

## STUDIES OF USE OF MILK BY FAMILIES HAVING LITTLE CHILDREN.

## $18-26370 \quad$ I. baltimore.

That babies and little children are directly affected by the decreased sales of milk reported by dealers in American cities is illustrated by findings for Baltimore compiled by the Children's Bureau of the U. S. Department of Labor.

Of 756 Baltimore children between 2 and 7 years of age, only 29 per cent are now having fresh milk to drink, as against 60 per cent a year ago. And only 20, or less than 3 per cent of the children studied, are having as much as 3 cups a day.

With the babies under 2, the Children's Bureau says the situation is a little less serious. Apparently their needs are more generally understood than the needs of the child over 2. Six in every 10 of the young babies are being nursed by their mothers (although a great majority of these nursing mothers are themselves drinking no milk at all, and only 3 per cent of them are drinking the daily pint and a half which phy sicians recommend). Of 108 babies under 2 who are not being nursed, 73 , or 68 per cent, are having some fresh milk to drink every day. In other words, relatively more than twice as many of the babies as of the children over 2 are being provided with fresh cows' milk to drink.

A few children- 7 per cent of those over 2 and 14 per cent of the babies-are not drinking milk, but are having some fresh milk in other foods. However, the total amount of fresh milk they are having in any form is small. The average quantity purchased last year for all purposes by the families who had some milk every day was $1 \frac{1}{10}$ quarts. This daily average has now been reduced to less than a quart.

The number of familes who are buying no fresh milk at all has risen from 37 a year ago to 107 , or 29 per cent of those from whom information was secured, and these 107 families include one-fourth of all the children under 7. At the same time the total daily purchase of canned milk by the families studied has increased from 25.5 cans to 84 cans.

Most serious, according to the Children's Bureau, is the general substitution in the children's diet of tea and coffee. For 64 per cent of the 575 children who are not drinking milk, tea and coffee have been definitely substituted; and 24 per cent of these children are "sharing the family diet" which may or may not include tea or coffee, or milk in other foods.

While the group of families studied is small, the bureau offers the findings as fairly representative, since the information was secured and transmitted to the Children's Bureau by school nurses of the Baltimore Department of Health and by nurses of the Instructive Visiting Nurse Association and the Babies' Milk Fund of Baltimore from all families they visited during a certain short period, provided (1) there were at least two children under 7 years of age; (2) the family had been in Baltimore at least a year; and (3) no tubercular patient was living with the family.

Various incomes are reported: Thirty-nine families report earnings of less than $\$ 11$ a week, and 45 report earnings of more than $\$ 20$ a week; 172 , or 47.1 per cent, are earning $\$ 11$ to $\$ 15 ; 100$, or 27.4 per cent, are earning $\$ 16$ to $\$ 20$; for 9 families the weekly earnings are not stated. But the changes in the amount of milk purchased are not unlike in the different earnings groups. Even of the poorest families a few have increased their purchase of fresh milk since last year, and even in the highest income group 50 per cent have now ceased buying milk or have decreased the daily amount. Some mothers seem to realize that milk must be provided for their children at whatever sacrifice; others who can better afford to buy milk do not understand its importance and let the children go without it.

Analysis of the families by nativity and race of the mother shows that the distribution of families among those who are buying less milk than formerly, or no milk at all, and those who are buying at least as much as they bought last year is approximately the same among the colored families and the native white families, in spite of the markedly lower incomes in the colored group. On the other hand, the foreign-born mothers, although their incomes are slightly lower than the incomes of the native white mothers, have more generally than any other group continued to buy milk. Almost half of the foreign-born mothers have either continued the amount purchased last year or increased it, and only 1 in 10 of the foreign mothers (as against 1 in 3 of the other mothers) is now buying no milk at all. The Children's Bureau states:
"Taking a pint and a half of fresh milk as the desirable daily allowance for the average child, these 756 children were having last year on an average only 40 per cent of what they should have had; this year their daily average has dwindled to 14.4 per cent of this allowance.
"Some varieties of canned milk can be used for feeding babies and young children where fresh milk is not obtainable and are far better than infant foods that contain no milk. But sweetened condensed milk has the great disadvantage of a very high sugar content and is not suitable for continued and exclusive use in the feeding of babies. The question of the relative value of different forms of canned milk is discussed at length in the Children's Bureau bulletin on Milk, the Indispensable Food for Children.
"The work of Children's Year should emphasize in every community the importance of fresh milk in the diet of young children. Without proper nourishment children can not keep well and free from physical defects, and a campaign of education on the feeding of children is an essential part of the saving of 100,000 lives during the second year of the war."

