Times, Gourmet, Sunset, Wine Spectator* and *House & Garden*. Videos have appeared on the Food Network and national and major market TV programs. When Real California Cheese enters new markets, Public Relations efforts target fine restaurants, specialty stores, gourmet cheese shops, chefs, specialty store buyers, media personalities, radio stations and newspapers. These stories create awareness for small cheese producers who can’t afford large advertising campaigns, and for whom coupons don’t make sense.

**Specialty Cheese**

One of the CMAB’s most successful initiatives, implemented under the public relations program, has been the extensive program it created to nurture the growth of the state’s nascent artisan and farmstead cheese industries. Artisan cheese is produced in small batches by skilled craftspersons who often use old world techniques. Farmstead cheeses are made on the same farms where the cows are raised. This gives the producers direct control over the entire process -- from determining the cow’s feed (which affects milk flavor), through aging of the cheese. The stories of these specialty cheesemakers have been of particular interest to the national and regional food media.

As a result of the comprehensive programs put in place by the CMAB in the 10 years since the initiative began, California has quickly developed a worldwide reputation as a respected producer of many specialty, artisan and farmstead cheese types. Its efforts involved extensive research, smart objectives and strategies, and superior tactical execution. Though total sales of these specialty cheeses are small relative to the state’s total cheese industry sales, the program has been a success that can be admired on many levels.

**Research**

The CMAB began by thoroughly researching the specialty cheese category. This involved:

1. Learning from nationally respected cheese experts.
2. Analyzing sales trends of popular domestic and imported specialty cheeses through Nielsen retail sales data and other reports.
3. Identifying European cheeses currently not produced in California that were believed to have potential in the U.S.
4. Determining which cheeses could be produced using existing production equipment and herd types to make it more affordable for farmers to produce.

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8 California Milk Advisory Board Publicity Results, January 2005
5. Visiting cheese shops and collecting restaurant menus to find out more about how cheese was used.
6. Meeting with California dairy farmers to determine their receptivity to the idea of becoming farmstead cheese producers and their concerns over barriers they faced.
7. Engaging experts to learn more about the economics and logistics of the specialty cheese business.

**Objectives**

The program’s objectives were to:

- Increase the number and types of cheeses produced in the state
- Encourage California dairy farmers to consider cheesemaking
- Increase appreciation and demand for California’s specialty and artisan cheesemakers among “food influentials,” including chefs, food writers and specialty retailers such as Whole Foods and Central Market, and independent cheese shops around the country.

**Strategies**

To achieve these objectives, the CMAB determined that it needed to:

1. Educate cheesemakers about the size of the opportunity based on marketplace trends.
2. Educate dairy farmers about the financial benefits of specialty cheesemaking and to provide them with guidance in operational areas such as equipment, manufacturing, distribution, marketing and pricing.
3. Encourage and support producers to enter prestigious cheese competitions that would gain them awareness and credibility.
4. Gain expert third-party endorsements from “food influentials” for California-produced cheese.

**Tactics**

To achieve the strategies, the California Milk Advisory Board:

1. Set up seminars and educational programs that covered the spectrum from planning a farmstead operation, to promoting artisan cheese to retailers and restaurants, to workshops with European cheesemakers and California Polytechnic University.
2. Developed and distributed information kits to dairies.
3. Retained a cheese consultant to advise farmers on the most desirable cheeses to produce given the type of cows, market trends and segment opportunities.
4. Created a panel of experts to review new cheeses and provide feedback to producers.
5. Enlisted a cheese competition judge to instruct cheesemakers how and when to enter various competitions.
6. Showcased California artisan cheeses at high-profile venues reaching food professionals and media such as the American Institute of Wine and Food, the International Association of Culinary Professionals, the Beard House, Slow Food, and the Culinary Institute of America (CIA) in Napa, CA.
7. Developed a chef education program with the CIA.
8. Educated specialty retailers and distributors about California’s artisan cheeses through special cheese tastings.
9. Communicated the stories behind California’s specialty cheese producers (family businesses, entrepreneurs, organic operations, career changers, use of old family recipes, apprenticeships in Europe, etc.) to the national and local “food media.”

The CMAB Specialty Cheese program set aggressive yet achievable objectives and strategies and followed up with thorough, comprehensive and creative tactics that were exceptionally well executed. As a result, within a relatively short time, California Specialty Cheeses emerged on the local, national and world markets as a source of pride and success to the industry. The awards that these cheeses have garnered (see “Results” section), the wonderful public relations they have received (see “PR” section), as well as the growth in volume of this segment, attest to the tremendous success of the program. Importantly, the program has benefited not only the artisan and farmstead cheesemakers, but also the entire state’s cheese industry, as the recognition has elevated the quality perception and awareness of all California-produced cheeses.

