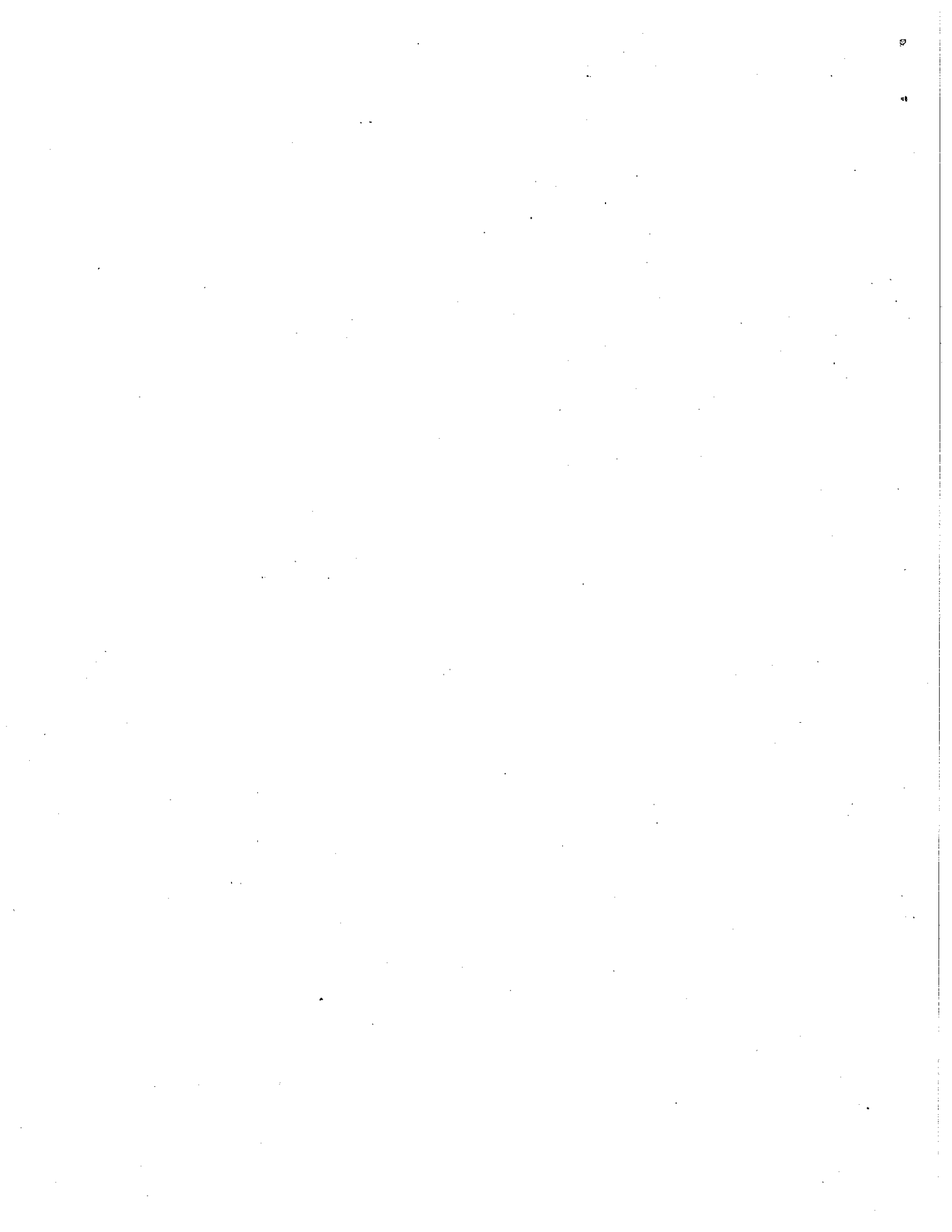


PACKAGED FLUID MILK SALES IN FEDERAL MILK ORDER MARKETS:

**BY SIZE AND TYPE OF CONTAINER
AND DISTRIBUTION METHOD
DURING NOVEMBER 1991**



**DAIRY DIVISION/AGRICULTURAL MARKETING SERVICE
U.S. DEPARTMENT OF AGRICULTURE/WASHINGTON, D.C.**



Preface

This publication presents information relating to the containers in which fluid milk products are sold, and the methods of distribution used to market these items by handlers regulated under Federal milk marketing orders. These orders are established under the authority of the Agricultural Marketing Agreement Act of 1937.

This information in this report is based on a survey of fluid milk sales under Federal milk marketing orders during November 1991. Its purpose was to update a similar survey in November 1987, and to see if trends observed in past surveys are continuing. Data were obtained from milk handlers regulated under 42 marketing orders.

The data in this report are for volume weights of milk in 1,000 pounds. The number of each size of container can be approximated by dividing the weights shown in the report by the conversion factors shown in Appendix C.

This is the seventeenth report in a series. Similar data have been distributed based on surveys made in November 1963 through 1967, 1969, and every other year through 1989.

Issued October 1993

TABLE OF CONTENTS

	<u>Page No.</u>
Preface.....	1
Table of Contents.....	2
Introduction and definitions.....	4
Historical Perspective.....	5
Chart 1: Fluid milk sales by type of container, November of selected years.....	6
Chart 2: Fluid milk sales by method of distribution, November of selected years.....	7
Chart 3: Fluid milk sales by size of container, November 1963 and 1991.....	8
Table 1: Percentage of whole milk items, lowfat and skim milk items, and total fluid milk items, sold by type of containers, by handlers regulated under Federal milk orders, November of selected years.....	9
Table 2: Percentage of whole milk items, lowfat and skim milk items, and total fluid milk items, sold by size of container, by handlers regulated under Federal milk orders, November of selected years.....	10
Table 3: Summary of fluid milk sales by size and type of containers, by handlers regulated under Federal milk orders, November of selected years, 1963 to 1989.....	11
Table 4: Summary of fluid milk sales by size and type of containers, by handlers regulated under 42 Federal milk orders, November 1991.....	17
Table 5: Total fluid milk items sold in various sizes and types of containers by handlers regulated under selected Federal milk orders, November 1991.....	18
Table 6: Individual fluid milk products sold in various sizes and types of containers by handlers regulated under 42 Federal milk orders, November 1991.....	30
Table 7: Percentage of total fluid milk items distributed by handlers regulated under Federal milk orders, grouped by region, by type and size of container, November 1991.....	34
Table 8: Size and type of containers in which the larger volumes of selected fluid cream and specialty products are sold by handlers regulated under Federal milk orders, November 1991.	35
Table 9: Percentage of fluid milk products distributed by handlers regulated under Federal milk orders, by method of distribution and type of wholesale outlet, November of selected years, 1963 to 1991.....	37
Table 10: Percentage of fluid milk products distributed by handlers regulated under Federal milk orders, grouped by region, by method of distribution, November 1991.....	38
Table 11: Percentage of fluid milk products distributed by handlers regulated under Federal milk orders, grouped by region, by type of chain store, November 1991.....	39

Table 12: Percentage of fluid milk products distributed by handlers regulated under Federal milk orders, by method of distribution, by marketing area, November 1991.....	40
Appendix A: Map of marketing areas under Federal orders as of January 1, 1992.....	42
Appendix B: Fluid milk product sales, United Sales, 1965, and 1970-91..	43
Appendix C: Conversion factors.....	44
Appendix D: Federal milk order markets grouped by region.....	45
Appendix E: Reported sales of market whole milk and lowfat milk in California, by type of trade and container characteristics October 1991.....	46
Appendix F: Additional information published in "Federal Milk Order Market Statistics.....	47

INTRODUCTION

Handlers regulated under Federal milk orders process approximately three-quarters of all the fluid milk products sold in the United States. In general, the sizes and types of containers, and methods of distribution used to market this production would be representative of the entire country. In addition, although these surveys are based on November fluid milk sales, the relationships shown would be representative in other months of the year. Two exceptions would be sales in half-pint containers and sales through school outlets which would not be applicable to sales in a nonschool month.

In general, the historical trend has shown a shift in fluid milk sales from glass to paper to plastic containers, from small to large containers, and from home-delivery to wholesale delivery.

DEFINITIONS

Type of Container. Containers are categorized by glass, paper, plastic, and metal cans. The paper category includes plastic-coated and wax-coated containers. Plastic includes rigid plastic containers, plastic pouches, and corrugated paper boxes or plastic containers with plastic linings. Containers larger than one gallon shown in the plastic column, for the most part, are bag-in-box containers. Metal cans larger than one gallon are included in the glass category. Subtotals shown under glass represent quantities of milk sold in glass and metal cans.

Method of Distribution. Sales are divided into home-delivery and wholesale. Home-delivery includes sales to homes or sales to others for delivery to homes. In some instances, home-delivery may include minor sales to institutions and vendors. Wholesale includes all sales other than home-delivered. Wholesale is broken down into chain stores, institutional outlets, and all other.

Chain stores are defined as 11 or more stores (supermarket, dairy, or convenience) nationwide, primarily engaged in food retailing, and either being under common management, being franchised by a common company, or belonging to a common purchasing association. Chain stores are categorized into supermarkets or dairy and convenience stores. Also identified are vertically integrated chain stores. A chain of stores is vertically integrated if the fluid milk products sold in its stores are processed by a plant owned by the chain.

Institutional outlets are military installations and schools (elementary, high school, colleges, and universities). All other wholesale outlets include nonchain food stores, nonfood stores (drug stores, gasoline stations, etc.), restaurants, hotels, hospitals, nursing homes, vending machines, and any other type of wholesale outlet.

HISTORICAL PERSPECTIVE

There has been a significant historical change in the types and sizes of containers in which fluid milk products have been sold and in the methods of distribution used to sell these products. The trend has been from glass to paper to plastic containers, from small to large containers, and from home-delivery to wholesale delivery. Some factors often cited in explaining these trends are: changes in consumer preferences and life styles; significant changes in the costs of packaging materials and delivery systems; technological developments in the container industry, particularly containers produced from by-products of the petroleum industry; and the increasing market share of supermarkets which brought about an additional handling of fluid milk containers by consumers.

In the first survey taken in 1963, sales of fluid milk products in glass containers accounted for about 32 percent and plastic accounted for 15 percent of the total. In the most recent survey, almost 72 percent of fluid milk products were sold in plastic containers, 28 percent in paper containers, with less than one-half percent remaining in glass containers.

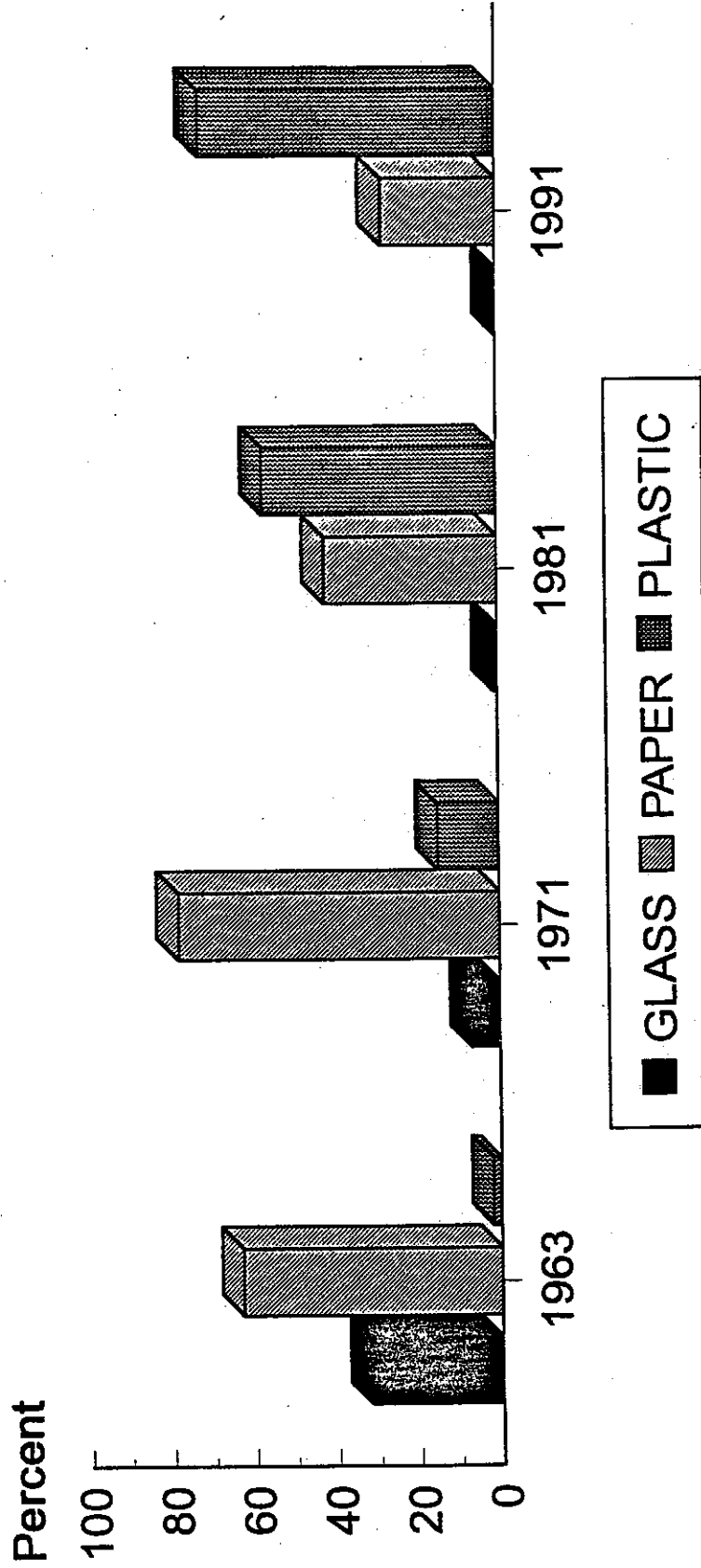
In November 1991, nearly 64 percent of fluid milk sales were made in gallon containers. This market share has more than doubled since 1971 and is nearly five times greater than the share found in the 1963 survey. This increase has come at the expense of half-gallons for which the market share has dropped from 56 percent of total sales in 1963 to 19 percent in 1991, and at the expense of quarts whose market share decreased from 15 percent to 4 percent during the same time period.

The importance of home-delivery of milk had decreased with every survey that had been taken through 1989. Since the first survey in 1963, the market share has dropped from about 30 percent to one percent in 1989 and 1991.

Surveys made prior to 1977 categorized all methods of distribution other than home-delivery as wholesale. Since 1977, information on the following types of wholesale distribution have been surveyed: food chain stores--supermarkets and dairy/convenience stores; institutional outlets--military and schools; and all other wholesale. Sales of fluid milk products in supermarket chain stores continued to be the predominant method of wholesale distribution with 55 percent of the market share in the most recent survey, up from 54 percent in November 1989. The market share for convenience stores was unchanged from the 1989 survey. The market share of vertically integrated food chain stores increased slightly from November 1989, largely as a result of increasing vertical integration of supermarket chains. The market share for the "all other" category, of which nonchain food stores are the larger proportion, decreased to about 26 percent.

