# The Alliance

## of Western Milk Producers

April 28, 1998

Mr. Richard McKee, Director Dairy Division, AMS United States Dept. Of Agriculture Room 2968 South Builiding 14th & Independence S.W. Washington, DC 20090-6456



SUBJECT: Comments on USDA FMMO Proposal, Docket No. DA 97-12

Dear Mr. McKee,

The Alliance of Western Milk Producers is a trade association that represents five major operating cooperatives in California. These organizations market milk and manufacture dairy products for more than 1200 producer-owners producing 60 percent of the state's milk.

During the 1996 Farm Bill debate, the Alliance worked successfully to maintain California's independent state milk pricing system and marketing order. We also worked to ensure that should California dairymen and dairy women choose to become part of the federal milk marketing order system, their \$800 million investment in quota would be protected.

The key point, however is that the changes that the USDA makes to the federal milk marketing orders and milk prices will significantly affect what California producers are paid for their milk. It is for this reason that the Alliance submits the following comments on the Department's federal order reform proposal. We ask that they be given serious consideration.

#### The Alliance:

- 1. Supports the reformed federal order system having four milk price classes including a true butter/powder class.
- 2. Supports the concept of basing all milk prices on the market value of the basic commodities of butter, nonfat dry milk powder and cheddar cheese.
- Urges that the product values and manufacturing allowances used in the milk pricing formulas
  reflect the regional differences in what manufacturers sell their products for and the cost of
  manufacturing those products.

- 4. Urges that annual (or, at the very least, biennial) audits of regional manufacturing costs be made by the Department.
- 5. Urges USDA to add a provision under the general provisions section that requires an annual declaration of a plant's intent to depool and that would be the plant's status for a full year (twelve months).
- 6. Supports the 1A differential option.

## Classification -- Maintain the four classes for pricing milk as proposed

The Alliance supports the use of four milk price classes as provided for in the proposal. Those who tout a two or three class system are ignoring market realities. The dairy industry and marketplace have evolved and so to must the classified pricing of milk.

When the federal order system was put in place, the vast majority of milk went into fluid use. At that time, two classes -- fluid and everything else -- may have been justified. However, today there are many uses that demand Grade A milk. The uses of milk are also much more balanced. Fluid milk and cheese are almost equal in total milk utilization (approximately 40 percent each) and butter/powder and "soft" dairy products account for about 10 percent utilization each.

Having two separate classes for milk used to produce cheese and butter/powder also reflects the nature of today's marketplace. With "Other" cheese production surpassing cheddar, cheese has separated itself from butter and nonfat dry milk powder in the marketplace. Reducing the support price level has contributed to the separation as well. There have been numerous instances over the past several years when cheese prices have remained strong while butter and nonfat powder prices have tumbled. Creating two distinct class for these two very different uses of milk recognizes market realities and allows the market value of each product to be reflected in the milk price for each.

There are no market-based reasons for reducing the number of classes of milk in the final rule. The Alliance urges USDA to maintain the four classes based on product values for the above reasons and because it brings the federal system and California system much closer into alignment.

## The BFP and the Class 1 price mover

The Basic Formula Price (BFP) under the current federal order pricing system serves two purposes -- it is the base price for Class I and Class II prices to which differentials are added and it is the price used for Class III, cheese milk. However, the current BFP no longer represents where milk is being produced, nor where the residual milk supplies to service fluid markets are located.

There are those in the industry who say a competitive milk pay price should still be used to price milk. The question is, which competitive pay price -- the Upper Midwest's, the Southeast's, the Southeast's, California's?

The Upper Midwest is no longer either a surplus milk production area or the only source of milk to serve deficit fluid milk markets. Recently, the CEO of the Wisconsin Milk Marketing Board cited a study that said Wisconsin will not have enough milk even to meet the needs of its cheese factories. The Southeast is also a milk deficit area. The Southwest has little manufacturing or fluid use, and California's milk prices all use commodity prices in one form or another.

The only accurate way to value milk is to use commodity prices as the basis for not only manufactured products, but for fluid milk and soft dairy products, too. Commodity prices in a region do reflect the supply and demand for milk and as such are superior to a single or multiple location competitive pay price as the basis for pricing all classes of milk.

The "higher of" approach to setting the Class I mover makes a great deal of sense. Class I processors are given a priority position under the federal order system when it comes to getting milk. Virtually every order has call provisions and/or minimum shipping requirements that assure the fluid processor an adequate supply of milk. This means that other users of milk, with just as strong a demand for the products they make from milk, may have to give their milk up to a fluid processor. Using the "higher of" concept in the Class I price mover ensures that the fluid processor is paying the market value of that milk.

There are those who will argue that using the declining rolling six month average for the Class I mover muffles or in some other way prevents producers from receiving market signals. Alliance analysis (see Chart 1 attached) for the period from 1994 through 1997 shows that there is no need for concern. Chart 1 shows that the Class I mover does follow market trends very faithfully. The key difference is that it reduces the month-to-month leaps and plunges in Class I prices experienced with the current BFP. Producers believe it is these sudden peaks and valleys which result in retail fluid milk prices that react quickly to a jump up, but are much slower coming down. The declining rolling average should allow producer and retail prices to remain more in sync.

#### Other Class Prices -- Milk prices must reflect regional product prices and make allowances

While supporting the concept of basing all milk prices (Class I, II, III, IV) on the market values of the basic commodities of cheese, butter, nonfat powder and whey, the Alliance members strongly believe that the product values and the manufacturing allowances used must reflect the regional differences that exist. Unless product values and manufacturing allowances are regionalized, the system will not reflect the marketplace conditions that manufacturers and processors operate under.

Product values vary greatly. Table A, attached, shows the range of block cheese values the weekly NASS cheese survey has generated. The U.S. NASS block price which USDA uses to

adjust the current BFP has ranged from one to two cents a pound more than the West NASS block price. The Minnesota/Wisconsin (MN/WI) NASS block price has ranged from 2.7 to 4.9 cents more than the U.S. NASS price. That converts to the MN/WI ranging from 2.7 to 8 cents more than the West NASS price.

The 7.99 cent a pound difference between the MN/WI and West NASS block cheese prices converts to a difference in the value of a pound of protein of 26 cents. That means that if the MN/WI NASS cheese price was used as the product price in the Class III protein formula, Western cheese plants would be paying at least 75 cents more per hundredweight than what they get paid for their cheese would generate. Even if U.S. NASS prices are used, Western cheese plants are still at a 20 cent a hundredweight disadvantage.

Table B is based on the USDA's "Dairy Market News" monthly commodity markets and a AA butter value based on the CME AA price adjusted for what Alliance data shows that Western butter is selling for. As with Table A, Table B clearly shows that picking a single commodity value for butter, nonfat powder or whey will create inequity in milk cost between manufacturers based on region.

Table C shows the variation in Class I, Class II, Class III, and Class IV prices depending on which region's commodity values are used. There is no question that either processors will pay too much or producers in a given region will receive too little if one "national" product value is used.

Variation in manufacturing costs also noted. The California Department of Food and Agriculture has been doing annual manufacturing cost surveys for many years. (See latest report attached.) Discussions by Alliance members with manufacturers in other parts of the country as well as actual experience in managing a Midwestern cheese plant indicate that there are differences in labor, energy and insurance costs. For this reason, the Alliance feels strongly that the manufacturing allowances used in the proposed federal order formulas should be adjusted to reflect regional differences as well.

