Seasonal Use of Dairy Products

studies of Sacramento families showed how uses of dairy products varied with season

Jessie V. Coles

Surveys of 262 families in Sacramento revealed that they used 16% more of 22 dairy products in one week in August than they did in one week in January.

The same families were interviewed in each survey and were found to use an average of 20.7 quarts in the summer and 17.8 quarts in the winter, in terms of milk equivalent—the common denominator of fluid milk. The term refers to the quantity of protein and mineral in each dairy product—excluding butter—equivalent to the amounts of these nutrients in fluid milk.

With the exception of butter, half-and-half, and condensed milk, the families studied used on the average more of each of the major dairy products in the summer than in the winter.

Seasonal Differences

The greatest difference in seasonal consumption was in the use of frozen desserts, mostly ice creams. The families used almost twice as much of these products in the summer as in the winter. This was a difference of one pound per family, one pound equaling from 1.2 to 1.6 quarts depending on the product.

The seasonal difference in consumption of fluid milk was also significant because 18%—2.1 quarts—more was used per family in the summer than in the winter. An average of almost 14 quarts was used per family in the summer and about 11.8 quarts in the winter. This difference was accounted for by the increased use of whole milk in the summer, because the average amounts of other milk used in the summer and winter were practically the same.

Over 18%, 0.18 pound per family, more cottage cheese was used in the summer than in the winter. More American Cheddar cheese was used in the summer but the difference between the two seasons was quite small. The use of other kinds of cheese did not vary with the season.

The average amount of evaporated milk was slightly higher in summer than in winter. The combined use of condensed, dry milk, and infant formula was twice as high in winter as in summer. This difference was accounted for by a large increase in use of nonfat dry milk in the winter, apparently as the result of promotional activities.

Although the consumption of all kinds of cream was 12.5% higher in summer than in winter, the use of half-and-half was almost 19% higher in winter than in summer.

Slightly more butter, 4% or 0.02 pound per family, was used in winter than in summer.

Average Quantities of Major Dairy Products Used by Same Households (262) in Sacramento During One Week in Summer and Winter and Average Quantities Used in Major Uses

Product	Households Using		Average Quantities per Household									
			All uses		Used as Beverages		Used at the table		Used in food preparation		Other uses **	
	Sum.	Win.	Sum.	Win.	Sum.	Win.	Sum.	Win.	Sum.	Win.	Sum.	Win.
	%	%	qts.	qts.	qts.	qts.	qts.	qts.	qts.	qts.	qts.	qts.
All fluid milk			13.95	11.84	10.58	8.94	1.55	1.22	1.36	1.36	0.46	0.32
Whole milk	96.2	97.3	12.57	10.44	9.39	7.78	1.52	1.18	1.23	1.16	0.43	0.32
Other milk	39.7	35.9	1.38	1.40	1.19	1.16	0.03	0.04	0.13	0.20	0.03	*
			lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Half and half	29.4	32.1	0.64	0.76	0.05	0.09	0.51	0.58	0.07	0.08	0.01	0.01
All cream	19.5	17.9	0.18	0.16	...	...	0.06	0.02	0.12	0.14	...	...
Evap. milk	51.5	58.8	1.27	1.23	0.07	0.11	0.46	0.46	0.44	0.46	0.30	0.20
Cond. dry milk and inf. form.	6.5	9.5	0.06	0.12	*	0.01	*	*	0.04	0.04	0.02	0.07
					Used in sandwiches		Used at the table		Used in food preparation		Used in salads	
					lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Cottage cheese	74.4	67.6	1.15	0.97	...	0.01	0.39	0.35	0.01	0.01	0.75	0.60
Cheddar cheese	68.7	64.9	0.58	0.55	0.34	0.29	0.10	0.12	0.14	0.14	*	*
Other cheese	27.5	32.1	0.16	0.16	0.06	0.05	0.06	0.07	0.04	0.03	*	0.01
Frozen desserts	75.2	54.6	2.09	1.07	...	...	2.09	1.07	...	...	...	...
Butter	46.2	47.3	0.46	0.48	0.06	0.03	0.29	0.33	0.11	0.12	...	...

* Less than 0.005 qts. or lbs.

** Includes quantities used in infant feeding, fed to pets, and wasted.

Families Using Dairy Products

The differences in the average quantities of dairy products used in summer and winter were the result of differences in the numbers of families using the dairy products and the quantities used by these families.

About 75% of the families used frozen desserts in the summer and 55% in the winter. The families who used frozen desserts in the summer averaged over 2¾ pounds, but those using them in the winter averaged only about two pounds. One half of the families using these products used them in both seasons.

The proportions of families using fluid milk in summer and winter were about the same, but the families using it in the summer averaged 14.1 quarts, and those using it in the winter averaged only 11.9 quarts per family.

More families used half-and-half than cream in both summer and winter. The average amount of half-and-half consumed by the families using it was slightly higher in the winter. In the families where cream was used the amounts were about the same in both summer and winter.

About the same proportion of families used the same average amounts of butter in summer and winter. Approximately 70% of those using butter used it in both summer and winter.

More families used cottage cheese in the summer than in the winter, and the average quantity they used was higher in the summer. Over two thirds of those using it used it in both summer and winter. The proportion of families using American Cheddar cheese was slightly higher in summer, but the average amounts used by these families was about the same in both seasons.

Evaporated milk was used by 59% of the families in winter and by 52% in summer. The latter averaged 2.5 pounds and the former, 2.1 pounds. Of all the families using evaporated milk, two

thirds used it in both summer and winter.

The ways in which the families studied used the different dairy products did not vary much from season to season. When the average amounts used per family and the proportions used in the different ways were studied, the pattern of use was much the same in summer and winter.

