

United States Department of Agriculture

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Agricultural Marketing Service

Dairy Program

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Packaged Fluid Milk Sales in Federal Milk Order Markets:

By Size and Type of Container, Category, and Distribution Method During November 2017

PREFACE

This publication presents information relating to the <u>containers</u> in which fluid milk products are sold, and the <u>methods of distribution</u> used to market these items by handlers regulated under Federal milk marketing orders (FMMO's). The information in this report is based on a survey of fluid milk sales by handlers regulated under Federal milk marketing orders during November 2017. Its purpose is to update a similar survey in November 2015, and to see if trends observed in past surveys are continuing. Data were obtained from milk handlers regulated under the 10 marketing orders.

Handlers regulated under FMMO's 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 non-school month.

The tables in this report provide historical information from past surveys and detailed information from the current survey. Information is presented for individual orders and for all orders combined. The data in this report are percentages of total fluid milk products sold by regulated handlers. The number of each size of container can be approximated by using the additional information provided in Appendix 1 (page 47).

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

New in 2017

The survey used to collect 2017 data underwent one relatively minor change compared with 2015. The 2015 survey grouped products into three categories -- conventional, organic, and extended shelf life (ESL) -- for all products except eggnog and cultured buttermilk. The 2017 survey required eggnog and cultured buttermilk to be grouped in the same manner as all other products. This data is detailed in Tables 3 and 5 of this publication.

The survey used to collect 2015 data underwent significant changes compared with those used for previous reports. This was done to "modernize" the data collection to better reflect current marketing conditions, and to allow a more user-friendly publication of survey results. The change in data collection resulted in an alteration of several tables compared with previous publications. Graphical presentation was significantly expanded in the 2015 report, with roughly double the number of graphs compared with the 2013 report.

Changes to the 2015 survey compared with previous years included reducing the number of container sizes reported, which allows publication with fewer instances of restricted data. Grouping products into three categories – conventional, organic, and extended shelf life (ESL) -- was also a new feature of the 2015 survey. Finally, data collection pertaining to the method of distribution was altered in the 2015 survey. A detailed description of the 2015 survey changes can be found in the preface of the 2015 publication.

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Table 1 Total Fluid Milk Products Sold By Handlers Regulated Under Federal Orders Percent by Container Type

November of Selected Years 1965-2017

| 37 | | Type of Cor | ntainer: | |
|------|-------|-----------------|-------------------|-------|
| Year | Glass | Paper | Plastic | Other |
| | | Percent of Fede | eral Order Total* | |
| 1965 | 29 | 65 | 4 | 2 |
| 1975 | 2 | 67 | 31 | LT |
| 1985 | LT | 34 | 65 | LT |
| 1995 | LT | 24 | 76 | LT |
| 2003 | LT | 16 | 84 | NA |
| 2005 | LT | 15 | 85 | NA |
| 2007 | LT | 15 | 85 | NA |
| 2009 | LT | 14 | 85 | NA |
| 2011 | LT | 15 | 85 | NA |
| 2013 | LT | 14 | 86 | NA |
| 2015 | LT | 16 | 84 | NA |
| 2017 | LT | 17 | 83 | NA |

Table 2 **Total Fluid Milk Products Sold By Handlers Regulated Under Federal Orders** Percent by **Container Size**

November of Selected Years 1965-2017

| 3 7 | | | S | ize of Containe | r: | | |
|------------|--------|-------------|-------|-----------------|----------------|---------------|---------|
| Year | Gallon | Half-gallon | Quart | Pint | Half-pint | Over 10 quart | Other** |
| | | | Perc | ent of Federal | Order Total* - | | |
| 1965 | 17 | 54 | 12 | 1 | 10 | 4 | 2 |
| 1975 | 43 | 34 | 7 | 1 | 11 | 3 | 1 |
| 1985 | 60 | 22 | 5 | 2 | 9 | 2 | LT |
| 1995 | 64 | 18 | 4 | 2 | 10 | 2 | LT |
| | | | | | | | |
| 2003 | 65 | 18 | 4 | 2 | 9 | 1 | 1 |
| 2005 | 65 | 18 | 3 | 2 | 10 | 1 | 1 |
| 2007 | 65 | 18 | 3 | 2 | 11 | 1 | 1 |
| 2009 | 67 | 17 | 3 | 1 | 10 | 1 | 1 |
| 2011 | 66 | 18 | 3 | 1 | 10 | 1 | 1 |
| 2013 | 66 | 18 | 3 | 1 | 10 | 1 | 1 |
| 2015 | 64 | 18 | 3 | 1 | 11 | CO | 1 |
| 2017 | 64 | 18 | 3 | 1 | 11 | CO | 3 |
| | | | | | | | |

NOTES for Table 1 and Table 2:

LT - Less than 0.5 percent.

CO - Included in "Other".

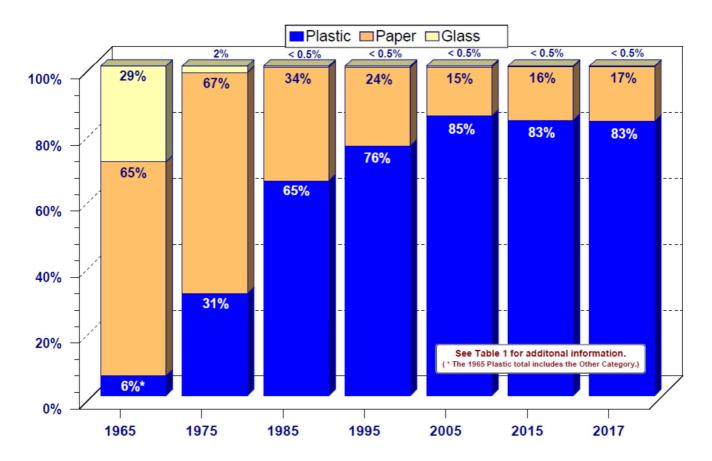
NA - This category was discontinued prior to 2003.

^{*} Totals may not add due to rounding.

** Other" (Table 2) includes miscellaneous sizes, in most cases smaller than a pint. For 2015 and 2017 it also includes 2.5 gallon and larger containers.

Fluid Milk Products Sold by Container Type

All Federal Milk Marketing Orders

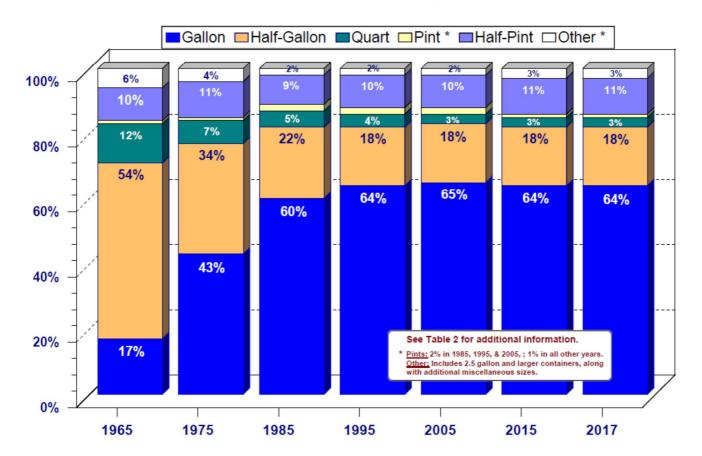


Graph 1: Fluid Milk Products Sold by Container Type

- ➢ Plastic containers continue to be the dominate type used to distribute fluid milk products, accounting for approximately 83% of the volume of packaged fluid milk sold by FMMO handlers during November 2017. Although plastic has accounted for two-thirds or more of the volume sold in each survey since 1987, its proportion has decreased by 2 percentage points compared with the November 2013 survey.
- ➤ Paper continues to be the second most popular container type, accounting for around 17% of the total sold, up from 14% in November 2013. Paper's popularity peaked in 1971 when it was responsible for approximately 78% of the volume sold. The proportion of total milk sold in paper containers declined steadily until 2005, but it has remained relatively stable since then.
- ➤ The volume of milk sold in glass containers has been less than 0.5% since 1983. The popularity of glass declined rapidly from 1965 to 1975, falling from approximately 29% of the total to around 2% in that 10-year period.
- The proportion of milk sold in each type of container has remained relatively stable during the last seven surveys (2005 through 2017).

Fluid Milk Products Sold by Container Size

All Federal Milk Marketing Orders



Graph 2: Fluid Milk Products Sold by Container Size

- Although gallon containers continue to account for the majority of fluid milk sold by FMMO handlers, the proportion declined from 66% in November 2013 to 64% during 2015 and 2017. Gallon containers have accounted for at least 60% of the total during each survey since 1985.
- The popularity of gallon containers increased dramatically from 1965 to 1975, rising from around 17% to approximately 43%. Most of this increase came at the expense of half-gallon and quart container sizes and coincides with the rapid decline in popularity of glass containers.
- The proportion of milk sold in half-gallon containers during November 2017 was approximately one-third the level recorded in 1965, falling from 54% to 18%. Similarly, the volume accounted for by quarts has fallen precipitously, with the 2017 proportion one-fourth that of 1965.
- The proportion of milk sold in half-pint containers has remained remarkably constant throughout the 50-year period depicted in this graph, with a high of approximately 11% and a low of 9%.
- The proportion by container size has remained relatively stable during the last seven surveys (2005 through 2017). Gallons had the largest variation with a high of 67% and a low of 64%.

Table 3-1

<u>Whole Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Type of Container – November 2017

| Size of | | Type of Co | ontainer: | |
|-------------|-------|------------------|-----------------|-----------|
| Container | Glass | Paper | Plastic | All Types |
| | | Percent of Feder | al Order Total* | |
| Gallon | | | 75.5 | 75.5 |
| Half-gallon | 0.1 | 5.2 | 12.2 | 17.6 |
| Quart | 0.1 | 0.5 | 1.6 | 2.1 |
| Pint | CR-LT | LT | 0.7 | 0.7 |
| Half-pint | | 1.2 | 0.3 | 1.5 |
| Other** | | 0.3 | 2.3 | 2.6 |
| | | | | |
| All sizes | 0.2 | 7.2 | 92.6 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-1A

<u>Whole Milk</u> Sold By Handlers Regulated Under Federal Orders

Percentage by Size and Category of Container – November 2017

| Size of | | Type of C | Container: | |
|-------------|--------------|---------------|--------------------|----------------|
| Container | Conventional | ESL | Organic | All Categories |
| | | Percent of Fe | deral Order Total* | |
| Gallon | 73.1 | 0.4 | 2.0 | 75.5 |
| Half-gallon | 12.5 | 1.3 | 3.8 | 17.6 |
| Quart | 1.8 | 0.3 | 0.1 | 2.1 |
| Pint | 0.6 | 0.1 | LT | 0.7 |
| Half-pint | 1.3 | CR-LT | 0.1 | 1.5 |
| Other** | 1.6 | 1.0 | LT | 2.6 |
| | | | | |
| All sizes | 90.8 | 3.1 | 6.0 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-1B

<u>Whole Milk</u> Sold By Handlers Regulated Under Federal Orders

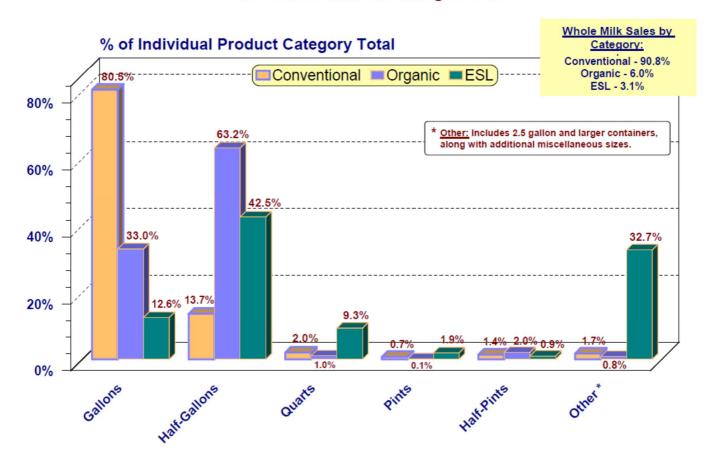
Percentage by Size and Category of Container – November 2017

| Size of | | Type of Container: | | |
|-------------|--------------|--------------------|-----------------|----------------|
| Container | Conventional | ESL | Organic | All Categories |
| | | Percent of C | Category Total* | |
| Gallon | 80.5 | 12.6 | 33.0 | 75.5 |
| Half-gallon | 13.7 | 42.5 | 63.2 | 17.6 |
| Quart | 2.0 | 9.3 | 1.0 | 2.1 |
| Pint | 0.7 | 1.9 | 0.1 | 0.7 |
| Half-pint | 1.4 | 0.9 | 2.0 | 1.5 |
| Other** | 1.7 | 32.7 | 0.8 | 2.6 |
| All sizes | 100.0 | 100.00 | 100.0 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

2017 Whole Milk Sales By Container Size and Category

All Federal Milk Marketing Orders



Graph 3: 2017 Whole Milk Sales by Container Size and Category

- ➤ Whole milk accounted for 31.8% of all FMMO milk sales during November 2017, which was the second largest proportion among all products sold and an increase of 3.3 percentage points compared with the previous survey.
- ➤ Conventional milk sales accounted for 90.8% of all FMMO whole milk sales during November 2017, while organic milk sales were responsible for 6.0%, and ESL sales represented 3.1%.
- ➤ Within the conventional whole milk category, gallon containers accounted for 80.5% of total sales, while half-gallon sales were responsible for 13.7%. Sales in all other container sizes represented only 5.8% of the November 2017 total.
- > Organic whole milk sales during November 2017 were dominated by half-gallon (63.2%) and gallon (33.0%) packaging, with these two container sizes accounting more than 96% of the FMO total.
- ➤ Over 75% of extended shelf life whole milk FMO sales during November 2017 were in two container size classifications half-gallons (42.5%) and other containers (32.7%). Gallon containers registered a distant third with 12.6% of ESL sales, and quarts were fourth with 9.3%.