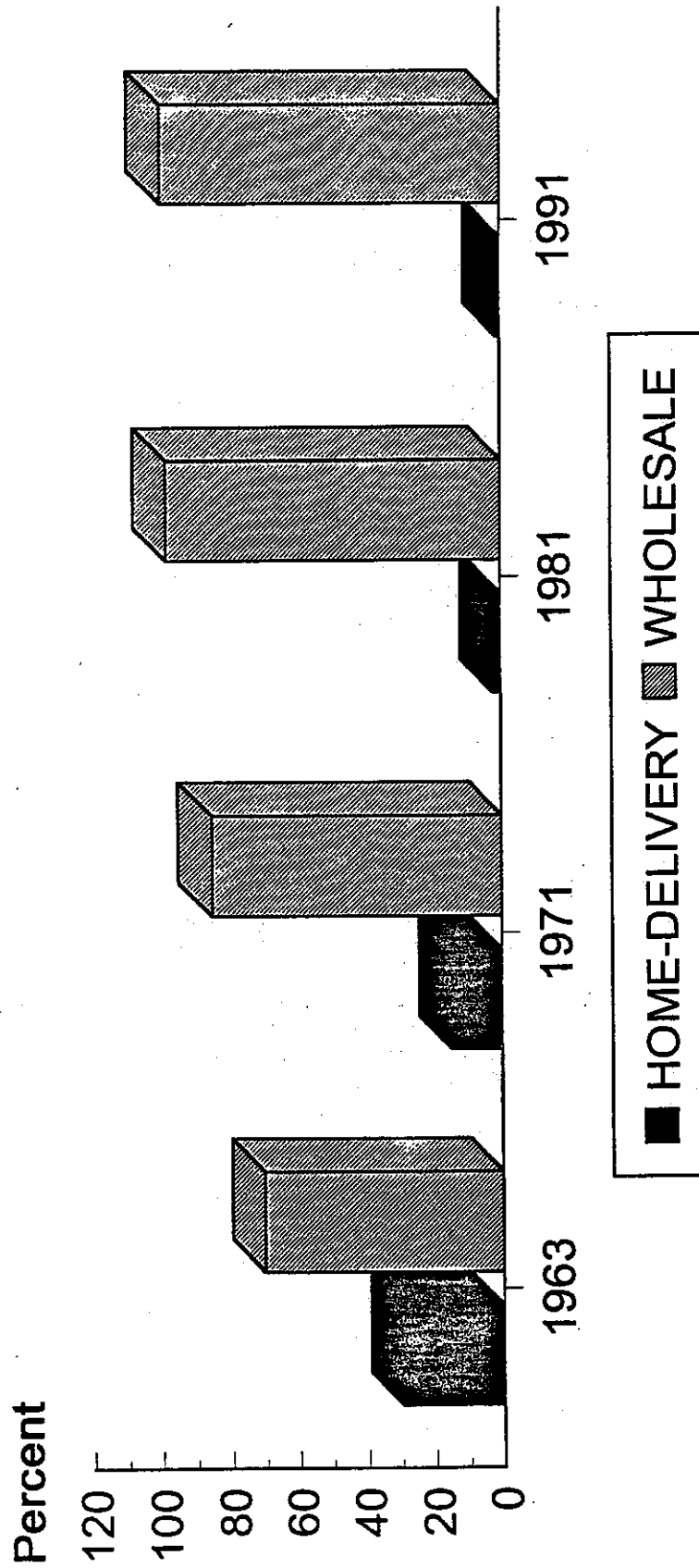
The following charts and tables provide historical information from past surveys and detailed information from the current survey. Information is presented for individual Federal milk order marketing areas, regional groups of these markets, and for all markets combined. Additional information is shown in the appendices at the end of the report.

CHART 1--FLUID MILK SALES BY TYPE OF CONTAINER, FOR NOVEMBER OF SELECTED YEARS



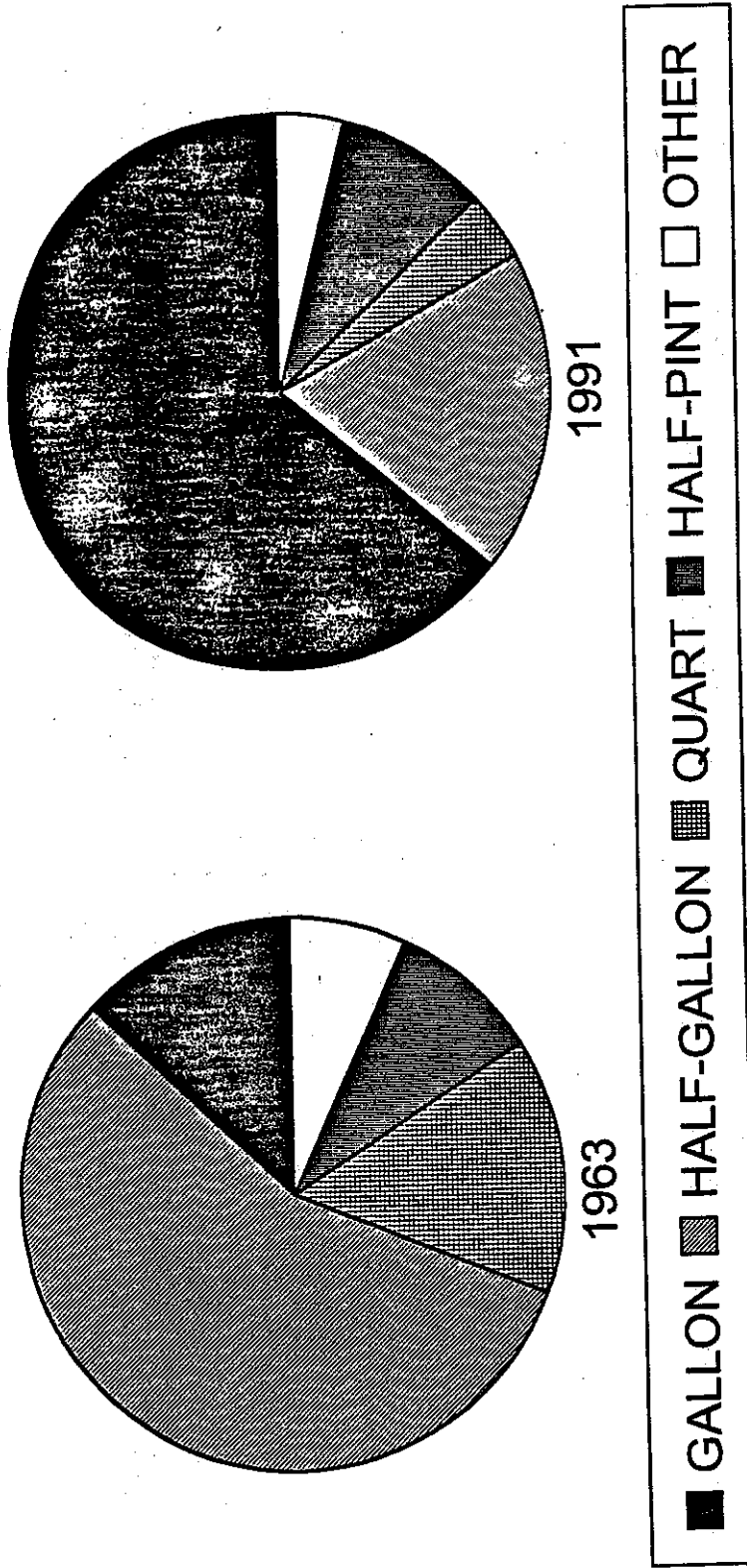
(Data for Chart in Table 1)

CHART 2--FLUID MILK SALES BY METHOD OF DISTRIBUTION, NOVEMBER OF SELECTED YEARS



(Data for Chart in Table 9)

**CHART 3--FLUID MILK SALES BY SIZE OF CONTAINERS,
NOVEMBER 1963 AND 1991**



(Data for Chart 3 in Table 2)

TABLE 1--PERCENTAGE OF WHOLE MILK ITEMS, LOWFAT AND SKIM MILK ITEMS, AND TOTAL FLUID MILK ITEMS SOLD BY TYPE OF CONTAINER, BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, NOVEMBER OF SELECTED YEARS 1/

Year	Number of markets 2/	Glass	Paper	Plastic	Other 3/	Total
<u>Whole Milk Items 4/</u>						
1963	68	33	62	5/	5	100
1964	67	32	62	3	3	100
1965	68	29	64	5	2	100
1966	68	26	66	6	2	100
1967	71	21	70	8	1	100
1969	66	13	75	11	1	100
1971	61	7	77	16	*	100
1973	61	4	70	26	*	100
1975	56	3	66	31	*	100
1977	47	1	57	42	*	100
1979	47	1	48	51	*	100
1981	48	*	41	59	*	100
1983	46	*	36	63	*	100
1985	44	*	34	65	*	100
1987	43	*	33	67	*	100
1989	41	*	31	69	*	100
1991	42	*	28	72	*	100
<u>Lowfat and Skim Milk Items 6/</u>						
1963	68	25	73	5/	2	100
1964	67	22	75	1	2	100
1965	68	22	75	2	1	100
1966	68	20	76	3	1	100
1967	71	16	79	4	1	100
1969	66	10	82	7	1	100
1971	61	6	83	11	*	100
1973	61	4	74	22	*	100
1975	56	2	69	29	*	100
1977	47	1	60	39	*	100
1979	47	1	51	48	*	100
1981	48	*	44	56	*	100
1983	46	*	40	60	*	100
1985	44	*	35	65	*	100
1987	43	*	33	67	*	100
1989	41	*	31	69	*	100
1991	42	*	28	72	*	100
<u>Total Fluid Milk Items 7/</u>						
1963	68	32	63	5/	5	100
1964	67	31	64	2	3	100
1965	68	29	65	4	2	100
1966	68	25	67	6	2	100
1967	71	20	71	8	1	100
1969	66	12	76	11	1	100
1971	61	7	78	15	*	100
1973	61	4	71	25	*	100
1975	56	2	67	31	*	100
1977	47	1	58	41	*	100
1979	47	1	49	50	*	100
1981	48	1	42	57	*	100
1983	46	*	38	62	*	100
1985	44	*	34	65	*	100
1987	43	*	33	67	*	100
1989	41	*	31	69	*	100
1991	42	*	28	72	*	100

* Less than one-half of one percent.

1/ Based on total sales including both wholesale and home-delivered.

2/ Number of markets for which complete data were available. See Appendix D for the Federal milk order markets included in current survey.

3/ Percentages represent metal cans and plastic bag-in-box containers in 1963; metal cans only, 1964 to date.

4/ Whole milk items include plain and flavored whole milk and miscellaneous whole milk products.

5/ Data not available.

6/ Lowfat and skim milk items include plain, fortified, and flavored skim and lowfat milk, buttermilk, and miscellaneous products.

7/ Whole milk items and lowfat and skim milk items combined.

TABLE 2--PERCENTAGE OF WHOLE MILK ITEMS, LOWFAT AND SKIM MILK ITEMS, AND TOTAL FLUID MILK ITEMS SOLD BY SIZE OF CONTAINER, BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, NOVEMBER OF SELECTED YEARS 1/

Year	Number of markets 2/	Gallon	Half-gallon	Quart	Pint	Half-pint	Other	Bulk 3/		Total
								5-10 qts.	Over 10 qts.	
<u>Whole Milk items 4/</u>										
1963	68	14	56	14	1	10	*	**	5**	100
1964	67	17	54	11	1	11	*	1	5	100
1965	68	18	53	11	1	11	*	1	5	100
1966	68	19	52	10	1	12	*	1	5	100
1967	71	20	52	8	1	12	1	1	5	100
1969	66	23	45	12	1	12	1	1	5	100
1971	61	30	41	10	1	13	*	1	4	100
1973	61	37	36	8	1	12	1	1	4	100
1975	56	43	33	7	1	11	1	*	4	100
1977	47	48	28	6	2	12	1	*	3	100
1979	47	52	26	6	2	10	1	*	3	100
1981	48	57	24	6	2	8	*	*	3	100
1983	46	58	23	6	2	7	*	*	3	100
1985	44	59	22	6	3	7	*	*	3	100
1987	43	60	21	6	3	8	*	*	3	100
1989	41	60	20	6	3	8	*	*	2	100
1991	42	63	19	5	3	7	*	*	2	100
<u>Lowfat and skim milk items 5/</u>										
1963	68	5	56	32	1	4	*	**	2**	100
1964	67	6	60	27	1	3	*	1	2	100
1965	68	8	60	24	1	3	1	1	2	100
1966	68	13	60	20	1	3	*	1	2	100
1967	71	16	61	16	1	3	*	1	2	100
1969	66	19	58	14	1	3	1	2	2	100
1971	61	27	55	11	1	3	*	1	2	100
1973	61	38	46	8	1	4	*	1	2	100
1975	56	44	38	6	1	8	1	*	2	100
1977	47	50	32	5	1	10	*	*	2	100
1979	47	54	26	4	1	12	1	*	2	100
1981	48	57	23	4	1	13	*	*	2	100
1983	46	58	22	4	1	13	*	*	2	100
1985	44	60	22	4	1	11	*	*	2	100
1987	43	61	21	4	1	11	*	*	2	100
1989	41	61	21	4	*	11	*	*	2	100
1991	42	64	19	4	*	10	*	*	2	100
<u>Total fluid milk items 6/</u>										
1963	68	13	56	15	1	9	1	**	5**	100
1964	67	16	54	13	1	10	1	1	4	100
1965	68	17	54	12	1	10	1	1	4	100
1966	68	18	53	11	1	10	1	1	5	100
1967	71	19	53	9	1	11	1	1	5	100
1969	66	23	48	12	1	10	1	1	4	100
1971	61	29	44	10	1	11	1	1	3	100
1973	61	37	38	8	1	10	1	1	4	100
1975	56	43	34	7	1	11	1	*	3	100
1977	47	49	29	6	1	11	1	*	3	100
1979	47	53	26	5	1	11	1	*	3	100
1981	48	57	24	5	1	10	*	*	3	100
1983	46	58	23	5	1	10	*	*	3	100
1985	44	60	22	5	2	9	*	*	2	100
1987	43	60	21	5	2	10	*	*	2	100
1989	41	61	21	4	2	10	*	*	2	100
1991	42	64	19	4	1	9	*	*	2	100

* Less than one-half of one percent.

** "5-10 quarts" and "over 10 quarts" are combined.

1/ Based on total sales including both wholesale and home-delivered.

2/ Number of markets for which complete data were available. See Appendix D for the Federal milk order markets included in current survey.

3/ Percentages represent metal cans and plastic bag-in-box containers.

4/ Whole milk items include plain and flavored whole milk and miscellaneous whole milk products.

5/ Lowfat and skim milk items include plain, fortified, and flavored skim and lowfat milk, buttermilk, and miscellaneous products.

6/ Whole milk items and lowfat and skim milk items combined.