Compare the proposed Class III and Class IV make allowances to the most recent weighted average data collected by the California Department of Food and Agriculture (CDFA). The California butter manufacturing cost published in July 1997 was 9.58 cents, 1.6 cents a pound of butter produced higher than the proposed federal order make allowance of 7.9 cents. CDFA data shows that less than 30 percent of the butter production would have its manufacturing costs covered by the proposed manufacturing allowance.

The nonfat powder manufacturing allowance that is proposed is 12.5 cents. CDFA data indicates a weighted average manufacturing cost of 13.27 cents. Barely 50 percent of the nonfat powder produced would have its cost of manufacturing covered by the proposed allowance. It should also be noted that the USDA solids not fat formula divides by a yield factor of 0.96. This converts to multiplying by a yield factor of 1.04 pounds of nonfat powder per pound of solids not fat. The Alliance believes this overstates the yield by overstating the practical moisture level in

the nonfat powder. The yield factor should be changed to 1.01 which more closely reflects the moisture level of nonfat powder sold today.

The cheese manufacturing allowance in the protein formula at 12.7 cents is far below California's weighted-average of 18.4 cents a pound. It should be noted that the California number does not include the cost of drying whey, only the cost of disposing of whey via field spreading. The 12.7 cents would cover zero percent of the cheddar cheese produced in California.

The manufacturing allowance proposed for converting whey to other solids is inadequate as well. USDA data, according to the National Milk Producers Federation, indicates a make allowance of 15.9 cents is more appropriate than the 10 cents proposed. One could argue that the whey make allowance should at least be no less than the cost of manufacturing nonfat dry milk powder although the solids content of skim milk is nearly double that of whey. Drying whey, therefore, should consume even more energy than drying nonfat powder.

Audited product prices and manufacturing costs are essential. It is in USDA's and the industry's best interests for USDA to use its auditing authority under the federal order system to immediately begin collecting product price and manufacturing cost data.

Consistent and accurate product price information requires two things -- the mandatory participation of plants and regular audits of the data reported by the plants to assure accuracy. Therefore, USDA must put in place a system for collecting product price information. Most of the manufacturing plants in the country are federal order pool plants, already subject to USDA audits to confirm milk utilization and payment. It would seem that only a little additional effort would be needed to audit the product price information provided by the plant.

The manufacturing allowances in the proposed rule are based on a combination of Cornell data that is nearly 15 years old and a simple average of California make allowances over the last several years reduced by 10 cents. With USDA auditors already going into most plants, doing annual cost of manufacturing audits should be relatively easy to accomplish. A program to collect data for the most recent twelve month period available should immediately be undertaken so regional cost of manufacturing data is available when the reform program goes into effect.

## General Provisions -- Limit depooling of milk

The depooling of milk has become an all to common practice in market orders today. In 1996, in California, the quantity of manufacturing milk (milk not pooled) increased over three-fold from 36 million pounds to 127 million pounds a month. This happened because the cheese milk price exceeded the blend price. The same was true in the Pacific Northwest where cheese plants would depool when the Class III price was higher than the blend. When the situation reverses itself, the plants jump back into the pool. In the federal order system, a plant can depool without notifying its producers when the cheese milk price is higher than the blend and simply pay the producer the blend price.

The ability to jump in and out of the pool, to the detriment of those producers and processors who pool year round, should not be allowed. The Alliance urges USDA to put a provision in its proposal that addresses this issue. It is recommended that a plant that wants to depool must notify the order administrator of its intent by January 1 of each year. If the choice to depool is made, the plant will remain out of the pool for the full year. It must then notify the administrator of its intent to come back into the pool for the coming year. Any new plant would declare its intent for the balance of the year.

To prevent this requirement being circumvented by degrading milk, USDA should create a "restricted use" Grade A milk that can only be used in Class III or Class IV. In this way, a plant cannot encourage a producer to let his milk go above 45 degrees so it will be depooled. The milk would stay in the pool on a restricted basis with the plant getting pool credit for the lowest value use.

The move USDA is making toward product based pricing of all classes increases the possibility that a manufacturing class price could be higher than the pool blend, perhaps for several months. When this happens, depooling is certain to occur. That is why the provision suggested here is needed.

## Class I price structure -- Support 1A differential option

The Alliance members support the use of the 1A Class I differential option. Option 1A provides a more uniform Class 1 differential surface with much less disruption to producers and the marketplace compared to Option 1B.

When comparing Option 1A to Option 1B and their respective impacts on producer prices, a significant difference in outcomes is observed. Option 1A raises Class I differentials in a few areas like the Upper Midwest where competition for milk is strong and which are, for all practical purposes, milk deficit areas. What is does is provide a more even differential floor in areas with 20 to 40 percent Class I utilization.

Option 1A recognizes that other demands for milk are just as important a fluid use. Option 1B says that the most important use of milk is Class I, followed by Class II and Class III (cheese), and any butter/powder production is essentially excess. This is not the case. It has been years since any significant quantity of butter has been sold to the Commodity Credit Corporation (CCC) as surplus and only during the past few months have significant quantities of nonfat powder moved to the CCC.

There are those who claim that the producer revenue lost by Option 1B can be recaptured through service charges and premiums. The vast majority of milk sold to fluid processors is sold to them by cooperatives. The cooperative charges "premiums" over the minimum Class I price for "services" it provides. These services include gathering and maintaining a milk supply, providing milk in the quantities needed on specific days, providing the type of milk (skim,

condensed) when needed and maintaining facilities to manufacture milk into storable products when fluid processors don't want the milk.

There is an economic limit on the amount of the service charge or premium that can be charged. If the service fee gets too high, the fluid processor is economically better off developing its own milk supply by getting milk from producers directly. A one dollar drop in the Class I differential in the Northwest cannot be made up by increasing the service charge a dollar. Producers will be solicited to ship direct for a premium that is substantially less.

### **Summary**

The Alliance urges USDA to give our comments serious and thoughtful consideration. We especially want to emphasize the need for regional product values and manufacturing allowances. All the data clearly shows that where product is produced determines what price manufacturers receive for it. And, where a manufacturer produces that product determines the manufacturing cost.

If you have any questions regarding our comments, please don't hesitate to contact me immediately.

