

## SURVEY OF SMALL TOWN MILK SUPPLIES

SINCE 1923 the American Child Health Association has co-operated with the Conference of State and Provincial Health Authorities and the Association of the Dairy, Food and Drug Officials in "a nation-wide movement to secure for every baby, child and adult in America a clean and safe milk supply."<sup>1</sup> This joint work has been carried on in nineteen states of this

disease still epidemic in this country. The findings of the American Child Health Association's survey give support to this recognition of the potential danger of the small town milk supply. Ninety-seven of the 117 towns and cities giving information on the extent of pasteurization reported that they had no pasteurized milk. None of these towns and cities reported 90 per cent or more of their supplies pasteurized. The status of pasteurization in these towns and cities is given in Table I, below:

	<i>Number of Cities Reporting</i>	<i>Cities Reporting No Pasteurized Milk</i>		<i>75 to 90 per cent of Supplies Pasteurized</i>	
		<i>Number</i>	<i>Per cent</i>	<i>Number</i>	<i>Per cent</i>
Under 2,500 .....	60	58	67	0	...
2,500-4,999 .....	21	17	81	1	0.9
5,000-9,999 .....	19	15	79	1	0.9
10,000-24,999 .....	17	7	41	0	...
Total—All Cities .....	117	97	83	2	1.7

country and one Canadian province during the period October, 1923, to August, 1927. An American Child Health Association representative supervised the laboratory examination of the milk supplies of surveyed cities, these findings being used later as the basis of an educational campaign to promote the production of clean and safe milk.

A report of this campaign was presented at the Annual Meeting of the Association of Dairy, Food and Drug Officials, held in West Baden Springs, Indiana, October 10 to 14, 1927. This report dealt chiefly with the condition of the milk supplies of 142 small towns and cities in three states and one Canadian province which were surveyed in the period January, 1926, to July, 1927.

A recent editorial comment on the Pasteurization of Milk<sup>2</sup> notes that the smaller towns and rural districts using raw milk are chiefly responsible for the milk-borne

The condition in large cities presents a striking contrast. Thirty of 61 cities over 100,000 population answering a questionnaire in January, 1927, reported 90 per cent or more of their supplies pasteurized. But even the large city falls short of the goal, 100 per cent pasteurization, which must be attained if we are to have a safe milk supply.

The results of the bacteriological analyses indicate immediate need for effective milk control. An average of 25 per cent of the supplies examined contained 200,000 or more bacteria per cubic centimeter; an average of 40 per cent of the supplies examined contained 100,000 or more bacteria per cubic centimeter. Fifty-one cities gave a positive test for *B. coli* in 50 per cent or more, 21 cities a positive test in 75 per cent or more, of their supplies examined.

The milk supplies were on the whole dirty according to physical standards. In only two of the towns and cities tested were 75 per cent or more of the milk supplies subjected to the sediment test found to be "clean" or "fairly clean." Only 19 cities

<sup>1</sup>From a Resolution passed at the 1923 meeting of the Association of Dairy, Food and Drug Officials.

<sup>2</sup>Journal of the American Medical Association, October 22, 1927, p. 1428.

had 50 per cent or more of their supplies "clean" or "fairly clean."

The temperature conditions of the milk were measured by noting the number of samples iced on the delivery vehicle, and by taking the exact temperature of a bottle from the supply at the time the samples were collected for bacteriological analysis. In 109 of the towns and cities surveyed none of the supplies examined were iced. Only 9 cities had 50 per cent or more of their supplies iced. In 71 cities 50 per cent or more of the supplies examined had a temperature over 55 degrees Fahrenheit at the time of delivery.

The temperature data are presented in detail in Table II, below:

tory of the science of public health, its first era being one of sanitary growth, followed later by expansion in personal health service. The large cities of this country have maturing and, in many cases, mature health programs. The cities of medium size, of which the city of 50,000 population is typical, have begun to develop their personal health service without, however, having perfected their sanitation. The American Child Health Association's survey of 86 cities of 40,000-70,000 population in 1923 found these cities, "speaking generally," paying "more attention to matters of sanitation than to other health activities." Yet only 20 of these cities pasteurized over 90 per cent of their milk supply in 1923.