Table 3-2

<u>Flavored Whole Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Type of Container – November 2017

| Size of | | Type of Co | ontainer: | |
|-------------|-------|------------------|-----------------|-----------|
| Container | Glass | Paper | Plastic | All Types |
| | | Percent of Feder | al Order Total* | |
| Gallon | | | 5.4 | 5.4 |
| Half-gallon | 0.8 | 2.4 | 33.7 | 36.8 |
| Quart | 0.2 | 0.7 | 14.7 | 15.6 |
| Pint | CR-LT | 0.8 | 29.9 | 30.7 |
| Half-pint | | 2.2 | 0.8 | 3.0 |
| Other** | | Cr-LT | 8.4 | 8.5 |
| All sizes | 1.0 | 6.1 | 92.9 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-2A

<u>Flavored Whole Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container—November 2017

| Size of | | Type of C | Container: | | | | |
|-------------|--------------|---------------------------------|------------|----------------|--|--|--|
| Container | Conventional | ESL | Organic | All Categories | | | |
| | | Percent of Federal Order Total* | | | | | |
| Gallon | 5.3 | 0.1 | | 5.4 | | | |
| Half-gallon | 34.1 | 2.2 | 0.5 | 36.8 | | | |
| Quart | 13.9 | 1.6 | 0.1 | 15.6 | | | |
| Pint | 29.4 | 1.2 | 0.1 | 30.7 | | | |
| Half-pint | 3.0 | CR-LT | | 3.0 | | | |
| Other** | 4.3 | 4.2 | CR-LT | 8.5 | | | |
| | | | | | | | |
| All sizes | 90.0 | 9.3 | 0.7 | 100.0 | | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-2B

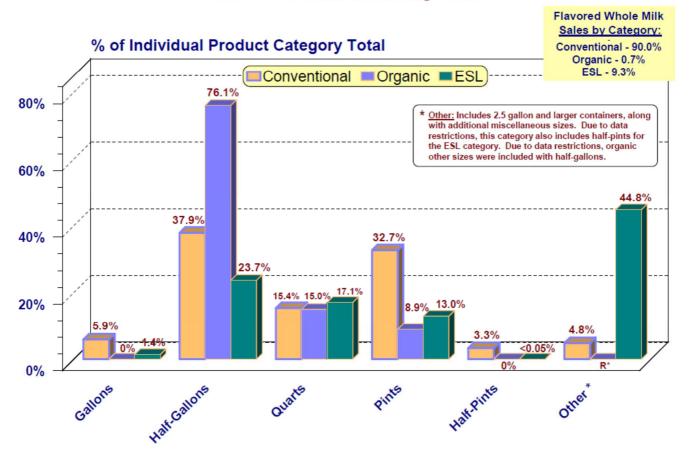
<u>Flavored Whole Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container – November 2017

| Size of | | Type of Container: | | |
|-------------|--------------|--------------------|-----------------|----------------|
| Container | Conventional | ESL | Organic | All Categories |
| | | Percent of C | Category Total* | |
| Gallon | 5.9 | 1.4 | | 5.4 |
| Half-gallon | 37.9 | 23.7 | 76.1 | 36.8 |
| Quart | 15.4 | 17.1 | 15.0 | 15.6 |
| Pint | 32.7 | 13.0 | 8.9 | 30.7 |
| Half-pint | 3.3 | CR-LT | | 3.0 |
| Other** | 4.8 | 44.8 | CR | 8.5 |
| | | | | |
| All sizes | 100.0 | 100.00 | 100.0 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

2017 Flavored Whole Milk Sales By Container Size and Category

All Federal Milk Marketing Orders



Graph 4: 2017 Flavored Whole Milk Sales by Container Size and Category

- Conventional flavored whole milk comprised 90.0% of all FMMO flavored whole milk sales during November 2017, while ESL sales accounted for 9.3% with organic milk represented just 0.7%. Flavored whole milk made up only 1.5% of all FMMO milk sales during November 2015.
- Within the conventional flavored whole milk category, half-gallons accounted for 37.9% of total sales, while pints made up 32.7%, quarts were responsible for 15.4%, and half-pints and other sizes represented a combined 8.1% of the total.
- ➤ The most popular size container for ESL flavored whole milk was the other size package classification with 44.8% of total sales. Half-gallons (23.7%), quarts (17.1%), and pints (13.0%) accounted for an additional 53.8% of sales.
- ➤ Organic flavored whole milk sales were grouped into three container sizes due to data restrictions—half-gallons (76.1%), quarts (15.0%), and pints (8.9%). The other size category was restricted and included with half-gallons, while there were no sales in the gallon or half-pint categories.

Table 3-3

<u>Reduced Fat (2%) Milk</u> Sold By Handlers Regulated Under Federal Orders

Percentage by Size and Type of Container – November 2017

| Size of | | Type of Co | ontainer: | | | | |
|-------------|-------|---------------------------------|-----------|-----------|--|--|--|
| Container | Glass | Paper | Plastic | All Types | | | |
| | | Percent of Federal Order Total* | | | | | |
| Gallon | | | 76.7 | 76.7 | | | |
| Half-gallon | 0.1 | 4.7 | 12.2 | 17.0 | | | |
| Quart | 0.1 | 0.4 | 0.9 | 1.4 | | | |
| Pint | | LT | 0.5 | 0.5 | | | |
| Half-pint | | 2.3 | 0.2 | 2.5 | | | |
| Other** | | 0.4 | 1.6 | 2.0 | | | |
| All sizes | 0.2 | 7.7 | 92.1 | 100.0 | | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-3A

<u>Reduced Fat (2%) Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container—November 2017

| Size of | | Type of C | ontainer: | |
|-------------|--------------|----------------|--------------------|----------------|
| Container | Conventional | ESL | Organic | All Categories |
| | | Percent of Fed | deral Order Total* | |
| Gallon | 74.6 | 0.5 | 1.6 | 76.7 |
| Half-gallon | 12.1 | 2.0 | 2.8 | 17.0 |
| Quart | 1.1 | 0.2 | 0.1 | 1.4 |
| Pint | 0.5 | 0.1 | | 0.5 |
| Half-pint | 2.3 | 0.1 | 0.1 | 2.5 |
| Other** | 1.6 | 0.4 | LT | 2.0 |
| | | | | |
| All sizes | 92.2 | 3.2 | 4.6 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-3B

<u>Reduced Fat (2%) Milk</u> Sold By Handlers Regulated Under Federal Orders

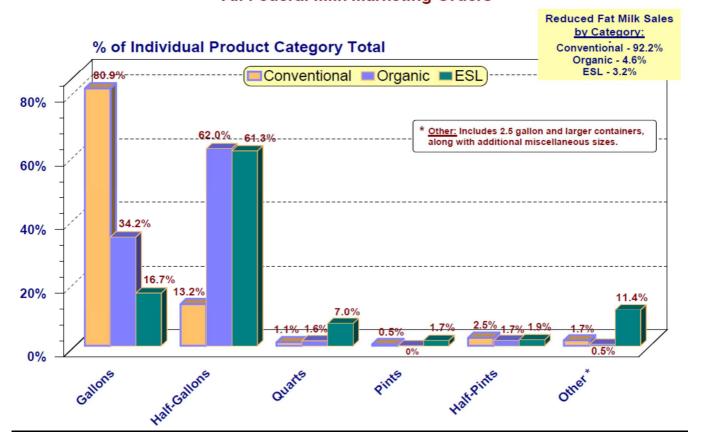
Percentage by Size and Category of Container – November 2017

| Size of | | Type of Container: | | | | |
|-------------|--------------|----------------------------|---------|----------------|--|--|
| Container | Conventional | ESL | Organic | All Categories | | |
| | | Percent of Category Total* | | | | |
| Gallon | 80.9 | 16.7 | 34.2 | 76.7 | | |
| Half-gallon | 13.2 | 61.3 | 62.0 | 17.0 | | |
| Quart | 1.1 | 7.0 | 1.6 | 1.4 | | |
| Pint | 0.5 | 1.7 | | 0.5 | | |
| Half-pint | 2.5 | 1.9 | 1.7 | 2.5 | | |
| Other** | 1.7 | 11.4 | 0.5 | 2.0 | | |
| All sizes | 100.0 | 100.00 | 100.0 | 100.0 | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

2017 Reduced Fat Milk Sales By Container Size and Category

All Federal Milk Marketing Orders



Graph 5: 2017 Reduced Fat Milk Sales by Container Size and Category

- ➤ Conventional products accounted for 92.2% of all reduced fat milk sales during November 2017, while organic products made up 4.6%, and ESL sales represented 3.2%. Reduced fat milk accounted for the largest proportion (31.9%) of all FMMO milk sales during November 2017.
- ➤ Gallons and half-gallons were the dominate size containers for all product categories during November 2017, accounting for 94.1% of conventional reduced fat milk sales, 96.2% of organic products sold, and 78.0% of the ESL category.
- ➤ Within the conventional reduced fat milk category, gallons made up 80.9% of total sales while half-gallons accounted for 13.2%. Half-pints were the only other size container that had more than 2% of the total during November 2017.
- ➤ Half-gallons were the most popular size container for organic reduced fat products with 62.0% of total sales. Gallons accounted 34.2% of the total, while all other size containers combined made up just 3.8% of the total during November 2017.
- ➤ ESL sales of reduced fat milk were dominated by half-gallons (61.3%), while gallons (16.7%) and other size containers (11.4%) came in a distant second and third. Quarts (7.0%), half-pints (1.9%), and pints (1.7%) combined for just 10.6% of ESL reduced fat sales during November 2017.

Table 3-4
<u>Low Fat (1%) Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Type of Container – November 2017

| Size of | Type of Container: | | | | |
|-------------|---------------------------------|-------|---------|-----------|--|
| Container | Glass | Paper | Plastic | All Types | |
| | Percent of Federal Order Total* | | | | |
| Gallon | | | 56.1 | 56.1 | |
| Half-gallon | 0.1 | 4.8 | 10.9 | 15.9 | |
| Quart | CR-LT | 1.6 | 0.9 | 2.5 | |
| Pint | CR-LT | 0.1 | LT | 0.1 | |
| Half-pint | | 19.3 | 2.8 | 22.1 | |
| Other** | | 0.3 | 3.0 | 3.2 | |
| All sizes | 0.1 | 26.1 | 73.8 | 100.0 | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-4A
Low Fat (1%) Milk Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container—November 2017

| Size of | | Type of C | Container: | | | |
|-------------|--------------|---------------------------------|------------|----------------|--|--|
| Container | Conventional | ESL | Organic | All Categories | | |
| | | Percent of Federal Order Total* | | | | |
| Gallon | 54.7 | 0.3 | 1.1 | 56.1 | | |
| Half-gallon | 11.2 | 1.2 | 3.5 | 15.9 | | |
| Quart | 1.1 | 1.4 | LT | 2.5 | | |
| Pint | LT | 0.1 | CR-LT | 0.1 | | |
| Half-pint | 21.1 | 0.2 | 0.9 | 22.1 | | |
| Other** | 2.7 | 0.6 | LT | 3.2 | | |
| | | | | | | |
| All sizes | 90.7 | 3.7 | 5.6 | 100.0 | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

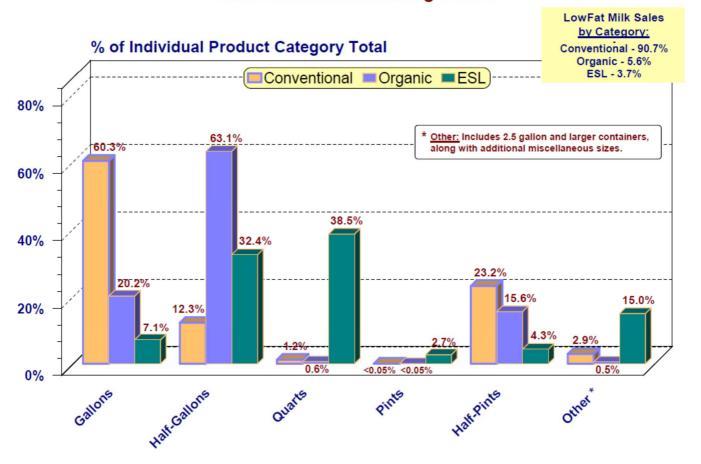
Table 3-4B
Low Fat (1%) Milk Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container – November 2017

| Size of | | Type of Container: | | | | |
|-------------|--------------|----------------------------|---------|----------------|--|--|
| Container | Conventional | ESL | Organic | All Categories | | |
| | | Percent of Category Total* | | | | |
| Gallon | 60.3 | 7.1 | 20.2 | 56.1 | | |
| Half-gallon | 12.3 | 32.4 | 63.1 | 15.9 | | |
| Quart | 1.2 | 38.5 | 0.6 | 2.5 | | |
| Pint | LT | 2.7 | CR-LT | 0.1 | | |
| Half-pint | 23.2 | 4.3 | 15.6 | 22.1 | | |
| Other** | 2.9 | 15.0 | 0.5 | 3.2 | | |
| All sizes | 100.0 | 100.00 | 100.0 | 100.0 | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

2017 LowFat Milk Sales By Container Size and Category

All Federal Milk Marketing Orders



Graph 6: 2017 Low Fat Milk Sales by Container Size and Category

- Conventional milk comprised 90.7% of all FMMO low fat milk sales during November 2017, while organic sales accounted for 5.6% and ESL represented 3.7%. Low fat milk made up 14.2% of all FMMO milk sales during November 2017.
- ➤ The most popular container sizes for conventional low fat milk during November 2017 were gallons (60.3%), followed by half-pints (23.2%), and half-gallons (12.3%). The combined sales for all other container sizes accounted for just 4.1% of the total.
- ➤ Organic low fat milk sales were primarily in half-gallons (63.1%) and gallons (20.2%) during November 2017. Half-pint sales made up 15.6% of the total, while the remaining containers sizes combined for just 1.1%.
- ➤ Quart (38.5%) and half-gallon (32.4%) sales of low fat milk made up 70.9% of the FMMO total for ESL products during November 2017. Sales in containers under the other size classification accounted for the next largest proportion with 15.0% of the total, followed by gallons with 7.1%, half-pints with 4.3%, and pints with 2.7%.