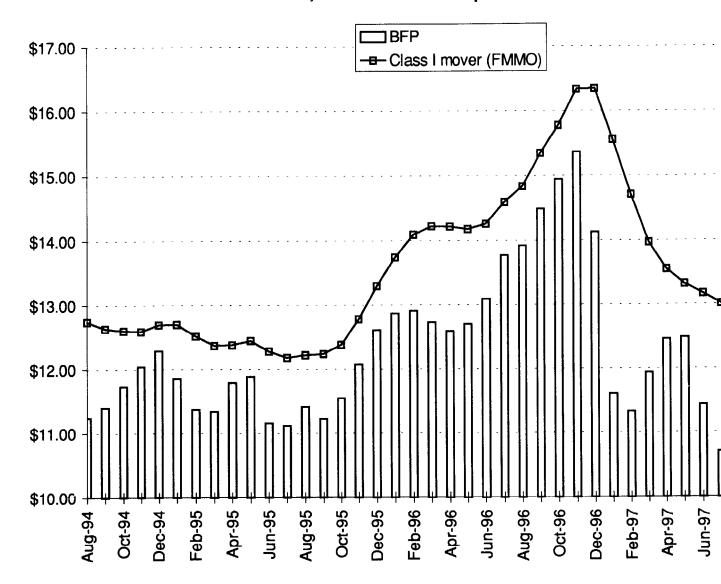
Sincerely,

Alliance of Western Milk Producers

James E. Tillison

**Executive Vice President/CEO** 

BFP, Class I Mover Comparison 1994-97



able A: N	ASS 40 lb. B	lock Prices	March 1997	Through Marc	h 1998			
Week								<u> </u>
Ending	MN/WI	West	US	MN/WI	West	US	MN/WI	
3/7/97	\$1.3622	\$1.3106	\$1.3227	1,253,514	4,061,259	5,314,773	\$1,707,537	\$5
3/14/97	\$1.3592	\$1.3079	\$1.3180	928,574	3,781,211	4,709,785	\$1,262,118	\$4
3/21/97	\$1.3605	\$1.3072	\$1.3207	1,102,772	3,417,524	4,585,534	\$1,500,321	\$4
3/28/97	\$1.3553	\$1.2989	\$1.3108	859,045	3,700,422	4,623,307	\$1,164,264	\$4
		-					\$1.3596	\$
4/4/97	\$1.3350	\$1.2838	\$1.2942	841,346	3,240,876	4,280,905	\$1,123,197	\$4
4/11/97	\$1.3185	\$1.2858	\$1.2960	1,291,405	3,417,747	4,889,805	\$1,702,717	\$4
4/18/97	\$1.2986	\$1.2495	\$1.2622	1,103,480	3,681,338	4,956,460	\$1,432,979	\$4
4/25/97	\$1.2614	\$1.2248	\$1.2348	1,142,779	3,857,559	5,211,906	\$1,441,501	\$4
							\$1.3105	\$
5/2/97	\$1.2089	\$1.1876	\$1.1928	973,957	4,038,175	5,243,234	\$1,177,417	\$4
5/9/97	\$1.1987	\$1.1461	\$1.1583	1,172,221	4,396,659	5,728,391	\$1,405,141	\$5
5/16/97	\$1.1817	\$1.1459	\$1.1579	1,752,036	4,272,613	6,223,596	\$2,070,381	\$4
5/23/97	\$1.1912	\$1.1423	\$1.1613	2,045,475	3,842,841	6,139,062	\$2,436,570	\$4
5/30/97	\$1.1882	\$1.1404	\$1.1558	1,563,877	3,897,461	5,643,180	\$1,858,199	\$4
			·				\$1.1918	\$
6/6/97	\$1.1928	\$1.1410	\$1.1595	1,839,944	3,820,455	5,838,913	\$2,194,685	\$4
6/13/97	\$1.1984	\$1.1453	\$1.1608	1,327,932	3,359,164	4,854,962	\$1,591,394	\$3
6/20/97	\$1.1906	\$1.1438	\$1.1575	1,733,258	4,005,425	6,049,131	\$2,063,617	\$4
6/27/97	\$1.1889	\$1.1466	\$1.1603	1,368,780	3,570,405	5,259,571	\$1,627,343	\$4
							\$1.1917	\$
7/3/97	\$1.1868	\$1.1445	\$1.1549	1,066,271	3,606,842	4,869,764	\$1,265,450	\$4
7/11/97	\$1.1906	\$1.1470	\$1.1590	1,090,164	3,447,101	4,684,782	\$1,297,949	\$3
7/18/97	\$1.2078	\$1.1617	\$1.1787	1,697,923	3,923,510	5,857,381	\$2,050,751	\$4
7/25/97	\$1.2636	\$1.1950	\$1.2150	1,095,379	3,269,397	4,498,249	\$1,384,121	\$3
							\$1.2069	\$

Week								
Ending	MN/WI	West	US	MN/WI	West	US	MN/WI	1
8/1/97	\$1.2753	\$1.2160	\$1.2320	1,072,017	3,164,620	4,483,640	\$1,367,143	\$3,
8/8/97	\$1.3031	\$1.2307	\$1.2538	1,387,882	3,343,780	4,819,264	\$1,808,549	\$4,
8/15/97	\$1.3522	\$1.3011	\$1.3180	1,308,102	3,219,373	4,626,836	\$1,768,816	\$4,
8/22/97	\$1.3948	\$1.3401	\$1.3574	1,165,567	2,975,288	4,247,535	\$1,625,733	\$3,
8/29/97	\$1.4020	\$1.3457	\$1.3660	1,267,977	2,502,498	3,829,031	\$1,777,704	\$3,
							\$1.3461	\$
9/5/97	\$1.4092	\$1.3434	\$1.3680	1,498,850	2,666,513	4,203,050	\$2,112,179	\$3,
9/12/97	\$1.4162	\$1.3624	\$1.3778	1,457,273	3,840,304	5,355,751	\$2,063,790	\$5,
9/19/97	\$1.4197	\$1.3681	\$1.3823	1,233,620	3,578,145	4,907,197	\$1,751,370	\$4,
9/26/97	\$1.4289	\$1.3701	\$1.3836	1,009,442	3,415,836	4,502,337	\$1,442,392	\$4,
							\$1.4175	\$
10/3/97	\$1.4243	\$1.3682	\$1.3829	1,316,912	3,851,280	5,291,672	\$1,875,678	\$5,
10/10/97	\$1.4142	\$1.3678	\$1.3842	1,596,960	3,757,348	5,561,961	\$2,258,421	\$5,
10/17/97	\$1.4198	1.3669	\$1.3828	1,440,675	3,866,859	5,484,873	\$2,045,470	\$5,
10/24/97	\$1.4257	\$1.3712	\$1.3843	1,023,123	3,859,337	5,000,976	\$1,458,666	\$5,
							\$1.4204	\$
10/31/97	\$1.4307	\$1.3684	\$1.3837	1,204,089	4,412,883	5,776,342	\$1,722,690	\$6,
11/7/97	\$1.4259	\$1.3692	\$1.3838	1,405,855	4,826,197	6,372,219	\$2,004,609	\$6,
11/14/97	\$1.4324	\$1.3719	\$1.3864	1,018,343	4,056,365	5,243,002	\$1,458,675	<b>\$</b> 5,
11/21/97	\$1.4430	\$1.3719	\$1.3884	873,026	4,097,030	5,401,882	\$1,259,777	<b>\$5</b> ,
11/28/97	\$1.4503	\$1.3704	\$1.3864	828,482	3,953,664	5,038,214	\$1,201,547	<b>\$</b> 5,
	MN/WI	West	US	MN/WI	West	US	\$1.4348	\$
12/5/97	\$1.4494	\$1.3983	\$1.4135	1,507,475	4,597,908	6,489,190	\$2,184,934	\$6,
12/12/97	\$1.4586	\$1.4001	\$1.4141	855,082	3,978,541	5,228,557	\$1,247,223	\$5,
12/19/97	\$1.4670	\$1.4112	\$1.4217	1,013,256	4,598,740	5,692,049	\$1,486,447	\$6,
12/26/97	\$1.4413	\$1.4083	\$1.4157	793,693	3,371,747	4,218,689	\$1,143,950	\$4,
					<u> </u>		\$1.4540	\$