The families used about three fourths of their fluid milk as beverage in both seasons, although they used an average of over 1.6 quarts more per family in summer than in winter in this way. The proportions of fluid milk used in other ways were about the same in both seasons.

The major use of half-and-half was at the table—in tea and coffee and on cereals and fruits. The families used about four fifths of it in this way. About one tenth was used in food preparation in summer and in winter.

Approximately 84% of all kinds of creams combined was used in food preparation in winter, but only 64% was used in this way in summer. Over 35% was used at the table in the summer and only 16% in the winter.

Over one third of the evaporated milk was used at the table in both summer and winter, and about the same proportions were used in food preparation. Close to 16% of the evaporated milk was used for infant feeding in the summer and almost 9% in the winter.

About two thirds of the cottage cheese was used in salads, the proportion having been slightly higher in summer than in the winter.

Sandwich filling accounted for over half of the American Cheddar cheese used in both summer and winter. About one fourth was used in food preparation. About 16% was used at the table in summer and 22% in the winter.

Butter served at the table accounted for about two thirds of the total used, and food preparation accounted for one fourth. In the summer, 11.7% was used in sandwiches, which was nearly twice the 6% used this way in the winter.

Fluid Milk as a Beverage

About 75% of the fluid milk was used as a beverage and—on the average—all individuals in the study who were one year or over in age drank 3.2 quarts per person during the week of the summer survey and 2.7 quarts during the winter.

The children one year and over and the adolescents through 20 years averaged from 4.5 to 4.8 quarts per person, their consumption not varying much in summer and winter.

The adult members drank, on the average, 2.2 quarts during the August survey and 1.5 quarts in the January survey —between one third and one half as much milk as the younger persons drank.

The men drank about 80% more per person than the women in the summer and over twice as much in the winter.

The biggest drinkers of milk were the boys from 16 through 20 years. They averaged 5.9 quarts in the summer and 5.7 quarts per person in the winter. Adults from 21 through 29 years drank on the average more than the older adults.

It seems significant that about one fourth of all the persons in the study did not drink any milk during the week of the study. About 24.7% did not drink any milk in the summer survey, and 26.8% did not drink any in the winter survey.

Almost 37% of the adults in the summer survey and 41% in the winter did not drink any milk. The proportion of women who did not drink any milk was higher than that of the men.

Those people who did drink milk averaged one quart more in both summer and winter surveys than the average of all persons in the study.

The habits of the individual members of the families in drinking milk at and away from home apparently influenced their consumption. Those who drank milk both away from and at home during the week studied averaged almost two quarts more per person in both summer and winter than those drinking it only at home.

Reasons for Not Drinking Milk

Almost 53% of the adults who did not drink milk in the summer survey and 30% in the winter said they did not like it. About 17% of these adults in August and 38% in January said that they preferred to drink some other beverage. These two reasons were given by about 70% of the adults not drinking milk in the summer and 68% of those not drinking it in the winter.

About 12% of the adults said that they did not drink milk because they were on diets prescribed by physicians. This proportion was about the same for men and women in the summer, but in the winter it was slightly higher for women.

Approximately 6.9% of the adults said in the summer that they did not drink milk because it was fattening, and 8.5% gave this season in the winter. The proportion of men and women giving this reason was almost the same in the summer, but the proportion of women was over two and one-half times greater in the winter.

About 3.5% of the adults said they did not drink milk because it was too expensive.

Reasons for Drinking Milk

In the winter survey almost 70% of the adults who drank milk—66% of the women and 74% of the men—said they did so because they liked it. About 11% —16% of the women and 7% of the men—said that they drank it because it was healthful.

The proportion of both men and women who drank milk because they liked it tended to decrease with advancing age, but the proportion who drank it because it was healthful tended to increase as age increased.

Uses of Fluid Milk as a Beverage by Individuals One Year and Over in Sacramento During One Week in Summer and Winter

Age and Sex Class	Average Quantities per Person Used as a Beverage by: All persons		Persons drinking milk		Persons drinking milk at home only		Persons drinking milk at and away from home		Proportions of persons not drinking	
	Sum.	Win.	Sum.	Win.	Sum.	Win.	Sum.	Win.	Sum.	Win.
									%	%
All persons ...	3.15	2.74	4.18	3.75	3.97	3.35	5.91	5.29	24.71	26.80
Children										
1–12 years .	4.81	4.74	4.93	4.80	4.86	4.67	5.38	5.31	2.44	1.21
Adolescents										
13–20 years.	4.49	4.88	4.99	5.35	4.58	4.81	7.92	6.55	10.00	8.86
Boys	5.48	5.63	5.86	6.03	5.34	5.28	7.50	8.03	6.45	6.67
Girls	3.87	4.42	4.41	4.92	4.16	4.51	9.38	5.67	12.24	10.20
*All Adults** ...	2.20	1.53	3.49	2.59	3.26	2.22	5.71	4.63	36.86	41.03
Men (all)* ..	2.87	2.08	4.23	3.22	3.88	2.71	6.49	5.05	32.32	35.38
21–39 yrs. ..	3.48	2.31	4.71	3.28	4.60	2.52	4.19	5.78	26.17	29.70
40–59 yrs. ..	2.50	1.96	4.05	3.27	3.20	2.71	8.55	4.88	38.24	40.00
Women (all)*	1.59	1.03	2.70	1.91	2.65	1.75	3.88	3.52	41.05	46.15
21–39 yrs. ..	1.70	1.19	2.76	2.03	2.63	1.73	4.50	3.88	38.28	41.27
40–59 yrs. ..	1.49	0.96	2.65	1.92	2.67	1.92	2.00	2.00	43.93	50.00

* Includes persons 60 years and over.

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