Table 3-5

<u>Fat Free (Skim) Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Type of Container – November 2017

| Size of | Type of Container: | | | | | |
|-------------|--------------------|---------------------------------|---------|-----------|--|--|
| Container | Glass | Paper | Plastic | All Types | | |
| | | Percent of Federal Order Total* | | | | |
| Gallon | | | 62.2 | 62.2 | | |
| Half-gallon | 0.1 | 8.1 | 14.3 | 22.5 | | |
| Quart | 0.2 | 0.7 | 1.5 | 2.4 | | |
| Pint | CR-LT | CR-LT | 0.2 | 0.2 | | |
| Half-pint | | 8.4 | 0.6 | 9.0 | | |
| Other** | | 0.5 | 3.3 | 3.8 | | |
| All sizes | 0.4 | 17.6 | 82.0 | 100.0 | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-5A

<u>Fat Free (Skim) Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container—November 2017

| Size of | | Type of C | Container: | | |
|-------------|---------------------------------|-----------|------------|----------------|--|
| Container | Conventional | ESL | Organic | All Categories | |
| | Percent of Federal Order Total* | | | | |
| Gallon | 59.7 | 0.8 | 1.6 | 62.2 | |
| Half-gallon | 14.7 | 3.9 | 3.8 | 22.5 | |
| Quart | 1.8 | 0.5 | LT | 2.4 | |
| Pint | 0.2 | LT | | 0.2 | |
| Half-pint | 8.6 | 0.4 | LT | 9.0 | |
| Other** | 3.1 | 0.7 | LT | 3.8 | |
| All sizes | 88.0 | 6.4 | 5.6 | 100.0 | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-5B

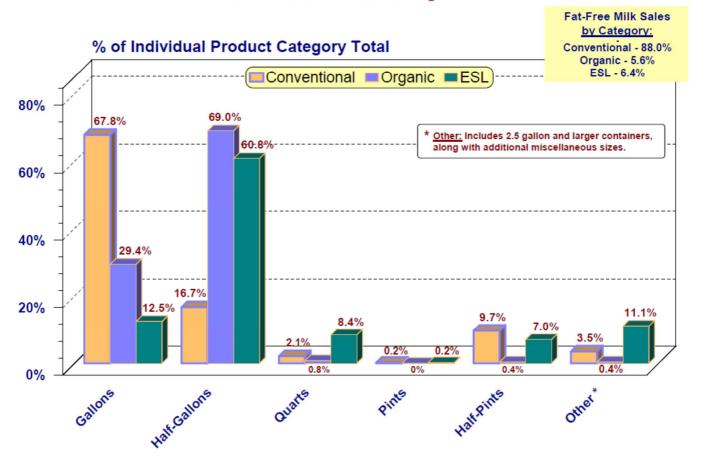
<u>Fat Free (Skim) Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container – November 2017

| Size of | | Type of Container: | | | | |
|-------------|--------------|----------------------------|---------|----------------|--|--|
| Container | Conventional | ESL | Organic | All Categories | | |
| | | Percent of Category Total* | | | | |
| Gallon | 67.8 | 12.5 | 29.4 | 62.2 | | |
| Half-gallon | 16.7 | 60.8 | 69.0 | 22.5 | | |
| Quart | 2.1 | 8.4 | 0.8 | 2.4 | | |
| Pint | 0.2 | 0.2 | | 0.2 | | |
| Half-pint | 9.7 | 7.0 | 0.4 | 9.0 | | |
| Other** | 3.5 | 11.1 | 0.4 | 3.8 | | |
| All sizes | 100.0 | 100.00 | 100.0 | 100.0 | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

2017 Fat Free Milk Sales By Container Size and Category

All Federal Milk Marketing Orders



Graph 7: 2017 Fat Free Milk Sales by Container Size and Category

- ➤ Conventional milk accounted for 88.0% of all FMMO fat free milk sales during November 2017, while ESL products made up 6.4%, and organic sales represented 5.6% of the total. Sales of all fat free products accounted for 9.1% of total FMMO milk sales during November 2017.
- Within the conventional fat free milk category, gallons were the most popular size container accounting for 67.8% of sales during November 2017. Half-gallons were a distant second with 16.7% of the total, while half-pints recorded the third largest proportion at 9.7%.
- ➤ Half-gallons were the prominent container size for fat free milk within the ESL category, accounting for 60.8% of all FMMO sales during November 2017. Gallon were a distant second at 12.5%, while sales in the other size classification contributed 11.1%, and quarts accounted for 8.4%. Half-pints (7.0%) and pints (0.2%) made up the remaining 7.2% of ESL fat free sales during 2017.
- ➤ Organic fat free milk sales were predominately in half-gallon (69.0%) and gallon (29.4%) containers during November 2017. The remaining container sizes quarts, pints, half-pints, and other accounted for only 1.6% of the FMMO fat free sales total.

Table 3-6

<u>Flavored Fat Reduced Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Type of Container – November 2017

| Size of | | Type of C | ontainer: | | |
|----------------------|---------------------------------|-----------|-----------|-----------|--|
| Container | Glass | Paper | Plastic | All Types | |
| | Percent of Federal Order Total* | | | | |
| Gallon | | | 14.6 | 14.6 | |
| Half-gallon | LT | 1.4 | 7.2 | 8.6 | |
| Quart | 0.2 | 0.3 | 1.0 | 1.5 | |
| Pint | CR-LT | 0.1 | 1.7 | 1.8 | |
| Half-pint | | 59.3 | 7.1 | 66.4 | |
| Half-pint Other** | | 0.7 | 6.3 | 7.0 | |
| | | | | | |
| All sizes | 0.2 | 61.9 | 37.9 | 100.0 | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-6A

<u>Flavored Fat Reduced Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container—November 2017

| Size of | | Type of C | Container: | | | |
|-------------|--------------|---------------------------------|------------|----------------|--|--|
| Container | Conventional | ESL | Organic | All Categories | | |
| | | Percent of Federal Order Total* | | | | |
| Gallon | 14.5 | CR-LT | | 14.6 | | |
| Half-gallon | 7.6 | 0.8 | 0.3 | 8.6 | | |
| Quart | 1.1 | 0.4 | LT | 1.5 | | |
| Pint | 1.4 | 0.4 | CR-LT | 1.8 | | |
| Half-pint | 65.1 | 0.6 | 0.7 | 66.4 | | |
| Other** | 2.9 | 3.6 | 0.5 | 7.0 | | |
| All sizes | 92.7 | 5.8 | 1.5 | 100.0 | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

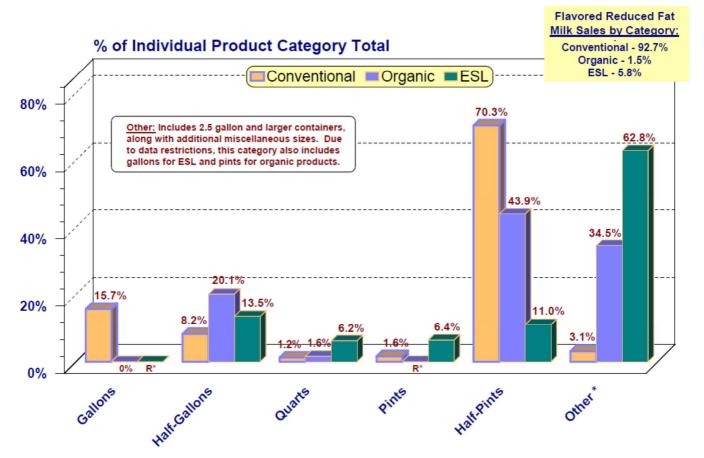
Table 3-6B

<u>Flavored Fat Reduced Milk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container – November 2017

| Size of | | Type of Container: | | | | | |
|-------------|--------------|----------------------------|---------|----------------|--|--|--|
| Container | Conventional | ESL | Organic | All Categories | | | |
| | | Percent of Category Total* | | | | | |
| Gallon | 15.7 | CR | | 14.6 | | | |
| Half-gallon | 8.2 | 13.5 | 20.1 | 8.6 | | | |
| Quart | 1.2 | 6.2 | 1.6 | 1.5 | | | |
| Pint | 1.6 | 6.4 | CR | 1.8 | | | |
| Half-pint | 70.3 | 11.0 | 43.9 | 66.4 | | | |
| Other** | 3.1 | 62.8 | 34.5 | 7.0 | | | |
| | | | | | | | |
| All sizes | 100.0 | 100.00 | 100.0 | 100.0 | | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

2017 Flavored Fat Reduced Milk Sales By Container Size and Category All Federal Milk Marketing Orders



Graph 8: 2017 Flavored Fat Reduced Milk Sales by Container Size and Category

- For purposes of this survey, flavored fat reduced milk sales include all lower fat flavored products (i.e., flavored reduced fat, flavored low fat, flavored fat free), and these products accounted for 9.1% of all FMMO milk sales during November 2017.
- ➤ The conventional milk category dominated sales of flavored reduced fat milk products during November 2017, accounting for 92.7% of FMMO sales. ESL products comprised 5.8% of sales, while the organic category recorded just 1.5% of the total.
- ➤ Half-pints were by far the most popular container size for conventional products accounting for 70.3% of sales. Similarly, the other size category dominated ESL sales with 62.8% of the total.
- ➤ Within the organic flavored fat reduced category, three container sizes accounted for nearly all sales— half-pints with 43.9%, the other size category with 34.5%, and half-gallons with 20.1%. Quarts made up the remaining 1.6% of sales during November 2017.
- ➤ Over 87% of flavored fat reduced ESL products were sold in three container sizes: the other size container classification (62.8%), half-gallons (13.5%), and half-pints (11.0%). Pints (6.4%) and quarts (6.2%) accounted for the remaining ESL products during November 2017.

Table 3-7
Eggnog Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Type of Container – November 2017

| Size of | | Type of Co | ontainer: | |
|-------------|-------|----------------|-------------------|-----------|
| Container | Glass | Paper | Plastic | All Types |
| | | Percent of Fed | eral Order Total* | |
| Gallon | | | 0.9 | 0.9 |
| Half-gallon | 0.1 | 19.0 | 39.1 | 58.2 |
| Quart | 0.7 | 22.2 | 14.0 | 36.9 |
| Pint | CR-LT | CR-LT | 2.6 | 2.7 |
| Half-pint | | | CR-LT | CR-LT |
| Other** | | 0.8 | 0.5 | 1.3 |
| | | | | |
| All sizes | 0.9 | 42.0 | 57.1 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-7A
Eggnog Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container – November 2017

| Size of | | Type of C | Container: | | | | |
|-------------|--------------|---------------------------------|------------|----------------|--|--|--|
| Container | Conventional | ESL | Organic | All Categories | | | |
| | | Percent of Federal Order Total* | | | | | |
| Gallon | 0.9 | | | 0.9 | | | |
| Half-gallon | 46.0 | 12.2 | | 58.2 | | | |
| Quart | 18.4 | 17.6 | 0.9 | 36.9 | | | |
| Pint | 2.5 | 0.1 | | 2.7 | | | |
| Half-pint | CR-LT | | | CR-LT | | | |
| Other** | 0.4 | 0.9 | | 1.3 | | | |
| All sizes | 68.2 | 30.9 | 0.9 | 1000.0 | | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-7B

<u>Eggnog</u> Sold By Handlers Regulated Under Federal Orders

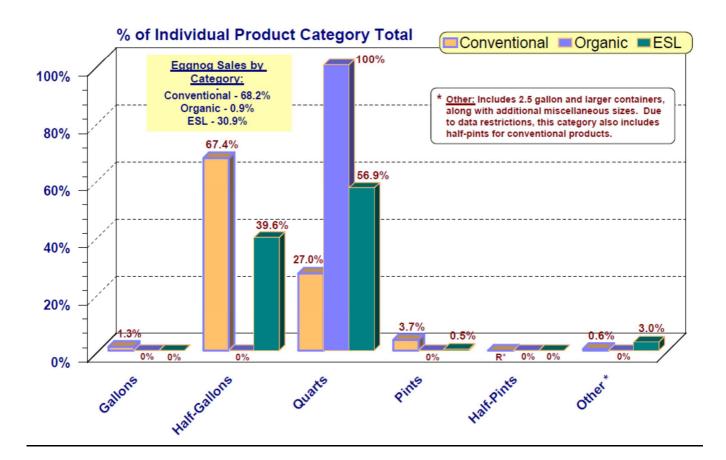
Percentage by Size and Category of Container – November 2017

| Size of | | Type of Container: | | |
|-------------|--------------|--------------------|-----------------|----------------|
| Container | Conventional | ESL | Organic | All Categories |
| | | Percent of C | Category Total* | |
| Gallon | 1.3 | | | 0.9 |
| Half-gallon | 67.4 | 39.6 | | 58.2 |
| Quart | 27.0 | 56.9 | 100.0 | 36.9 |
| Pint | 3.7 | 0.5 | | 2.7 |
| Half-pint | CR-LT | | | CR-LT |
| Other** | 0.6 | 3.0 | | 1.3 |
| | | | | |
| All sizes | 100.0 | 100.00 | 100.0 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

2017 Eggnog Sales By Container Size and Category

All Federal Milk Marketing Orders



Graph 9: 2017 Eggnog Sales by Container Size and Category

- Eggnog accounted for a very small proportion of FMMO total fluid milk sales during November 2017, comprising just 1.5% of the FMMO total.
- ➤ The conventional milk category accounted for 68.2% of all eggnog sales, which was its smallest proportion among all products. Conversely, ESL products comprised 30.9% of sales, which was its largest share among all products. The organic category recorded just 0.9% of eggnog sales during November 2017.
- ➤ Half-gallons (58.2%) and quarts (36.9%) were by far the most popular container sizes, accounting for 95.1% of all eggnog sales during November 2017.
- ➤ Within the conventional eggnog category, half-gallons were the most popular size with 67.4% of sales, followed by quarts with 27.0%. All other containers sizes comprised just 5.6% of sales.
- Within the ESL eggnog category, quarts were the most popular size with 56.9% of sales, followed by half-gallons with 39.6%. All other container sizes comprised just 3.5% of sales.
- Quarts made up 100% of organic eggnog sales during November 2017.

Table 3-8
Cultured Buttermilk Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Type of Container – November 2017

| Size of | Type of Container: | | | |
|-------------|--------------------|-----------------|--------------------------|-----------|
| Container | Glass | Paper | Plastic | All Types |
| | | Percent of Fede | <u>ral Order </u> Total* | |
| Gallon | | | 5.2 | 5.2 |
| Half-gallon | 0.1 | 6.7 | 53.6 | 60.3 |
| Quart | 0.1 | 10.2 | 18.0 | 28.3 |
| Pint | | 0.6 | 1.6 | 2.2 |
| Half-pint | | 1.1 | 0.2 | 1.2 |
| Other** | | | 2.8 | 2.8 |
| All sizes | 0.2 | 18.6 | 81.3 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page xx.

