# U. S. DEPARTMENT OF LABOR CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

## **BABY-SAVING CAMPAIGNS**

ij.

xle.

14

A PRELIMINARY REPORT ON WHAT AMERICAN CITIES ARE DOING TO PREVENT INFANT MORTALITY

INFANT MORTALITY SERIES, No. 1

Bureau Publication No. 3

Fourth Edition



WASHINGTON
GOVERNMENT PRINTING OFFICE

#### LAW ESTABLISHING THE CHILDREN'S BUREAU.

AN ACT To establish in the Department of Commerce and Labor a bureau to be known as the Children's Bureau.

[62d Cong., 2d session, S. 252, Public, No. 116.]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established in the Department of Commerce and Labor a bureau to be known as the Children's Bureau.<sup>1</sup>

SEC. 2. That the said bureau shall be under the direction of a chief, to be appointed by the President, by and with the advice and consent of the Senate, and who shall receive an annual compensation of five thousand dollars. The said bureau shall investigate and report to said department upon all matters pertaining to the welfare of children and child life among all classes of our people, and shall especially investigate the questions of infant mortality, the birth rate, orphanage, juvenile courts, desertion, dangerous occupations, accidents and diseases of children, employment, legislation affecting children in the several States and Territories. But no official, or agent, or representative of said bureau shall, over the objection of the head of the family, enter any house used exclusively as a family residence. The chief of said bureau may from time to time publish the results of these investigations in such manner and to such extent

as may be prescribed by the Secretary of Commerce and Labor.

Sec. 3. That there shall be in said bureau, until otherwise provided for by law, an assistant chief, to be appointed by the Secretary of Commerce and Labor, who shall receive an annual compensation of two thousand four hundred dollars; one private secretary to the chief of the bureau, who shall receive an annual compensation of one thousand five hundred dollars; one statistical expert, at two thousand dollars; two clerks of class four; two clerks of class three; one clerk of class two; one clerk of class one; one clerk, at one thousand dollars; one copyist, at nine hundred dollars; one special agent, at one thousand four hundred dollars; one special agent, at one thousand two hundred dollars, and one messenger at eight hundred and

forty dollars.

Sec. 4. That the Secretary of Commerce and Labor is hereby directed to furnish sufficient quarters for the work of this bureau at an annual rental not to exceed two thousand dollars.

SEC. 5. That this Act shall take effect and be in force from and after its passage.

Approved, April 9, 1912.

<sup>&</sup>lt;sup>1</sup>Transferred from Department of Commerce and Labor to Department of Labor, upon the creation of the latter by act approved March 4, 1913.

## CONTENTS.

<del></del>	_
Letter of transmittal.	P
Scope of the bulletin	
City health officials' work in reducing death rate.	
Lack of adequate funds for carrying on work.	
Cooperation of health boards with benevolent agencies.	
Complete and prompt birth registration as a basis for effective work	
Morbidity and mortality charts	
Inspection of milk supply.	
Mathods in different cities	
Methods in different cities	
Recognized grades of milk	
Milk stations	
Recent increase in number.	
Not a means of encouraging bottle feeding.	
Instruction of mothers a necessary feature.	
Equipment and management.	
Baby clinics	
Operation in certain cities	
Little Mother Leagues	
Visiting nurses	
Value of service in prenatal and postnatal work.	
Work in different cities	
Prenatal work	
Effect of housing conditions on infant mortality	
Fight against flies, garbage accumulation, dust, etc	
Stables and stable flies.	
Fresh-air camps and hospitals	
Educational work through the distribution of circulars, pamphlets, etc.	
Conclusion	
Appendix	
How to Save the Babies (circular issued by the New York State Depart-	
ment of Health).	
Ten Reasons Why a Mother Should Nurse Her Baby (leaflet issued by the	
New York City Department of Health)	
Save the Babies (circular issued by the Pennsylvania Department of	
Health):	
English	
Italian	
German	
Polish	
Viddish	
Yiddish	
Slovak.	
General Directions for Feeding Young Children (circular issued by the	
Providence, R. I., Health Department).	
_	