Results of the CMAB’s Marketing Programs

By all measures, the program to expand California cheese production and consumption has been tremendously successful:

Campaign Awareness and Recognition

- Today, 3 out of every 4 Californians report they have seen the RCC seal where they shop. Of those, 95% report purchasing cheese that carries the seal.9
- The seal appears on most California cheese sold as private label in supermarkets and on many branded products, including some manufactured by Land O’Lakes, Lactalis and Cacique.
- In the expansion markets (outside California) between 1999 and 2004, the average number of SKU’s bearing the RCC seal in supermarkets more than doubled.10
- Since 2001, the Real California Cheese campaign has won numerous creative awards, including AdWeek’s “Creative Best Spots,” as well as Addy, Shoot, and Beldings awards for TV. The campaign received a “Best Radio Spot of the Month” award and the “Annual Radio Stars Award” from the Southern California Broadcasters Association.
- In 2002, the CMAB received a Public Relations Society of America Silver Anvil Award (the top award) for Excellence in Institutional Programs. In 1998, it won the Award for Excellence in Multi-Cultural Public Relations for its Hispanic Cheese Program.

Volume Increases11 (See Exhibits 14-17)

- By 1993, California had become the country’s leading supplier of milk and the country’s largest dairy state. Milk production increased by 44% in the past decade to 36.4 billion pounds in 2004.

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9 CMAB Advertising Tracking Study, The Gallup Organization, October 2004
10 Real California Cheese Expansion Market Distribution Study, CMAB, August 2004
11 California Department of Food & Agriculture, 2004
California Milk Advisory Board Press Materials, 2004
California Dairy Industry Economic Impact Study, November 2003
J/D/G Consulting, 2004
• In 1983, 17% of California’s milk went into cheese production. By 2003, 45% went to cheese production and it’s expected to reach 54% by 2013.
• Today, 40% of California’s milk production is sold outside the state, primarily in the forms of cheese, butter and powdered milk.

![California Milk Utilization](image1)

• In 2006, California is projected to become the country’s leading cheese producer. In addition to being the leading producer of milk, it’s also the leading producer of butter, ice cream, cottage cheese, whey protein concentrate and nonfat dry milk.
• From 1983 to 2004, California cheese production increased 609% – seven times the national growth rate – and national cheese consumption increased by 1.8 billion pounds. Between 1994-2003, 48% of the U.S. increase in cheese consumption was supplied by California.

![California Cheese Production 1985-2012](image2)

• In 1983, California produced 10% of the nation’s milk and cheese; 21% by 2004; and a projected 26% by 2013.
• Between 2003 and 2013, the U.S. market for cheese is expected to grow by 1.6 billion pounds to a total of 10.4 billion pounds (+18%). During that time, California’s cheese production will grow by 900 million pounds (+50% growth), representing 56% of the national growth.
• California produces 25% of U.S. Mozzarella (the country’s most popular cheese), 19% of U.S. Cheddar cheese, and more Monterey Jack and Hispanic-style cheeses than any other state. Mozzarella cheese tops 7 of every 10 pizzas in California.
• The number of different cheese varieties and styles increased from 50 in the early ‘80’s, to 250 today.
• The state went from being a net importer of 70% of its cheese consumption needs in the early ‘80’s, to a net exporter.
• RCC is sold in supermarkets and club stores in many states through national chains such as Wal-Mart and Costco, and through foodservice distributors in virtually every state.  
• California has 10 of the largest cheese manufacturing plants in the country, including the largest cheese plant in the world.  
• The state has one of the largest and most acclaimed artisan and farmstead cheese industries in the U.S. today.  

Cheese Consumption  
• U.S. per capita consumption of cheese has increased from 11.1 lbs./year in 1970 to 30.6 lbs./year by 2003, and it’s projected to increase further to 32.8 lbs. by 2013.

![U.S. Per Capita Cheese Consumption 1985-2012](image)

• It’s believed there’s still much upside potential as European nations such as France and Greece consume more than 50 pounds of cheese annually per capita. Additionally, according to the American Dietetic Association, more than 90% of women and as many as 75% of all Americans do not consume their recommended daily allowance of calcium. One ounce of natural cheese contains approximately 20% of a person’s recommended daily calcium intake and is therefore an easy way to increase much needed calcium.