							<del></del>	
Week								
Ending	MN/WI	West	US	MN/WI	West	US	MN/WI	
1/2/98	\$1.4474	\$1.4054	\$1.4169	1,322,061	4,773,229	6,363,788	\$1,913,551	\$6,7
1/9/98	\$1.4343	\$1.4071	\$1.4195	1,411,383	4,809,610	6,339,021	\$2,024,347	\$6,7
1/16/98	\$1.4456	\$1.3952	\$1.4117	1,739,721	4,695,894	6,671,996	\$2,514,941	\$6,
1/23/98	\$1.4544	\$1.4091	\$1.4183	1,005,671	4,998,310	6,144,943	\$1,462,648	\$7,0
							\$1.4447	\$1
1/30/98	\$1.4494	\$1.4088	\$1.4209	1,461,836	4,427,277	6,349,082	\$2,118,785	\$6,2
2/6/98	\$1.4603	\$1.4017	\$1.4129	702,021	3,992,998	4,867,002	\$1,025,161	\$5,
2/13/98	\$1.4534	\$1.4090	\$1.4190	1,044,344	4,640,566	5,900,764	\$1,517,850	\$6,
2/20/98	\$1.4460	\$1.3999	\$1.4125	1,131,797	4,328,610	5,696,531	\$1,636,578	\$6,0
							\$1.4512	\$1
2/27/98	\$1.4539	\$1.4039	\$1.4145	859,573	4,109,969	5,139,749	\$1,249,733	\$5,
3/6/98	\$1.4108	\$1.3675	\$1.3768	906,109	4,627,408	5,778,066	\$1,278,339	\$6,3
3/13/98	\$1.4097	\$1.3647	\$1.3734	1,073,059	4,807,291	6,054,818	\$1,512,691	\$6,
3/20/98	\$1.4064	\$1.3553	\$1.3658	855,993	4,189,886	5,339,374	\$1,203,869	\$5,0
3/27/98	\$1.3968	\$1.3507	\$1.3611	858,304	4,416,779	5,691,987	\$1,198,879	\$5,9
							\$1.4062	\$1
Average Di	fferences:							
		¢ to 2¢ highe	r than West I	VASS				
J.S. Nass ra	anges from 2	.7¢ lower to 4	.9¢ lower tha	an the MN/WI	NASS			

	1994	1995	1996	1997
	Average	Average	Average	Average
NASS Block Cheese*				
MN/WI	\$1.3048	\$1.3186	\$1.4812	\$1.3279
West	\$1.2692	\$1.2829	\$1.4455	\$1.2792
US	\$1.2791	\$1.2928	\$1.4554	\$1.2924
Butter **				
Central	\$0.7088	\$0.8141	\$1.0777	\$1.1594
West	\$0.6675	\$0.7728	\$1.0427	\$1.1118
US	\$0.6936	\$0.7990	\$1.0649	\$1.1419
Nonfat Dry Milk				
EAST	\$1.1012	\$1.1028	\$1.2414	\$1.1217
CENTRAL	\$1.0793	\$1.0858	\$1.2216	\$1.1001
WEST/CA Weighted Average	\$1.0505	\$1.0484	\$1.1702	\$1.0722
U.S.	\$1.0647	\$1.0651	\$1.1925	\$1.0860
Whey Powder***				
East	\$0.2088	\$0.2242	\$0.2210	\$0.2460
Central	\$0.1952	\$0.2109	\$0.2241	\$0.2369
West	\$0.1835	\$0.2075	\$0.2480	\$0.2260
U.S.**	\$0.1864	\$0.2034	\$0.2196	\$0.2257
*NASS Cheese prices generate	d by adjusting	the following v	/alues from the	e CME
monthly averages U.S0.98				
March 1997 thru Dec. 1997.				
**Butter prices based on region	al percent of n	ational produc	 tion times CMI	E AA,
West price is based on WCMM				
***U.S. Whey prices based on r	egional percer	at of national o	roduction time	e regional
Dairy Market News Price average		<del></del>		s regional,

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TABLE C: FMMO Compone	ent Values Us	sing Regiona	I NASS-type	prices
	1994	<u>1995</u>	<u>1996</u>	<u>1997</u>
U.S. Butterfat per lb.	\$0.7496	\$0.8780	\$1.2023	\$1.2962
West Butterfat per lb.	\$0.7177	\$0.8461	\$1.1752	\$1.2595
MN/WI Butterfat per lb.	\$0.7681	\$0.8965	\$1.2180	\$1.3175
U.S. solids-not-fat per lb.	\$0.9788	\$0.9792	\$1.1120	\$1.0010
West solids-not-fat per lb.	\$0.9640	\$0.9619	\$1.0887	\$0.9867
MN/WI solids-not-fat per lb.	\$0.9941	\$1.0008	\$1.1423	\$1.0157
U.S. Protein per lb.	\$2.8084	\$2.6984	\$2.8327	\$2.1951
West Protein per lb.	\$2.8148	\$2.7049	\$2.8333	\$2.1969
MN/WI Protein per lb.	\$2.8691	\$2.7591	\$2.8967	\$2.2838
U.S. Whey per lb.	\$0.0893	\$0.1068	\$0.1235	\$0.1299
West Whey per lb.	\$0.0863	\$0.1110	\$0.1529	\$0.1301
MN/WI Whey per lb.	\$0.0983	\$0.1146	\$0.1282	\$0.1414
U.S. Class I (Cwt.)	\$12.84	\$12.61	\$15.25	\$13.99
West Class I (Cwt.)	\$12.67	\$12.49	\$15.01	\$13.63
MN/WI Class I (Cwt.)	\$13.07	\$12.85	\$15.40	\$14.02
U.S. Class II (Cwt.)	\$11.80	\$12.25	\$14.54	\$13.91
West Class II (Cwt.)	\$11.56	\$11.99	\$14.24	\$13.65
MN/WI Class II (Cwt.)	\$12.00	\$12.51	\$14.86	<b>\$14.11</b>
U.S. Class III (Cwt.)	\$12.06	\$12.25	\$13.91	\$12.24
West Class III (Cwt.)	\$11.95	\$12.19	\$13.98	\$12.12
MN/WI Class III (Cwt.)	\$12.37	\$12.55	\$14.19	\$12.66
U.S. Class IV (Cwt.)	\$11.12	\$11.58	\$13.87	\$13.23
West Class IV (Cwt.)	\$10.88	\$11.32	\$13.57	\$12.98
MN/WI Class IV (Cwt.)	\$11.32	\$11.83	\$14.18	\$13.43

TABLE C: FMMO Compoi	ABLE C: FMMO Component Values (continued)							
	1994	1995	<u>1996</u>	<u>1997</u>				
U.S. Class I SNF	\$1.1536	\$1.0896	\$1.2473	\$1.0822				
West Class I SNF	\$1.1537	\$1.0969	\$1.2367	\$1.0661				
MN/WI Class I SNF	\$1.1794	\$1.1169	\$1.2646	\$1.0867				
U.S. Class II SNF	\$1.0548	\$1.0552	\$1.1877	\$1.0770				
West Class II SNF	\$1.0400	\$1.0379	\$1.1645	\$1.0626				
MN/WI Class II SNF	\$1.0700	\$1.0767	\$1.2180	\$1.0916				
U.S. Class III SNF	\$1.0863	\$1.0571	\$1.1169	\$0.8871				
West Class III SNF	\$1.0867	\$1.0621	\$1.1357	\$0.8879				
MN/WI Class III SNF	\$1.1143	\$1.0842	\$1.1433	\$0.9269				
U.S. Class IV SNF	\$0.9788	\$0.9792	\$1.1120	\$1.0010				
West Class IV SNF	\$0.9640	\$0.9619	\$1.0887	\$0.9867				
MN/WI Class IV SNF	\$0.9941	\$1.0008	\$1.1423	\$1.0157				

# DEPARTMENT OF FOOD AND AGRICULTURE

1220 N Street Room A-224 Sacramento, California 95814 Phone (916) 654-1456 Fax (916) 654-0867

July 15, 1997



## TO THE PERSON ADDRESSED:

Attached are copies of latest Nonfat Powder, Bulk Butter and Cheddar Cheese costs for selected periods September 1994 to December 1996. This year there are two sets of figures for cheddar cheese; one with protein premiums paid to producers and one without.