## Children and Adults in Families Studied.

Total number of families studied........................................................... 365
Total persons in families studied..................................................... 2, 456
16 years of age and over. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 890
8 years of age but under $16 \ldots \ldots \ldots$................................................... 530

Under 2 years..................................................................... 280
Total daily consumption of fresh milk by all families studied, 1917 and 1918.

|  | 1917 | 1918 |
| :---: | :---: | :---: |
| Selected milk. | Quarts daily. 23 | Quarts daily. $9.5$ |
| Pasturized. | 328.6 | 240.3 |
| Loose milk. | 45.5 |  |
|  | 397.0 | 249.8 |

Of the 365 families studied, 37 in 1917 and 107 in 1918 bought no fresh milk.
Comparison of average daily consumption of fresh milk by 756 children 2 to 7 years of age to recommended daily allowance of $1 \frac{1}{2}$ pints for each child.

|  | Recommended daily allowance (cups) | Actual consumption. |  |
| :---: | :---: | :---: | :---: |
|  |  | Cups. | Percentage of recommended allowance. |
| Last year (1917) | 2,268 | 927.3 | 40.9 |
| This year (1918) | 2,268 | 329.4 | 14.5 |

Distribution of families according to change in amount and use of fresh milk, 1917 to 1918.
Total number of families studied........................................................... . . 365
Families buying same as last year.................................................. 121
No milk either year............................................................ . . 31
Some milk both years.......................................................... 90
Families buying more than last year.................................................. 40
No milk last year............................................................. 6
Some milk both years........................................................ 34
Families buying less milk than last year............................................ 204
Decrease of less than 25 per cent........................................... 1
25 per cent but less than $50 \ldots$.............................................. . . 33
50 per cent but less than $75 . \ldots$............................................... . 86

100 per cent (no milk this year)............................................ . . 76
Number and per cent distribution of families with mothers of specified nativity and race, according to use offresh milk and change in amount consumed, 1917 to 1918.

|  | All families. |  | Nativity and race of mother. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Native white. |  | Foreign white. |  | Colored. |  |
|  | Num- ber. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | Per cent. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | Per cent. |
| Total families. | 365 | 100.0 | 168 | 100.0 | 114 | 100.0 | 83 | 100.0 |
| Purchasing no milk: |  |  |  |  |  |  |  |  |
| Both years. | 31 | 8.5 | 18 | 10.7 | 4 | 3.5 | 9 | 10.8 |
| This year only.. | 76 | 20.8 | 45 | 26.8 | 8 | 7.0 | 23 | 27.7 |
| Purchasing some milk this year: |  |  |  |  |  |  |  |  |
| Less than last year... | 128 | 35.1 | 51 | 30.4 | 50 | 43.9 | 27 | 32.5 |
| Same, as last year.. | 90 | 24.7 | 38 | 22.6 | 34 | 29.8 | 18 | 21.7 |
| More than last year... | 40 | 11.0 | 16 | 9.5 | 18 | 15.8 | 6 | 7.2 |

Number and per cent distribution of families having specified income according to use of fresh milk and change in amount consumed, 191\% to 1918.


Number and per cent distribution of children 2 to 7 years of age by average daily consumption of fresh milk, 1917 and 1918.

|  | 1917 |  | 1918 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number. | Per cent. | Number. | Per cent. |
| All children. | 756 | 100.0 | 756 | 100.0 |
| Drinking fresh milk. | 443 | 58.5 | 216 | 28.6 |
| Less than 1 cup. | 35 | 4.6 | 30 | 4.0 |
| 1 cup butless than 3. | 317 | 41.9 | 166 | 22.0 |
| 3 cups or more... | 91 | 12.0 | 20 | 2.6 |
| Having no fresh cows' milk to drink $a$. | 302 | 39.9 | 540 | 71.4 |
| Breast fed.. | 11 | 1.5 |  | .... |

$a$ It is possible that some of the 17 children now 2 years of age who are included in the 302 having no cows' milk last year may have been breast fed, since no specific question was asked about breast feeding in 1917.

Daily consumption, 1918, of fresh milk by children under 2 years not breast fed.

|  | Number. | Per cent. |
| :---: | :---: | :---: |
| Total children. | 108 | 100.0 |
| Drinking fresh milk. | 73 | 67.6 |
| Less than 1 cup. | 2 | 1.9 |
| 1 cup but less than 3 | 39 | 36.1 |
| 3 cups or more. | 32 | 29.6 |
| Having fresh milk only | 15 | 13.9 |
| Having no fresh milk. | 20 | 18.5 |

Children 7 years and younger receiving no fresh milk (breast-fed babies excluded).

|  | Number. | Per cent. |
| :---: | :---: | :---: |
| All children. | 575 | 100.0 |
| Having milk in other f | 69 | 12.0 |
| Having tea and coffee. | 370 | 64.3 |
| Having family diet. | 136 | 23.7 |

Gaylord Bros.

## Makers

Syracuse, N. Y. PAI. JAN. 21, 1908