12 California Milk Advisory Board Update, December 2004
13 California Dairy Industry Economic Impact Study, November 2003
14 California Milk Advisory Board Press Materials, 2004
15 California Department of Food & Agriculture, 2004
California Milk Advisory Board Press Materials, 2004
California Milk Advisory Board Update, December 2004
California Dairy Industry Economic Impact Study, November 2003
USDA 2004 and Food Agriculture Policy Research Institute (FAPRI) 2004
California Milk Advisory Board Restaurant Survey, 2004
Stanford Research Institute (SRI) Study on California Cheese Industry, 1983
• In 2003, 83% of restaurants in the San Francisco area named fine cheeses as an ingredient or offering on appetizer menus compared to 19% in 2000.  
• Foodservice cheese consumption grew 15% per year from 1969 to 1979, accounting for approximately 70% of the net increase in U.S. per capita consumption during this period.  
• Cheese has gained added focus on restaurant menus. In a California restaurant survey in 2000, 65% of Northern California restaurants featured cheese courses, up from less than 10% in 1995.

**Cows**

• One out of every five U.S. cows lives in California.  
• California is among the nation’s leaders in milk production per cow.  
• The state has the largest average herd size per farmer in the country.

**Economic Impact**

• As of 2002, California’s dairy industry was having an economic impact on the state approaching that of the state’s world famous wine industry: $35 billion compared with the wine industry’s $45 billion.

**Quality Awards**

• In 2004, California cow’s milk cheesemakers received 36 awards at the American Cheese Society Competition, including nine first-place awards. This was the fourth consecutive year they received more awards than any other state.  
• State cheesemakers won a total of 11 awards in the World Cheese Awards in 2004 and 2005. Notably, a California cheese took a top award in the Brie category in 2005, an honor traditionally held by Europeans.  
• Cheesemakers from California earned eight awards at the biennial World Cheese Championships in 2004, including three first-place and two second-place awards.  
• State cheesemakers won 11 awards, including four top awards, at the U.S. Championship Cheese Contest in 2005.

**Current Industry Trends**

A number of national retail trends are impacting the way the California cheese industry is marketing its products. The most significant trends include 1) the continuing consolidation among supermarket chains, 2) the emergence of supercenters such as Wal-Mart, Target and Kmart, and membership clubs such as Sam’s Club and Costco as dominant players, and 3) the increase in cheese sales and variety as a point of differentiation and high margins for specialty retailers (such as Whole Foods and Trader Joe’s) and independent grocers. The key implications are that the centralized buying of the large chains has increased the need for effective promotional programs that can easily be implemented in markets across the U.S. and that increased consumer demand nationally. For this reason, the RCC’s national advertising and promotion presence has been critical for gaining distribution with retailers in states where they had not previously done business.

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16 California Dairy Statistics & Trends, California Department of Food and Agriculture, 2003  
17 California Dairy Industry Economic Impact Study, November 2003
Another important trend has been the increase in consumption of meals away from home. Americans currently spend nearly half their food dollar on foods prepared outside the home. Since cheese-intensive foods like pizza, other Italian foods and Mexican cuisine represent a significant portion of out-of-home prepared foods, the foodservice opportunity is huge for the California cheese industry.

California cheese producers have been able to capitalize on the trends of increased snacking and on-the-go consumption by creating single-serve, portable snack packaging such as cheese sticks and individually wrapped slices.

California cheeses are also well-positioned to benefit from the trend in in-home food preparation called “casual gourmet,” which has resulted from the convergence of the increased desire for foods that are quick to prepare with foods that are, at the same time, good tasting and gourmet. The use or substitution of artisan and farmstead cheeses can dress up a meal with very little effort. Cheese is also tremendously versatile as an ingredient.

In spite of the CMAB’s avoidance of promoting RCC in the context of fad diets, cheese has probably been a beneficiary because it is low in carbohydrates and high in protein. Virtually every food segment is now focusing on the problem of obesity in some way. As a result we will undoubtedly see a trend toward increased availability and consumption of lower fat cheeses.