Except as noted, the table below depicts the Weighted Average Manufacturing Costs for Butter (salted and unsalted), Nonfat Powder and Cheddar Cheese as published for the last eight years. Costs include Packaging, Processing Labor, Processing Non-Labor, General and Administrative, Return on Investment and, for Butter and Cheddar Cheese, Miscellaneous Ingredients. Also included is the number (#) of plants costed for each exhibit.

Exhibit Date	Butter*	Nonfat Powder	Cheddar Cheese
May 1989	0.0879 (11)	0.1370 (11)	0.2251 (9)
June 1990	0.0888 (11)	0.1398 (11)	0.2324 (9)
	0.0883 (10)	0.1438 (11)	0.2192 (9)
May 1991	0.0969 (12)	0.1443 (12)	0.2010 (9)
July 1992	0.0936 (12)	0.1430 (11)	0.1868 (10)
August 1993	• •	0.1341 (11)	0.1889 (8)
September 1994	0.0895 (11)	` ,	0.1862 (8)
April 1995	0.0889 (9)	0.1327 (9)	` *
November 1995	0.0928 (9)	0.1328 (9)	0.1981 (8)
December 1996	0.0970 (9)	0.1333 (9)	0.1898** (8)
July 1997	0.0958 (8)	0.1327 (9)	0.1840*** (9)

- \* All butter costs, prior to November 1995, have been increased by \$0.0027 per pound which is the weighted average cost of miscellaneous ingredients for November 1995.
- \*\* This and successive figures include costs associated with bulk cheddar plants, although packaging labor and packaging expenses reflect costs from the 40-lb. block plants.
- \*\*\* If the \$0.0226 protein premium paid to producers was included, the cheddar cheese manufacturing cost increases to \$0.2066 per pound.

If you have any questions, please contact Tom Gossard or myself at the above number.

Sincerely,

Edward Hunter Supervising Auditor I Dairy Marketing Branch

# CHEDDAR CHEESE PROCESSING COSTS

FOR SELECTED PERIODS, CALIFORNIA, JANUARY 1995 TO DECEMBER 1996 1/ QUANTITY WEIGHTED AVERAGE PROCESSING COSTS 2/ INCLUDES COSTS OF PROTEIN PREMIUMS

PLANT GROUPS RANKED BY LOWEST COST 3/	NO. OF PLANTS IN GROUP	MISC. INGREDIENT 7/	PACKAGE 1/	PROCE LABOR 1/	SSING NONLABOR		TOTAL OPERATING COSTS	VOLUME COVERED 4/5/	RETURN ON INVESTMEN	TOTAL COST	VOLUME PROCESSED 5/6/
in the state of th						(\$/lb.)		(percent)	(\$/lb.)		(lbs.)
GROUP 1	3	0.0142	0.0156	0.0520	0.0713	0.0194	0.1725	18.6%	0.0089	0.1815	181,010,578
GROUP 2	3	0.0253	0.0228	0.0744	0.0565	0.0223	0.2012	53.5%	0.0133	0.2145	57,142,740
GROUP 3	3	0.0725	0.0168	0.0493	0.0623	0.0242	0.2252	98.3%	0.0111	0.2363	137,485,879
										•	375,639,197
STATISTICS FOR										0.0470	
SIMPLE AVERA		0.0313	0.0189	0.0603		0.0261	0.2067	56.2%		0.2172	
WEIGHTED AV	ERAGE 2/	0.0372	0.0172	0.0544	0.0658	0.0216	0.1962	53.5%	0.0104	0.2066	
MEDIAN		0.0168	0.0171	0.0628	0.0663	0.0251	0.1881	53.5%	0.0063	0.1944	

<sup>1/</sup> COSTS REFLECT SELECTED ANNUAL PERIODS FROM JANUARY 1995 TO DECEMBER 1996; PACKAGE AND LABOR COSTS UPDATED TO MAY 1997.

6/ THESE NINE PLANTS PROCESSED 98.9% OF THE CHEDDAR AND MONTEREY JACK CHEESE IN CALIFORNIA IN 1996.

DAIRY MARKETING BRANCH, CDFA

JULY 1997

<sup>2/</sup> WEIGHTED BY POUNDS OF PRODUCT PROCESSED BY EACH PLANT.

<sup>3/</sup> PLANTS HAVE BEEN GROUPED ON THE BASIS OF PROGRESSIVELY INCREASING PROCESSING COSTS WITH THE FIRST GROUP BEING THE LOWEST COST PLAN

<sup>4/</sup> THE VOLUME COVERED IS THE CUMULATIVE VOLUME OF ALL PLANTS WHOSE ACTUAL COSTS ARE LESS THAN OR EQUAL TO THE LISTED AVERAGE COST.
5/ INCLUDES BOTH CHEDDAR AND MONTEREY JACK FOR VOLUME. COSTS, MOISTURE, FAT, SNF AND YIELDS ARE FOR 40 LB. BLOCKS OF CHEDDAR ONLY.

THREE CHEESE PLANTS MAKE 500 LB. BARRELS OR 640 LB. BLOCKS. FOR THESE THREE PLANTS, THE PACKAGING COSTS WITH THEIR ASSOCIATED REPLACED BY THE AVERAGE PACKAGING COSTS WITH THEIR ASSOCIATED PROCESSING COSTS OF THE SIX 40 LB. BLOCK PLANTS

# NONFAT DRY MILK (NFDM) PROCESSING COSTS

FOR SELECTED PERIODS, CALIFORNIA, SEPTEMBER 1994 TO DECEMBER 1996 1/ QUANTITY WEIGHTED AVERAGE PROCESSING COSTS 2/

PLANT GROUPS RANKED BY LOWEST COST 3/	NO. OF PLANTS IN GROUP	PACKAGE 1/		CESSING NONLABOR	GENERAL & ADMINIST.	TOTAL OPERATING COSTS	VOLUME COVERED 4/5/	RETURN ON INVESTMENT	COST	PR
 					(\$/lb.)		(percent)	— (\$/\b.) -		
GROUP 1	3	0.0124	0.0315	0.0555	0.0054	0.1047	22.9%	0.0141	0.1188	
GROUP 2	3	0.0115	0.0365	0.0652	0.0089	0.1221	82.3%	0.0115	0.1336	
GROUP 3	3	0.0114	0.0515	0.0859	0.0126	0.1613	97.3%	0.0362	0.1975	
STATISTICS FOR	R 9 PLANTS	S								,
SIMPLE AVER	RAGE	0.0116	0.0477	0.0673	0.0099	0,1366	82.3%	6 0.0153	0.1518	
WEIGHTED A		777.72					56.6%	6 0.0159	0.1327	
MEDIAN		0.0114	0.0347	0.0667	0.0091	0.1219	82.3%	6 0.0120	0.1339	

<sup>1/</sup> COSTS REFLECT SELECTED ANNUAL PERIODS FROM SEPTEMBER 1994 TO DECEMBER 1996; PACKAGE AND LABOR COSTS UPDATED

DAIRY MARKETING BRANCH, CDFA

**JULY 1997** 

<sup>2/</sup> WEIGHTED BY POUNDS OF PRODUCT PROCESSED BY EACH PLANT.