Table 3-8A
Cultured Buttermilk Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container—November 2017

| Size of | Type of Container: | | | | | | |
|-------------|--------------------|---------------------------------|---------|----------------|--|--|--|
| Container | Conventional | ESL | Organic | All Categories | | | |
| | | Percent of Federal Order Total* | | | | | |
| Gallon | 5.2 | | CR-LT | 5.2 | | | |
| Half-gallon | 60.3 | | CR-LT | 60.3 | | | |
| Quart | 27.1 | 0.5 | 0.6 | 28.3 | | | |
| Pint | 2.2 | | LT | 2.2 | | | |
| Half-pint | 1.2 | CR-LT | | 1.2 | | | |
| Other** | 2.8 | | | 2.8 | | | |
| All sizes | 98.8 | 0.5 | 0.7 | 1000.0 | | | |

Footnotes for Tables 3-1 through 3-9 are detailed on page xx.

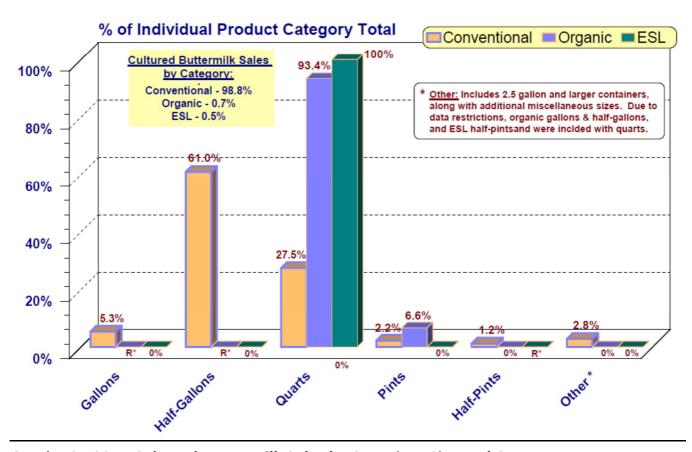
Table 3-8B

<u>Cultured Buttermilk</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Size and Category of Container – November 2017

| Size of | | Type of Container: | | |
|-------------|--------------|--------------------|-----------------|----------------|
| Container | Conventional | ESL | Organic | All Categories |
| | | Percent of C | Category Total* | |
| Gallon | 5.3 | | CR-LT | 5.2 |
| Half-gallon | 61.0 | | CR-LT | 60.3 |
| Quart | 27.5 | 100.0 | 93.4 | 28.3 |
| Pint | 2.2 | | 6.6 | 2.2 |
| Half-pint | 1.2 | CR-LT | | 1.2 |
| Other** | 2.8 | | | 2.8 |
| | | | | |
| All sizes | 100.0 | 100.0 | 100.0 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page xx.

2017 Cultured Buttermilk Sales By Container Size and Category All Federal Milk Marketing Orders



Graph 10: 2017 Cultured Buttermilk Sales by Container Size and Category

- Cultured buttermilk accounted for a very small proportion of FMMO total fluid milk sales during November 2017, comprising just 1.0% of the FMMO total.
- ➤ The conventional milk category accounted for 98.8% of all eggnog sales, which was its largest proportion among all types of milk products. Conversely, organic and ESL products comprised just 0.7% and 0.5%, respectively, which were each category's smallest share of sales among all products during November 2017.
- ➤ Half-gallons (60.3%) and quarts (28.3%) were by far the most popular container sizes, accounting for 88.6% of all cultured buttermilk sales during November 2017.
- ➤ Within the conventional cultured buttermilk category, half-gallons were the most popular size with 61.0% of sales, followed by quarts with 27.5%. All other containers sizes comprised the remaining 11.5% of sales.
- Quarts were the primary container size within the ESL cultured buttermilk category, comprising nearly 100% of sales.
- ➤ Quarts were also the most popular organic container size, accounting for 93.4% of sales. Pints contributed the remaining 6.6% of sales during November 2017.

Table 3-9

<u>Total Fluid Milk (All Products Combined)</u> Sold By Handlers Regulated Under Federal Orders

Percentage by Size and Type of Container – November 2017

| Size of | Type of Container: | | | | |
|-------------|-----------------------------------|-------|---------|-----------|--|
| Container | Glass | Paper | Plastic | All Types | |
| | Percent of Federal Order Total*** | | | | |
| Gallon | | | 63.5 | 63.5 | |
| Half-gallon | 0.1 | 5.1 | 12.9 | 18.1 | |
| Quart | 0.1 | 1.0 | 1.8 | 2.9 | |
| Pint | CR-LT | 0.1 | 1.0 | 1.1 | |
| Half-pint | | 10.0 | 1.3 | 11.3 | |
| Other** | | 0.4 | 2.7 | 3.1 | |
| | | | | | |
| All sizes | 0.2 | 16.6 | 83.2 | 100.0 | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-9A

<u>Total Fluid Milk (All Products Combined)</u> Sold By Handlers Regulated Under Federal Orders

Percentage by Size and Category of Container—November 2017

| Size of | Size of Type of Container: | | | | |
|-------------|----------------------------|-----------------|---------------------|----------------|--|
| Container | Conventional | ESL | Organic | All Categories | |
| | | Percent of Fede | eral Order Total*** | | |
| Gallon | 61.7 | 0.4 | 1.4 | 63.5 | |
| Half-gallon | 13.2 | 1.9 | 3.0 | 18.1 | |
| Quart | 2.1 | 0.7 | 0.1 | 2.9 | |
| Pint | 1.0 | 0.1 | CR-LT | 1.1 | |
| Half-pint | 10.9 | 0.2 | 0.3 | 11.3 | |
| Other** | 2.0 | 1.0 | 0.1 | 3.1 | |
| | | | | | |
| All sizes | 90.9 | 4.3 | 4.8 | 100.0 | |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

Table 3-9B

<u>Total Fluid Milk (All Products Combined)</u> Sold By Handlers Regulated Under Federal Orders

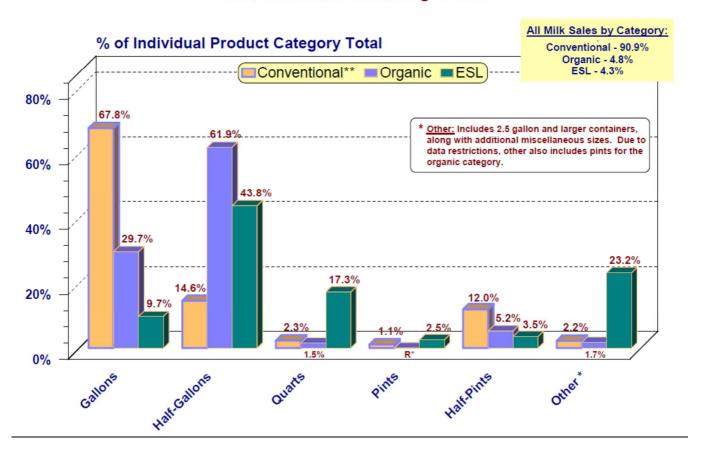
Percentage by Size and Category of Container – November 2017

| Size of | | Type of Container: | | |
|-------------|--------------|--------------------|-----------------|----------------|
| Container | Conventional | ESL | Organic | All Categories |
| | | Percent of Ca | tegory Total*** | |
| Gallon | 67.8 | 9.7 | 29.7 | 63.5 |
| Half-gallon | 14.6 | 43.8 | 61.9 | 18.1 |
| Quart | 2.3 | 17.3 | 1.5 | 2.9 |
| Pint | 1.1 | 2.5 | CR | 1.1 |
| Half-pint | 12.0 | 3.5 | 5.2 | 11.3 |
| Other** | 2.2 | 23.2 | 1.7 | 3.1 |
| A 11 | 100.0 | 100.00 | 100.0 | 100.0 |
| All sizes | 100.0 | 100.00 | 100.0 | 100.0 |

Footnotes for Tables 3-1 through 3-9 are detailed on page 26.

2017 All Milk Sales By Container Size and Category

All Federal Milk Marketing Orders

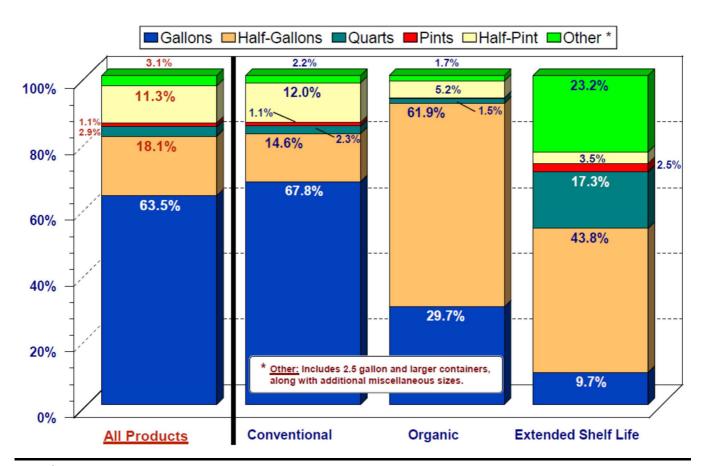


Graph 11: 2017 All Milk Sales by Container Size and Category

- Products in the conventional sales category made up 90.9% of all FMMO milk sales during November 2017. Organic milk products accounted for 4.8% of this total, while ESL products were responsible for 4.3%.
- ➤ Within the conventional milk category, gallons were the overwhelming favorite container size, accounting for 67.8% of FMMO total sales during November 2017. Half-gallons (14.6%) and half-pints (12.0%) were a distant second and third in popularity, while the remaining container sizes combined for just 5.6% of total sales.
- ➤ Over 91% of all FMMO organic milk sales during November 2017 were in two container sizes half-gallons with 61.9% of the total, and gallons with 29.7%. Half-pints held the largest share of the remaining container sizes, accounting for 5.2% of the organic total.
- ➤ Within the ESL category, half-gallons accounted for 43.8% of all FMMO milk sales during November 2017. Sales in the other size classification were second in popularity with 23.2% of the total, while quart sales accounted for 17.3%, and gallon containers were responsible for 9.7%. Pints and half-pints combined for 6.0% of November 2017 ESL total milk sales.

2017 Sales By Container Size and Category

All Federal Milk Marketing Orders



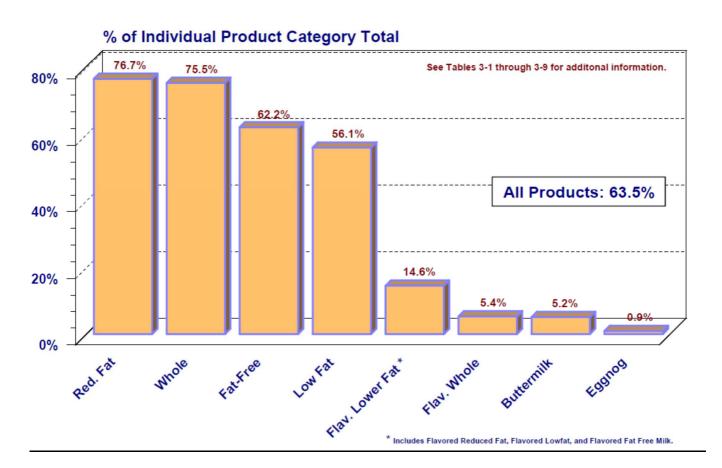
Graph 12:

NOTES for Table 3:

- LT Less than 0.05 percent.
- CR Restricted due confidentiality. Included in "Other" when applicable, included in the largest size category otherwise.
- * The figures in Tables 3-1 to 3-8 are based on the aggregate sales volume (all orders combined) for the specified product. See Table 10 for applicable sales volume for each product. *Totals may not add due to rounding*.
- ** The "Other" category includes 2.5 gallon and larger containers, along with miscellaneous other sizes, in most cases smaller than a pint.
- *** The figures in Tables 3-9 are based on the aggregate sales volume (all orders combined) for all products combined. See Table 10 for applicable sales volume. *Totals may not add due to rounding.*

2017 Fluid Milk Products Sold in Gallon Containers

All Federal Milk Marketing Orders, All Categories

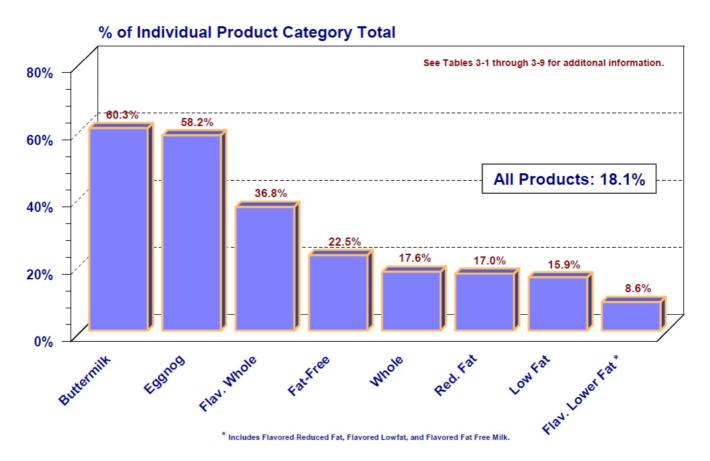


Graph 13: 2017 Fluid Milk Products Sold in Gallon Containers, All Categories

- ➤ Gallon containers were the prominent type used for reduced fat, whole, fat-free, and low fat milk during November 2017, accounting for over more than half of the sales for each of these product categories. Overall, gallons were responsible for more than 63.5% of all milk sold by FMMO handlers.
- ➤ Over three-fourths of reduced fat and whole milk were sold in gallon containers during November 2017, while gallons accounted over 62% of fat-free milk sales.
- ➤ Sales of eggnog, buttermilk, and flavored whole in gallon containers accounted for a very small proportion of the total 6% or less -- for each of these categories. Flavored lower fat milk sales in gallon containers were also a small proportion for this category, accounting for less than 15% of the total during November 2017.
- ➤ While gallon containers were the predominate size for conventional milk sales, accounting for 67.8% of conventional milk sales, they were much less popular for organic and ESL products. Gallons accounted for 29.7% of organic milk sales and 9.7% of ESL sales. (See Graph #11 for detailed comparison of sales by container size and category.)