TABLE II

*Specified Temperatures of Milk Supplies at Time of Collection in 118 Cities*

Size of City	Number of Cities Having Milk Supplies Tested at (Fahrenheit)								
	Temperature of								
	46°-50°	50°-54°	54°-58°	58°-62°	62°-66°	66°-70°	70°-74°	74°-78°	78° and above
Under 2,500 .....	4	8	9	12	5	5	3	1	1
2,500-4,999 .....	2	9	4	8	2	2	0	0	1
5,000-9,999 .....	0	8	4	8	0	0	0	0	0
10,000-24,999 .....	2	5	6	3	4	0	0	2	0
Total—All Cities .....	8	30	23	31	11	7	3	3	2

The per capita consumption of milk in the small town averages slightly less than that for cities. The average per capita consumption for 99 of the surveyed towns and cities reporting this information was .5 pint, whereas among the 86 cities of 40,000-70,000 population surveyed by this Association in 1923 the per capita consumption was .85 pint. Cities over 70,000 population, according to the American Public Health Association's survey of 1923, had a per capita consumption of .83 pint.

The danger of infection of milk consumers by tuberculous cattle is a real one in the towns and cities surveyed. Only 43 per cent of the surveyed cities reported that the cattle supplying their milk had been tuberculin tested within a year.

Conclusion: The history of community health development usually parallels the his-

If we may use milk supply control as an indication of sanitary development, health department practice of the small town is still in its infancy. Its milk supply is little better in sanitary quality than it would have been if the process of pasteurization had never been discovered. The initial high bacterial count of the milk is increased by failure to ice the supply, and protection from danger of infection by man and cattle is not prevented by pasteurization.

The large cities have long recognized the protection afforded by pasteurization; can we permit the 25,000,000 in the small towns of the country to be without this protection? The problem of the large city is to extend the provisions of existing pasteurization requirements. The problem of the small town is to awaken its citizens to the need for the production of clean milk rendered safe by

pasteurization. This requires the passage and enforcement of a proper milk control ordinance.

Most American cities have safe water supplies; most American cities need to secure safe milk supplies.

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#### FORTY IMPORTANT AMERICAN BOOKS OF 1926

AT THE request of the International Institute of Intellectual Co-operation, the American Library Association has selected the forty books in the United States during 1926 which it considers most worthy of inclusion in a *Word List of Notable Books*. *The World List*, published by the Institute, in Paris, is confined each year to six hundred titles, and the purpose of the list is to acquaint nationals of each country with the best literary production of other countries. The number allowed each country is apportioned on the basis of its total publishing output.

Instructions received from the Institute direct that "the works chosen should deal with an important subject, in an original and interesting manner and be capable of being read by a person of average culture."

On the following list will be found two books by men of foreign birth, one a Hindu, the other an Englishman. But, since both these men live and write in the United States and their books have been published here, their eligibility for the list has been allowed.

In compiling the list, the A. L. A. headquarters staff has had the co-operation of a number of distinguished librarians, scholars, and specialists in various fields. The result therefore represents a consensus of opinion, and not individual judgment.

##### History

Adams, James Truslow. *New England in the Republic, 1776-1850*. Little, Brown. 542p. \$5.

Mims, Edwin. *The Advancing South*. Doubleday, Page. 319p. \$3.

Nash, Roy. *The Conquest of Brazil*. Harcourt, Brace. 458p. \$5.

Sedgwick, Mary Katrine. *Acoma, the Sky City*. Harvard University Press. 314p. \$4.

Sullivan, Mark. "Our Times" I. *The Turn of the Century*. Scribner. 810p. \$5.

Thomason, J. W., Jr. *Fix Bayonets!* Scribner's. 245. \$3.50.

##### Social Science

Hayes, Carlton J. H. *Essays on Nationalism*. Macmillan. 279p. \$3.

Ise, John. *The United States Oil Policy*. Yale University Press. 547p. \$7.50.

Martin, Everett Dean. *Meaning of a Liberal Education*. W. W. Norton. 317p. \$3.

Moon, Parker T. *Imperialism and World Politics*. Macmillan. 585p. \$3.50.

Puckett, N. N. *Folk Beliefs of the Southern Negro*. University of North Carolina Press. 644p. \$5.

##### Religion

Browne, Lewis. *This Believing World*. Macmillan. 347p. \$3.50.

Mukerji, Dhan Gopal. *The Face of Silence*. E. P. Dutton. 255p. \$3.

Whitehead, A. N. *Religion in the Making*. Macmillan. 160p. \$1.50.

##### Philosophy and Psychology

Brownell, Baker. *The New Universe*. D. Van Nostrand Company. 455p. \$4.

Durant, Will. *Story of Philosophy*. Simon & Schuster. 577p. \$5.

Edman, Irwin. *Richard Kane Looks at Life*. Houghton Mifflin. 319p. \$2.50.

Randall, John Herman. *The Making of the Modern Mind*. Houghton Mifflin. 653p. \$3.50.

Terman, Lewis M., and Catherine M. Cox. *Genetic Studies Genius*. Stanford University Press. 2v. \$5.

##### Belles Lettres and Art

Guillaume, Paul, and Thomas Munro. *Primitive Negro Sculpture*. Harcourt, Brace. 134p. \$6.