## CONTENTS.

Page.
76
79
81
83
85
. 87
90
91

## LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, D. C., June 16, 1913.

Sir: As a preliminary to more careful study of the work now carried on in various cities for the prevention of infant mortality, the following letter was sent to the mayors of the 109 cities of the United States having a population of 50,000 or more each:

Dear Sir: We are much interested in ascertaining the prospects of baby-saving campaigns for the summer of 1913 in the principal cities of the country. May we ask you to give us information as to the organization of your department of health as especially related to the care of infants in summer? We should like especially to have any recent reports that you have made as to this service, and to know whether there is to be any enlargement of the service over last year; also what special features of your system you would recommend for general adoption.

In making this inquiry it was only anticipated that it would secure needed information for the office of this Bureau. The replies have shown that work of the utmost significance is going on in certain cities, while little or nothing is being done in others. In various instances city officials have shown much interest in such work and have made inquiries as to the best methods of initiating it.

In view of the interest shown and of the practical value of many of the replies received, the Bureau has summed up the information contained in them in the following statement as to the summer care of babies in certain American cities. The effort has been not to present in any respect an exhaustive report, but to show what is being done in various localities and the ways to go about such work. The appendix contains examples of circulars in various languages available for reproduction. It is intended to follow this preliminary statement by fuller bulletins, issued from time to time, showing the most advanced methods employed by various communities to safeguard the health of children, with especial reference to the growing work of rural health officers and rural nursing.

Special acknowledgment is made of the services of Mr. Ethelbert Stewart, statistical expert of this Bureau, in the preparation of the present pamphlet.

Very respectfully,

JULIA C. LATHROP, Chief.

Hon. William B. Wilson,

Secretary of Labor.

This page is blank in the original document.

## BABY-SAVING CAMPAIGNS.

## SCOPE OF THE BULLETIN.

What the American cities are doing and can do toward preventing infant mortality and the too common high death rate of children under 5 years of age is to be the subject of an annual bulletin by the Children's Bureau. The present issue does not claim to be complete either as to the cities which are giving attention to such work or to the scope of their activities; it is merely a preliminary outline, introductory of what the Bureau hopes to accomplish in the way of acquainting cities with one another, when all cities have come habitually to report all such activities or lack of them to this Bureau.

Summer campaigns for babies' lives have been waged with such marvelously good effect in some cities, both in this and foreign countries, that it seems important to enlist the energies of as many cities in this work as possible. To this end it is most important that each city should know, in somewhat of detail, just what the other cities are doing. Information which represents a large expenditure of labor and which is invaluable as demonstrating comparative methods in different cities is tied up in reports of local health officials which have little or no circulation. To present, for the information and perhaps encouragement of all, the results of investigation as to the little or much that is being done by the various cities, whether directly or through municipal activity in conjunction or cooperation with private philanthropies, will be the purpose of this annual bulletin on summer campaigns for babies to be issued hereafter by this Bureau.

## CITY HEALTH OFFICIALS' WORK IN REDUCING DEATH RATE.

The Special Public Health Commission of the State of New York, which was appointed by Gov. William Sulzer to collect facts, receive suggestions, and make recommendations as to changes in the public health laws and their administration, in its report to the governor, under date of February 19, 1913, makes clear the influence of city health officers in reducing the general death rate of cities within the last 10 years. It shows the mortality rate per 100,000 in cities of