2017 Fluid Milk Products Sold in Half-Gallon Containers

All Federal Milk Marketing Orders, All Categories

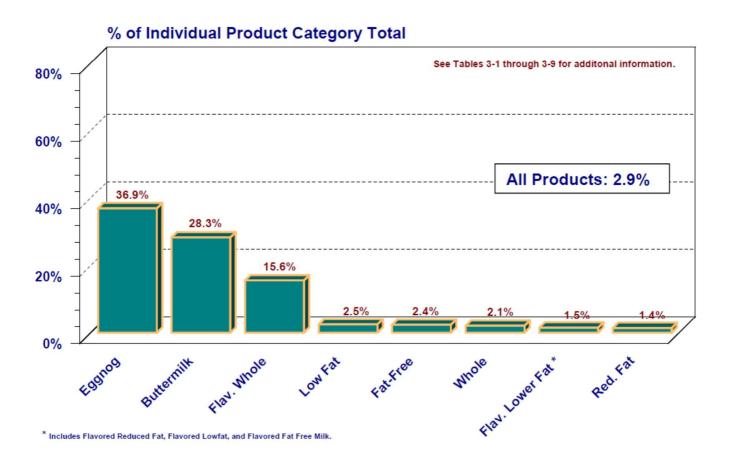


Graph 14: 2017 Fluid Milk Products Sold in Half-Gallon Containers, All Categories

- ➤ Half-gallon containers accounted for a little over 18% of the volume of all milk sold by FMMO handlers during November 2017, and this proportion has been quite stable since 1995. (However, half-gallon containers were the most popular type for organic and ESL sales, accounting for 61.9% and 43.8%, respectively, for these categories see Graph #11.)
- ➤ Half-gallons were the prevalent container size for buttermilk, eggnog, and flavored whole milk, accounting for 60.3%, 58.2%, and 36.8%, respectively, of the volume sold for each of these products during November 2017.
- Less than 20% of the total volume sold during November 2017 for each of the following categories was in half-gallon containers: whole, reduced fat, low fat, and flavored reduced fat.
- ➤ Half-gallons were the prevalent container size for many organic products: flavored whole milk (76.1%), fat free milk (69.0%), whole milk (63.2%), low fat milk (63.1%), and reduced fat milk (62.0%) containers during November 2017. For ESL products, half-gallons were the most popular container size for reduced fat milk (61.3%), fat free milk (60.8%), and whole milk (42.5%).

2017 Fluid Milk Products Sold in Quart Containers

All Federal Milk Marketing Orders All Categories

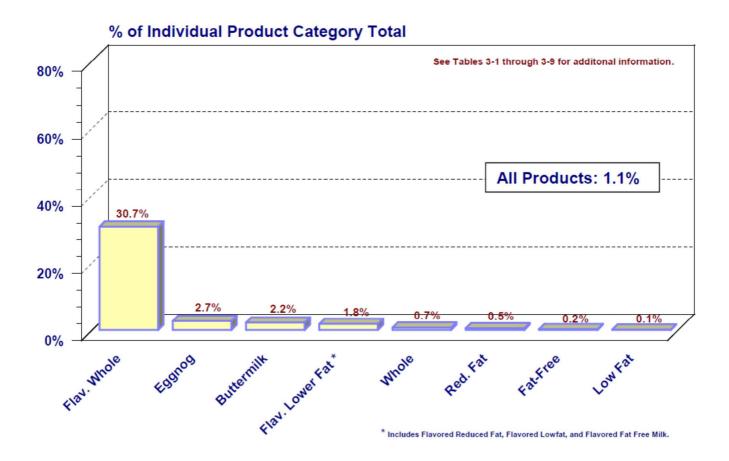


Graph 15: 2017 Fluid Milk Products Sold in Quart Containers, All Categories

- ➤ The proportion of all FMMO milk sold in quart containers during November 2017 was quite small, accounting for less than 3% of the total. (The proportion of sales accounted for by quart containers for ESL products was 17.3, while it was only 2.3% for conventional products and 1.5% for organic milk sales see Graph #11.)
- According to the biennial surveys, quarts have accounted for 10% or less of the total volume of milk sold since 1971.
- Approximately 37% of eggnog sales during November 2017 were in quart containers, which was the largest proportion of any fluid milk category.
- Quart containers accounted for more than 28% of all buttermilk sales, while they made up 15.6% of flavored whole milk sales during November 2017. For all other categories, quarts comprised 2.5% or less of total sales.

2017 Fluid Milk Products Sold in Pint Containers

All Federal Milk Marketing Orders, All Categories

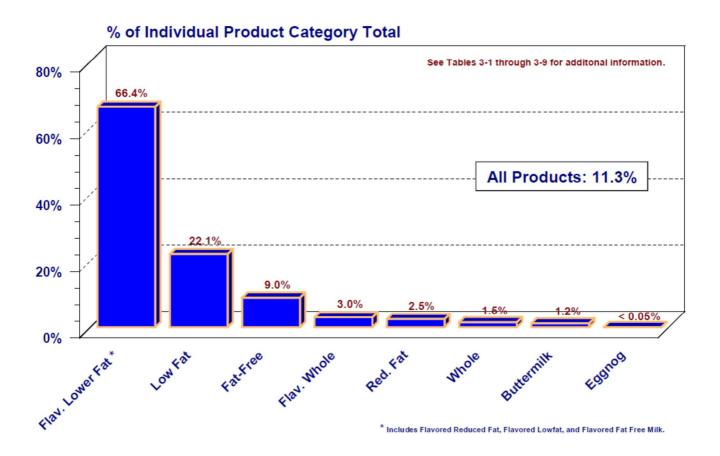


Graph 16: 2017 Fluid Milk Products Sold in Pint Containers, All Categories

- ➤ Pint containers comprise a very small proportion of all FMMO fluid milk sales. During November 2017 they made up approximately 1.1% of the total, which was down marginally from the proportion recorded in November 2015. (Pints accounted for 2.5% of ESL milk sales, but only 1.1% of conventional milk sales during November 2017 see Graph #11. Pint sales for organic products were combined with the other size category due to data restrictions.)
- Flavored whole milk was the only product with substantial sales in pint containers during November 2017, with pints accounting for 30.7% of the total.
- The only other products with sales in pints accounting for more than 1% of the FMMO total were eggnog (2.7%), buttermilk (2.2%), and flavored lower fat milk (1.8%).

2017 Fluid Milk Products Sold in Half-Pint Containers

All Federal Milk Marketing Orders, All Categories

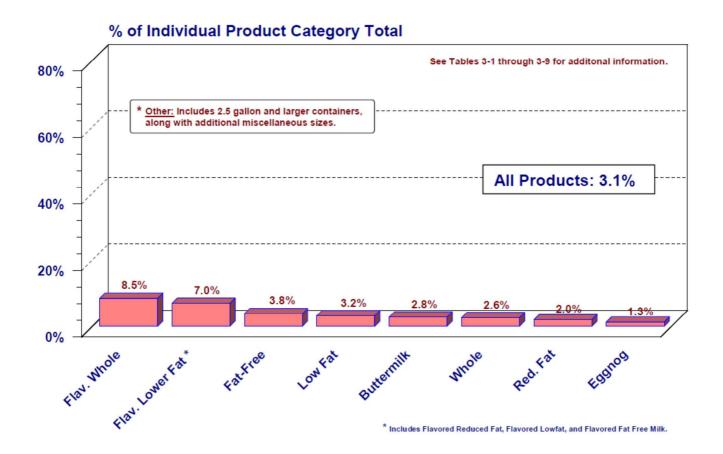


Graph 17: 2017 Fluid Milk Products Sold in Half-Pint Containers, All Categories

- ➤ Half-pint containers accounted for 11.3% of all FMMO milk sales during November 2017, which was the second time since these biennial surveys began in 1963 that this proportion has topped 11%. Overall, this proportion has remained remarkably stable, with the proportion falling between 9 and 11% during each survey prior to November 2015.
- Approximately two-thirds of all flavored lower fat sales were in half-pint containers, while half-pints accounted for more than 22% of low fat milk sales.
- ➤ The only other product with half-pint sales accounting for more than 3% of total volume was fatfree milk with 9.0%. Sales in half-pint containers made up 3% or less of total sales for all other products.
- ➤ Half-pints accounted for 12.0% of all conventional milk sales, 5.2% of organic milk sales, and 3.5% of ESL milk sales see Graph #11.

2017 Fluid Milk Products Sold in Other Containers

All Federal Milk Marketing Orders, All Categories



Graph 18: 2017 Fluid Milk Products Sold in Other Containers, All Categories

- ➤ Other container sizes comprised approximately 3.1% of all November 2017 fluid milk sales. The other sizes category is made up of a wide variety of container sizes, including multi-gallon containers along with various additional sizes, most smaller than a pint.
- Flavored whole fat milk had the largest proportion of sales in the other size category with approximately 8.5%. The only other product with more than 5% of total sales in other size containers was flavored lower fat milk at 7.0%.
- ➤ Other container sizes accounted for less than 4% of November 2017 sales for all of the following products: fat-free (3.8%), low fat (3.2%), buttermilk (2.8%), whole (2.6%), reduced fat (2.0), and eggnog (1.3%).
- ➤ Other container sizes accounted for 23.2% of sales for the ESL milk category, which was substantially different compared with the conventional milk category (2.2%) and the organic milk category (1.6%) see Graph #11.

Table 4-1

Total Fluid Milk Products Sold by Handlers Regulated Under the Northeast Order (001)

Percentage by Size and Type of Container for November 2017

| Size of | Type of Container: | | | | |
|-------------|------------------------------------|-------|---------|-----------|--|
| Container | Glass | Paper | Plastic | All Types | |
| | Percent of Individual Order Total* | | | | |
| Gallon | | | 54.3 | 54.3 | |
| Half-gallon | 0.3 | 11.1 | 16.0 | 27.3 | |
| Quart | 0.1 | 2.3 | 3.1 | 5.5 | |
| Pint | LT | 0.1 | 0.6 | 0.7 | |
| Half-pint | | 7.7 | 0.9 | 8.6 | |
| Other** | | 1.3 | 2.2 | 3.5 | |
| All sizes | 0.3 | 22.5 | 77.2 | 100.0 | |

Table 4-2
Total Fluid Milk Products Sold by Handlers Regulated Under the <u>Appalachian Order (005)</u>
Percentage by <u>Size and Type of Container</u> for November 2017

| Size of | Type of Container: | | | | |
|-------------|------------------------------------|-------|---------|-----------|--|
| Container | Glass | Paper | Plastic | All Types | |
| | Percent of Individual Order Total* | | | | |
| Gallon | | | 62.5 | 62.5 | |
| Half-gallon | CR-1 | LT | 13.4 | 13.5 | |
| Quart | CR-1 | 0.1 | 1.3 | 1.4 | |
| Pint | | | 1.3 | 1.3 | |
| Half-pint | | 18.1 | 1.6 | 19.8 | |
| Other** | | | 1.6 | 1.6 | |
| All sizes | CR-1 | 18.3 | 81.7 | 100.0 | |

Table 4-3
Total Fluid Milk Products Sold by Handlers Regulated Under the Florida Order (006)
Percentage by Size and Type of Container for November 2017

| Size of | Type of Container: | | | | |
|-------------|------------------------------------|-------|---------|-----------|--|
| Container | Glass | Paper | Plastic | All Types | |
| | Percent of Individual Order Total* | | | | |
| Gallon | | | 69.1 | 69.1 | |
| Half-gallon | 0.1 | LT | 15.9 | 16.0 | |
| Quart | | | 1.0 | 1.0 | |
| Pint | | | 1.1 | 1.1 | |
| Half-pint | | 9.6 | 2.2 | 11.8 | |
| Other** | | LT | 1.0 | 1.0 | |
| All sizes | 0.1 | 9.6 | 90.3 | 100.0 | |

Table 4-4

Total Fluid Milk Products Sold by Handlers Regulated Under the Southeast Order (007)

Percentage by Size and Type of Container for November 2017

| Size of | | Type of Co | ontainer: | | |
|-------------|------------------------------------|------------|-----------|-----------|--|
| Container | Glass | Paper | Plastic | All Types | |
| | Percent of Individual Order Total* | | | | |
| Gallon | | | 60.8 | 60.8 | |
| Half-gallon | LT | 0.6 | 16.8 | 17.3 | |
| Quart | | 0.2 | 2.0 | 2.2 | |
| Pint | | LT | 1.9 | 1.9 | |
| Half-pint | | 13.1 | 4.2 | 17.3 | |
| Other** | | | 0.5 | 0.5 | |
| All sizes | LT | 13.9 | 86.1 | 100.0 | |

Table 4-5
Total Fluid Milk Products Sold by Handlers Regulated Under the Upper Midwest Order (030)
Percentage by Size and Type of Container for November 2017

| Size of | | Type of C | ontainer: | | | |
|-------------|------------------------------------|-----------|-----------|-----------|--|--|
| Container | Glass | Paper | Plastic | All Types | | |
| | Percent of Individual Order Total* | | | | | |
| Gallon | | | 68.6 | 68.6 | | |
| Half-gallon | 0.1 | 3.8 | 10.9 | 14.7 | | |
| Quart | 1.1 | 1.0 | 1.3 | 3.3 | | |
| Pint | | 0.2 | 0.7 | 0.9 | | |
| Half-pint | | 9.6 | 0.7 | 10.2 | | |
| Other** | | 0.2 | 2.0 | 2.2 | | |
| All sizes | 1.2 | 14.7 | 84.2 | 100.0 | | |

Table 4-6
Total Fluid Milk Products Sold by Handlers Regulated Under the <u>Central Order (032)</u>
Percentage by <u>Size and Type of Container</u> for November 2017

| Size of Container | Type of Container: | | | | |
|-------------------|------------------------------------|-------|---------|-----------|--|
| | Glass | Paper | Plastic | All Types | |
| | Percent of Individual Order Total* | | | | |
| Gallon | | | 62.8 | 62.8 | |
| Half-gallon | 0.1 | 11.3 | 11.2 | 22.5 | |
| Quart | | 0.7 | 1.7 | 2.4 | |
| Pint | | LT | 1.3 | 1.3 | |
| Half-pint | | 9.6 | 0.1 | 9.7 | |
| Other** | | LT | 1.3 | 1.3 | |
| All sizes | 0.1 | 21.6 | 78.4 | 100.0 | |

Table 4-7
Total Fluid Milk Products Sold by Handlers Regulated Under the Mideast Order (033)
Percentage by Size and Type of Container for November 2017

| Size of Container | Type of Container: | | | | | |
|----------------------|--------------------|------------------------------------|---------|-----------|--|--|
| | Glass | Paper | Plastic | All Types | | |
| | | Percent of Individual Order Total* | | | | |
| Gallon | | | 68.7 | 68.7 | | |
| Half-gallon | 0.1 | 1.2 | 10.3 | 11.6 | | |
| Quart | LT | 1.3 | 1.2 | 2.5 | | |
| Pint | | LT | 0.7 | 0.7 | | |
| Half-pint | | 7.4 | 1.1 | 8.5 | | |
| Other** | | 0.2 | 7.8 | 8.0 | | |
| All sizes | 0.1 | 10.1 | 89.9 | 100.0 | | |