<sup>3/</sup> PLANTS HAVE BEEN GROUPED ON THE BASIS OF PROGRESSIVELY INCREASING PROCESSING COSTS WITH THE FIRST GROUP BEING 4/ THE VOLUME COVERED IS THE CUMULATIVE VOLUME OF ALL PLANTS WHOSE ACTUAL COSTS ARE LESS THAN OR EQUAL TO THE LIS

<sup>5/</sup> VOLUME INCLUDES ALL GRADES OF NONFAT DRY MILK IN ALL SIZE CONTAINERS. COSTS ARE FOR 50 AND 55 LB. BAGS OF NFDM ONI

<sup>6/</sup> THESE NINE PLANTS PROCESSED 96.5% OF THE NONFAT DRY MILK IN CALIFORNIA IN 1996.

# THEORETICAL NONFAT DRY MILK (NFDM) PROCESSING OF FOR SELECTED PERIODS, CALIFORNIA, SEPTEMBER 1994 TO DECEMBER 1996 1/

EFFICIENCY RANKING	PACKAGE 1/	PROC LABOR 1/	CESSING NONLABOR	GENERAL & ADMINIST.	TOTAL OPERATING COSTS	VOLUME COVERED 3/4/5/	INVESTMENT	TOTAL COST
				- (\$/lb.)		(percent)	<b>(\$/l</b> b.)	
1	0.0098	0.0251	0.0498	0.0051	0.0898	0.0%	0.0062	0.0960
2	0.0105	0.0310	0.0551	0.0051	0.1017	22.9%	0.0068	0,1085
3	0.0108	0.0316	0.0570	0.0056	0.1050	22.9%	0.0076	0.1126
4	0.0112	0.0344	0.0586	0.0058	0.1100	56.6%	0.0117	0.1217
5	0.0114	0.0347	0.0667	0.0091	0.1219	82.3%	0.0120	0.1339
6	0.0114	0.0401	0.0674	0.0097	0.1286	82.3%	0.0138	0.1424
7	0.0129	0.0558	0.0766	0.0117	0.1570	97.3%	0.0160	0.1730
8	0.0129	0.0869	0.0857	0.0130	0.1985	97.9%		0.2166
9	0.0135	0.0895	0.0892	0.0243	0.2165	5 100.0%	0.0452	0.2617
STATISTICS FOR 9 PLANTS				·				
SIMPLE AVERAGE	0.0116	0.0477	7 0.0673	0.0099	0.1366	82.3%	0.0153	0.1518
WEIGHTED AVERAGE 2/	0.0120	0.0354	0.0621	0.0073	0.1168	3 56.6%	0.0159	0.1327
MEDIAN	0.0114	0.0347	7 0.0667	0.0091	0.1219	9 82.3%	0.0120	0.1339

<sup>1/</sup> COSTS REFLECT SELECTED ANNUAL PERIODS FROM SEPTEMBER 1994 TO DECEMBER 1996; PACKAGE AND LABOR COSTS UP TABLE CONSTRUCTED BY RANKING ACTUAL COSTS IN EACH CATEGORY FROM LOWEST TO HIGHEST.

DAIRY MARKETING BRANCH, CDFA

JULY 1997

<sup>2/</sup> WEIGHTED BY POUNDS OF PRODUCT PROCESSED BY EACH PLANT.

<sup>3/</sup> THE VOLUME COVERED IS THE CUMULATIVE VOLUME OF ALL PLANTS WHOSE ACTUAL COSTS ARE LESS THAN OR EQUAL TO T

<sup>4/</sup> VOLUME INCLUDES ALL GRADES OF NONFAT DRY MILK IN ALL SIZE CONTAINERS. COSTS ARE FOR 50 AND 55 LB. BAGS OF NFD

<sup>5/</sup> THESE NINE PLANTS PROCESSED 96.5% OF THE NONFAT DRY MILK IN CALIFORNIA IN 1996.

# THEORETICAL BUTTER PROCESSING COSTS

FOR SELECTED PERIODS, CALIFORNIA, SEPTEMBER 1994 TO DECEMBER 1996 1/

FERIOIFNOV	1400	DACKACING	DDA	CECCINC	CENEDAL .	TOTAL OPERATING	VOLUME COVERED	RETURN ON
EFFICIENCY	MISC.	PACKAGING 1/	LABOR	CESSING NONLABOR	GENERAL & R ADMINIST.	COSTS	3/ 4/ 5/	INVESTMI
RANKING	MOKEDIENT	17		MONDON	. ADMINIOT.	00313	JI 41 JI	1140 2011117
	<del></del>	*	1/	(\$/lb			(percent)	
				(4/ID	.)		(percent)	,
1	0.0018	0.0066	0.0281	0.0221	0.0049	0.0635	0.0%	6 0.001
2	0.0018	0.0070	0.0293	0.0259	0.0055	0.0695	20.7%	6 0.003
3	0.0018	0.0077	0.0315	0.0347	7 0.0059	0.0816	57.6%	6 0.004
4	0.0024	0.0079	0.0337	0.0382	0.0061	0.0883	57.6%	6 0.005
5	0.0024	0.0083	0.0407	0.0403	0.0089	0.1006	65.4%	6 0.007
6	0.0026		0.0444	0.0408	8 0.0118	0.1083	65.4%	6 0.007
7	0.0027	0.0089	0.0536	0.0484	4 0.0140	0.1276	100.0%	6 0.014
8	0.0036	0.0093	0.0615	0.0516	6 0.0146	0.1406	100.0%	% 0. <b>0</b> 32
STATISTICS FOR 8 PLANTS								
SIMPLE AVERAGE	0.0024	0.0081	0.0404	4 0.0378	8 0.0090	0.0975	57.6%	% 0.009
WEIGHTED AVERAGE 2/	0.0025	0.0079	0.0372	2 0.0332	2 0.0082	0.0890	57.6%	% 0.00 <del>€</del>
MEDIAN	0.0024	0.0081	0.0372	2 0.0393	3 0.0075	0.0945	57.6%	% 0.006

<sup>1/</sup> COSTS REFLECT SELECTED ANNUAL PERIODS FROM SEPTEMBER 1994 TO DECEMBER 1996; PACKAGE AND LABOR COSTS UPDATED TO TABLE CONSTRUCTED BY RANKING ACTUAL COSTS IN EACH CATEGORY FROM LOWEST TO HIGHEST.

DAIRY MARKETING BRANCH, CDFA

JULY 1997

<sup>2/</sup> WEIGHTED BY POUNDS OF PRODUCT PROCESSED BY EACH PLANT.

<sup>3/</sup> THE VOLUME COVERED IS THE CUMULATIVE VOLUME OF ALL PLANTS WHOSE ACTUAL COSTS ARE LESS THAN OR EQUAL TO THE LISTE

<sup>4/</sup> VOLUME INCLUDES BOTH BLOCK AND CUT BUTTER. COSTS ARE FOR 55 AND 68 LB. BLOCKS OF BUTTER ONLY.

<sup>5/</sup> THESE EIGHT PLANTS PROCESSED 95.8% OF THE BUTTER IN CALIFORNIA IN 1996.