the State, including villages of over 8,000 inhabitants, and the corresponding rate in rural districts and villages of fewer than 8,000 inhabitants. "It will be noted," says the report in discussing a chart in which the conditions are graphically shown, "that the urban death rate, beginning at 1,771 in 1902, falls to 1,466 in 1912. The rural and village death rate, beginning at 1,404 in 1902, has slowly risen, beginning to exceed the urban death rate in 1909, and since that date the divergence between the two in favor of the urban death rate has steadily increased." While, as Prof. Walter F. Willcox, of Cornell University, states, the somewhat more "complete registration of rural deaths in later years and the preponderance of population of the middle ages in cities, owing to immigration" may account for some of the sharpness of the contrast, nevertheless these considerations leave practically unaffected the general fact indicated by the figures, that the urban death rate is falling more rapidly than the rural and village death rate. That the attention given to such matters by local health officers, by private charitable societies, and by both in cooperation, has reduced the general death rate of cities below that of rural districts and villages is certainly a tribute to such efforts. It indicates clearly what can be done even with faulty organization and meager cooperation and emphasizes the importance of more extended and better organized means and method.

Discussing the reduction of death rates, the report referred to, after detailing the work against tuberculosis, says:

Next largest in the groups of deaths which are to a large extent preventable by known and practical methods, is infant mortality. The number of deaths from diarrhea and enteritis among those under 2 years of age in 1912 was 7.024.

Measures are being taken in a number of cities for reducing infant mortality. The first step in a comprehensive plan for the State as a whole is an adequate birth registration law, efficiently and uniformly enforced throughout the State. The enactment of such a law and the initial steps in its enforcement rest upon the State. With knowledge of the number of infants born and the localities and the causes of deaths, each village and city of considerable size should, when necessary, secure through its health department (a) the instruction of mothers during the prenatal period, (b) competent attendance at childbirth, (c) the encouragement of breast feeding, (d) medical supervision of the child at stated intervals, whether breast or bottle fed, and (e) pure, clean milk for infants for whom maternal nursing is impossible.

Each city with a population in excess of 10,000 and having an industrial population should have one infant-welfare station and larger cities with an industrial population should have one such station for approximately each 20,000 inhabitants.

There is no doubt that through effective action by the State in securing birth registration and in encouraging localities to undertake and effectively to prosecute such infant-welfare work, the number of deaths of children under 2 years could be enormously reduced in the immediate future.

Gov. Sulzer's Message on Public Health with Report of Special Health Commission, transmitted to the legislature Feb. 19 1913.

Among the specific recommendations made by the commission and approved by the governor in his message to the legislature are:

Each city, county, village, and town should be given specific authority to employ one or more trained nurses to act as infant-welfare nurses, school nurses, tuberculosis nurses, and generally at the request of physicians or health officers, to visit the sick who are unable otherwise to secure adequate care and to instruct other members of the households in the care of the sick. The State Public Health Council should establish qualifications of eligibility and conditions of appointment for such public-health nurses. In larger communities, when several nurses are employed, some would doubtless be assigned to one or the other of these duties, but in smaller localities all of them may be performed by one trained nurse. The advent of trained nursing marks not only a new era in the treatment of the sick, but a new era in public-health administration.

In the city of New York there are in the service of the department of health over 300 trained nurses in addition to those employed in hospitals for contagious diseases. Trained nurses are also employed by health authorities in some of the other cities of the State. Three counties and a considerable number of cities, villages, and voluntary committees employ tuberculosis nurses. An exceptionally interesting account was given to this commission of the work of district visiting nurses in the rural communities and villages of northern Westchester County. These nurses are in the employ of a benevolent corporation and are supported by private contributions, but in our judgment such nurses might equally well be employed elsewhere by local authorities. We strongly urge, therefore, that specific authority be given to each city, county, village, and town to employ one or more trained nurses for all the publichealth purposes for which trained nursing has now been found to be practicable.

## LACK OF ADEQUATE FUNDS FOR CARRYING ON WORK.

The principal impediment to efficient work in the health department of most cities is the lack of adequate funds either to pay a suitable salary to the health officer or to provide means for carrying on preventive measures intelligently. The New York commission recommended minimum salaries to health officers of towns and villages, equivalent to at least 15 cents per inhabitant of the village or town. This in addition to expense of carrying on the work.