Table 4-8
Total Fluid Milk Products Sold by Handlers Regulated Under the Pacific Northwest Order (124)
Percentage by Size and Type of Container for November 2017

| Size of Container | Type of Container: | | | | |
|-------------------|------------------------------------|-------|---------|-----------|--|
| | Glass | Paper | Plastic | All Types | |
| | Percent of Individual Order Total* | | | | |
| Gallon | | | 66.9 | 66.9 | |
| Half-gallon | | 12.6 | 9.8 | 22.4 | |
| Quart | | 2.4 | 0.2 | 2.6 | |
| Pint | | 0.2 | 1.0 | 1.2 | |
| Half-pint | | 6.0 | 0.2 | 6.2 | |
| Other** | | CR-1 | | 0.7 | |
| All sizes | | 21.2 | 78.8 | 100.0 | |

Table 4-9
Total Fluid Milk Products Sold by Handlers Regulated Under the Southwest Order (126)
Percentage by Size and Type of Container for November 2017

| Size of Container | Type of Container: | | | | |
|----------------------|------------------------------------|-------|---------|-----------|--|
| | Glass | Paper | Plastic | All Types | |
| | Percent of Individual Order Total* | | | | |
| Gallon | | | 65.0 | 65.0 | |
| Half-gallon | | 1.5 | 13.7 | 15.2 | |
| Quart | | 0.1 | 1.6 | 1.6 | |
| Pint | | 0.1 | 1.7 | 1.8 | |
| Half-pint | | 11.9 | 1.9 | 13.8 | |
| Other** | | 0.6 | 2.0 | 2.6 | |
| All sizes | | 14.1 | 85.9 | 100.0 | |

Table 4-10
Total Fluid Milk Products Sold by Handlers Regulated Under the <u>Arizona Order (131)</u>
Percentage by Size and Type of Container for November 2017

| Size of Container | Type of Container: | | | | |
|----------------------|------------------------------------|-------|---------|-----------|--|
| | Glass | Paper | Plastic | All Types | |
| | Percent of Individual Order Total* | | | | |
| Gallon | | | 78.3 | 78.3 | |
| Half-gallon | CR-1 | | 9.1 | 9.1 | |
| Quart | CR-1 | CR-LT | 1.2 | 1.2 | |
| Pint | CR-2 | | | CR | |
| Half-pint | | CR-2 | CR | CR | |
| Other** | | | 11.4 | 11.4 | |
| All sizes | CR-1 | CR-1 | 99.6 | 100.0 | |

NOTES for Table 4-1 to 4-10:

LT: Less than 0.05 percent.

CR: Restricted due confidentiality. Included in "Other". CR-1: Restricted due confidentiality. Included in "Plastic".

CR-2: Restricted due confidentiality. Included in "Plastic Other".

^{*} The figures in Tables 4-1 to 4-10 are based on the total sales volume for the respective milk order. See Table 10 for applicable sales volume. *Totals may not add due to rounding*.

^{**} The "Other" category includes 2.5 gallon and larger containers, along with miscellaneous other sizes, in most cases smaller than a pint.

Table 5-1

<u>Gallon Containers</u> Sold By Handlers Regulated Under Federal Orders
Percentage by <u>Product and Category</u> – November 2017

| | <u> </u> | <u> </u> | | | | | |
|----------------------|--------------|--------------|---------------|-----------|--|--|--|
| Duodust Catagony | Category: | | | | | | |
| Product Category | Conventional | ESL | Organic | All Types | | | |
| | | Percent of G | Gallon Total* | | | | |
| Whole Milk | 36.6 | 0.2 | 1.0 | 37.8 | | | |
| Reduced Fat (2%) | 37.4 | 0.3 | 0.8 | 38.5 | | | |
| Low Fat (1%) | 12.2 | 0.1 | 0.3 | 12.5 | | | |
| Fat-Free (skim) | 8.6 | 0.1 | 0.2 | 8.9 | | | |
| Flavored Whole | 0.1 | LT | | 0.1 | | | |
| Flavored Reduced Fat | 2.1 | CR-C | | 2.1 | | | |
| Eggnog | LT | | | LT | | | |
| Buttermilk | 0.1 | | CR-LT | 0.1 | | | |
| All Products | 97.1 | 0.6 | 2.3 | 100.0 | | | |

Table 5-2

<u>Half-Gallon Containers</u> Sold By Handlers Regulated Under Federal Orders
Percentage by <u>Product and Category</u> – November 2017

| D 1 (C) | Category: | | | | | | |
|----------------------|--------------|------------------|-----------------|-----------|--|--|--|
| Product Category | Conventional | Conventional ESL | | All Types | | | |
| | | Percent of Halj | f-Gallon Total* | | | | |
| Whole Milk | 21.9 | 2.3 | 6.7 | 30.9 | | | |
| Reduced Fat (2%) | 21.4 | 3.5 | 5.0 | 29.8 | | | |
| Low Fat (1%) | 8.7 | 0.9 | 2.8 | 12.4 | | | |
| Fat-Free (skim) | 7.4 | 2.0 | 1.9 | 11.3 | | | |
| Flavored Whole | 2.7 | 0.2 | LT | 3.0 | | | |
| Flavored Reduced Fat | 3.8 | 0.4 | 0.2 | 4.3 | | | |
| Eggnog | 3.8 | 1.0 | | 4.8 | | | |
| Buttermilk | 3.4 | | CR-C | 3.4 | | | |
| All Products | 73.1 | 10.3 | 16.6 | 100.0 | | | |

Table 5-3
Quart Containers Sold By Handlers Regulated Under Federal Orders
Percentage by Product and Category – November 2017

| | 1 creentage by 1 rout | ct and Category – I | TOVEINE 2017 | | | | |
|----------------------|-----------------------|---------------------|--------------|-----------|--|--|--|
| Product Category | Category: | | | | | | |
| Froduct Category | Conventional | ESL | Organic | All Types | | | |
| | | Percent of Qu | uart Total* | | | | |
| Whole Milk | 19.6 | 3.2 | 0.7 | 23.5 | | | |
| Reduced Fat (2%) | 11.7 | 2.5 | 0.8 | 15.0 | | | |
| Low Fat (1%) | 5.4 | 6.9 | 0.2 | 12.5 | | | |
| Fat-Free (skim) | 5.7 | 1.7 | 0.1 | 7.5 | | | |
| Flavored Whole | 7.0 | 0.8 | 0.1 | 7.8 | | | |
| Flavored Reduced Fat | 3.5 | 1.1 | 0.1 | 4.7 | | | |
| Eggnog | 9.5 | 9.0 | 0.5 | 19.0 | | | |
| Buttermilk | 9.6 | 0.2 | 0.2 | 10.0 | | | |
| All Products | 71.9 | 25.5 | 2.6 | 100.0 | | | |

Table 5-4
Pint Containers Sold By Handlers Regulated Under Federal Orders
Percentage by Product and Category – November 2017

| | <u> </u> | | | | | | |
|----------------------|--------------|--------------|------------|-----------|--|--|--|
| Duadwat Catagony | Category: | | | | | | |
| Product Category | Conventional | ESL | Organic | All Types | | | |
| | | Percent of P | int Total* | | | | |
| Whole Milk | 18.7 | 1.7 | 0.1 | 20.5 | | | |
| Reduced Fat (2%) | 13.2 | 1.6 | | 14.8 | | | |
| Low Fat (1%) | 0.4 | 1.3 | CR-C | 1.7 | | | |
| Fat-Free (skim) | 1.3 | 0.1 | | 1.5 | | | |
| Flavored Whole | 39.1 | 1.6 | 0.1 | 40.7 | | | |
| Flavored Reduced Fat | 12.0 | 3.1 | CR-C | 15.1 | | | |
| Eggnog | 3.4 | 0.2 | | 3.6 | | | |
| Buttermilk | 2.1 | | LT | 2.1 | | | |
| All Products | 90.2 | 9.5 | 0.3 | 100.0 | | | |

Table 5-5

10-14 oz Containers Sold By Handlers Regulated Under Federal Orders
Percentage by Product and Category – November 2017

| Due do et Cete e em | Category: | | | | | | |
|----------------------|--------------|--------------------------|-------------|-----------|--|--|--|
| Product Category | Conventional | Conventional ESL Organic | | All Types | | | |
| | | Percent of 10-1 | 4 oz Total* | | | | |
| Whole Milk | 4.5 | 4.3 | | 8.8 | | | |
| Reduced Fat (2%) | 4.0 | 1.9 | | 5.9 | | | |
| Low Fat (1%) | 48.4 | 0.9 | | 49.3 | | | |
| Fat-Free (skim) | 0.6 | 0.2 | | 0.9 | | | |
| Flavored Whole | 5.6 | 4.3 | | 9.9 | | | |
| Flavored Reduced Fat | 12.0 | 12.2 | CR-C | 24.2 | | | |
| Eggnog | 0.8 | 0.2 | | 1.0 | | | |
| Buttermilk | | | | | | | |
| All Products | 75.9 | 24.1 | CR-C | 100.0 | | | |

Table 5-6

<u>Half-Pint Containers</u> Sold By Handlers Regulated Under Federal Orders
Percentage by Product and Category – November 2017

| | Tercentage by 110du | | | | | | |
|----------------------|---------------------|--------------|-----------------|-----------|--|--|--|
| Product Category | Category: | | | | | | |
| Troduct Category | Conventional | ESL | Organic | All Types | | | |
| | | Percent of H | alf-Pint Total* | | | | |
| Whole Milk | 3.7 | 0.1 | 0.3 | 4.1 | | | |
| Reduced Fat (2%) | 6.6 | 0.2 | 0.2 | 7.0 | | | |
| Low Fat (1%) | 26.4 | 0.2 | 1.1 | 27.7 | | | |
| Fat-Free (skim) | 6.9 | 0.4 | LT | 7.3 | | | |
| Flavored Whole | 0.4 | CR-C | | 0.4 | | | |
| Flavored Reduced Fat | 52.4 | 0.5 | 0.5 | 53.4 | | | |
| Eggnog | CR-LT | | | CR-LT | | | |
| Buttermilk | 0.1 | CR-C | | 0.1 | | | |
| All Products | 96.5 | 1.3 | 2.2 | 100.0 | | | |

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Table 5-7

<u>All Other Container Sizes</u> Sold By Handlers Regulated Under Federal Orders
Percentage by <u>Product and Category</u> – November 2017

| | Category: | | | | | | |
|----------------------|--------------|------------------------|------------------------|-----------|--|--|--|
| Product Category | Conventional | ESL | Organic | All Types | | | |
| | l | Percent of All Other C | Container Sizes Total* | | | | |
| Whole Milk | 19.0 | 12.2 | 0.6 | 31.8 | | | |
| Reduced Fat (2%) | 19.4 | 4.3 | 0.3 | 24.0 | | | |
| Low Fat (1%) | 3.1 | 3.0 | 0.2 | 6.2 | | | |
| Fat-Free (skim) | 11.2 | 2.6 | 0.1 | 13.9 | | | |
| Flavored Whole | 1.1 | 1.4 | CR-C | 2.5 | | | |
| Flavored Reduced Fat | 7.7 | 10.3 | 2.0 | 19.9 | | | |
| Eggnog | LT | 0.5 | | 0.5 | | | |
| Buttermilk | 1.2 | | | 1.2 | | | |
| All Products | 62.7 | 34.2 | 3.1 | 100.0 | | | |

NOTES for Table 5-1 to 5-7:

LT - Less than 0.05 percent.

CR-C - Restricted due to confidentiality. Included in "Conventional Category"

^{*} Totals may not add due to rounding

Table 6
Total Fluid Milk Products Sold By Handlers Regulated Under Federal Orders
Method of Distribution-All Orders Combined

November of Selected Years 1965-2017

| | | | M | lethod of Distr | ibution: | | |
|------|------------------|-------------------|-----------------------|-----------------|--------------|--------------------|-------|
| Year | | Food | d Chain* | Institu | ıtional | | |
| | Home Delivery | Super- markets | Dairy and Convenience | Military | Schools | Other Wholesale | Total |
| | | | Percent | t of Federal O | rder Total** | | |
| 1965 | 28.3 | N/A | N/A | N/A | N/A | N/A | 100.0 |
| 1975 | 6.9 | N/A | N/A | N/A | N/A | N/A | 100.0 |
| 1985 | 1.5 | 52.6 | 9.4 | 1.2 | 6.8 | 28.5 | 100.0 |
| 1995 | 0.7 | 56.5 | 10.2 | 1.0 | 6.5 | 25.1 | 100.0 |
| 2003 | 0.4 | 49.6 | 10.5 | 0.8 | 6.4 | 32.3 | 100.0 |
| 2005 | 0.4 | 48.1 | 9.1 | 1.0 | 6.1 | 35.2 | 100.0 |
| 2007 | 0.3 | 47.0 | 8.5 | 1.0 | 6.9 | 36.2 | 100.0 |
| 2009 | 0.3 | 45.2 | 8.6 | 0.9 | 6.9 | 38.2 | 100.0 |
| 2011 | 0.3 | 42.6 | 7.6 | 0.8 | 8.0 | 40.6 | 100.0 |
| 2013 | 0.3 | 40.9 | 8.2 | 0.8 | 8.5 | 41.3 | 100.0 |
| 2013 | 0.3 | 40.9 | 8.2 | 0.8 | 8.5 | 41.3 | 100.0 |
| 2015 | 0.4 | 40.4 | 6.3 | NC | 8.0 | NC | 100.0 |
| 2017 | 0.4 | 36.7 | 5.6 | NC | 8.9 | NC | 100.0 |

NOTES for Table 6:

N/A-This breakdown was not available prior to 1977.

NC – Comparable data is not available due to changes in the categories used in the 2015 and 2017 surveys.

^{*} The definitions for these methods of distribution were changed somewhat in the 2015 and 2017 surveys; consequently, 2015 and 2017 data may not be completely comparable to prior years.

^{**} The figures in Table 6 are based on the aggregate sales volume (all products and all orders combined, excluding Arizona due to data confidentiality). See Table 10 for applicable sales volume. *Totals may not add due to rounding*.