**Where Do They Go From Here?**

The California Milk Advisory Board is faced with the challenge of how best to sustain the growth trend. Should the CMAB continue to focus on the cheese business or should increased emphasis be placed on other dairy product areas. What aspects of the current programs can be further improved upon?
EXHIBIT 2

From Cow To Counter
How Cheese Gets to Market
(Courtesy California Milk Advisory Board)

Milk Producer sells Milk to Cheese maker, which is either a cooperative or a private company.
Cheese maker produces cheese and sells either to a Distributor or Cut and Wrap facility, which sells to the Distributor.
Distributor or Cheese maker sells the cheese to Retail, Retailer or Food Service users.
Industrial user creates food products using cheese and sells these products either to Retail or Food Service users.

The Retailer and Food Service and user sell the cheese, or products containing cheese (Industrial), to the Consumer.
California Milk Advisory Board
Title: Grandma Medium: :30 TV

CALF1: Hey Grandma? You weren't born here like we were, right Grandma?

CALF2: Um... Grandma? How come you never talk 'bout...

CALF2: ...Where you come from...

CALF2: (echo) Where you come from ... Where you come from ... Where you come from ...

(Flashback) SFX: Screaming, blizzard-wind.

CALF2: Grandma?
CALF1: I told you not to ask her that.

VO: Great cheese comes from Happy Cows.

VO: Happy Cows come from California.

VO: Real California Cheese. It's the cheese.
California Milk Advisory Board
Title: Cloud
Medium: 30 TV

COW 1: Oh my gosh.
Cloud! Cloud! Cloud!

COW 2: Run!
COW 3: Oh mercy, mercy!

COW 4: Come on legs!

COW 5: Man. I hate the rainy season.
COW 6: Yeah!

VO: Great cheese comes from Happy Cows.

VO: Happy Cows come from California.

VO: Real California Cheese.
Q14: "Thinking about the cheese advertising, please tell me as best as you can who the advertiser was?"

(\textit{California Themes})

Base: Aware of Cheese Advertising

\textbf{Exhibit 7}

Q5: "What state or country does the (list cheeses) that you buy come from?"

Q6: "Have you bought cheese that comes from California?"

\textit{California Milk Advisory Board, Development Market Summary Report}

Adult Cheese Track
**U.S. Cheese Sales by Outlet**

![Pie Chart 1]

- **Foodservice**: 43%
- **Retail**: 39%
- **Food Processing**: 18%

*Source: Wisconsin Milk Marketing Board Channel Volume Study, 2000*

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**U.S. Supermarket Sales of Natural Cheese by Form (in million lbs)**

![Pie Chart 2]

- **Chunk/Loaf**: 474
- **Sliced**: 64
- **Grated**: 56
- **Shredded**: 425
- **Spread**: 11
- **Cubed**: 11
- **All other forms**: 176

# Pizza Menu

We make all our pizzas with Whole Milk Mozzarella Cheese, Fresh Ingredients, Hand Spun Dough and our Specially Prepared Tomato Sauce

Create your own pizza from our list of fresh ingredients & sauces

- Pepperoni
- Black Olives
- Sun Dried Tomatoes
- Bacon Pieces
- Pineapple
- Red Onion
- Anchovies
- BBQ Sauce
- Mushrooms
- Spinach
- Canadian Bacon
- Bell Peppers
- Fresh Basil
- Ground Beef
- Pesto
- Feta Cheese
- Chicken
- Onions
- Roasted Red Peppers
- Salami
- Artichoke Hearts
- Eggplant
- Italian Sausage
- Tomatoes
- Jalapeño Peppers
- Ham
- Garlic
- Green Onions
- Clams

*Charged as two toppings

**Lunch Special**

Served Between 11:00am - 4: pm  
Personal 8" - 4 Slices  
Cheese - 3.95  •  Add Items - 0.60

<table>
<thead>
<tr>
<th>Size</th>
<th>8 Slices</th>
<th>10 Slices</th>
<th>12 Slices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small 12&quot;</td>
<td>8.95</td>
<td>11.45</td>
<td>14.45</td>
</tr>
<tr>
<td>Medium 14&quot;</td>
<td>9.90</td>
<td>12.75</td>
<td>15.95</td>
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<tr>
<td>Large 16&quot;</td>
<td>10.85</td>
<td>14.05</td>
<td>17.45</td>
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<tr>
<td>Three Items</td>
<td>11.80</td>
<td>15.35</td>
<td>18.95</td>
</tr>
<tr>
<td>Each Additional Item</td>
<td>0.95</td>
<td>1.30</td>
<td>1.50</td>
</tr>
</tbody>
</table>

## The House Specials

- **North Beach Special**: Pepperoni, Green Pepper, Sausage, Mushroom and Onions
- **Vegetarian Special**: Fresh Tomatoes, Green Peppers, Onions, Black Olives and Mushroom
- **Coit Tower Special**: 12.75, 16.65, 20.45
**Fajita Quesadilla**  
A late-night kitchen experiment brought these two popular dishes together as one. Macayo's sizzling beef or chicken fajita meat, green chiles, onions, with melted cheeses, folded in a grilled flour tortilla. Served with rice and refried beans, sour cream and guacamole.  
8.95

* Please allow a few extra minutes for preparation.  
* Spicy item.