As a general rule the most effective health service is not accomplished when the annual resources of the department, including salary of health officer, falls much below \$1 per capita of population. In cities of over 100,000, or when a great deal of work is done and the expense met by benevolent societies working in cooperation with the health department, this per capita is sometimes reduced without crippling the efficiency of the office.

That it is worth while to make some effort to arouse such an interest in saving infant lives as shall force appropriations in some degree commensurate with the work to be done is made evident by the following illustrations of the situation in two States, New York and Illinois—States in which certainly the poverty of the taxing bodies can not be pleaded in excuse for parsimony.

Dr. George Thomas Palmer, of Springfield, Ill., has collected reports from Illinois cities which show that in 44 cities and towns in Illinois having a population of 3,000 or over, and averaging about 16,500 for all, the average salary paid to health officers is \$300. Twelve cities, including one with a population of 30,000, another of 22,000, and one of 21,500, pay nothing. Twenty-one of the 44 cities and towns make no appropriation for expense beyond that covering the nominal salary of the health officer, if any.

His report is contained in a paper written by him, entitled "The Shortcomings of Municipal Public Health Administration," published in the American City for August, 1911. Some of the strongest paragraphs of the report are as follows:

- \* \* I have ascertained the facts in 44 Illinois cities of 3,000 population or over. \* \* \* Of the 44 Illinois cities, we find that 6 have medical commissioners personally responsible for the work of their departments, and 15 have boards of health with medical officers. That is, 21 of the 44 cities have forms of health organization which may reasonably be presumed to afford efficient service. Of the others, 4 have headless boards of physicians in which no one is especially responsible; 1 has a board of physicians with layman health officer; 7 have boards of physicians and laymen with no health officer; 1 has a mixed board with layman health officer; 6 have boards of laymen with no medical guidance; and 3 intrust their health affairs to lay health officers without boards of any kind. One city of 26,000 employs merely a layman health officer, while a city of 22,000 has a board of laymen, the police matron acting as health officer when she is not otherwise engaged. While 15 of these cities exceed 20,000 in population and 3 are over 50,000, not one pays sufficient salary to warrant a competent man in devoting all of his time to the health department. One city of 59,000 pays \$1,500 per year, the highest salary paid to any municipal health officer in Illinois outside Chicago; a city of 70,000 pays \$1,200, and one of 51,000 pays \$1,000. Three of the 44 cities pay \$900 per annum, 1 pays \$800 per annum, 5 pay \$600, 2 pay \$400, 2 pay \$300, 7 pay \$200, 1 pays \$150, 1 pays \$100, 1 pays \$75, 4 pay \$50, 2 pay \$25, and 12 pay nothing at all for publichealth supervision. The average population of the 44 cities is about 16,500; the average salary paid to health officers is \$300. The 12 cities paying nothing, including one of 30,000, one of 22,000, and one of 21,500, should expect nothing in the way of protection of the lives and health of their people. A city of 30,000 which pays \$400 per year for its health officer could not expect to receive the services of a competent man for more than one-sixth of his time, while a city of 25,000 paying \$200 per year could not ask a well-qualified officer to devote a full hour a day to its public-health affairs. I make this estimate on the assumption that a competent health officer could be secured to devote all his time to the office for \$2,400 per year, and it was this assumption I had in mind when I stated that, in my opinion, every growing city of 20,000 or over should employ a competent man constantly in its protective and constructive publichealth work.
- \* \* \* It may be noted that 36 of the 44 Illinois cities pay less than unskilled workman's wages to their health officers. Applying our third standard of preparedness and efficiency—specific appropriation for public-health purposes—we find that 21 of the 44 Illinois cities have no appropriation, or only that for the payment of the nominal salaries of board members and health

officer. In some of the appropriations given the cost of garbage disposal is included, making the showing, so far as public-health purposes are concerned, far too high. We note, however, that two cities of over 20,000 propose to give adequate public-health protection at a cost of \$300 per year, while one city has no appropriation

\* \* \* Of the 44 cities, 29 employ no inspectors; among these one of over 20,000 pays nothing for its health officer, and another of 10,000 pays its health

officer \$25 per annum.