TABLE 3--SUMMARY OF FLUID MILK SALES BY SIZE AND TYPE OF CONTAINERS, BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS 1/, NOVEMBER OF SELECTED YEARS, 1963 TO 1989 2/

Size of container	Type of container			Total
	Glass	Paper	Plastic	
Thousand pounds				
1963 (68 markets)*				
Gallons	132,765	81,223		213,988
Half gallons	253,863	680,149		934,012
Quarts	123,251	145,571		268,822
Pints	2,499	31,028		33,527
Half pints	21,339	140,855		162,194
Other	1,131	6,202		7,333
Bulk: 3/	---	---		81,308
Total	534,848	1,085,028		1,701,184

1964 (67 markets)				
Gallons	184,133	112,688	2,674	299,495
Half gallons	266,863	737,495	73	1,004,431
Quarts	102,665	147,007	1	249,673
Pints	2,976	37,812	6	40,794
Half pints	18,328	173,549	23	191,900
Other	150	7,702	12	7,864
<u>Total glass</u>	<u>575,115</u>			
Bulk: 4/				
(5-10 qts.)	7,697	0	13,027	20,724
(over 10 qts.)	46,566	0	34,280	80,846
<u>Total can</u>	<u>54,263</u>			
Total	629,378	1,216,253	50,096	1,895,727

1965 (68 markets)				
Gallons	182,434	165,212	22,662	370,308
Half gallons	320,433	890,438	133	1,211,004
Quarts	121,315	170,628	73	292,016
Pints	2,658	43,686	151	46,495
Half pints	18,832	216,884	257	235,973
Other	312	11,018	49	11,379
<u>Total glass</u>	<u>645,984</u>			
Bulk: 4/				
(5-10 qts.)	7,424	0	24,441	31,865
(over 10 qts.)	45,630	0	53,817	99,447
<u>Total can</u>	<u>53,054</u>			
Total	699,038	1,497,866	101,583	2,298,487

TABLE 3--SUMMARY OF FLUID MILK SALES BY SIZE AND TYPE OF CONTAINER, BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS 1/, NOVEMBER OF SELECTED YEARS, 1963 TO 1988 2/ -CONTINUED

Size of container	Type of container			
	Glass	Paper	Plastic	Total
Thousand pounds				
1966 (68 markets)				
Gallons	142,176	217,693	33,642	393,511
Half gallons	292,989	882,261	1,288	1,176,538
Quarts	100,127	156,071	50	256,248
Pints	1,847	40,473	183	42,503
Half pints	14,690	222,174	577	237,441
Other	189	11,318	75	11,582
<u>Total glass</u>	<u>552,018</u>			
Bulk: 4/				
(5-10 qts.)	4,389	6	27,658	32,053
(over 10 qts.)	42,928	2	60,049	102,979
<u>Total can</u>	<u>47,317</u>			
<u>Total</u>	<u>599,335</u>	<u>1,529,998</u>	<u>123,522</u>	<u>2,252,855</u>
1967 (71 markets)				
Gallons	123,583	254,464	57,226	435,273
Half gallons	252,263	968,973	7,033	1,228,269
Quarts	80,847	153,915	244	235,006
Pints	1,123	40,844	203	42,170
Half pints	9,887	243,970	725	254,582
Other	136	14,677	148	14,961
<u>Total glass</u>	<u>467,839</u>			
Bulk: 4/				
(5-10 qts.)	1,192	2	32,814	34,008
(over 10 qts.)	31,483	0	74,599	106,082
<u>Total can</u>	<u>32,675</u>			
<u>Total</u>	<u>500,514</u>	<u>1,676,845</u>	<u>172,992</u>	<u>2,350,351</u>
1969 (66 markets)				
Gallons	98,399	471,542	145,112	715,053
Half gallons	187,711	1,285,794	32,618	1,506,123
Quarts	91,942	325,434	407	417,783
Pints	764	54,447	364	55,575
Half pints	4,447	318,378	1,697	324,522
Other	90	24,607	874	25,571
<u>Total glass</u>	<u>383,353</u>			
Bulk: 4/				
(5-10 qts.)	2,434	57	40,682	43,173
(over 10 qts.)	23,068	0	117,973	141,041
<u>Total can</u>	<u>25,502</u>			
<u>Total</u>	<u>408,855</u>	<u>2,480,259</u>	<u>339,727</u>	<u>3,228,841</u>

Continued

TABLE 3--SUMMARY OF FLUID MILK SALES BY SIZE AND TYPE OF CONTAINER, BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS 1/, NOVEMBER OF SELECTED YEARS, 1963 TO 1989 2/-CONTINUED

Size of container	Type of container			Total
	Glass	Paper	Plastic	
Thousand pounds				
1971 (61 markets)				
Gallons	50,569	623,993	311,173	985,735
Half gallons	115,633	1,319,249	49,518	1,484,400
Quarts	55,536	306,610	2,898	365,044
Pints	509	58,213	460	59,182
Half pints	3,359	365,346	2,773	371,478
Other	72	22,901	594	23,567
<u>Total glass</u>	<u>225,678</u>			
Bulk: 4/				
(5-10 qts.)	2,246	35	29,942	32,223
(over 10 qts.)	11,777	2	107,885	119,664
<u>Total can</u>	<u>14,023</u>			
<u>Total</u>	<u>239,701</u>	<u>2,696,349</u>	<u>505,243</u>	<u>3,441,293</u>

1973 (61 markets)				
Gallons	33,020	598,926	641,224	1,273,170
Half gallons	69,259	1,185,786	56,594	1,311,639
Quarts	30,852	263,617	1,205	295,674
Pints	609	61,644	885	63,138
Half pints	1,340	348,131	7,619	357,090
Other	16	22,704	2,127	24,847
<u>Total glass</u>	<u>135,096</u>			
Bulk: 4/				
(5-10 qts.)	290	26	19,146	19,462
(over 10 qts.)	10,575	6	111,238	121,819
<u>Total can</u>	<u>10,865</u>			
<u>Total</u>	<u>145,961</u>	<u>2,480,840</u>	<u>840,038</u>	<u>3,466,839</u>

1975 (56 markets)				
Gallons	11,470	567,698	842,788	1,421,956
Half gallons	49,224	1,042,423	43,877	1,135,524
Quarts	18,911	223,425	1,670	244,006
Pints	220	55,966	1,785	57,971
Half pint	427	352,407	10,874	363,708
Other	143	27,535	9,498	37,176
<u>Total glass</u>	<u>80,395</u>			
Bulk: 4/				
(5-10 qts.)	23	17	9,603	9,643
(over 10 qts.)	3,389	17	105,957	109,363
<u>Total can</u>	<u>3,412</u>			
<u>Total</u>	<u>83,807</u>	<u>2,269,488</u>	<u>1,026,052</u>	<u>3,379,347</u>

Continued

TABLE 3--SUMMARY OF FLUID MILK SALES BY SIZE AND TYPE OF CONTAINER, BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS 1/, NOVEMBER OF SELECTED YEARS, 1963 TO 1989 2/-CONTINUED

Size of container	Type of container			Total
	Glass	Paper	Plastic	
Thousand pounds				
1977 (47 markets)				
Gallons	5,130	434,546	1,256,516	1,696,192
Three quarts		1,737	3,493	5,230
Half gallons	28,111	943,160	50,142	1,021,413
Quarts	11,019	189,153	894	201,066
Pints	6	43,164	184	43,354
Third quarts		2,034	5	2,039
Ten ounces		9,824		9,824
Half pints	344	379,474	1,907	381,725
<u>Total glass</u>	<u>44,610</u>			
Six gallons	531		49,946	50,477
Five gallons	2,681		47,009	49,690
Two and one-half gallons	35		5,372	5,407
<u>Total can</u>	<u>3,247</u>			
All other sizes**	665	1,181	5,649	7,495
<u>Total of all sizes</u>	<u>48,522</u>	<u>2,004,273</u>	<u>1,421,117</u>	<u>3,473,912</u>
1979 (47 markets)				
Gallons	1,602	264,126	1,596,523	1,862,251
Three quarts		311	**	311
Half gallons	20,607	343,425	47,123	911,155
Quarts	6,378	178,829	242	185,449
Pints	4	46,635	267	46,906
Third quarts		1,649	7	1,656
Ten ounces	**	9,310	**	9,310
Half pints	6,086	377,155	2,301	385,542
<u>Total glass</u>	<u>34,677</u>			
Six gallons	**	43,859	43,859	
Five gallons	1,859		53,815	55,674
Two and one-half gallons			1,814	1,814
<u>Total can</u>	<u>1,859</u>			
All other sizes**	599	425	7,426	8,450
<u>Total of all sizes</u>	<u>37,135</u>	<u>1,721,865</u>	<u>1,753,377</u>	<u>3,512,377</u>
1981 (48 markets)				
Gallons	1,033	131,866	1,756,268	1,889,167
Three quarts	**	**	2,652	2,652
Half gallons	14,579	718,339	53,141	786,059
Quarts	3,748	165,641	1,575	170,964
Pints	**	45,477	135	45,612
Third quarts		720	12	732
Ten ounces		8,588		8,588
Half pints	60	321,270	1,105	322,435
<u>Total glass</u>	<u>19,420</u>			
Six gallons			34,997	34,997
Five gallons	436		56,394	56,830
Two and one-half gallons	**		2,162	2,162
<u>Total can</u>	<u>436</u>			
All other sizes**	70	1,107	2,444	3,621
<u>Total of all sizes</u>	<u>19,926</u>	<u>1,393,008</u>	<u>1,910,885</u>	<u>3,323,819</u>

CONTINUED

TABLE 3--SUMMARY OF FLUID MILK SALES BY SIZE AND TYPE OF CONTAINER, BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS 1/, NOVEMBER OF SELECTED YEARS, 1963 TO 1989 2/-CONTINUED

Size of container	Type of container			
	Glass	Paper	Plastic	Total
Thousand pounds				
1983 (46 markets)				
Gallons	568	65,963	1,960,991	2,027,522
Three quarts		273	55	328
Half gallons	11,553	690,400	92,646	794,599
Quarts	2,985	169,302	2,059	174,346
Pints	17	53,099	232	53,348
Third quarts		554		554
Ten ounces		8,221		8,221
Half pints	383	331,752	1,214	333,349
<u>Total glass</u>	<u>15,506</u>			
Six gallons	**		32,308	32,308
Five gallons	156		55,724	55,880
Two and one-half gallons	**		2,179	2,179
<u>Total can</u>	<u>156</u>			
All other sizes	200	1,287	1,877	3,364
<u>Total of all sizes</u>	<u>15,862</u>	<u>1,320,851</u>	<u>2,149,285</u>	<u>3,485,998</u>
1985 (44 markets)				
Gallons	**	33,616	2,124,251	2,157,867
Three quarts			416	416
Half gallons	10,763	653,221	137,125	801,109
Quarts	2,437	169,346	2,402	174,185
Pints	**	58,190	617	58,807
Third quarts		256		256
Ten ounces		8,354	**	8,354
Half pints	**	325,701	2,104	327,805
<u>Total glass</u>	<u>13,200</u>			
Six gallons			31,792	31,792
Five gallons	**	**	56,837	56,837
Two and one-half gallons			2,907	2,907
<u>Total can</u>	<u>5/</u>			
All other sizes	458	1,888	2,076	4,422
<u>Total of all sizes</u>	<u>13,658</u>	<u>1,250,572</u>	<u>2,360,527</u>	<u>3,624,757</u>
1987 (43 markets)				
Gallons	124	29,100	2,083,726	2,112,950
Three quarts		**	**	**
Half gallons	7,744	552,021	172,470	732,235
Quarts	1,835	158,245	3,359	163,439
Pints	**	59,325	1,499	60,824
Third quarts		400		400
Ten ounces		7,656	**	7,656
Half pints	**	331,864	2,372	334,236
<u>Total glass</u>	<u>9,703</u>			
Six gallons	14		28,012	28,026
Five gallons	260		50,972	51,232
Two and one-half gallons	**		1,974	1,974
<u>Total can</u>	<u>274</u>			
All other sizes	51	4,974	2,269	7,294
<u>Total of all sizes</u>	<u>10,028</u>	<u>1,143,585</u>	<u>2,346,653</u>	<u>3,500,266</u>

See footnotes on page 16.

TABLE 3--SUMMARY OF FLUID MILK SALES BY SIZE AND TYPE OF CONTAINERS, BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS 1/, NOVEMBER OF SELECTED YEARS, 1963 TO 1989 2/

Size of container	Type of container			Total
	Glass	Paper	Plastic	
<u>Thousand pounds</u>				
1989 (41 markets)				
GALLONS	**	15,177	2,194,731	2,209,908
THREE QUARTS		**	**	**
HALF GALLONS	6,971	537,030	209,706	753,707
QUARTS	972	156,486	3,366	160,824
PINTS		56,182	1,940	58,122
THIRD QUARTS		431		431
TEN OUNCES		7,262	78	7,340
HALF PINTS	**	342,163	2,434	344,597
<u>TOTAL GLASS</u>	<u>7,943</u>			
SIX GALLONS			24,005	24,005
FIVE GALLONS	**		50,494	50,494
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>	<u>*</u>			
ALL OTHER SIZES	263	5,558	2,461	8,282
<u>TOTAL OF ALL SIZES</u>	<u>8,206</u>	<u>1,120,289</u>	<u>2,489,215</u>	<u>3,617,710</u>

FOOTNOTES FOR TABLE 3.

* Data for plastic were not available.

** Represents sales made by fewer than three handlers which cannot be shown without revealing the volume of their individual business. Quantities are included in "all other sizes".

1/ Number of markets for which complete data were available.

2/ Based on total sales including both wholesale and home deliveries. Data for 1963-1975 include sales of whole milk items, lowfat and skim milk items, mixtures, cream items, and eggnog. Data for 1977 to date represent sales of whole milk items and lowfat and skim milk items only.

3/ Includes 5-10 quart containers; breakdown by type of container was not available.

4/ Quantities indicated under glass represent metal cans; under plastic represent mostly bag-in-box containers.

5/ Less than 500 pounds.

FOOTNOTES FOR TABLE 4

* Less than 500 pounds.

** Represents sales made by fewer than three handlers which cannot be shown without revealing the volume of their individual business. Quantities are included in "all other sizes."

1/ Based on total sales including both wholesale and home-delivered. See Appendix D for the Federal milk order markets included.

2/ Two and one-half gallon and larger containers under glass represent metal can, under plastic represent mostly bag-in-box containers.

3/ Whole milk items include plain and flavored whole milk and miscellaneous whole milk products.

4/ Lowfat and skim milk items include plain, solids added, and flavored lowfat and skim milk, buttermilk and miscellaneous products.

5/ Whole milk items and lowfat and skim milk items combined.