# **BUTTER PROCESSING COSTS**

FOR SELECTED PERIODS, CALIFORNIA, SEPTEMBER 1994 TO DECEMBER 1996 1/ QUANTITY WEIGHTED AVERAGE PROCESSING COSTS 2/

when one age	PLANT GROUPS RANKED BY LOWEST COST 3/	NO. OF PLANTS IN GROUP	MISC. INGREDIENT	PACKAGE 1/	PROC LABOR 1/	NONLABOR	ADMINIST.	TOTAL OPERATING COSTS	VOLUME COVERED 4/5/	RETURN 1 ON INVESTMENT
					**************	( <b>\$/</b> lb.	)	***************************************	(percent)	(\$/)
	GROUP 1	4	0.0026	0.0079	0.0314	0.0288	0.0058	0.0765	50.0%	0.0043
	GROUP 2	4	0.0023	0.0079	0.0480	0.0416	0.0128	0.1126	89.1%	0.0117
	STATISTICS FOR	8 PLANTS								
	SIMPLE AVERA		0.0024	0.0081	0.0404	0.0378	0.0090	0.0975	57.6%	0.0095
	WEIGHTED AVI	ERAGE 2/	0.0025	0.0079	0.0372	0.0332	0.0082	0.0890	57.6%	0.0068
	MEDIAN		0.0024	0.0081	0.0372	0.0393	0.0075	0.0945	57.6%	0.0063

<sup>1/</sup> COSTS REFLECT SELECTED ANNUAL PERIODS FROM SEPTEMBER 1994 TO DECEMBER 1996; PACKAGE AND LABOR COSTS UPDATED TO MA 2/ WEIGHTED BY POUNDS OF PRODUCT PROCESSED BY EACH PLANT.

DAIRY MARKETING BRANCH, CDFA
JULY 1997

<sup>3/</sup> PLANTS HAVE BEEN GROUPED ON THE BASIS OF PROGRESSIVELY INCREASING PROCESSING COSTS WITH THE FIRST GROUP BEING THE L

<sup>4/</sup> THE VOLUME COVERED IS THE CUMULATIVE VOLUME OF ALL PLANTS WHOSE ACTUAL COSTS ARE LESS THAN OR EQUAL TO THE LISTED A

<sup>5/</sup> VOLUME INCLUDES BOTH BLOCK AND CUT BUTTER. COSTS ARE FOR 55 AND 68 LB. BLOCKS OF BUTTER ONLY.

<sup>6/</sup> THESE EIGHT PLANTS PROCESSED 95.8% OF THE BUTTER IN CALIFORNIA IN 1996.

## CHEDDAR CHEESE PROCESSING COSTS

FOR SELECTED PERIODS, CALIFORNIA, JANUARY 1995 TO DECEMBER 1996 1/ QUANTITY WEIGHTED AVERAGE PROCESSING COSTS 2/

RANKED BY OWEST COST 3/	PLANTS IN GROUP	MISC. INGREDIENT	PACKAGE 1/	PROCE LABOR 1/	SSING NONLABOR		OPERATING COSTS	COVERED 4/5/	ON INVESTMENT	COST	VOLUI PROCES 5/6
	هو منجسد بسطاع د د					(\$/lb.)		(percent)	(\$/lb.) -		
GROUP 1	3	0 0117	0.0159	0.0523	0.0665	0.0192	0.1656	27.2%	0.0108	0.1764	259,3
GROUP 2	3	0.0260	0.0206	0.0472	0.0589	0.0244	0.1771	83.1%	0.0040	0.1811	72,9
GROUP 3	3	0.0128	0.0190	0.0793	0.0731	0.0312	0.2154	98.3%	0.0185	0.2339	43,3
TATISTICS FOR	9 PLANTS	i									375,6
SIMPLE AVERA	GE	0.0170	0.0189	0.0603	0.0701	0.0261	0.1924	88.59	0.0105	0.2029	
										0.1840	
MEDIAN		0.0122	0.0171	0.0628	0.0663	0.0251	0.1835	5 83.19	6 0.0063	0.1898	
	GROUP 1 GROUP 2 GROUP 3 TATISTICS FOR SIMPLE AVERAWEIGHTED AV	GROUP 1 3 GROUP 2 3 GROUP 3 3 GROUP 3 3 TATISTICS FOR 9 PLANTS SIMPLE AVERAGE WEIGHTED AVERAGE 2/	3/ GROUP  GROUP 1 3 0.0117  GROUP 2 3 0.0260  GROUP 3 3 0.0128  TATISTICS FOR 9 PLANTS  SIMPLE AVERAGE 0.0170  WEIGHTED AVERAGE 2/ 0.0146  MEDIAN 0.0122	GROUP 1 3 0.0117 0.0159  GROUP 2 3 0.0260 0.0206  GROUP 3 3 0.0128 0.0190  TATISTICS FOR 9 PLANTS SIMPLE AVERAGE 0.0170 0.0189 WEIGHTED AVERAGE 2/ 0.0146 0.0172  MEDIAN 0.0122 0.0171	3/ GROUP 1/  GROUP 1 3 0.0117 0.0159 0.0523  GROUP 2 3 0.0260 0.0206 0.0472  GROUP 3 3 0.0128 0.0190 0.0793  TATISTICS FOR 9 PLANTS  SIMPLE AVERAGE 0.0170 0.0189 0.0603  WEIGHTED AVERAGE 2/ 0.0146 0.0172 0.0544	3/ GROUP 1/  GROUP 1 3 0.0117 0.0159 0.0523 0.0665  GROUP 2 3 0.0260 0.0206 0.0472 0.0589  GROUP 3 3 0.0128 0.0190 0.0793 0.0731  TATISTICS FOR 9 PLANTS  SIMPLE AVERAGE 0.0170 0.0189 0.0603 0.0701  WEIGHTED AVERAGE 2/ 0.0146 0.0172 0.0544 0.0658  MEDIAN 0.0122 0.0171 0.0628 0.0663	3/ GROUP 1/ (\$\frac{1}{3}\) 0.0117 0.0159 0.0523 0.0665 0.0192  GROUP 2 3 0.0260 0.0206 0.0472 0.0589 0.0244  GROUP 3 3 0.0128 0.0190 0.0793 0.0731 0.0312  TATISTICS FOR 9 PLANTS  SIMPLE AVERAGE 0.0170 0.0189 0.0603 0.0701 0.0261  WEIGHTED AVERAGE 2/ 0.0146 0.0172 0.0544 0.0658 0.0216  MEDIAN 0.0122 0.0171 0.0628 0.0663 0.0251	3/ GROUP 1 3 0.0117 0.0159 0.0523 0.0665 0.0192 0.1656  GROUP 2 3 0.0260 0.0206 0.0472 0.0589 0.0244 0.1771  GROUP 3 3 0.0128 0.0190 0.0793 0.0731 0.0312 0.2154  TATISTICS FOR 9 PLANTS  SIMPLE AVERAGE 0.0170 0.0189 0.0603 0.0701 0.0261 0.1924  WEIGHTED AVERAGE 2/ 0.0146 0.0172 0.0544 0.0658 0.0216 0.1736  MEDIAN 0.0122 0.0171 0.0628 0.0663 0.0251 0.1835	3/ GROUP 1 3 0.0117 0.0159 0.0523 0.0665 0.0192 0.1656 27.2%  GROUP 2 3 0.0260 0.0206 0.0472 0.0589 0.0244 0.1771 83.1%  GROUP 3 3 0.0128 0.0190 0.0793 0.0731 0.0312 0.2154 98.3%  TATISTICS FOR 9 PLANTS  SIMPLE AVERAGE 0.0170 0.0189 0.0603 0.0701 0.0261 0.1924 88.59  WEIGHTED AVERAGE 2/ 0.0146 0.0172 0.0544 0.0658 0.0216 0.1736 76.89  MEDIAN 0.0122 0.0171 0.0628 0.0663 0.0251 0.1835 83.19	3/ GROUP 1 3 0.0117 0.0159 0.0523 0.0665 0.0192 0.1656 27.2% 0.0108  GROUP 2 3 0.0260 0.0206 0.0472 0.0589 0.0244 0.1771 83.1% 0.0040  GROUP 3 3 0.0128 0.0190 0.0793 0.0731 0.0312 0.2154 98.3% 0.0185  TATISTICS FOR 9 PLANTS  SIMPLE AVERAGE 0.0170 0.0189 0.0603 0.0701 0.0261 0.1924 88.5% 0.0105  WEIGHTED AVERAGE 2/ 0.0146 0.0172 0.0544 0.0658 0.0216 0.1736 76.8% 0.0104  MEDIAN 0.0122 0.0171 0.0628 0.0663 0.0251 0.1835 83.1% 0.0063	3/ GROUP 1 3 0.0117 0.0159 0.0523 0.0665 0.0192 0.1656 27.2% 0.0108 0.1764  GROUP 2 3 0.0260 0.0206 0.0472 0.0589 0.0244 0.1771 83.1% 0.0040 0.1811  GROUP 3 3 0.0128 0.0190 0.0793 0.0731 0.0312 0.2154 98.3% 0.0185 0.2339  TATISTICS FOR 9 PLANTS  SIMPLE AVERAGE 0.0170 0.0189 0.0603 0.0701 0.0261 0.1924 88.5% 0.0105 0.2029  WEIGHTED AVERAGE 2/ 0.0146 0.0172 0.0544 0.0658 0.0216 0.1736 76.8% 0.0104 0.1840  MEDIAN 0.0122 0.0171 0.0628 0.0663 0.0251 0.1835 83.1% 0.0063 0.1898