**Blue Corn Chicken Enchiladas**  
Grilled red-pepper chicken with green chiles and onions wrapped in blue corn tortillas, topped with green chile sauce. Served with rice and black beans.  
8.95

**Carnitas Enchiladas**  
Our tender, juicy pork carnitas stuffed into soft corn tortillas and topped with Macayo's relleno sauce. Served with rice and black beans.  
8.95

**Red Corn Shrimp Enchiladas**  
First we net our shrimp from the Baja, spice them up, sauté, and then stuff them into two red corn tortillas topped with Macayo's relleno sauce. Served with rice and black beans.  
8.95

**Sonoran Enchilada Sampler**  
Conquer this trio of favorites — beef with green sauce, Baja chicken and red cheese enchiladas served with rice and black beans. A combinacion sure to satisfy all of your enchilada cravings.  
8.95

**Chimichangas**

**Chimichanga de Macayo**  
This dish was the reward for any of Woody's children who came home with straight As. Flour tortilla, filled with shredded beef, chicken or pork, fried until crisp and covered with Macayo's relleno sauce and sour cream.  
7.50
### California Dairy Products Production*
1983 vs. 2004

<table>
<thead>
<tr>
<th>Dairy Category</th>
<th>1983</th>
<th>2004**</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese</td>
<td>281.2 M/lbs</td>
<td>1.994 B/lbs</td>
<td>+609%</td>
</tr>
<tr>
<td>Butter</td>
<td>190.8 M/lbs</td>
<td>383.2 M/lbs</td>
<td>+101%</td>
</tr>
<tr>
<td>Cottage Cheese</td>
<td>217.5 M/lbs</td>
<td>99.3 M/lbs</td>
<td>-54%</td>
</tr>
<tr>
<td>(all types)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice Cream</td>
<td>101.0 M/gal</td>
<td>115.7 M/gal</td>
<td>+15%</td>
</tr>
<tr>
<td>Yogurt</td>
<td>NA</td>
<td>452.6 M/lbs</td>
<td></td>
</tr>
</tbody>
</table>

### California Cheese Production*
1983 vs. 2004

<table>
<thead>
<tr>
<th>Cheese Category</th>
<th>1983</th>
<th>2004**</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheddar</td>
<td>84.7 M/lbs</td>
<td>583.3 M/lbs</td>
<td>+589%</td>
</tr>
<tr>
<td>Mozzarella</td>
<td>133.3 M/lbs</td>
<td>887.6 M/lbs</td>
<td>+566%</td>
</tr>
<tr>
<td>Monterey Jack</td>
<td>25.0 M/lbs</td>
<td>291.1 M/lbs</td>
<td>+1064%</td>
</tr>
<tr>
<td>All Other</td>
<td>38.2 M/lbs</td>
<td>232.0 M/lbs</td>
<td>+507%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>281.2 M/lbs</td>
<td>1.994 B/lbs</td>
<td>+609%</td>
</tr>
</tbody>
</table>

* All data: California Department of Food & Agriculture (CDFA)