TABLE 3.- TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER 2/	TYPE OF CONTAINER			
	GLASS	PAPER	PLASTIC	TOTAL
THOUSAND POUNDS				
<u>ALABAMA-WEST FLORIDA</u>				
GALLONS			51,205	51,205
HALF GALLONS				
QUARTS	6,173		10,645	16,818
PINTS	2,552		**	2,552
THIRD QUARTS	1,704		32	1,736
TEN OUNCES	**			**
HALF PINTS	**			**
<u>TOTAL GLASS</u>	10,009			10,009
SIX GALLONS			395	395
FIVE GALLONS			177	177
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES	51		98	149
<u>TOTAL OF ALL SIZES</u>	20,489		62,552	83,041
<u>CAROLINA</u>				
GALLONS	6,076		121,160	127,236
HALF GALLONS	9,943		24,140	34,089
QUARTS	5,197			5,197
PINTS	2,762			2,762
TEN OUNCES	11			11
HALF PINTS	17,919			17,919
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			997	997
<u>TOTAL CAN</u>				
ALL OTHER SIZES			387	387
<u>TOTAL OF ALL SIZES</u>	41,908		146,690	188,598
<u>CENTRAL ARIZONA</u>				
GALLONS			54,055	54,055
HALF GALLONS			**	10,179
QUARTS	10,179			2,376
PINTS	2,376			1,160
TEN OUNCES	1,160			125
HALF PINTS	125			5,790
<u>TOTAL GLASS</u>	5,790			
SIX GALLONS			2,636	2,636
<u>TOTAL CAN</u>				
ALL OTHER SIZES	5		795	800
<u>TOTAL OF ALL SIZES</u>	19,035		57,486	77,121

CONTINUED

TABLE 4.--SUMMARY OF FLUID MILK SALES BY SIZE AND TYPE OF CONTAINERS, BY HANDLERS REGULATED UNDER 42 FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER 2/	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
THOUSAND POUNDS				
WHOLE MILK ITEMS 3/				
GALLONS	**	4,029	903,008	907,037
THREE QUARTS		**		**
HALF GALLONS	2,009	169,654	98,136	270,004
QUARTS	436	69,332	1,769	71,537
PINTS		44,255	1,030	45,285
THIRD QUARTS		**		**
TEN OUNCES		1,781		1,781
HALF PINTS	**	102,606	784	103,390
<u>TOTAL GLASS</u>	<u>2,445</u>			
SIX GALLONS	115		10,256	10,371
FIVE GALLONS		**	16,353	16,353
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>	<u>115</u>			
ALL OTHER SIZES	20	2,531	671	3,222
<u>TOTAL OF ALL SIZES</u>	<u>2,580</u>	<u>344,393</u>	<u>1,032,007</u>	<u>1,428,980</u>
LOWFAT AND SKIM MILK ITEMS 4/				
GALLONS	**	25,132	1,520,466	1,545,598
THREE QUARTS			**	**
HALF GALLONS	4,936	304,778	159,348	469,062
QUARTS	400	82,616	1,738	84,754
PINTS	**	9,852	451	10,303
THIRD QUARTS		**		**
TEN OUNCES		3,745		3,745
HALF PINTS		241,620	3,828	245,448
<u>TOTAL GLASS</u>	<u>5,336</u>			
SIX GALLONS	307		11,973	12,280
FIVE GALLONS	**		34,376	34,376
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>	<u>307</u>			
ALL OTHER SIZES	40	3,505	1,109	4,654
<u>TOTAL OF ALL SIZES</u>	<u>5,683</u>	<u>671,248</u>	<u>1,733,289</u>	<u>2,410,220</u>
TOTAL FLUID MILK ITEMS 5/				
GALLONS	**	29,161	2,423,474	2,452,635
THREE QUARTS		**	**	**
HALF GALLONS	6,945	474,637	257,484	739,066
QUARTS	836	151,948	3,507	156,291
PINTS	**	54,107	1,481	55,588
THIRD QUARTS		**		**
TEN OUNCES		5,526		5,526
HALF PINTS	**	344,226	4,612	348,838
<u>TOTAL GLASS</u>	<u>7,781</u>			
SIX GALLONS	422		22,229	22,651
FIVE GALLONS	**	**	50,729	50,729
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>	<u>422</u>			
ALL OTHER SIZES	60	6,036	1,780	7,876
<u>TOTAL OF ALL SIZES</u>	<u>8,263</u>	<u>1,065,641</u>	<u>2,765,296</u>	<u>3,839,200</u>

TABLE 5 — TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER <u>2/</u>	TYPE OF CONTAINER			
	GLASS	PAPER	PLASTIC	TOTAL
THOUSAND POUNDS				
CENTRAL ARKANSAS				
GALLONS	**	4,582	15,958	20,540
HALF GALLONS	**	1,676	2,760	4,436
QUARTS	**	**	248	248
PINTS		**		**
HALF PINTS		3,097		3,097
<u>TOTAL GLASS</u>				
FIVE GALLONS			748	748
<u>TOTAL CAN</u>				
ALL OTHER SIZES	69	1,051		1,120
<u>TOTAL OF ALL SIZES</u>	69	10,406	19,714	30,189
CHICAGO REGIONAL				
GALLONS	**	**	182,713	182,713
HALF GALLONS	842	8,440	20,140	29,422
QUARTS	**	7,333	**	7,333
PINTS		1,195	**	1,195
TEN OUNCES		690		690
HALF PINTS		20,223		20,223
<u>TOTAL GLASS</u>	842			
SIX GALLONS			**	**
FIVE GALLONS		**	2,851	2,851
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES	16	645	1,221	1,882
<u>TOTAL OF ALL SIZES</u>	858	38,526	206,925	246,309
EASTERN OHIO-WESTERN PENNSYLVANIA				
GALLONS		**	101,561	101,561
HALF GALLONS	**	30,565	2,884	33,449
QUARTS	17	5,559	394	5,970
PINTS		1,921	**	1,921
TEN OUNCES		**		**
HALF PINTS		11,804	**	11,804
<u>TOTAL GLASS</u>	17			
SIX GALLONS			639	639
FIVE GALLONS			1,345	1,345
<u>TOTAL CAN</u>				
ALL OTHER SIZES	71	3,491	391	3,953
<u>TOTAL OF ALL SIZES</u>	88	53,340	107,214	160,642

CONTINUED

TABLE 5.—TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER <u>2/</u>	TYPE OF CONTAINER			
	GLASS	PAPER	PLASTIC	TOTAL
THOUSAND POUNDS.				
EASTERN COLORADO				
GALLONS			38,900	38,900
HALF GALLONS	**	9,206	**	9,206
QUARTS		2,094	**	2,094
PINTS		840		840
TEN OUNCES		79		79
HALF PINTS		3,783		3,783
<u>TOTAL GLASS</u>				
SIX GALLONS			450	450
FIVE GALLONS			672	672
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES		9	1,215	1,224
TOTAL OF ALL SIZES		16,011	41,237	57,248
GEORGIA				
GALLONS		**	27,978	27,978
HALF GALLONS	**	2,470	5,268	7,738
QUARTS		2,012	**	2,012
PINTS		1,204		1,204
TEN OUNCES		**		**
HALF PINTS		12,162	**	12,162
<u>TOTAL GLASS</u>				
FIVE GALLONS			1,042	1,042
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES	78	54	676	808
TOTAL OF ALL SIZES	78	17,902	34,964	52,944
GREAT BASIN				
GALLONS			46,985	46,985
HALF GALLONS		4,234	5,649	9,883
QUARTS		4,434	56	4,490
PINTS		832	**	832
THIRD QUARTS		**		**
TEN OUNCES		**		**
HALF PINTS		4,160		4,160
<u>TOTAL GLASS</u>				
SIX GALLONS			732	732
FIVE GALLONS			1,359	1,359
<u>TOTAL CAN</u>				
ALL OTHER SIZES		1,019	30	1,049
TOTAL OF ALL SIZES		14,679	54,811	69,490

CONTINUED

TABLE 5.—TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 ^{1/}

SIZE OF CONTAINER ^{2/}	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
<u>THOUSAND POUNDS</u>				
<u>GREATER LOUISIANA</u>				
GALLONS		1,128	23,149	24,277
HALF GALLONS		3,916	2,231	6,147
QUARTS		801	**	801
PINTS		841		841
HALF PINTS		5,650	**	5,650
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			853	853
<u>TOTAL CAN</u>				
ALL OTHER SIZES			1,805	1,805
<u>TOTAL OF ALL SIZES</u>		12,336	28,038	40,374
<u>INDIANA</u>				
GALLONS		**	74,759	74,759
HALF GALLONS		12,664	2,277	14,941
QUARTS		2,133		2,133
PINTS		701	**	701
TEN OUNCES		466		466
HALF PINTS		7,713	**	7,713
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			2,369	2,369
<u>TOTAL CAN</u>				
ALL OTHER SIZES		1,305	251	1,556
<u>TOTAL OF ALL SIZES</u>		24,462	79,656	104,638
<u>IOWA</u>				
GALLONS		**	50,773	50,773
HALF GALLONS		6,871	1,041	7,912
QUARTS		1,873	**	1,873
PINTS		478		478
TEN OUNCES		499		499
HALF PINTS		9,724	**	9,724
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			2,330	2,330
<u>TOTAL CAN</u>				
ALL OTHER SIZES		12	181	193
<u>TOTAL OF ALL SIZES</u>		19,457	54,325	73,782

CONTINUED

TABLE 5.- TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER 2/	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
THOUSAND POUNDS				
<u>LOUISVILLE-LEXINGTON-EVANSVILLE</u>				
GALLONS			56,250	56,250
HALF GALLONS		1,558	6,640	8,198
QUARTS		1,307		1,307
PINTS		902		902
TEN OUNCES		**		**
HALF PINTS		5,125		5,125
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			721	721
<u>TOTAL CAN</u>				
ALL OTHER SIZES		42	157	199
<u>TOTAL OF ALL SIZES</u>		8,934	63,768	72,702

MEMPHIS 3/

GALLONS				
HALF GALLONS				
QUARTS				
PINTS				
TEN OUNCES				
HALF PINTS				
<u>TOTAL GLASS</u>				
FIVE GALLONS				
<u>TOTAL CAN</u>				
ALL OTHER SIZES				
<u>TOTAL OF ALL SIZES</u>				

MICHIGAN UPPER PENINSULA 3/

GALLONS				
HALF GALLONS				
QUARTS				
PINTS				
HALF PINTS				
<u>TOTAL GLASS</u>				
FIVE GALLONS				
<u>TOTAL CAN</u>				
ALL OTHER SIZES				
<u>TOTAL OF ALL SIZES</u>				

CONTINUED

TABLE 5.—TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER 2/	TYPE OF CONTAINER			
	GLASS	PAPER	PLASTIC	TOTAL
THOUSAND POUNDS				
<u>MIDDLE ATLANTIC</u>				
GALLONS		5,076	151,983	157,059
HALF GALLONS	**	51,349	10,406	61,755
QUARTS	**	16,043	246	16,289
PINTS		5,101	367	5,468
TEN OUNCES		409		409
HALF PINTS		22,446	569	23,015
<u>TOTAL GLASS</u>				
SIX GALLONS			1,145	1,145
FIVE GALLONS			3,269	3,269
<u>TOTAL CAN</u>				
ALL OTHER SIZES	550	594	15	1,159
<u>TOTAL OF ALL SIZES</u>	550	101,018	168,060	270,228
<u>NASHVILLE</u>				
GALLONS		**	47,047	47,047
HALF GALLONS		**	7,238	7,238
QUARTS		1,527		1,527
PINTS		**		**
TEN OUNCES		**		**
HALF PINTS		**		**
<u>TOTAL GLASS</u>				**
FIVE GALLONS			**	**
<u>TOTAL CAN</u>				**
ALL OTHER SIZES		13,923	255	14,178
<u>TOTAL OF ALL SIZES</u>		13,923	54,540	69,990
<u>NEBRASKA-WESTERN IOWA</u>				
GALLONS			36,087	36,087
HALF GALLONS		6,173	**	6,173
QUARTS		1,339		1,339
PINTS		345		345
THIRD QUARTS		**		**
TEN OUNCES		**		**
HALF PINTS		4,501	**	4,501
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			1,340	1,340
<u>TOTAL CAN</u>				
ALL OTHER SIZES		4	4,730	4,734
<u>TOTAL OF ALL SIZES</u>		12,422	42,757	55,179

CONTINUED

TABLE 5.- TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER <u>2/</u>	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
THOUSAND POUNDS				
NEW ENGLAND				
GALLONS			129,450	129,450
THREE QUARTS		**	**	**
HALF GALLONS	729	39,952	15,265	55,946
QUARTS	242	10,911	406	11,559
PINTS		2,725	503	3,228
TEN OUNCES		73		73
HALF PINTS	**	18,459	**	18,459
<u>TOTAL GLASS</u>	971			
SIX GALLONS	422		1,200	1,622
FIVE GALLONS			4,665	4,665
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>	422			
ALL OTHER SIZES		1,034	853	1,887
<u>TOTAL OF ALL SIZES</u>	1,393	73,154	152,342	226,889
NEW ORLEANS-MISSISSIPPI				
GALLONS			33,192	33,192
HALF GALLONS		4,049	5,971	10,020
QUARTS		1,197	**	1,197
PINTS		1,152		1,152
HALF PINTS		8,418	489	8,907
<u>TOTAL GLASS</u>				
SIX GALLONS			315	315
FIVE GALLONS			184	184
<u>TOTAL CAN</u>				
ALL OTHER SIZES		53	37	90
<u>TOTAL OF ALL SIZES</u>		14,869	40,188	55,057
NEW YORK-NEW JERSEY				
GALLONS		43	164,090	164,133
HALF GALLONS	3,320	112,652	5,400	121,372
QUARTS	365	44,242	590	45,197
PINTS	**	5,899	84	5,983
TEN OUNCES		79		79
HALF PINTS		31,433	276	31,709
<u>TOTAL GLASS</u>	3,685			
SIX GALLONS			5,925	5,925
FIVE GALLONS			1,419	1,419
<u>TOTAL CAN</u>				
ALL OTHER SIZES	6	1,716		1,722
<u>TOTAL OF ALL SIZES</u>	3,691	196,064	177,784	377,539

CONTINUED

TABLE 5.—TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER 2/	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
THOUSAND POUNDS				
OHIO VALLEY				
GALLONS		424	99,744	100,168
HALF GALLONS		6,483	7,743	14,226
QUARTS		2,662	39	2,701
PINTS		2,372	23	2,395
TEN OUNCES		**		**
HALF PINTS		12,249		12,249
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			2,276	2,276
<u>TOTAL CAN</u>				
ALL OTHER SIZES		289	30	319
TOTAL OF ALL SIZES		24,479	109,855	134,334
PACIFIC NORTHWEST				
GALLONS	**	69	113,713	113,782
HALF GALLONS	**	33,575	920	34,495
QUARTS		6,591		6,591
PINTS		2,474		2,474
THIRD QUARTS		**		**
TEN OUNCES		509		509
HALF PINTS		9,468		9,468
<u>TOTAL GLASS</u>				
SIX GALLONS			1,758	1,758
FIVE GALLONS			2,156	2,156
<u>TOTAL CAN</u>				
ALL OTHER SIZES	57	22	143	222
TOTAL OF ALL SIZES	57	52,708	118,690	171,455
RIO GRANDE VALLEY				
GALLONS			18,194	18,194
HALF GALLONS		4,608	311	4,919
QUARTS		803		803
PINTS		352		352
HALF PINTS		3,290		3,290
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			477	477
<u>TOTAL CAN</u>				
ALL OTHER SIZES			191	191
TOTAL OF ALL SIZES		9,053	19,173	28,226