<sup>1/</sup> COSTS REFLECT SELECTED ANNUAL PERIODS FROM JANUARY 1995 TO DECEMBER 1996; PACKAGE AND LABOR COSTS UPDATED TO MAY 1997.

DAIRY MARKETING BRANCH, CDFA
JULY 1997

<sup>2/</sup> WEIGHTED BY POUNDS OF PRODUCT PROCESSED BY EACH PLANT.

<sup>3/</sup> PLANTS HAVE BEEN GROUPED ON THE BASIS OF PROGRESSIVELY INCREASING PROCESSING COSTS WITH THE FIRST GROUP BEING THE LOWEST COS 4/ THE VOLUME COVERED IS THE CUMULATIVE VOLUME OF ALL PLANTS WHOSE ACTUAL COSTS ARE LESS THAN OR EQUAL TO THE LISTED AVERAGE COS 5/ INCLUDES BOTH CHEDDAR AND MONTEREY JACK FOR VOLUME. COSTS, MOISTURE, FAT, SNF AND YIELDS ARE FOR 40 LB. BLOCKS OF CHEDDAR ONLY

<sup>/</sup> INCLUDES BOTH CHEDDAR AND MONTEREY JACK FOR VOLUME. COSTS, MOISTURE, FAT, SNF AND YIELDS ARE FOR 40 LB. BLOCKS OF CHEDDAR ONLY
THREE CHEESE PLANTS MAKE 500 LB. BARRELS OR 640 LB. BLOCKS. FOR THESE THREE PLANTS, THE PACKAGING COSTS WITH THEIR ASSOCIATED PROCESSING COSTS OF THE SIX 40 LB. BLOCK PLANTS

<sup>6/</sup> THESE NINE PLANTS PROCESSED 98.9% OF THE CHEDDAR AND MONTEREY JACK CHEESE IN CALIFORNIA IN 1996.

# THEORETICAL CHEDDAR CHEESE PROCESSING COSTS

FOR SELECTED PERIODS, CALIFORNIA, JANUARY 1995 TO DECEMBER 1996 1/

EFFICIENCY RANKING	MISC. INGREDIENT	PACKAGE 1/	PROCE LABOR 1/	SSING NONLABOR	GENERAL & ADMINIST.	TOTAL OPERATING COSTS	VOLUME COVERED 3/ 4/ 5/	RETURN ON INVESTMENT	TOTAL COST	FINISHED MOISTURE
					(\$/lb.)		(percent)	(\$/ <b>l</b> b.)		- — (реі
1	0.0090	0.0141	0.0317	0.0422	0.0113	0.1083	0.0%	0.0027	0.1110	37.97
2	0.0110	0.0166	0.0439	0.0554	0.0132	0.1401	0.0%	0.0042	0.1443	37.89
3	0.0118	0.0171	0.0499	0.0604	0.0196	0.1588	0.0%	0.0051	0.1639	37.88
4	0.0119	0.0171	0.0523	0.0632	0.0221	0.1666	27.2%	0.0060	0.1726	
5	0.0122	0.0171	0.0628	0.0663	0.0251	0.1835	83.1%	0.0063	0.1898	37.78
6	0.0123	0.0185	0,0666	0.0670	0.0268	0.1912	88.5%	0.0123	0.2035	
7	0.0157	0.0194	0.0712	0.0737	0.0284	0.2084	98.3%	0.0127	0.2211	
8	0.0329	0.0200	0.0814	0.0774	0.0339	0.2456	98.3%		0.2678	
9	0.0361	0.0299	0.0833	0.1254	0.0544	0.3291	100.0%	0.0229	0.3520	35.27
STATISTICS FOR 9 PLANTS										
SIMPLE AVERAGE	0.0170	0.0189	0.0603	0.0701	0.0261	0,1924	88.59	0.0105	0,2029	37.29
WEIGHTED AVERAGE 2/	0.0146		0.0544	0.0658	0.0216	0.1736	76.89	0.0104	0.1840	37.48
MEDIAN	0.0122	0.0171	0.0628	0.0663	0.0251	0.1835	83,1%	6 0.0063	0.1898	37.78

<sup>1/</sup> COSTS REFLECT SELECTED ANNUAL PERIODS FROM JANUARY 1995 TO DECEMBER 1996; PACKAGE AND LABOR COSTS UPDATED TO MAY 1997. TABLE CONSTRUCTED BY RANKING ACTUAL COSTS IN EACH CATEGORY FROM LOWEST TO HIGHEST.

5/ THESE NINE PLANTS PROCESSED 98.9% OF THE CHEDDAR AND MONTEREY JACK CHEESE IN CALIFORNIA IN 1996.

HAIRY MARKETING BRANCH, CDFA **JULY 1997** 

<sup>2/</sup> WEIGHTED BY POUNDS OF PRODUCT PROCESSED BY EACH PLANT.

<sup>3/</sup> THE VOLUME COVERED IS THE CUMULATIVE VOLUME OF ALL PLANTS WHOSE ACTUAL COSTS ARE LESS THAN OR EQUAL TO THE LISTED AVERA

<sup>4/</sup> INCLUDES BOTH CHEDDAR AND MONTEREY JACK FOR VOLUME. COSTS, MOISTURE, FAT, SNF AND YIELDS ARE FOR 40 LB. BLOCKS OF CHEDDAR THREE CHEESE PLANTS MAKE 500 LB. BARRELS OR 640 LB. BLOCKS. FOR THESE THREE PLANTS, THE PACKAGING COSTS WITH THEIR COSTS HAVE BEEN REPLACED BY THE AVERAGE PACKAGING COSTS WITH THEIR ASSOCIATED PROCESSING COSTS OF THE SIX 40 LB