** CDFA preliminary data for 2004
## DAIRY AND POULTRY STATISTICS

**Table 8.19.—Dairy products: Quantities manufactured, United States, 1998–2002**

<table>
<thead>
<tr>
<th>Product</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,000 pounds</td>
<td>1,000 pounds</td>
<td>1,000 pounds</td>
<td>1,000 pounds</td>
<td>1,000 pounds</td>
</tr>
<tr>
<td>Butter</td>
<td>1,167,963</td>
<td>1,277,090</td>
<td>1,256,030</td>
<td>1,231,938</td>
<td>1,355,148</td>
</tr>
<tr>
<td>All American cheese</td>
<td>3,587,824</td>
<td>3,841,824</td>
<td>3,544,185</td>
<td>3,760,015</td>
<td></td>
</tr>
<tr>
<td>Cheddar cheese</td>
<td>3,314,652</td>
<td>2,809,534</td>
<td>2,919,023</td>
<td>2,746,091</td>
<td>2,840,077</td>
</tr>
<tr>
<td>Swiss cheese</td>
<td>299,408</td>
<td>220,453</td>
<td>229,022</td>
<td>245,504</td>
<td>254,096</td>
</tr>
<tr>
<td>Muenster cheese</td>
<td>94,615</td>
<td>80,273</td>
<td>85,475</td>
<td>82,222</td>
<td>80,405</td>
</tr>
<tr>
<td>Brick cheese</td>
<td>7,578</td>
<td>8,114</td>
<td>8,628</td>
<td>8,708</td>
<td>9,306</td>
</tr>
<tr>
<td>Limburger cheese</td>
<td>5,65</td>
<td>5,64</td>
<td>6,37</td>
<td>7,02</td>
<td>6,51</td>
</tr>
<tr>
<td>Cream and Neuchatel cheese</td>
<td>621,135</td>
<td>644,164</td>
<td>687,440</td>
<td>645,056</td>
<td>709,551</td>
</tr>
<tr>
<td>Hispanic cheese</td>
<td>75,993</td>
<td>86,570</td>
<td>99,303</td>
<td>108,810</td>
<td>121,251</td>
</tr>
<tr>
<td>Mozzarella</td>
<td>2,366,164</td>
<td>2,527,208</td>
<td>2,634,999</td>
<td>2,767,784</td>
<td>2,813,712</td>
</tr>
<tr>
<td>All Italian varieties of cheese</td>
<td>3,004,715</td>
<td>3,151,736</td>
<td>3,288,911</td>
<td>3,425,888</td>
<td>3,506,478</td>
</tr>
<tr>
<td>All other varieties of cheese</td>
<td>185,958</td>
<td>18,1,550</td>
<td>219,678</td>
<td>199,567</td>
<td>208,256</td>
</tr>
<tr>
<td><strong>Total of all cheese</strong></td>
<td>7,492,119</td>
<td>7,941,248</td>
<td>8,257,998</td>
<td>8,260,826</td>
<td>8,599,049</td>
</tr>
</tbody>
</table>

**Cottage cheese:**

- Curd¹: 465,769 (464,785), 460,814 (453,186), 437,935 (437,585)
- Creamed²: 386,761 (380,531), 371,480 (371,023), 372,399 (372,499)
- Lowfat²: 361,246 (359,315), 363,658 (370,233), 374,296

**Sweetened condensed milk:**

- Skimmed: 37,810 (37,510), 34,611 (32,616), 22,345
- Unskimmed: 79,766 (74,104), 70,803 (70,212), 76,692

**Unsweetened condensed milk:**

- Bulk goods:
  - Skimmed: 1,053,762 (1,163,789), 1,021,907 (937,027), 1,033,838
  - Unskimmed: 91,216 (86,254), 74,841 (70,162), 56,028

**Evaporated and condensed milk:**

- Case goods:
  - Skimmed: 28,701 (27,782), 23,488 (14,972), 19,744
  - Unskimmed: 481,520 (470,021), 441,898 (452,846), 573,301

**Condensed or evaporated buttermilk:**

- Dry buttermilk: 50,080 (52,107), 56,245 (51,712), 54,886
- Dry whole milk: 42,520 (41,391), 41,377 (41,201), 47,714
- Nonfat dry milk: 1,135,383 (1,356,662), 1,451,751 (1,413,777), 1,556,591
- Dry skim milk (animal feed): 4,330 (4,017), 5,567 (5,707), 7,585
- Dry whey: 1,178,361 (1,147,388), 1,187,903 (1,045,856), 1,116,772
- Yogurt plant & fruit flavored: 1,638,992 (1,711,161), 1,836,591 (2,002,825), 2,135,106

1 Preliminary.  2 Cottage cheese curd includes pot and bakers' cheese. Creamed cottage cheese contains not less than 4 percent milkfat. Lowfat cottage cheese contains less than 4 percent milkfat. 3 Contains minimum milkfat content of 10 percent and not less than 4.5 pounds per gallon. 4 Includes frozen milkshake in most States. Contains less than 10 percent milkfat required for ice cream.