Table 7
Total Fluid Milk Products Sold By Handlers Regulated Under Federal Orders

<u>Method of Distribution – Individual Orders</u>

November 2017

| | | | | | Metho | od of Distrib | oution: | | |
|------------------------|------------|------------------|----------------------------|-----------------------|---------------|--------------------|------------|--------------------|----------------|
| Marketing | | | Food | Stores | School, In | stitutional, | and Other | | |
| Area | Order | Home Delivery | Super- market Chains | Convenience Stores | Schools | Institu- tional | Other | Other Wholesale | Total |
| | | | | Perc | ent of Indivi | dual Order | Total** | | |
| Northeast | 001 | 0.1 | 36.0 | 8.7 | 4.1 | 1.8 | 7.4 | 42.0 | 100.0 |
| Appalachian Florida | 005 006 | CR | 29.7 36.2 | 3.5 5.1 | 21.8 16.2 | 5.0 5.1 | 5.3 5.7 | 34.6 31.7 | 100.0 100.0 |
| Southeast | 007 | LT | 30.8 | 3.8 | 11.6 | 4.4 | 8.5 | 40.9 | 100.0 |
| Upper MW | 030 | 2.9 | 31.7 | 9.8 | 3.7 | 3.2 | 3.9 | 44.7 | 100.0 |
| Central | 032 | CR | 45.9 | 3.8 | 7.1 | 1.9 | 11.4 | 29.9 | 100.0 |
| Mideast | 033 | CR | 35.7 | 5.8 | 5.5 | 3.8 | 3.8 | 45.5 | 100.0 |
| Pacific NW | 124 | CR | 43.6 | 2.4 | 2.0 | 0.8 | 1.9 | 49.3 | 100.0 |
| Southwest | 126 | | 42.0 | 3.1 | 15.0 | 3.8 | 4.2 | 31.9 | 100.0 |
| Arizona | 131 | | CR-X | CR-X | CR-X | CR-X | CR-X | CR-X | CR-X |
| All Orders | | 0.4 | 36.7 | 5.6 | 8.9 | 3.2 | 6.1 | 39.1 | 100.0 |

NOTES for Tables 7:

- LT Less than 0.05 percent.
- CR- Restricted due to confidentiality. Included in applicable "Other" category.
- CR-X -Arizona restricted due to confidentiality. Not included in "All Orders" percentages.

^{*} The Other Wholesale category includes Mass Merchandisers (such as Walmart, Target. etc.), Drug Stores (such as CVS, Rite Aid, Walgreens, etc.), Club Stores (such as Costco, Sam's, BJ's Wholesale, etc.), and Wholesale Distributors. See Table 8 for additional information for this category.

^{**} The data in Table 7 for the individual orders are based on the total sales volume for the respective milk order. See Table 10 for applicable sales volume. *Totals may not add due to rounding.*

Table 8
Total Fluid Milk Products Sold By Handlers Regulated Under Federal Orders
Type of Other Wholesale Outlet* – Individual Orders
November 2017

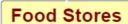
| | Order | Type of Other Wholesale Outlet:* | | | | | |
|----------------|--------|----------------------------------|---------------------------|-------------------|-------|--|--|
| Marketing Area | Number | Mass Merchandisers | Wholesale Distributors | Club Stores | Total | | |
| | | | Percent of Individ | ual Order Total** | | | |
| | | | | | | | |
| Northeast | 001 | 10.0 | 25.0 | 7.0 | 42.0 | | |
| Appalachian | 005 | 20.2 | 12.8 | 1.6 | 34.6 | | |
| Florida | 006 | 14.2 | 12.6 | 4.9 | 31.7 | | |
| Southeast | 007 | 24.0 | 12.2 | 4.7 | 40.9 | | |
| Upper Midwest | 030 | 22.6 | 18.5 | 3.6 | 44.7 | | |
| Central | 032 | 18.0 | 5.1 | 6.8 | 29.9 | | |
| Mideast | 033 | 21.3 | 14.4 | 9.8 | 45.5 | | |
| Pacific NW | 124 | 14.2 | 25.4 | 9.6 | 49.3 | | |
| Southwest | 126 | 17.4 | 9.2 | 5.3 | 31.9 | | |
| Arizona | 131 | CR-X | CR-X | CR-X | CR-X | | |
| All Orders | | 17.4 | 15.5 | 6.2 | 39.1 | | |

NOTES for Tables 8:

CR-X -Arizona restricted due to confidentiality. Not included in "All Orders" percentages.

^{*} Mass merchandisers include outlets such as Walmart, Target, etc., as well as drug stores such as CVS, Rite Aid, Walgreens, etc. Club stores include outlets like Costco, Sam's, BJ's Wholesale, etc.

^{**} The data in Table 8 for individual orders is based on the total sales volume for the respective milk order. See Table 10 for applicable sales volume. *Totals may not add due to rounding.*

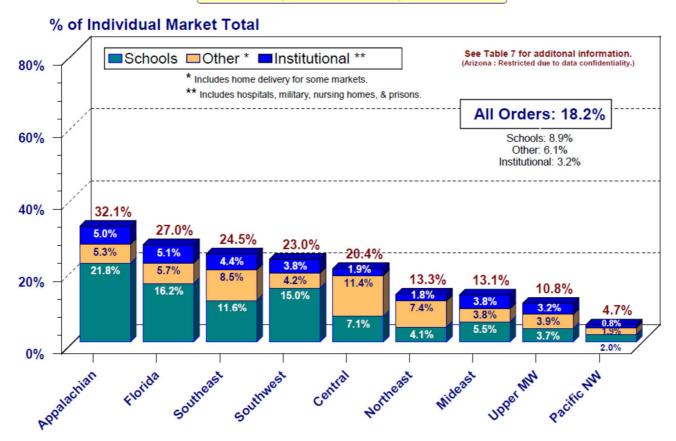




Graph 19: 2017 Fluid Milk Products Sold by Method of Distribution: Food Stores

- ➤ During November 2017, 42.3% of all FMMO fluid milk sales were sold through food stores, down from 46.7% in November 2015. This proportion varied significantly among FMMO's, ranging from a low of just under one-third of total sales in the Appalachian Order (33.2%) to nearly one-half for the Central Order (49.7%). The food store category includes supermarket chains and convenience stores but does not include drug stores.
- > Supermarket chains comprised 36.7% of fluid milk sales during November 2017, while convenience stores accounted for 5.6% of the FMMO total. Supermarket chain sales accounted for more than 40% of total sales for three orders and over one-third of the total for three others.
- The proportion of sales attributable to supermarket chains ranged from a low of 29.7% for the Appalachian Order to a high of 45.9% for the Central Order.
- The Upper Midwest and Northeast Orders reported the largest proportion of sales by convenience stores with 9.8% and 8.7%, respectively, of each order's total milk sales.

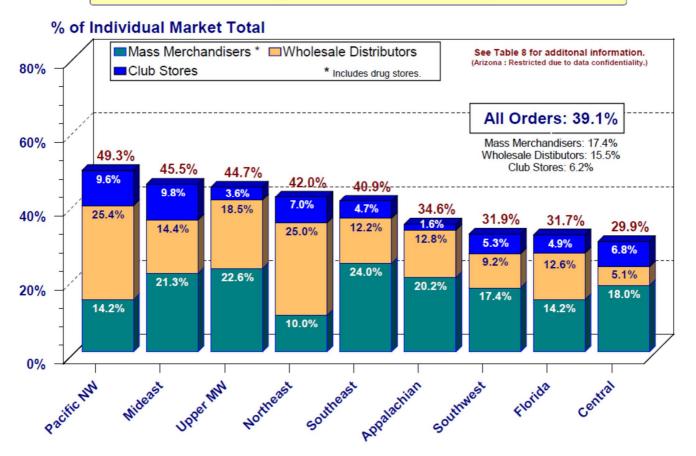
Schools, Institutional, and Other



Graph 20: 2017 Fluid Milk Products Sold by Method of Distribution : Schools, Institutional and Other

- Schools, institutional and other sales outlets accounted for 18.2% of all FMMO fluid milk sales during November 2017, up from 16.8% in November 2015. The Appalachian Order reported the largest proportion with 32.1% of sales in this category, while the Pacific Northwest Order reported the lowest at 4.7%.
- Sales to institutional outlets ranged from a low of 0.8% of the market total for the Pacific Northwest Order to a high of 5.1% for the Florida Order during November 2017. The institutional category includes hospital, military, nursing home, and prison milk sales.
- School sales ranged from a low of 2.0% of the market total for the Pacific Northwest Order to a high of 21.8% for the Appalachian Order. The Florida (16.2%), Southwest (15.0%), and Southeast Orders (11.6%) were other markets to report school milk sales over 10% during November 2017.
- Sales in the other category ranged from a low of 1.9% of the total for the Pacific Northwest Order to a high of 11.4% for the Central Order. This category includes sales to outlets not otherwise defined in the survey questionnaire, as well as home delivery milk sales for some markets.

Mass Merchandisers, Wholesale Distributors, & Club Stores



Graph 21: **2017** Fluid Milk Products Sold by Method of Distribution : Mass Merchandisers, Wholesale Distributors, and Club Stores

- The mass merchandisers, wholesale distributors, and club stores category accounted for 39.1% of total FMMO fluid milk sales during November 2017, up from 36.1% in November 2015. Mass merchandisers include retailers such as Walmart, Target, etc., while the club store category includes outlets like Costco, Sam's Club, BJ's Wholesale, etc. Drug stores, such as CVS, Rite Aid, Walgreens, etc., are included in the mass merchandisers category.
- Milk sales in this combined category ranged from a low of 29.9% of the total for the Central Order, to a high of 49.3% for the Pacific Northwest Order.
- Mass merchandiser milk sales ranged from a low of 10.0% of the total for the Northeast Order, to a high of 24.0% for the Southeast Order.
- Milk sales by wholesale distributors was quite variable, with a range of 5.1% of the total for the Central Order to a high of 25.4% for the Pacific Northwest Order during November 2017.
- ➤ Club stores accounted for the smallest proportion of sales with 6.2% of the FMMO total, compared with 17.4% for mass merchandisers and 15.5% for wholesale distributors. Club store sales ranges from a low of 1.6% of the total for the Appalachian Order to a high of 9.8% for the Mideast Order.

Table 9
Total Fluid Milk Products Sold By Handlers Regulated Under Federal Orders
November of Selected Years 1965-2017

| | | | Category: | | | | |
|------|----------------|--------------|-----------------------|---------|--|--|--|
| Year | Sales: | Conventional | ESL | Organic | | | |
| | Million Pounds | P | ercent OF FMO Total - | | | | |
| 1965 | 2,242 | 100.0 | N/A | N/A | | | |
| 1975 | 3,290 | 100.0 | N/A | N/A | | | |
| 1985 | 3,625 | 100.0 | N/A | N/A | | | |
| 1995 | 3,762 | 100.0 | N/A | N/A | | | |
| 2003 | 3,761 | 100.0 | N/A | N/A | | | |
| 2005 | 3,761 | 100.0 | N/A | N/A | | | |
| 2007 | 3,873 | 100.0 | N/A | N/A | | | |
| 2009 | 3,774 | 97.9 | N/A | 2.1 | | | |
| 2011 | 3,794 | 96.9 | N/A | 3.1 | | | |
| 2013 | 3,701 | 96.3 | N/A | 3.7 | | | |
| 2015 | 3,481 | 92.0 | 3.7 | 4.3 | | | |
| 2017 | 3,498 | 90.9 | 4.3 | 4.8 | | | |
| | • | | | | | | |

NOTES for Table 9: N/A - Organic milk was included with Conventional prior to 2009; ESL was included with Conventional prior to 2015.

Table 10
Total Fluid Milk Products Sold By Handlers Regulated Under Federal Orders
By Product and By Marketing Area
November 2017

| Product | Sales: | Marketing Area | Order# | Sales: |
|----------------------|-----------------|----------------|--------|------------------|
| | Million Pounds* | | | Million Pounds** |
| Whole Milk | 1,112 | Northeast | 001 | 772 |
| Flavored Whole | 51 | Appalachian | 005 | 352 |
| Reduced Fat (2%) | 1,114 | Florida | 006 | 186 |
| Low Fat (1% | 497 | Southeast | 007 | 317 |
| Fat-Free (skim) | 318 | Upper MW | 030 | 276 |
| Flavored Reduced Fat | 318 | | | |
| Eggnog | 52 | Central | 032 | 415 |
| Buttermilk | 36 | Mideast | 033 | 545 |
| All Orders | 3,498 | Pacific NW | 124 | 159 |
| All Olucis | 3,470 | Southwest | 126 | 368 |
| Conventional | 3,179 | Arizona | 131 | 109 |
| ESL | 149 | | | |
| Organic | 170 | All Orders | | 3,498 |

NOTES for Table 10:

^{*} Total sales for all orders combined. Sales based on survey results. Totals may not add due to rounding.

^{**} Sales of total fluid milk products by handlers regulated under the order; the outlet to which the milk product is delivered may not be located in the marketing area of the order. *Totals may not add due to rounding*.

Appendix 1

Definitions and Factors for Converting Container Units to Sales Volume

Definitions:

Fluid Milk Product (FMP): Products included in the survey are limited to those that have been defined as Class I Fluid Milk Products in FMMO's. *Note: The one exception would be eggnog testing more than 9% butterfat. They are not considered a Class I FMP under FMMO's but are included in the survey with Class I Eggnogs.*

Type of Containers: Containers are categorized by <u>glass</u>, <u>paper</u>, and <u>plastic</u>. Containers larger than one gallon shown in the glass category are metal cans. The paper category includes wax-coated and plastic-coated containers, and foil-lined ultra-high temperature (UHT) containers. Plastic includes rigid blow mold or thermoformed containers, single-serve round (milk bottle shaped) containers, plastic-lined boxes (polyethylene bag in corrugated paper box or in rigid plastic case), and plastic bags sold separately. Containers larger than one gallon in the plastic category, for the most part, are bag-in-box containers.

Product Category: Products included in this survey have been grouped into one of three categories: conventional, extended shelf life, and organic. <u>Conventional products</u> are non-organic fluid milk products that have been processed using traditional pasteurization and bottling methods. These products have a "standard" shelf life historically associated with fluid milk products. <u>Extended shelf life (ESL) products</u> are those that have been processed in a manner that allows for a longer shelf life compared with conventional products. Typically, this involves some form of ultra-pasteurization combined with specialized packaging that provides the product with a longer shelf life. <u>Organic products</u> are those made with milk from certified organic dairy herds. These products can be bottled using either traditional or ultra-pasteurization methods. (Thus, an ultra-pasteurized product from organic milk would be classified under the organic category even though it would also have an extended shelf life.)