The New York situation is described by the Special Health Commission thus:

There is the widest diversity as to the compensation of town and village health officers, except that in nearly every case it is inadequate and in many cases ridiculous. In some cases there is a salary, in other cases fees, in some cases both, and in a few cases no compensation at all. The average annual compensation including fees and salaries of health officers of the 771 towns and villages represented by the 652 health officers replying to our letter of inquiry (652 of a total of 1,032) was \$60.84. The amounts received range from \$3 to \$1,400. Their average annual compensation (some serving more than one town or village) is \$71.96.

There is no reason to believe that New York and Illinois are different from other States in this regard. A letter from the clerk of the board of health in a city of 687,029 population to this Bureau, dated February 20, 1913, says: "I have to advise that the health department has no funds available for organizing a division for the care of infants." Another health officer of a city of over 168,000, replying to the Bureau's letter asking what plans were being considered for a summer campaign against infant mortality, said: "We have been unable to get an appropriation from the city council for carrying on a campaign of this kind."

When the truth of the motto of the New York City Health Department—"Public health is purchasable; within natural limitations a community can determine its own death rate"—is generally recognized, it is certain that civic appropriations will become adequate.

# COOPERATION OF HEALTH BOARDS WITH PRIVATE BENEVOLENT AGENCIES.

In view of this wide-spread, if not general, lack of appropriation to enable health boards to deal with the situation, direct cooperation with private benevolent societies has suggested itself and has been acted upon with excellent results in many places. Dr. Selskar M. Gunn, when health officer of Orange, N. J., said:

The campaigns against infant mortality in the past have been conducted for the most part in large cities, and this is quite natural, as in the large city the necessity for work in this direction is more evident than in the smaller community, but I venture to state that in some of our smaller cities the condi-

<sup>&</sup>lt;sup>1</sup> Gov. Sulzer's Message on Public Health, with Report of Special Public Health Commission, transmitted to the legislature Feb. 19, 1913.

tions are almost as serious as in the larger places. \* \* \* The methods of approaching and attacking these problems are varied and many. One of the first things to be done is for the board of health to establish, if it has neglected to do so, good relationships with the various civic organizations that are present in the community. I refer particularly to the bureau of associated charities, day nurseries, diet kitchens, visiting nursing settlements, and organizations of similar character that are working for the good of the community. This is very essential in small cities where the board of health does not receive adequate financial support from the city fathers, a condition usually to be met. These societies can be of very material help in supplying the necessary weapons for the attack. Such cooperation will be found particularly useful in all branches of public-health work. \* \* \* Many of these organizations are not doing the effective work they are capable of because they are not in a position to discover the cases which they really should be assisting. They have oftentimes to take the cases as they come, irrespective of the real need, and so many who most need help are never reached. All of this emphasizes the important fact that in small cities the health department should cooperate in every way possible with all the private social agencies that are at work in the city. These agencies are not infrequently doing work which probably should be done by the health department, but which, through the parsimony or false economy of the city fathers, can not be undertaken at the present time. \* \* \* Milk depots are examples of this.1

When, as is sometimes the case, no private agencies exist with which to cooperate, the health officer often resorts to agitation to bring them into existence. This is done by using the local press to call attention to the infant mortality of the place, emphasizing the number of preventable deaths each week from causes so largely social in their nature that the individual parents can not be considered wholly to blame. In thus showing the need of private philanthropies, directed toward the causes of preventable infant mortality, the health officer has recourse to his wall charts. In Utica, N. Y., a fusillade of newspaper paragraphs calling attention to the fact that the infant death rate of that city exceeded that of any other city of its size in the State except two, one of which was exceptional because of its hospital population, finally brought into existence the Utica Babies' Pure Milk and Health Station Association, which most effectively entered the campaign against preventable infant mortality in 1912.