CONTINUED

TABLE 5.- TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER 2/	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
THOUSAND POUNDS				
SOUTHERN ILLINOIS-EASTERN MISSOURI				
GALLONS			65,651	65,651
HALF GALLONS	**	7,398	3,356	10,754
QUARTS	**	1,816	303	2,119
PINTS		837		837
TEN OUNCES		148		148
HALF PINTS		10,095	**	10,095
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			2,935	2,935
<u>TOTAL CAN</u>				
ALL OTHER SIZES	848	154	639	1,641
<u>TOTAL OF ALL SIZES</u>	<u>848</u>	<u>20,448</u>	<u>73,884</u>	<u>95,180</u>
SOUTHEASTERN FLORIDA				
GALLONS			45,248	45,248
HALF GALLONS		4,613	15,091	20,704
QUARTS		3,090	**	3,090
PINTS		1,369		1,369
HALF PINTS		7,647		7,647
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			812	812
<u>TOTAL CAN</u>				
ALL OTHER SIZES			775	775
<u>TOTAL OF ALL SIZES</u>		<u>15,719</u>	<u>63,926</u>	<u>80,645</u>
SOUTHERN MICHIGAN				
GALLONS		**	123,852	123,852
HALF GALLONS	228	5,070	14,539	24,837
QUARTS	83	4,347	**	4,430
PINTS		1,984	99	2,083
TEN OUNCES		136		136
HALF PINTS		13,783		13,783
<u>TOTAL GLASS</u>	<u>311</u>			
FIVE GALLONS			996	996
<u>TOTAL CAN</u>				
ALL OTHER SIZES		706	118	824
<u>TOTAL OF ALL SIZES</u>	<u>311</u>	<u>26,026</u>	<u>144,604</u>	<u>170,941</u>

CONTINUED

TABLE 5.- TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 ^{1/}

SIZE OF CONTAINER ^{2/}	TYPE OF CONTAINER			
	GLASS	PAPER	PLASTIC	TOTAL
<u>THOUSAND POUNDS</u>				
<u>SOUTHWESTERN IDAHO-EASTERN OREGON</u>				
GALLONS	**	**	6,138	6,138
HALF GALLONS	**	5,047	**	5,047
QUARTS	**	557		557
PINTS		271		271
TEN OUNCES		**		**
HALF PINTS		1,249		1,249
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES	43	418	426	887
<u>TOTAL OF ALL SIZES</u>	<u>43</u>	<u>7,542</u>	<u>6,564</u>	<u>14,149</u>
<u>SOUTHWEST PLAINS</u>				
GALLONS		53	85,954	86,007
HALF GALLONS		5,870	16,122	21,992
QUARTS		2,158		2,158
PINTS		1,746		1,746
HALF PINTS		11,435	32	11,467
<u>TOTAL GLASS</u>				
FIVE GALLONS			2,259	2,259
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES		20	122	142
<u>TOTAL OF ALL SIZES</u>		<u>21,282</u>	<u>104,489</u>	<u>125,771</u>
<u>TAMPA BAY</u>				
GALLONS			32,802	32,802
HALF GALLONS		1,476	8,612	10,088
QUARTS		1,729		1,729
PINTS		1,319		1,319
TEN OUNCES		**		**
HALF PINTS		6,883		6,883
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES		1	675	676
<u>TOTAL OF ALL SIZES</u>		<u>11,408</u>	<u>42,089</u>	<u>53,497</u>

CONTINUED

TABLE 5.—TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER 2/	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
THOUSAND POUNDS				
TENNESSEE VALLEY				
GALLONS			48,524	48,524
HALF GALLONS		2,411	7,257	10,168
QUARTS		1,175		1,175
PINTS		2,203		2,203
TEN OUNCES		**		**
HALF PINTS		9,221		9,221
<u>TOTAL GLASS</u>				
FIVE GALLONS			1,100	1,100
<u>TOTAL CAN</u>				
ALL OTHER SIZES		298		298
TOTAL OF ALL SIZES		15,808	56,881	72,689
TEXAS				
GALLONS			190,134	190,134
HALF GALLONS		22,248	18,605	40,853
QUARTS		5,829	**	5,829
PINTS		4,837		4,837
HALF PINTS		26,472		26,472
<u>TOTAL GLASS</u>				
FIVE GALLONS			3,165	3,165
<u>TOTAL CAN</u>				
ALL OTHER SIZES			252	252
TOTAL OF ALL SIZES		59,386	212,156	271,542
UPPER FLORIDA				
GALLONS			51,887	51,887
HALF GALLONS		4,851	13,699	18,550
QUARTS		1,819		1,819
PINTS		883		883
TEN OUNCES		**		**
HALF PINTS		3,776		3,776
<u>TOTAL GLASS</u>				
FIVE GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES		26	758	784
TOTAL OF ALL SIZES		11,355	66,344	77,699

CONTINUED

TABLE 5.- TOTAL FLUID MILK ITEMS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER SELECTED FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER <u>2/</u>	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
THOUSAND POUNDS				
UPPER MIDWEST				
GALLONS		**	70,493	70,493
HALF GALLONS	**	53,751	7,296	41,047
QUARTS		3,288	**	3,288
PINTS		660		660
TEN OUNCES		1,078		1,078
HALF PINTS		11,481	**	11,481
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS	**		3,875	3,875
<u>TOTAL CAN</u>				
ALL OTHER SIZES	278	199	398	875
<u>TOTAL OF ALL SIZES</u>	278	50,457	82,062	132,797

** Represents sales made by fewer than three handlers which cannot be shown without revealing the volume of their individual operations. These data are included in "all other sizes".

1/ Based on total sales including both wholesale and home-delivery.

2/ Two and one-half gallon and larger containers under glass represent metal cans; under plastic represent mostly bag-in-box containers.

3/ All the data were restricted--pertains to fewer than three processing plants.

TABLE 6.-INDIVIDUAL FLUID MILK PRODUCTS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER 42 FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER 2/	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
	THOUSAND POUNDS			
	WHOLE MILK			
GALLONS	**	4,029	902,676	906,705
THREE QUARTS		**		**
HALF GALLONS	1,720	166,266	95,648	263,634
QUARTS	375	60,152	1,178	61,705
PINTS		23,344	700	24,044
THIRD QUARTS		**		**
TEN OUNCES		1,429		1,429
HALF PINTS	**	87,073	712	87,785
<u>TOTAL GLASS</u>	<u>2,095</u>			
SIX GALLONS	115		9,941	10,056
FIVE GALLONS		**	15,835	15,835
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>	<u>115</u>			
ALL OTHER SIZES	20	2,414	651	3,085
<u>TOTAL OF ALL SIZES</u>	<u>2,230</u>	<u>344,707</u>	<u>1,027,341</u>	<u>1,374,278</u>
	FLAVORED WHOLE MILK PRODUCTS			
GALLONS			335	335
HALF GALLONS	286	3,542	2,487	6,365
QUARTS	62	9,178	591	9,831
PINTS		20,914	332	21,246
THIRD QUARTS		**		**
TEN OUNCES		351		351
HALF PINTS		15,528	73	15,601
<u>TOTAL GLASS</u>	<u>348</u>			
SIX GALLONS			312	312
FIVE GALLONS			519	519
<u>TOTAL CAN</u>				
ALL OTHER SIZES		116	20	136
<u>TOTAL OF ALL SIZES</u>	<u>348</u>	<u>49,679</u>	<u>4,669</u>	<u>54,696</u>
	2% LOWFAT MILK - PLAIN			
GALLONS	**	13,879	946,603	960,482
HALF GALLONS	2,501	124,684	77,337	204,522
QUARTS	26	19,723	478	20,227
PINTS		1,611	**	1,611
THIRD QUARTS		**		**
TEN OUNCES		1,238		1,238
HALF PINTS		88,470	764	89,234
<u>TOTAL GLASS</u>	<u>2,527</u>			
SIX GALLONS	**		8,930	8,930
FIVE GALLONS	**		25,062	25,062
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES	222	1,450	778	2,450
<u>TOTAL OF ALL SIZES</u>	<u>2,749</u>	<u>251,055</u>	<u>1,059,952</u>	<u>1,313,756</u>

CONTINUED

TABLE 6.—INDIVIDUAL FLUID MILK PRODUCTS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER 42 FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER <u>2/</u>	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
THOUSAND POUNDS				
<u>2% LOWFAT MILK - MILK SOLIDS ADDED</u>				
GALLONS			46,207	46,207
HALF GALLONS		11,172	7,182	18,354
QUARTS		2,541	**	2,541
PINTS		70		70
TEN OUNCES		**		**
HALF PINTS		2,993		2,993
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			633	633
<u>TOTAL CAN</u>				
ALL OTHER SIZES		27	108	135
<u>TOTAL OF ALL SIZES</u>		16,803	54,130	70,933
<u>1% LOWFAT MILK - PLAIN</u>				
GALLONS	**	1,828	225,768	227,596
THREE QUARTS			**	**
HALF GALLONS	1,170	43,523	14,908	59,601
QUARTS	123	13,094	172	13,389
PINTS		58		58
TEN OUNCES		1,493		1,493
HALF PINTS		12,025	128	12,153
<u>TOTAL GLASS</u>	<u>1,293</u>			
SIX GALLONS			**	**
FIVE GALLONS			1,246	1,246
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES	8	69	1,045	1,122
<u>TOTAL OF ALL SIZES</u>	<u>1,301</u>	<u>72,090</u>	<u>245,267</u>	<u>316,658</u>
<u>1% LOWFAT MILK - MILK SOLIDS ADDED</u>				
GALLONS		**	26,530	26,530
HALF GALLONS	**	6,096	6,569	12,665
QUARTS		1,357		1,357
PINTS		**		**
HALF PINTS		819		819
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			143	143
<u>TOTAL CAN</u>				
ALL OTHER SIZES	41	504	49	594
<u>TOTAL OF ALL SIZES</u>	<u>41</u>	<u>8,776</u>	<u>33,291</u>	<u>42,108</u>

CONTINUED

TABLE 6.—INDIVIDUAL FLUID MILK PRODUCTS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER 42 FEDERAL MILK ORDERS, NOVEMBER 1991 1/

SIZE OF CONTAINER 2/	TYPE OF CONTAINER			
	GLASS	PAPER	PLASTIC	TOTAL
<u>THOUSAND POUNDS</u>				
<u>SKIM MILK - PLAIN</u>				
GALLONS	**	**	223,417	223,417
HALF GALLONS	1,133	67,597	34,154	102,884
QUARTS	226	19,650	346	20,222
PINTS	**	128	**	128
TEN OUNCES		215		215
HALF PINTS		18,471	65	18,536
<u>TOTAL GLASS</u>	<u>1,359</u>			
SIX GALLONS	67		1,211	1,278
FIVE GALLONS			4,291	4,291
<u>TOTAL CAN</u>	<u>67</u>			
ALL OTHER SIZES	10	9,179	48	9,237
<u>TOTAL OF ALL SIZES</u>	<u>1,436</u>	<u>115,240</u>	<u>263,532</u>	<u>300,208</u>
<u>SKIM MILK - MILK SOLIDS ADDED</u>				
GALLONS		**	39,413	39,413
HALF GALLONS	**	12,383	9,792	22,175
QUARTS		3,511	**	3,511
PINTS		**		**
TEN OUNCES		9		9
HALF PINTS		3,186	**	3,186
<u>TOTAL GLASS</u>				
SIX GALLONS			**	**
FIVE GALLONS			778	778
<u>TOTAL CAN</u>				
ALL OTHER SIZES	85	461	85	631
<u>TOTAL OF ALL SIZES</u>	<u>85</u>	<u>19,550</u>	<u>50,068</u>	<u>69,703</u>
<u>FLAVORED LOWFAT AND SKIM MILK PRODUCTS</u>				
GALLONS		**	8,551	8,551
HALF GALLONS	**	5,709	4,204	9,913
QUARTS	8	7,026	490	7,524
PINTS		7,336	369	7,705
THIRD QUARTS		**		**
TEN OUNCES		738		738
HALF PINTS		114,521	2,844	117,365
<u>TOTAL GLASS</u>	<u>8</u>			
SIX GALLONS	**		605	605
FIVE GALLONS			1,960	1,960
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES	39	918	132	1,089
<u>TOTAL OF ALL SIZES</u>	<u>47</u>	<u>136,248</u>	<u>19,155</u>	<u>155,450</u>

CONTINUED

TABLE 6.-INDIVIDUAL FLUID MILK PRODUCTS SOLD IN VARIOUS SIZES AND TYPES OF CONTAINERS BY HANDLERS REGULATED UNDER 42 FEDERAL MILK ORDERS, NOVEMBER 1991 ^{1/}

SIZE OF CONTAINER ^{2/}	TYPE OF CONTAINER			TOTAL
	GLASS	PAPER	PLASTIC	
	THOUSAND POUNDS			
			<u>BUTTERMILK</u>	
GALLONS	**	**	3,980	3,980
HALF GALLONS	**	33,619	5,203	38,822
QUARTS	**	15,712	246	15,958
PINTS		613	**	613
THIRD QUARTS		**		**
TEN OUNCES		40		40
HALF PINTS		1,143	**	1,143
<u>TOTAL GLASS</u>				
IX GALLONS			**	**
FIVE GALLONS			263	263
TWO AND ONE-HALF GALLONS			**	**
<u>TOTAL CAN</u>				
ALL OTHER SIZES	25	365	207	597
<u>TOTAL OF ALL SIZES</u>	25	51,498	9,899	61,422

** Represents sales made by fewer than three handlers which cannot be shown without revealing the volumes of their individual operations. These data are included in "all other sizes".

^{1/} Based on total sales including both wholesale and home-delivery.

^{2/} Two and one-half gallon and larger containers under glass represent metal cans; under plastic represents mostly bag-in-box containers.

TABLE 7--PERCENTAGE OF TOTAL FLUID MILK ITEMS 1/ DISTRIBUTED BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, GROUPED BY REGION, BY TYPE AND SIZE OF CONTAINER, NOVEMBER 1991

Region 2/	Total sales of fluid milk items 1/	Type of Container			
		Glass	Paper	Plastic	Other
	<u>Mil. lbs.</u>		<u>Percent of total sales</u>		
North Atlantic	874.5	0.6	42.4	57.0	*
South Atlantic	536.4	*	22.3	77.7	0
East North Central	984.7	0.2	20.0	79.8	0
West North Central	261.8	0.1	31.5	68.4	0
East South Central	142.7	0	21.9	78.1	0
West South Central	522.9	*	22.6	77.4	0
Mountain	246.2	*	27.2	72.8	0
Pacific	171.5	*	30.7	69.2	0
Total 3/	3,839.2	0.2	27.8	72.0	*

Region 2/	Size of Container						
	Gallon	Half-gallon	Quart	Pint	Half-pint	Over 10 qts.	Other
			<u>Percent of total sales</u>				
North Atlantic	51.6	27.4	8.4	1.7	8.4	2.1	0.5
South Atlantic	62.9	20.1	3.1	1.7	10.9	1.1	0.2
East North Central	72.2	13.9	2.7	1.1	8.2	1.5	0.4
West North Central	60.3	21.4	2.5	0.6	9.8	2.9	2.5
East South Central	71.2	15.5	1.9	2.1	8.1	0.9	0.2
West South Central	67.7	16.0	2.1	1.7	10.9	1.5	0.1
Mountain	66.7	16.8	4.2	1.4	7.4	2.7	0.7
Pacific	66.4	20.1	3.8	1.4	5.5	2.3	0.4
Total 3/	63.9	19.3	4.1	1.4	9.1	1.9	0.3

* Less than one-tenth of one percent.