Source: USDA
## DAIRY AND POULTRY STATISTICS

### Table 8-25.—Milk: Supply and utilization, United States, 1993–2002

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</tr>
</thead>
<tbody>
<tr>
<td>Routine milk production</td>
<td>150,626</td>
<td>153,652</td>
<td>156,092</td>
<td>154,066</td>
<td>156,091</td>
<td>157,348</td>
<td>153,718</td>
<td>157,658</td>
<td>166,452</td>
<td>188,768</td>
</tr>
<tr>
<td>Fat deroping of ingredients (milk equivalent)</td>
<td>127</td>
<td>146</td>
<td>144</td>
<td>145</td>
<td>150</td>
<td>148</td>
<td>142</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Fat change in skim milk (milk equivalent)</td>
<td>6</td>
<td>-20</td>
<td>1</td>
<td>11</td>
<td>17</td>
<td>18</td>
<td>23</td>
<td>26</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Total supply</td>
<td>150,766</td>
<td>153,740</td>
<td>155,457</td>
<td>154,191</td>
<td>156,209</td>
<td>157,516</td>
<td>153,944</td>
<td>157,926</td>
<td>166,174</td>
<td>189,077</td>
</tr>
</tbody>
</table>

#### Utilization (milk equivalents):

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<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>American</td>
<td>1,776</td>
<td>1,842</td>
<td>2,049</td>
<td>2,168</td>
<td>2,131</td>
<td>1,917</td>
<td>1,961</td>
<td>2,020</td>
<td>2,257</td>
<td>2,299</td>
</tr>
<tr>
<td>Bulk condensed whole milk</td>
<td>947</td>
<td>1,042</td>
<td>1,252</td>
<td>1,402</td>
<td>1,422</td>
<td>1,277</td>
<td>1,277</td>
<td>1,306</td>
<td>1,383</td>
<td>1,409</td>
</tr>
<tr>
<td>Dairy cream</td>
<td>947</td>
<td>1,042</td>
<td>1,252</td>
<td>1,402</td>
<td>1,422</td>
<td>1,277</td>
<td>1,277</td>
<td>1,306</td>
<td>1,383</td>
<td>1,409</td>
</tr>
<tr>
<td>Evaporated and sweetened milk</td>
<td>1,119</td>
<td>1,321</td>
<td>1,573</td>
<td>1,823</td>
<td>2,168</td>
<td>1,409</td>
<td>1,409</td>
<td>1,409</td>
<td>1,409</td>
<td>1,409</td>
</tr>
<tr>
<td>Milk equivalent of cream</td>
<td>14,026</td>
<td>15,285</td>
<td>15,624</td>
<td>15,986</td>
<td>16,015</td>
<td>15,015</td>
<td>15,015</td>
<td>15,015</td>
<td>15,015</td>
<td>15,015</td>
</tr>
<tr>
<td>Total milk production</td>
<td>93,559</td>
<td>96,853</td>
<td>99,795</td>
<td>101,885</td>
<td>103,867</td>
<td>96,417</td>
<td>99,781</td>
<td>102,047</td>
<td>104,711</td>
<td>106,991</td>
</tr>
<tr>
<td>Total available for fluid milk</td>
<td>55,319</td>
<td>54,445</td>
<td>55,408</td>
<td>56,164</td>
<td>56,674</td>
<td>55,287</td>
<td>55,712</td>
<td>55,517</td>
<td>55,165</td>
<td>55,282</td>
</tr>
</tbody>
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#### Exports

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</thead>
<tbody>
<tr>
<td>Routine milk production</td>
<td>150,626</td>
<td>153,652</td>
<td>156,092</td>
<td>154,066</td>
<td>156,091</td>
<td>157,348</td>
<td>153,718</td>
<td>157,658</td>
<td>166,452</td>
<td>188,768</td>
</tr>
<tr>
<td>Fat deroping of ingredients (milk equivalent)</td>
<td>127</td>
<td>146</td>
<td>144</td>
<td>145</td>
<td>150</td>
<td>148</td>
<td>142</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Fat change in skim milk (milk equivalent)</td>
<td>6</td>
<td>-20</td>
<td>1</td>
<td>11</td>
<td>17</td>
<td>18</td>
<td>23</td>
<td>26</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Total supply</td>
<td>150,766</td>
<td>153,740</td>
<td>155,457</td>
<td>154,191</td>
<td>156,209</td>
<td>157,516</td>
<td>153,944</td>
<td>157,926</td>
<td>166,174</td>
<td>189,077</td>
</tr>
</tbody>
</table>