The health officer can, more effectively than anyone else, call public attention to the fact that: "The reduction of infant mortality is a public-health problem. The basis of responsibility lies with the public which must voice its decision through its mouthpiece, the government." In the event of local government neglecting or refusing, private philanthropies must step in.

When cooperation is offered with a view to directing and thus minimizing wasted effort, it is usually accepted in good spirit. The

<sup>&</sup>lt;sup>1</sup> Dr. Selskar M. Gunn, Modern Methods of Health Boards in Small Cities, Journal of American Public Health Association, May, 1911.

<sup>&</sup>lt;sup>2</sup> "The Principles of the Reduction of Infant Mortality," by Josephine Baker, M. D., New York Medical Journal of Nov. 25, 1911.

excellent work being done in Atlanta, Ga., with the exception of milk inspection, is private work with municipal cooperation; this is also true in Baltimore, Md.; Columbus, Ohio; Erie, Pa.; Indianapolis, Ind.; Jacksonville, Fla.; Newark, N. J.; Washington, D. C.; and many other cities. Probably the most conspicuous examples of successful cooperation are those of the New York City Health Department with the New York Milk Committee and Cleveland, Ohio, with the Babies' Dispensary and Hospital. In the report of the latter institution for the year ending September 13, 1912, Dr. H. J. Gerstenberger writes:

The success in the reduction of infant mortality in any community depends principally upon the following factors: First, the full recognition of the various causes of infant mortality and their relative importance; second, the knowledge of the means to remedy these causes and, better still, to prevent them, and the application of these means; third, the education of the future parents, physicians, and nurses; and fourth, the degree of unity in plans for action existing among the various private philanthropies and departments of the municipality and State that are more or less directly interested in this subject.

The outcome of successful private work through the cooperation of city health officers is usually to cause the city councils to appropriate sufficient funds to allow the municipality to take over this work, gradually sometimes, but eventually completely. This has been the experience, for instance, in Bridgeport, Conn., where a private visiting nurses' association established a milk station, demonstrating its value to the city, which established two in 1912, providing a nurse in connection with them. The Milwaukee division of child welfare in the Municipal Health Department is an outgrowth of a child-welfare campaign conducted by a commission. This extension of municipal control of preventive work through cooperation with private associations is being experienced in Reading, Pa; Holyoke, Mass.; Indianapolis, Ind.; Philadelphia, Pa.; Boston, Mass.; Richmond, Va.; Jacksonville, Fla.; and many other places. The health officer of Jacksonville, Fla., writes:

We have organized an Infant Welfare Association and are at the present time preparing to employ a nurse who shall devote her whole time to that work. She will be under the direction of the welfare association and in constant touch with this department, from which she will probably receive the largest portion of her calls.

## COMPLETE AND PROMPT BIRTH REGISTRATION AS A BASIS FOR EFFECTIVE WORK.

The plan adopted in some cities toward a summer campaign is to arrange for a complete and quick registration of births; to get the baby under observation as quickly as possible. Even where State

laws permit much longer time in which to report births, some city health officers have made arrangements with physicians and midwives to give immediate notification of births during the summer months. Lists of all physicians and midwives are presumably kept complete at all times, and calling these groups together-separately of course-and having frequent conferences with them is suggested as a great aid in securing speedy notification of births. Sending each mother immediately a card or letter stating that the health office has been apprised of the birth of her child, as is done in Kansas City and other places, has been found to be an effectual means of securing the interest of the mother and of spreading sentiment in favor of complete registration. Upon receipt of a card or letter the mother will comment upon it to other mothers. The mother who has not received such a letter will at once want to know of her physician or midwife why her baby was not registered and why she did not get a notice of it. Inclosed with this card or letter to the mother many cities send a folder containing advice to mothers on the care of babies. The health bureau thus gets in with its advice ahead of the neighbors. The folders carry, of course, a strong appeal for breast feeding and give instructions for the care of the breasts and for feeding in case breast feeding is impossible.