1/ Includes plain and flavored whole milk products, plain, fortified, and flavored skim and lowfat milk products, buttermilk, and miscellaneous whole, lowfat and skim milk products.

2/ See Appendix D for the Federal milk order markets included in each region.

3/ Includes those Federal milk order markets for which all of the data were restricted -- pertains to fewer than three processing plants. See Appendix D.

TABLE 8-- SIZE AND TYPE OF CONTAINER IN WHICH THE LARGER VOLUMES OF SELECTED FLUID CREAM AND SPECIALTY PRODUCTS ARE SOLD BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, NOVEMBER 1991 1/

Federal milk order marketing area	Milk and cream mixtures		Light cream		Heavy cream	
	First container	Second container	First container	Second container	First container	Second container
<u>NORTH ATLANTIC</u>						
New England	qt.-p	1/2 gal.-p	pt.-p	qt.-p	pt.-p	1/2 pt.-p
New York-New Jersey	qt.-p	pt.-p	qt.-p	1/2 pt.-p	qt.-p	1/2 pt.-p
Middle Atlantic	qt.-p	pt.-p	qt.-p	pt.-p	qt.-p	pt.-p
<u>SOUTH ATLANTIC</u>						
Carolina	1/2 pt.-p	pt.-p	1/2 pt.-p	pt.-p	1/2 pt.-p	pt.-p
Georgia	qt.-p	pt.-p	qt.-p	15 oz.-c	qt.-p	1/2 pt.-p
Alabama-W. Florida	qt.-p	pt.-p	pt.-p	qt.-p	qt.-p	1/2 pt.-p
Upper Florida	qt.-p	pt.-p	1/2 pt.-p	qt.-p	qt.-p	1/2 pt.-p
Tampa Bay	qt.-p	3/8 oz.-pl	qt.-p	1/2 pt.-p	qt.-p	1/2 pt.-p
Southeastern Florida	qt.-p	pt.-p	qt.-p	1/2 pt.-p	qt.-p	6 gal.-pl
<u>EAST NORTH CENTRAL</u>						
Mich. Upper Penin.	pt.-p	3/8 oz.-pl	---	---	1/2 pt.-p	1/2 pt.-pl
Southern Michigan	qt.-p	pt.-p	1/2 pt.-p	qt.-p	qt.-p	1/2 pt.-p
E. Ohio-W. Pa.	qt.-p	pt.-p	1/2 pt.-p	qt.-p	qt.-p	1/2 pt.-p
Ohio Valley	qt.-p	pt.-p	---	---	5 gal.-pl	1/2 pt.-p
Indiana	qt.-p	pt.-p	qt.-p	1/2 pt.-p	1/2 pt.-p	qt.-p
Chicago Regional	pt.-p	qt.-p	15 oz.-c	qt.-p	1/2 pt.-p	qt.-p
Central Illinois	pt.-p	qt.-p	1/2 pt.-p	qt.-p	---	---
Southern Ill.-E. Mo.	qt.-p	pt.-p	pt.-p	qt.-p	1/2 pt.-p	qt.-p
Louisville-Lex.-Evans.	1/2 pt.-pl	pt.-p	---	---	1/2 pt.-p	qt.-p
<u>WEST NORTH CENTRAL</u>						
Upper Midwest	pt.-p	qt.-p	6.5 oz.-g	5 gal.-pl	pt.-p	1/2 gal.-p
Eastern South Dakota	pt.-p	qt.-p	14 oz.-c	---	pt.-p	1/2 pt.-p
Black Hills	pt.-p	qt.-p	---	---	1/2 pt.-p	qt.-p
Iowa	pt.-p	qt.-p	5 gal.-pl	gal.-pl	1/2 pt.-p	qt.-p
Nebraska-W. Iowa	pt.-p	qt.-p	pt.-p	14 oz.-c	1/2 pt.-p	pt.-p
Greater Kansas City	qt.-p	qt.-p	14 oz.-c	6.5 oz.-c	qt.-p	1/2 gal.-p
<u>EAST SOUTH CENTRAL</u>						
Tennessee Valley	pt.-p	3/8 oz.-pl	---	---	1/2 pt.-p	qt.-p
Nashville	qt.-p	pt.-p	1/2 pt.-p	pt.-p	pt.-p	1/2 pt.-p
Paducah	pt.-p	3/8 oz.-pl	---	---	1/2 pt.-p	---
Memphis	3/8 oz.-pl	pt.-p	6.5 oz.-c	7 oz.-c	1/2 pt.-p	qt.-p
<u>WEST SOUTH CENTRAL</u>						
Central Arkansas	pt.-p	qt.-p	6.5 oz.-c	---	1/2 pt.-p	qt.-p
Southv. Plains	pt.-p	qt.-p	pt.-p	15 oz.-c	1/2 pt.-p	qt.-p
Texas Panhandle	pt.-p	qt.-p	---	---	1/2 pt.-p	pt.-p
Lubbock-Plainview	pt.-p	qt.-p	---	---	1/2 pt.-p	qt.-p
Texas	qt.-p	3/8 oz.-pl	5 gal.-pl	1/2 pt.-p	qt.-p	1/2 pt.-p
Greater Louisiana	pt.-p	3/8 oz.-pl	pt.-p	1/2 pt.-p	1/2 pt.-p	qt.-p
New Orleans-Miss.	pt.-p	qt.-p	1/2 pt.-p	qt.-p	qt.-p	1/2 pt.-p
<u>MOUNTAIN</u>						
Eastern Colorado	qt.-p	pt.-p	pt.-p	1/2 pt.-p	pt.-p	1/2 pt.-p
Western Colorado	qt.-p	pt.-p	pt.-p	---	5 gal.-pl	qt.-p
S.W. Idaho-E. Oreg.	qt.-p	pt.-p	---	---	1/2 pt.-p	pt.-p
Great Basin	qt.-p	pt.-p	14 oz.-c	6.5 oz.-c	1/2 pt.-p	pt.-p
Central Arizona	qt.-p	pt.-p	7 oz.-c	16 oz.-c	qt.-p	1/2 gal.-p
Rio Grande Valley	qt.-p	pt.-p	---	---	qt.-p	1/2 pt.-p
<u>PACIFIC</u>						
Pacific Northwest	qt.-p	pt.-p	---	---	pt.-p	1/2 pt.-p

TABLE 8--SIZE AND TYPE OF CONTAINER IN WHICH THE LARGER VOLUMES OF SELECTED FLUID CREAM AND SPECIALITY PRODUCTS ARE SOLD BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, NOVEMBER 1991 1/ -CONTINUED

Federal milk order marketing area	Milk and cream mixture		Light cream		Heavy cream	
	First container	Second container	First container	Second container	First container	Second container
<u>NORTH ATLANTIC</u>						
New England	1/2 pt.-pl	pt.-pl	1/2 gal.-p	qt.-p	5 lb.-pl	pt.-pl
New York-New Jersey	1/2 pt.-pl	6 oz.-pl	qt.-p	1/2 gal.-p	pt.-pl	5 qt.-pl
Middle Atlantic	1/2 pt.-pl	pt.-pl	1/2 gal.-p	qt.-p	pt.-pl	1/2 pt.-pl
<u>SOUTH ATLANTIC</u>						
Carolina	1/2 pt.-pl	6 oz.-pl	qt.-p	1/2 gal.-p	1/2 pt.-pl	1 lb.-pl
Georgia	5 lb.-pl	1/2 pt.-pl	qt.-p	1/2 gal.-p	5 lb.-pl	1/2 pt.-pl
Alabama-W. Florida	1/2 pt.-p	1/2 pt.-pl	qt.-p	---	5 lb.-pl	1/2 pt.-pl
Upper Florida	1/2 pt.-pl	5 lb.-pl	1/2 gal.-p	qt.-p	5 lb.-pl	1/2 pt.-pl
Tampa Bay	1/2 pt.-pl	5 oz.-pl	qt.-p	1/2 gal.-pl	pt.-pl	1/2 pt.-pl
Southeastern Florida	1/2 pt.-p	10 lb.-pl	1/2 gal.-pl	qt.-p	5 lb.-pl	1/2 pt.-pl
<u>EAST NORTH CENTRAL</u>						
Mich. Upper Penin.	1/2 pt.-pl	5 lb.-pl	qt.-p	---	pt.-pl	1/2 pt.-pl
Southern Michigan	1/2 pt.-pl	qt.-pl	qt.-p	qt.-pl	pt.-pl	5 lb.-pl
E. Ohio-W. Pa.	5 lb.-pl	1/2 pt.-pl	qt.-p	1/2 gal.-pl	pt.-pl	1/2 pt.-pl
Ohio Valley	1/2 pt.-pl	6 oz.-pl	qt.-p	1/2 gal.-p	pt.-pl	1/2 pt.-pl
Indiana	1/2 pt.-pl	5 lb.-pl	qt.-p	1/2 gal.-p	1 lb.-pl	5 lb.-pl
Chicago Regional	1/2 pt.-pl	5 lb.-pl	qt.-p	10 oz.-p	1 lb.-pl	5 lb.-pl
Central Illinois	1/2 pt.-pl	5 lb.-pl	qt.-p	---	1 lb.-pl	1/2 pt.-pl
Southern Ill.-E. Mo.	1/2 pt.-pl	5 lb.-pl	qt.-p	qt.-pl	pt.-pl	5 lb.-pl
Louisville-Lex.-Evans.	1/2 pt.-pl	6 oz.-pl	qt.-p	1/2 gal.-p	1/2 pt.-pl	pt.-pl
<u>WEST NORTH CENTRAL</u>						
Upper Midwest	1/2 pt.-pl	6 oz.-pl	qt.-p	pt.-p	pt.-pl	5 lb.-pl
Eastern South Dakota	6 oz.-pl	1/2 pt.-pl	qt.-p	---	5 lb.-pl	1/2 pt.-pl
Black Hills	1/2 pt.-pl	6 oz.-pl	qt.-p	pt.-p	pt.-pl	5 lb.-pl
Iowa	1/2 pt.-pl	6 oz.-pl	qt.-p	pt.-p	pt.-pl	1/2 pt.-pl
Nebraska-W. Iowa	6 oz.-pl	1/2 pt.-pl	qt.-p	1/2 gal.-p	pt.-pl	5 lb.-pl
Greater Kansas City	1/2 pt.-pl	6 oz.-pl	qt.-p	1/2 gal.-pl	pt.-pl	5 lb.-pl
<u>EAST SOUTH CENTRAL</u>						
Tennessee Valley	1/2 pt.-pl	5 lb.-pl	qt.-p	1/2 gal.-p	1 lb.-pl	1/2 pt.-pl
Nashville	1/2 pt.-pl	qt.-pl	qt.-p	1/2 gal.-pl	1 lb.-pl	1/2 pt.-pl
Paducah	1/2 pt.-pl	---	qt.-p	---	1/2 pt.-pl	pt.-pl
Memphis	1/2 pt.-pl	---	qt.-p	---	pt.-pl	5 lb.-pl
<u>WEST SOUTH CENTRAL</u>						
Central Arkansas	1/2 pt.-pl	---	qt.-p	1/2 gal.-p	1/2 pt.-pl	pt.-pl
Southwest Plains	1/2 pt.-pl	pt.-pl	qt.-p	1/2 gal.-pl	1/2 pt.-pl	5 lb.-pl
Texas Panhandle	1/2 pt.-pl	---	qt.-p	---	1/2 pt.-pl	pt.-pl
Lubbock-Plainview	1/2 pt.-pl	5 lb.-pl	qt.-p	---	1/2 pt.-pl	4 oz.-pl
Texas	1/2 pt.-pl	32 lb.-pl	qt.-p	1/2 gal.-p	pt.-pl	1/2 pt.-pl
Greater Louisiana	1/2 pt.-pl	5 lb.-pl	qt.-p	---	pt.-pl	1 oz.-pl
New Orleans-Miss.	1/2 pt.-pl	5 lb.-pl	qt.-p	---	5 lb.-pl	1/2 pt.-pl
<u>MOUNTAIN</u>						
Eastern Colorado	1/2 pt.-pl	qt.-pl	1/2 gal.-p	qt.-p	pt.-pl	5 lb.-pl
Western Colorado	1/2 pt.-pl	qt.-pl	1/2 gal.-p	qt.-p	5 lb.-pl	1 lb.-pl
S.W. Idaho-E. Oreg.	1/2 pt.-pl	6 oz.-pl	qt.-p	1/2 gal.-p	pt.-pl	5 lb.-pl
Great Basin	1/2 pt.-pl	pt.-pl	qt.-p	1/2 gal.-p	1 lb.-pl	5 lb.-pl
Central Arizona	1/2 pt.-pl	qt.-pl	1/2 gal.-p	qt.-p	pt.-pl	5 lb.-pl
Rio Grande Valley	1/2 pt.-pl	2 lb.-pl	qt.-p	---	1/2 pt.-pl	1 lb.-pl
<u>PACIFIC</u>						
Pacific Northwest	1/2 pt.-pl	qt.-pl	qt.-p	1/2 gal.-p	pt.-pl	5 lb.-pl

1/ Containers are listed according to the proportion of the volume of the product sold in that particular container. The type of container is identified as follows: p=paper, pl=plastic, g=glass, and c=cream (mostly aerated).

TABLE 9. -- PERCENTAGE OF FLUID MILK PRODUCTS 1/ DISTRIBUTED BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, BY METHODS OF DISTRIBUTION, AND TYPE OF WHOLESALE OUTLET, NOVEMBER OF SELECTED YEARS, 1963 TO 1991

Month/Year	Number of markets 2/	Percent	Method of Distribution							All other 5/	
			Home-delivery	Total wholesale	Type of wholesale outlet 3/				Schools		
					Super-market	Food chain stores 4//	Dairy and convenience	Military			Institutional
NOVEMBER											
1963	68		29.7	70.3	--	--	--	--	--	--	--
1964	67		28.2	71.3	--	--	--	--	--	--	--
1965	68		28.0	72.0	--	--	--	--	--	--	--
1966	68		24.7	75.3	--	--	--	--	--	--	--
1967	71		23.1	76.9	--	--	--	--	--	--	--
1969	66		19.0	81.0	--	--	--	--	--	--	--
1971	61		14.8	85.2	--	--	--	--	--	--	--
1973	61		10.3	89.7	--	--	--	--	--	--	--
1975	56		6.9	93.1	--	--	--	--	--	--	--
1977	47		5.3	94.7	42.9	10.0	6/	1.7	6/	7.7	32.8
1979	47		3.8	96.2	46.2	10.7		1.5		7.6	30.2
1981	48		2.3	97.7	49.7	9.8		1.4		6.8	29.9
1983	46		1.8	98.2	50.2	9.8		1.4		6.7	30.1
1985	44		1.5	98.5	52.6	9.4		1.2		6.8	28.5
1987	43		1.2	98.8	51.2	10.6		1.4		7.1	28.5
1989	41		1.0	99.0	53.8	10.4		1.0		6.7	27.1
1991	42		1.0	99.0	55.2	10.4		1.0		6.7	25.8

1/ Fluid milk products includes whole milk items and lowfat and skim milk items combined.