Size of Container: Container sizes surveyed are: *gallon, half-gallon, quart, pint, half-pint, 14 ounce, 12 ounce, 10 ounce, and other*. Containers banded together, or containers put into larger bags, sacs, etc., are reported separately. Examples: half-gallon twin packs are reported as two half-gallons; four 1-quart bags in a larger bag are reported as four-quart units, not as a gallon; six-packs of half-pints are reported as six half-pints, etc. *Note: The unit to pound conversion factors for the various sizes and types of Fluid Milk Products included in this survey are shown in Appendix 1*).

Method of Distribution: Sales are divided into <u>home-delivery</u> and <u>wholesale</u>. Home-delivery includes quantities delivered to homes or sold to others for delivery to homes. Wholesale includes quantities distributed through all other methods. Wholesale is broken down into food stores; school, institutional, and other outlets; and all other wholesale.

<u>Food stores</u> are further broken down into supermarket chains and convenience stores. <u>Schools</u> include all public schools (elementary and high school), colleges, and universities. <u>Institutional</u> outlets include hospitals, military, nursing homes, and prisons. The <u>Other</u> category includes outlets not specified under any of the other specified categories. <u>Other Wholesale</u> is broken down into mass merchandisers, wholesale distributors, and club stores. <u>Mass Merchandisers</u> include retailers such as Walmart, Target, etc., as well as drug stores such as CVS, Rite Aid, Walgreens, etc. <u>Club Stores</u> include outlets such as Costco, Sam's Club, BJ's Wholesale, etc. <u>Wholesale Distributors</u> are those entities that purchase fluid milk products from processing plants for distribution to other outlets.

Restricted Information: Items that have been foot-noted with a "CR" are confidentiality restricted. These figures can't be published as they represent the activity of fewer than three handlers.

Packaged Fluid Milk Sales Report Agricultural Marketing Service

Appendix 1
Factors for Converting Container Units to Sales Volume – Pounds per Unit

| | Product Type: | | | | | | | |
|-------------------|-----------------|---------------------------|--------|-----------------------------|----------------------|----------------------------|------------------------------------|------------|
| Size of Container | Whole Milk | Flavored Whole Milk | Eggnog | Reduced Fat Milk (2%) | Low Fat Milk (1%) | Fat Free Milk (Skim) | Flavored Fat Reduced Milk | Buttermilk |
| | pounds per unit | | | | | | | |
| Gallon | 8.600 | 8.000 | 9.000 | 8.620 | 8.620 | 8.630 | 8.000 | 8.620 |
| Half-gallon | 4.300 | 4.000 | 4.500 | 4.310 | 4.310 | 4.310 | 4.000 | 4.310 |
| Quart | 2.150 | 2.000 | 2.250 | 2.155 | 2.155 | 2.1575 | 2.000 | 2.155 |
| 6-Gallon | 51.600 | 48.000 | 54.000 | 51.720 | 51.720 | 51.780 | 48.000 | 51.720 |
| 5-Gallon | 43.000 | 40.000 | 45.000 | 43.100 | 43.100 | 43.150 | 40.000 | 43.100 |
| | | | | | | | | |
| Pint | 1.075 | 1.0000 | 1.125 | 1.0775 | 1.0775 | 1.0788 | 1.0000 | 1.0775 |
| Pint (Round) | 1.075 | 1.0000 | 1.125 | 1.0775 | 1.0775 | 1.0788 | 1.0000 | 1.0775 |
| Half-pint | .5375 | .5000 | .5625 | .5388 | .5388 | .5394 | .5000 | .5388 |
| Half-pint (Round) | .5375 | .5000 | .5625 | .5388 | .5388 | .5394 | .5000 | .5388 |
| Other (Round) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | | | | | | | | |
| 14 Ounce | .9406 | .8750 | .9844 | .9428 | .9428 | .9439 | .8750 | .9428 |
| 13.5 Ounce | .9070 | .8438 | .9492 | .9091 | .9091 | .9102 | .8438 | .9091 |
| 12 Ounce | .8063 | .7500 | .8438 | .8081 | .8081 | .8091 | .7500 | .8081 |
| 10 Ounce | .6719 | .6250 | .7031 | .6734 | .6734 | .6742 | .6250 | .6734 |
| Other | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

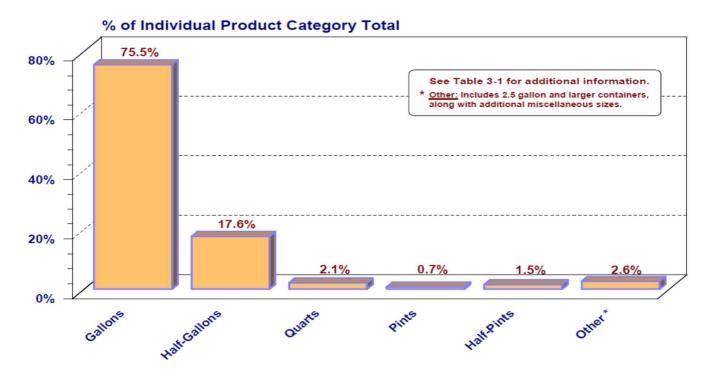
Appendix 2

Sales by Product and Container Size

All Federal Milk Marketing Orders, All Categories

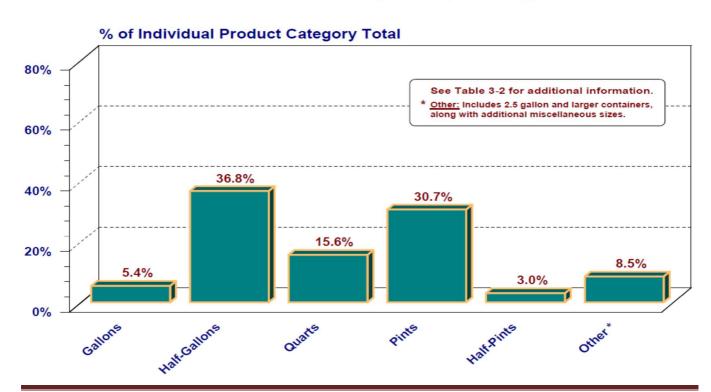
2017 Whole Milk Sales By Container Size

All Federal Milk Marketing Orders, All Categories



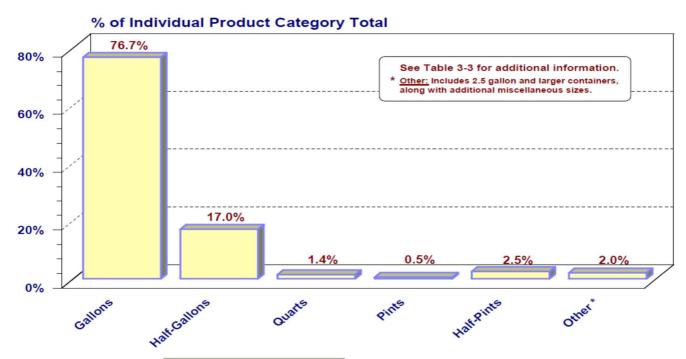
2017 Flavored Whole Milk Sales By Container Size

All Federal Milk Marketing Orders, All Categories



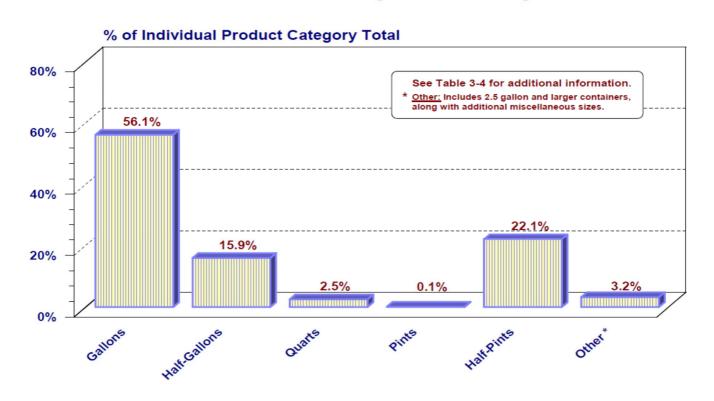
2017 Reduced Fat Milk Sales By Container Size

All Federal Milk Marketing Orders, All Orders



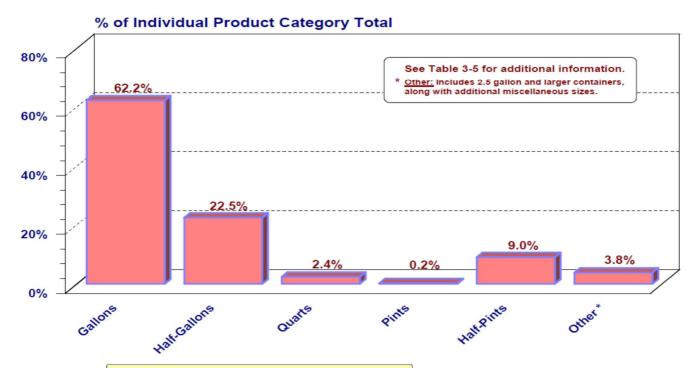
2017 Lowfat Fat Milk Sales By Container Size

All Federal Milk Marketing Orders. All Categories



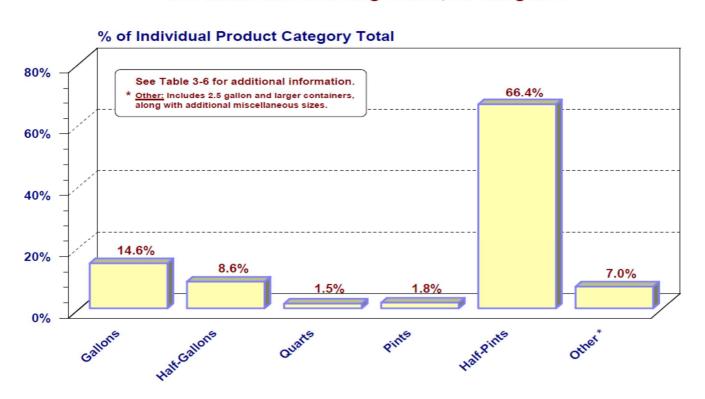
2017 Fat-Free Milk Sales By Container Size

All Federal Milk Marketing Orders, All Categories



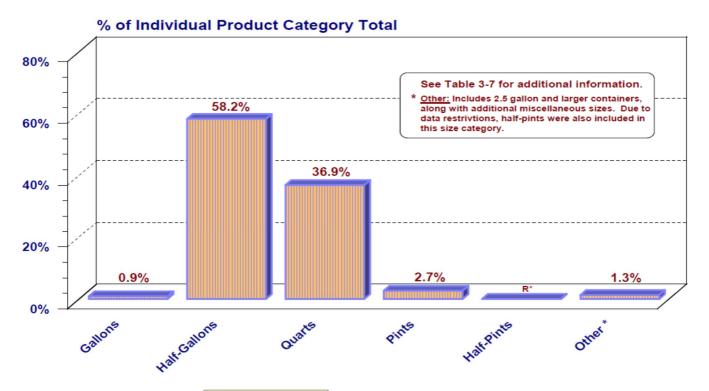
2017 Flavored Fat Reduced Milk Sales By Container Size

All Federal Milk Marketing Orders, All Categories



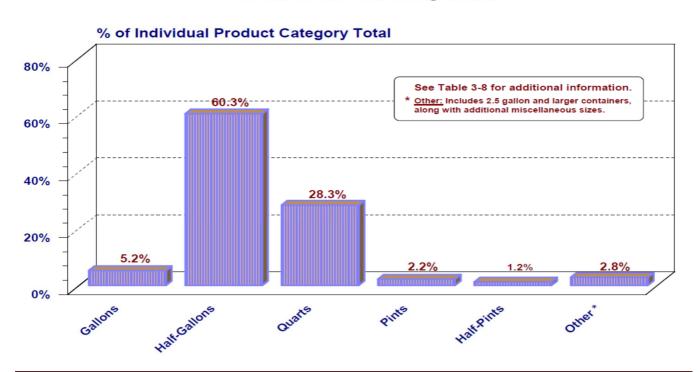
2017 Eggnog Sales By Container Size

All Federal Milk Marketing Orders



2017 Buttermilk Sales By Container Size

All Federal Milk Marketing Orders



Appendix 3

Sales by Method of Distribution

Individual Markets and All Orders Combined

Northeast Order



2017 Fluid Milk Products Sold by Method of Distribution

Appalachian Order

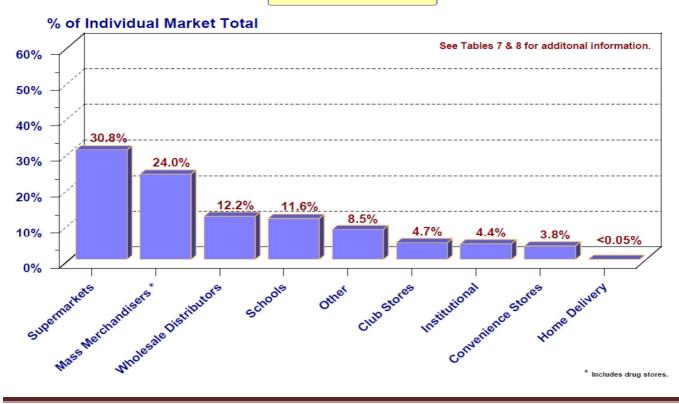


Florida Order



2017 Fluid Milk Products Sold by Method of Distribution

Southeast Order



Upper Midwest Order



2017 Fluid Milk Products Sold by Method of Distribution

Central Order

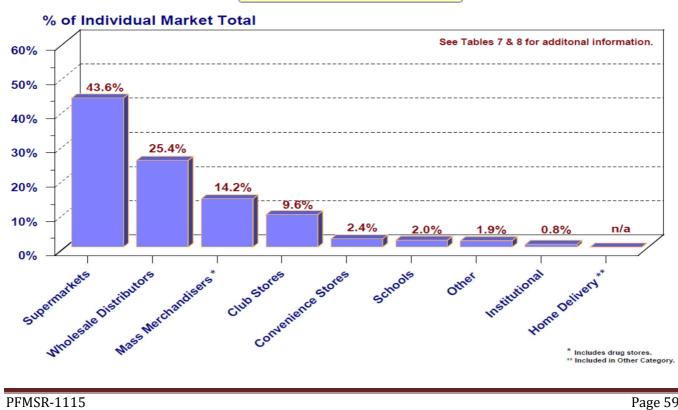


Mideast Order



2017 Fluid Milk Products Sold by Method of Distribution

Pacific Northwest Order



Southwest Order



2017 Fluid Milk Products Sold by Method of Distribution

All Orders



Packaged Fluid Milk Sales Report Agricultural Marketing Service

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