Source: USDA
### AGRICULTURAL STATISTICS 2004

#### Table 8-20.—Dairy Products: Factory production of specified items, by States, 2001–2002

<table>
<thead>
<tr>
<th>State</th>
<th>Butter 2001 (1,000 pounds)</th>
<th>2002 a (1,000 pounds)</th>
<th>Total American cheese 2001 (1,000 pounds)</th>
<th>2002 a (1,000 pounds)</th>
<th>Total cheese 2001 (1,000 pounds)</th>
<th>2002 a (1,000 pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>341,103</td>
<td>379,462</td>
<td>745,391</td>
<td>814,170</td>
<td>1,643,334</td>
<td>1,722,190</td>
</tr>
<tr>
<td>ID</td>
<td>470,345</td>
<td>482,841</td>
<td>959,419</td>
<td>919,943</td>
<td>1,979,358</td>
<td>2,042,053</td>
</tr>
<tr>
<td>IL</td>
<td>131,188</td>
<td>139,159</td>
<td>263,552</td>
<td>272,109</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>858</td>
<td></td>
<td>841</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MN</td>
<td>557,277</td>
<td>569,945</td>
<td>594,085</td>
<td>590,943</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>26,221</td>
<td>28,292</td>
<td>96,475</td>
<td>92,703</td>
<td>172,744</td>
<td>175,923</td>
</tr>
<tr>
<td>NY</td>
<td>48,125</td>
<td>52,498</td>
<td>152,256</td>
<td>158,183</td>
<td>200,371</td>
<td>206,676</td>
</tr>
<tr>
<td>OH</td>
<td>70,258</td>
<td></td>
<td>146,184</td>
<td>159,527</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>60,505</td>
<td></td>
<td>366,972</td>
<td>374,051</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>81,162</td>
<td>77,151</td>
<td>146,897</td>
<td>155,664</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>142,776</td>
<td>153,010</td>
<td>146,715</td>
<td>153,901</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WI</td>
<td>342,503</td>
<td>384,948</td>
<td>2,133,156</td>
<td>2,235,639</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>81,162</td>
<td>77,151</td>
<td>1,282,312</td>
<td>1,337,847</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>1,231,838</td>
<td>1,355,148</td>
<td>3,544,185</td>
<td>3,709,015</td>
<td>8,260,828</td>
<td>8,599,049</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Nonfat dry milk for human food 2001 (Pounds)</th>
<th>2002 a (Pounds)</th>
<th>Total ice cream, regular 2001 (Pounds)</th>
<th>2002 a (Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>694,459</td>
<td>768,865</td>
<td>143,525</td>
<td>131,526</td>
</tr>
<tr>
<td>FL</td>
<td>144,901</td>
<td>151,117</td>
<td>23,401</td>
<td>23,403</td>
</tr>
<tr>
<td>IN</td>
<td>48,125</td>
<td>52,498</td>
<td>152,256</td>
<td>158,183</td>
</tr>
<tr>
<td>MI</td>
<td>22,415</td>
<td>27,218</td>
<td>46,413</td>
<td>55,055</td>
</tr>
<tr>
<td>MN</td>
<td>20,369</td>
<td>21,901</td>
<td>36,454</td>
<td>37,127</td>
</tr>
<tr>
<td>MO</td>
<td>37,418</td>
<td>36,411</td>
<td>72,847</td>
<td>72,847</td>
</tr>
<tr>
<td>NY</td>
<td>21,254</td>
<td>23,703</td>
<td>44,957</td>
<td>44,957</td>
</tr>
<tr>
<td>OH</td>
<td>13,478</td>
<td>12,368</td>
<td>25,846</td>
<td>25,846</td>
</tr>
<tr>
<td>OR</td>
<td>50,506</td>
<td>55,999</td>
<td>106,505</td>
<td>111,999</td>
</tr>
<tr>
<td>PA</td>
<td>66</td>
<td>66</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td>SD</td>
<td>142,776</td>
<td>153,010</td>
<td>146,715</td>
<td>153,901</td>
</tr>
<tr>
<td>WI</td>
<td>342,503</td>
<td>384,948</td>
<td>2,133,156</td>
<td>2,235,639</td>
</tr>
<tr>
<td>Other</td>
<td>81,162</td>
<td>77,151</td>
<td>1,282,312</td>
<td>1,337,847</td>
</tr>
<tr>
<td>US</td>
<td>1,413,777</td>
<td>1,566,991</td>
<td>3,544,185</td>
<td>3,709,015</td>
</tr>
</tbody>
</table>

1 Preliminary. 2 Includes Colby, washed curd, high and low moisture Jack, and Monterey. 3 Includes full-skim American cheese; excludes cottage cheese.

Source: USDA