2/ Number of markets for which complete data were available.

3/ This breakdown was not available prior to 1977. Percentages may not add to total wholesale due to rounding.

4/ Generally, 1 or more stores (supermarkets, dairy and convenience) nationwide, primarily engaged in food retailing and either under common management, being franchised by a common company, or belonging to a common purchasing association.

5/ Nonchain food stores, nonfood stores (drug stores, gasoline stations, etc.), restaurants, hotels, hospitals, nursing homes, vending machines, and any other type of wholesale outlet.

6/ Does not include data for the New York - New Jersey marketing area for which these data were not available.

TABLE 10--PERCENTAGE OF FLUID MILK PRODUCTS ^{1/} DISTRIBUTED BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, GROUPED BY REGION, BY METHOD OF DISTRIBUTION, AND TYPE OF WHOLESALE OUTLET, NOVEMBER 1991

Region ^{2/}	Total Sales of fluid milk products ^{1/}	Method of distribution									
		Home-delivery	Total wholesale	Type of wholesale outlet ^{3/}							All other ^{5/}
				Food chain stores ^{4/}		Dairy and convenience	Institutional		Total		
				Super-markets	Total		Military	Schools			
Percent											
	Mil. lbs.										
North Atlantic	874.7	0.8	99.2	59.4	44.8	14.6	7.4	1.0	6.5	32.4	
South Atlantic	536.4	0.9	99.1	73.5	60.1	13.4	8.9	2.0	6.9	16.7	
East North Central	984.7	1.4	98.6	66.8	57.1	9.8	6.5	0.3	6.1	25.3	
West North Central	261.8	1.1	98.9	70.4	60.4	10.0	7.9	R	7.9	20.6	
East South Central	142.7	R	100.0	68.5	62.2	6.3	5.9	R	5.9	25.6	
West South Central	522.9	0.5	99.5	65.8	58.9	6.9	9.4	1.1	8.3	24.3	
Mountain	246.2	2.8	97.2	62.7	57.4	5.3	7.6	2.3	5.3	27.0	
Pacific	171.5	0.4	99.6	65.5	57.9	7.6	6.3	1.8	4.5	27.8	
All Region Total ^{6/}	3,839.2	1.0	99.0	65.5	55.2	10.4	7.7	1.0	6.7	25.8	

R. Restricted, represents data for fewer than three handlers. "Home-delivery" data are included in "all-other wholesale". "Military" data are included in "schools". All region totals include restricted data.

^{1/} Fluid milk products include whole milk items and lowfat and skim milk items combined.

^{2/} See Appendix D for Federal milk order marketing areas included in each region.

^{3/} Percentages may not add to total wholesale due to rounding.

^{4/} Generally, 11 or more stores (supermarkets, dairy and convenience) nationwide, primarily engaged in food retailing and either under common management, being franchised by a common company, or belonging to a common purchasing association.

^{5/} Nonchain food stores, nonfood stores (drug stores, gasoline stations, etc.), restaurants, hotels, hospitals, nursing homes, vending machines, and any other type of wholesale outlet.

^{6/} Includes those Federal milk order markets for which all the data are restricted. See Appendix D.

TABLE 11.--PERCENTAGE OF FLUID MILK PRODUCTS ^{1/} DISTRIBUTED BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, GROUPED BY REGION, BY TYPE OF CHAIN STORE, NOVEMBER 1991

Region ^{3/}	Type of food chain store ^{2/}					
	Total food chain store	Supermarket		Dairy/convenience		Total vertically integrated ^{4/}
		Vertically integrated ^{4/}	Other	Vertically integrated ^{4/}	Other	
	<u>Percent</u>					
North Atlantic	59.4	6.3	38.5	4.0	10.5	10.3
South Atlantic	73.5	30.4	29.7	2.2	11.2	32.6
East North Central	66.8	15.0	42.1	2.8	6.9	17.8
West North Central	70.4	0.0	60.4	R	10.0	R
East South Central	68.5	35.9	26.2	R	6.3	35.9
West South Central	65.8	22.4	36.6	2.3	4.6	24.7
Mountain	62.7	R	57.4	R	5.3	R
Pacific	65.5	26.8	31.1	0.0	7.6	34.4
All Region Total ^{5/}	65.5	16.8	41.2	2.4	8.0	19.2

R Restricted. Represents data for fewer than three handlers. Data are included in "other." All Region totals include restricted data.

^{1/} Fluid milk products includes whole milk items and lowfat and skim milk items combined.

^{2/} Generally, 11 or more stores nationwide, primarily engaged in food retailing and either under common management, being franchised by a common company, or belonging to a common purchasing association.

^{3/} See Appendix D for the Federal milk order markets included in each region.

^{4/} Chain stores which have integrated backward into fluid milk processing, or fluid milk processing organizations which have integrated forward into chain store ownership.

^{5/} Includes those Federal milk order markets for which all of the data were restricted--pertains to fewer than three processing plants. See Appendix D.

TABLE 12 -- PERCENTAGES OF FLUID MILK PRODUCTS 1/ DISTRIBUTED BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, BY METHOD OF DISTRIBUTION, BY MARKETING AREA, NOVEMBER 1991

Federal milk order marketing area	Home - delivery	Total wholesale	Method of Distribution							All other 5/
			Type of wholesale outlet 2/			Institutional 4/				
			Total	Super- markets	Dairy and convenience	Total	Military	Schools		
Percent										
NORTH ATLANTIC										
New England	2.0	98.0	60.1	44.2	15.9	8.9	0.9	8.0	29.0	
New York - New Jersey	0.4	99.6	57.4	44.3	13.1	7.0	0.2	6.8	35.2	
Middle Atlantic	0.3	99.7	61.5	46.0	15.5	6.8	2.0	4.7	31.5	
SOUTH ATLANTIC										
Carolina	1.7	98.3	73.6	62.5	11.1	8.8	1.9	6.9	15.9	
Georgia	6/	100.0	65.3	50.6	14.7	17.9	3.4	14.5	16.8	
Alabama - West Florida	6/	100.0	76.3	62.5	13.8	12.4	4.3	8.0	11.3	
Upper Florida	0	100.0	80.1	68.3	11.9	6/	6/	6/	19.9	
Tampa Bay	0	100.0	69.9	51.8	18.1	9.0	7/	9.0	21.1	
Southeastern Florida	6/	100.0	72.1	56.1	16.0	4.7	7/	4.7	23.2	
EAST NORTH CENTRAL										
Southern Michigan	0.5	99.5	75.7	62.8	12.9	5.2	7/	5.2	18.6	
E. Ohio - W. Pa.	3.0	97.0	59.3	44.3	15.0	7.5	0	7.5	30.3	
Ohio Valley	6/	100.0	64.5	56.9	7.7	7.7	0	7.7	27.8	
Indiana	6/	100.0	56.5	54.5	2.0	6.6	0.9	5.7	37.0	
Chicago Regional	0.4	99.6	66.9	59.5	7.5	4.4	7/	4.4	28.3	
S. Ill. - E. Mo.	6/	100.0	66.5	53.8	12.7	9.8	0.4	9.4	23.7	
Louis - Lex. - Evans.	0	100.0	82.9	73.4	9.5	6.6	1.4	5.2	10.5	
WEST NORTH CENTRAL										
Upper Midwest	1.8	98.2	68.4	55.2	13.3	7.3	7/	7.3	22.4	
Iowa	0.3	91.7	70.8	62.5	8.3	9.7	7/	9.7	19.2	
Nebraska - Western Iowa	6/	100.0	74.5	70.2	4.3	7.0	7/	7.0	18.5	

Continued

TABLE 12 -- PERCENTAGES OF FLUID MILK PRODUCTS 1/ DISTRIBUTED BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, BY METHOD OF DISTRIBUTION, BY MARKETING AREA, NOVEMBER 1991 - CONTINUED

Federal milk order marketing area	Method of Distribution							All other 5/
	Home - delivery	Total wholesale	Chain stores 3/			Institutional 4/		
			Total	Super - markets	Dairy and convenience	Total	Military	
Percent								
EAST SOUTH CENTRAL								
Tennessee Valley	0	100.0	48.8	37.9	10.9	10.6	7/	40.6
Nashville	8/	100.0	100.0	100.0	8/	8/	0	8/
WEST SOUTH CENTRAL								
Central Arkansas	6/	100.0	16.8	14.3	2.6	8.2	7/	75.0
Southwest Plains	0.1	99.9	71.6	60.2	11.4	8.1	1.3	20.2
Texas	0.5	99.5	69.6	64.3	5.4	8.2	1.1	21.7
Greater Louisiana	2.3	97.7	48.4	41.3	7.0	19.7	7/	29.7
New Orleans - Miss.	8/	100.0	73.1	67.1	6.1	11.6	1.1	15.3
MOUNTAIN								
Eastern Colorado	7.3	92.7	69.2	64.0	5.2	5.2	1.7	18.4
SW. Idaho - E. Oregon	3.5	96.5	39.6	35.7	3.9	9.4	1.1	47.6
Great Basin	8/	100.0	47.9	41.1	6.8	7.5	4.3	44.5
Central Arizona	0	100.0	80.8	75.8	5.0	7.3	7/	11.9
Rio Grande Valley	0.1	99.9	47.7	44.4	3.3	12.9	3.7	39.3
PACIFIC								
Pacific Northwest	0.4	99.6	65.5	57.9	7.6	6.3	1.8	27.8
All Market Total 10/	1.0	99.0	65.5	55.2	10.4	7.7	1.0	25.8

1/ Fluid milk products represent whole milk items and lowfat and skim milk items combined.

2/ Percentages may not add to total wholesale due to rounding.

3/ Generally, 11 or more stores (supermarket, dairy and convenience) nationwide, primarily engaged in food retailing and either under common management, being franchised by a common company, or belonging to a common purchasing association.

4/ Institutional represents sales made through military installations and public schools, colleges and universities.

5/ All other wholesale represents nonchain food stores, nonfood stores (drug stores, gasoline stations, etc.) restaurants, hotels, hospitals, nursing homes, vending machines, and any other type of wholesale outlet.

6/ Restricted, represents data for fewer than three handlers. Data are included in all other wholesale.

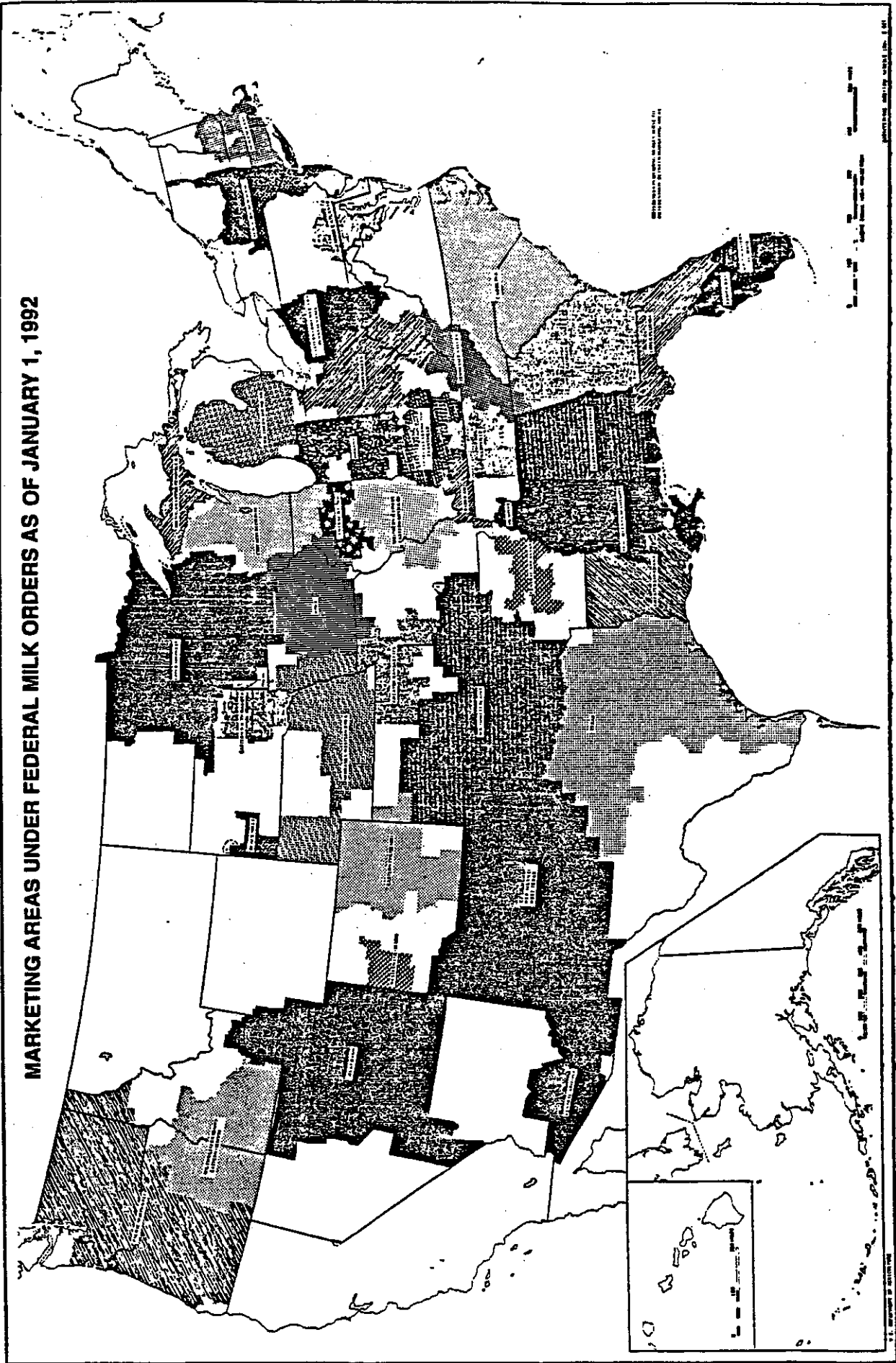
7/ Restricted, represents data for fewer than three handlers. Data are included in schools.

8/ Restricted, represents data for fewer than three handlers. Data are included in supermarkets.

9/ Includes the Black Hills, Central Illinois, Eastern South Dakota, Greater Kansas City, Lubbock - Plainview, Memphis, Michigan Upper Peninsula, Paducah, Texas Panhandle, and Western Colorado marketing areas for which all the data were restricted. Each method total includes restricted data which were not shown for individual marketing areas.

APPENDIX A

MARKETING AREAS UNDER FEDERAL MILK ORDERS AS OF JANUARY 1, 1992



APPENDIX B--FLUID MILK PRODUCT SALES, UNITED STATES, 1965, AND 1970-91 ^{1/}

Year	Fluid Whole milk ^{1/}	Lowfat milk ^{2/}	Total fluid milk products
	Million pounds		
1965	45,829	5,911	51,740
1970	42,507	10,191	52,698
1971	42,330	11,265	53,595
1972	41,511	12,470	53,981
1973	40,022	13,657	53,679
1974	38,205	14,271	52,476
1975	37,554	15,678	53,232
1976	36,716	16,840	53,556
1977	35,482	18,112	53,594
1978	34,594	18,873	53,467
1979	33,716	19,715	53,431
1980	32,328	20,678	53,006
1981	31,240	21,459	52,699
1982	30,060	21,719	51,780
1983	29,620	22,492	52,112
1984	29,111	23,680	52,791
1985	28,642	25,297	53,939
1986	27,297	26,925	54,222
1987	26,451	27,771	54,222
1988	25,230	28,517	53,747
1989	23,510	31,270	54,780
1990	22,024	32,746	54,770
1991 ^{3/}	21,524	33,741	55,265

^{1/} Plain and flavored whole milk.

^{2/} Lowfat (2 percent and 1 percent) milk, skim milk, flavored milk drinks, and buttermilk.

^{3/} Preliminary.

SOURCE: Economic Research Service, USDA.

APPENDIX C - CONVERSION FACTORS

Product	Conversion factors - pounds per										
	6 Gal.:	5 Gal.:	2 1/2 Gal.:	Gal.:	3 Qts.:	Gal.:	1/2 Gal.:	Quart:	Pint:	1/3 Qt.:	10 Oz.:
Whole milk	51.60	43.00	21.500	8.60	6.4500	4.300	2.1500	1.0750	.7167	.6719	.5375
Flavored whole milk	48.00	40.00	20.000	8.00	6.0000	4.000	2.0000	1.0000	.6667	.6250	.5000
2% milk - plain	51.72	43.10	21.550	8.62	6.4650	4.310	2.1550	1.0780	.7183	.6734	.5388
2% milk - added solids	51.96	43.30	21.650	8.66	6.4950	4.330	2.1650	1.0825	.7217	.6766	.5412
1% milk- plain	51.72	43.10	21.550	8.62	6.4650	4.310	2.1550	1.0780	.7183	.6734	.5388
1% milk - added solids	51.96	43.30	21.650	8.66	6.4950	4.330	2.1650	1.0825	.7217	.6766	.5412
Skim milk - plain	51.78	43.15	21.575	8.63	6.4725	4.315	2.1575	1.0788	.7192	.6742	.5394
Skim milk - added solids	52.08	43.40	21.700	8.68	6.5100	4.340	2.1700	1.0850	.7233	.6781	.5425
Flavored lowfat and skim milk	48.00	40.00	20.000	8.00	6.0000	4.000	2.0000	1.0000	.6667	.6250	.5000
Buttermilk	51.72	43.10	21.550	8.62	6.4650	4.310	2.1550	1.0780	.7183	.6734	.5388

APPENDIX D--FEDERAL MILK ORDER MARKETS GROUPED BY REGION

NORTH ATLANTIC

New England
New York--New Jersey
Middle Atlantic

SOUTH ATLANTIC

Carolina
Georgia
Alabama--West Florida
Upper Florida
Tampa Bay
Southeastern Florida

EAST NORTH CENTRAL

Southern Michigan
E. Ohio--W. Pennsylvania
Ohio Valley
Indiana
Chicago Regional
Southern Illinois--E. Missouri
Louisville--Lexington--Evansville

WEST NORTH CENTRAL

Upper Midwest
Iowa
Nebraska--Western Iowa

EAST SOUTH CENTRAL

Tennessee Valley
Nashville

WEST SOUTH CENTRAL

Central Arkansas
Southwest Plains
Texas
Greater Louisiana
New Orleans--Mississippi

MOUNTAIN

Eastern Colorado
SW. Idaho--E. Oregon
Great Basin
Central Arizona
Rio Grande Valley

PACIFIC

Pacific Northwest

RESTRICTED MARKETS

Black Hills
Central Illinois
Eastern South Dakota
Greater Kansas City
Lubbock--Plainview
Memphis
Michigan Upper Peninsula
Paducah
Texas Panhandle
Western Colorado

APPENDIX E--REPORTED SALES OF MARKET WHOLE MILK AND LOWFAT MILK IN CALIFORNIA
BY TYPE OF TRADE AND CONTAINER CHARACTERISTICS, OCTOBER 1991 1/

TYPE OF TRADE	SALES VOLUME (1,000 GALLONS)	PERCENT OF TOTAL SALES VOLUME
WHOLESALE	45,794	85.2
RETAIL	27	0.1
CASH-AND CARRY	111	0.2
PEDDLER	7,062	13.1
FEDERAL GOVERNMENT	758	1.4
TOTAL OF ALL TYPES	53,713	100.0

CONTAINER SIZE	PERCENT OF TOTAL SALES VOLUME BY TYPE OF CONTAINER			
	ALL TYPES	GLASS	PAPER	PLASTIC
BULK	1.9	0	0	1.9
TEN-QUART	<u>2/</u>	0	0	<u>2/</u>
GALLON	62.0	0	0	62.0
ONE-HALF GALLON	21.9	<u>2/</u>	19.3	2.6
QUART	4.5	<u>2/</u>	4.4	<u>2/</u>
PINT	2.2	0	2.2	0
ONE-THIRD QUART	1.4	0	1.4	0
ONE-HALF PINT	5.5	0	5.5	0
OTHER	0.5	0	0.5	0
ALL SIZES COMBINED	100.0	0.1	33.4	66.5

1/ SOURCE: "California Dairy Industry Statistics, 1991, California Department of Food and Agriculture, Table 67, page 62.

2/ Less than 0.05 percent.

APPENDIX F--ADDITIONAL INFORMATION PUBLISHED IN "FEDERAL MILK ORDER MARKET STATISTICS"

In the March/April 1993 Summary of "Federal Milk Order Market Statistics" (FMOS-394), there appeared two special articles that highlighted some of the more important findings of the 1991 Container Survey. These articles were titled "Fluid Milk Sales By Size and Type of Container" and "Fluid Milk Sales by Method of Distribution." Following are excerpts from these articles including two tables that otherwise do not appear in this report.

(1) The proportion of fluid milk products sold in plastic containers increased, continuing the long-term trend in evidence since this survey was first taken in 1963. The 3 percentage point increase pushed the market share of plastic to 72 percent. Sales of fluid milk in paper containers accounted for 28 percent of total sales, while glass containers accounted for less than one-half of one percent of total sales. (See table 1.)

(2) In all regions of the country, more fluid milk products were sold in plastic containers than in paper and glass combined. Market shares of plastic ranged from 57 percent in the North Atlantic region to nearly 80 percent in the East North Central region. Glass containers accounted for less than 1 percent of total sales in all regions. (See table 7.)

(3) Plastic containers accounted for about 70 percent or more of the sales of whole milk, 2% and 1% lowfat milk and skim milk. Conversely, 83 percent or more of the sales of flavored whole milk, flavored lowfat and skim milk, and buttermilk were sold in paper containers. (See page 50.)

(4) The proportion of fluid milk products sold in gallon containers increased from 1989, continuing the other long-term trend first evidenced in these surveys. An increase of 3 percentage points pushed the market share of gallons to 64 percent. About 19 percent of total sales were made in half-gallon containers--down 2 percentage points from the previous survey. The market share of half-pint containers decreased to 9 percent. Other container sizes were down slightly from 1989. (See table 2.)

(5) In all regions of the country, more fluid milk products were sold in gallon containers than in all other sizes combined. The market share of gallons ranged from 51.6 percent in the North Atlantic region to 72.2 percent in the East North Central region. The proportion of fluid milk products sold in half-pint containers was significantly larger in the West South Central, South Atlantic, and West North Central regions. In the North Atlantic region, quarts accounted for more than twice the national average. (See table 7.)

(6) Gallon containers accounted for much larger proportions of the sales of whole milk, 2% lowfat milk, and 1% lowfat milk. On the other hand, more than two-thirds of the sales of flavored whole milk and more than 80 percent of the sales of flavored lowfat and skim milk were made in pint and half-pint containers. These market shares might be expected as the sales of these flavored milk products are made predominantly through schools and other food service outlets. More buttermilk was sold in half-gallon

containers than in other sizes. (See page 50.)

(7) Sales of fluid milk products in gallon sizes were nearly all in plastic containers while sales in quart or smaller sizes were made predominantly in paper containers. This leads to the conclusion that the importance of a particular size of container in any particular region, or for any particular product, determines the importance of a container type. (See page 51.)

For example, in the North Atlantic region, the proportion of fluid milk products sold in paper containers was significantly higher--42.4 percent compared to the national average of 27.8 percent. (See table 7.) This occurred because the proportion of fluid milk products sold in this region in half-gallon and quart containers--sizes for which paper is the dominant type--was significantly higher. Similarly, both flavored whole milk and flavored lowfat and skim milk had more than 87 percent of their sales in paper containers because over 85 percent of these products were sold in container sizes for which paper is dominant--quart and smaller sizes. (See page 50.)

(8) The container size with the largest change in container type is the half-gallon. While paper is still dominant, the market share of plastic half-gallons increased by 7 percentage points to 34.8. This drop in the sales of paper half-gallons is largely responsible for the overall drop in the

market share of paper. (See page 51.) Fluid Milk Sales by Method of Distribution:

(1) The proportion of fluid milk products sold through wholesale outlets remained unchanged. The market share of wholesale in all markets in 1991 was 99.0 percent of total sales; the remaining 1.0 percent was home-delivered. (See table 9.) Although the long-term trend has been an increasing proportion of sales through wholesale outlets, it now appears that the rate of decline in home-delivery may have ended. In fact, home-delivery accounted for larger proportions of sales in 1991 in the East North Central, Mountain, and Pacific regions.

(2) The most important wholesale outlet continues to be food chain stores, which accounted for nearly two-thirds of total fluid milk sales. The market share of supermarket chains--55.2 percent--increased from 1989 while the market share of dairy/convenience chains remained unchanged at 10.4 percent. Food chain stores accounted for larger proportions of sales in the South Atlantic and West North Central regions, and a smaller proportion in the North Atlantic region. There was significant regional variation in the importance of both supermarket and dairy/convenience chains. (See table 10.)

(3) The market share of vertically integrated food chain stores totaled 19.2 percent, up from the 18.6 percent

registered in 1989. Sales by vertically integrated supermarket chains accounted for 16.8 percent of total sales, dairy/convenience store chains 2.4 percent. (See table 11.) The market share of supermarket chains has been increasing over the last two surveys; the market share of dairy/convenience chains has been decreasing.

(4) Vertical integration of food chains showed significant regional variation. In the South Atlantic region, more than 32 percent of total fluid milk sales were made by vertically integrated food chains. The comparable proportion in the West North Central region was less than 1 percent. Vertically integrated supermarket chains accounted for 35.9 percent of total sales in

the East South Central region, more than 5 times the market share of these firms in the North Atlantic region. The market share of vertically integrated dairy/convenience chains in the North Atlantic region was 4.0 percent, well above the national average of 2.4 percent. (See table 11.)

(5) Fluid milk sales through institutional outlets (military and schools) totaled 7.7 percent of total sales, unchanged from 1989. Sales through all other wholesale outlets (nonchain food stores, nonfood stores, restaurants, hospitals, vending machines, etc., combined) accounted for 25.8 percent of total sales, down from 1989. (See table 9.)

APPENDIX F--ADDITIONAL INFORMATION PUBLISHED IN "FEDERAL MILK ORDER MARKET STATISTICS"

PERCENTAGE OF INDIVIDUAL FLUID MILK PRODUCTS DISTRIBUTED BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, ALL MARKETS COMBINED ^{1/}, BY TYPE AND SIZE OF CONTAINER, NOVEMBER 1991

Fluid milk product	Total sales in all markets combined	Type of Container			
		Glass	Paper	Plastic	Other
	<u>Mil. lbs.</u>		<u>Percent of total sales</u>		
Whole milk	1,374.3	0.2	25.1	74.8	*
Flavored whole milk	54.7	0.6	90.8	8.5	0
2% lowfat milk	1,384.7	0.2	19.3	80.5	0
1% lowfat milk	358.8	0.4	22.5	77.1	0
Skim milk	449.9	0.3	30.0	69.7	*
Flavored lowfat and skim milk	155.5	*	87.6	12.3	0
Buttermilk	61.4	*	83.8	16.1	0
Total fluid milk products	3,839.2	0.2	27.8	72.0	*

Fluid milk product	Size of Container						
	Gallon	Half-gallon	Quart	Pint	Half-pint	Over 10 qts.	Other
	<u>Percent of total sales</u>						
Whole milk	66.0	19.2	4.5	1.7	6.4	1.9	0.3
Flavored whole milk	0.6	11.6	18.0	38.8	28.5	1.5	0.9
2% lowfat milk	72.7	16.1	1.6	0.1	6.7	2.5	0.3
1% lowfat milk	70.8	20.1	4.1	*	3.6	0.4	0.9
Skim milk	58.4	27.8	5.3	*	4.8	1.4	2.2
Flavored lowfat and skim milk	5.5	6.4	4.8	5.0	75.5	1.7	1.2
Buttermilk	6.5	63.2	26.0	1.0	1.9	0.4	1.0
Total fluid milk products	63.9	19.3	4.1	1.4	9.1	1.9	0.3

* Less than one-tenth of one percent.

^{1/} See Appendix D for the Federal milk order markets included.

APPENDIX F--ADDITIONAL INFORMATION PUBLISHED IN "FEDERAL MILK ORDER MARKET STATISTICS"

PERCENTAGE OF TOTAL FLUID MILK ITEMS ^{1/} DISTRIBUTED BY HANDLERS REGULATED UNDER FEDERAL MILK ORDERS, ALL MARKETS COMBINED ^{2/}, BY TYPE OF CONTAINER, BY TYPE OF CONTAINER, NOVEMBER 1991

Size of container	Total sales of fluid milk items	Type of Container			
		Glass	Paper	Plastic	Other
	<u>Mil lbs.</u>				
			<u>Percent of total sales</u>		
Gallon	2,452.6	R	1.2	98.8	---
Half-gallon	739.1	0.9	64.2	34.8	---
Quart	156.3	0.5	97.2	2.2	---
Pint	55.6	R	97.3	2.7	---
Ten-ounce	5.5	0	100.0	0	---
Half-pint	348.8	R	98.7	1.3	---
6-Gallon	22.7	---	0	98.1	1.9
5-Gallon	50.7	---	0	100.0	R
All other	7.9	0.8	76.6	22.6	---
Total of all sizes	3,839.2	0.2	27.8	72.0	*

* Less than one-tenth of one percent.

R. Restricted, pertains to fewer than three processing plants. Data are included in "All other."

^{1/} Includes plain and flavored whole milk products, plain, fortified, and flavored skim and lowfat milk products, buttermilk, and miscellaneous whole, lowfat and skim milk products.

^{2/} See Appendix D for the Federal milk order markets included.