## MORBIDITY AND MORTALITY CHARTS.

The health officer should be the guiding hand in these private activities; he has but to call attention to his morbidity and mortality charts upon which, with various colored pins, he shows exactly where the high death rate is coming from and the causes producing it. These wall charts are city ward maps upon which blocks and, if possible, lots and buildings are indicated. A colored pin is stuck into the map at the proper place for each reported death and for each reportable disease return. By means of these pins of various colors the relative health conditions of the different localities can be shown and the health officer can point out the high death-rate districts, and can show the causes which have produced this death rate. As Mr. Sherman C. Kingsley, when superintendent of the United Charities of Chicago, said: "Where the white hearse goes most often there you will find the weakest place in your municipal housekeeping." The health officer, from the pins upon his wall chart, can follow the route of the bad-milk man and can prophesy very accurately where

<sup>&</sup>lt;sup>1</sup> The work in Detroit, Mich., is thus described by the health officer: "As to some special features in connection with this work would say that we are looking after the midwives, boarding out of babies, maternity homes, watching the birth certificates very closely, seeing about getting proper registration of births, keeping close watch of the death rates, making maps showing where the babies die, in order to direct our work to these locations this coming summer."

the white hearse will go. Summer diarrhea and enteritis in children under 2 years is, wherever possible, made a reportable disease during the hot months, and reported morbidity from this cause is indicated on the wall map. A separate map is frequently used for children's diseases. Better results in locating bad-milk routes are obtained from studying these morbidity returns than from merely following mortality returns.

Cooperation with private benevolent societies makes itself most felt and is most effective when such societies have immediate notification of births and of morbidity returns. The best results have been obtained where there is no waiting for the official formalities; when birth notifications, reports of sick babies, and infant death returns are immediately telephoned to the private society.

#### INSPECTION OF MILK SUPPLY.

A rigid inspection of the milk supply is strictly the province of the municipality, and usually the summer campaign against infant mortality begins, as in Atlanta, Ga., with a "more rigid inspection of the milk and dairies during the summer."

Lists of every milk producer furnishing milk to the city and every dealer in the city, whether from wagon or from store, usually kept complete at all times, is made subject to vigorous revision, even where license is not necessary, and frequent samples from all dealers are thoroughly tested, not only for fat but for dirt and bacteria. A number of cities that get no further in the way of summer baby saving make a complete inspection of dairies and the milk supply during the hot months. The importance of milk control in summer months can not be overestimated. Health officers are practically as one in the opinion that unclean milk, or the improper preparation and care of milk in the home, is responsible for a large share of the increase in infant death rate that comes with the heated season. It is the citv's duty to see that the people can buy clean milk; it is the parent's duty to see that the milk is kept clean. The wall charts above referred to enable the health officer to locate the bad districts—to get a geography, as it were, of the death rate.

#### METHODS IN DIFFERENT CITIES.

That the example of Atlanta, Ga., in beginning the summer with more rigid inspection of the milk and dairies is followed by many cities, the following extracts from letters to this Bureau will attest:

New Haven, Conn.—We give more close attention to dairy and farm inspections and make a larger number of examinations of milk.

Salt Lake City, Utah.—We have a very good milk ordinance which is rigidly enforced and has a tendency to reduce infant mortality.

Springfield, Ill.—The Department of Health has done nothing toward the prevention of infant mortality, except very careful inspection and reinspection of dairies for an area of 15 miles about the city.

Seattle, Wash.—In all our milk work we have endeavored to raise the standard of milk production along lines somewhat original. We have first sought to make the business profitable by endeavoring, so far as possible, to educate the dairyman how to produce the best stock, how to feed the same, and in general make the occupation of dairying profitable. We have done this primarily so that we might have steady shippers. There is no branch of milk production comparable with this in my judgment. A city must strive to maintain a shipment of milk from dairymen who are well acquainted with the laws and ordinances, who on account of experience can produce milk under the terms of our ordinances. If a city has a number of dairymen changing from one vocation to another, such a milk supply can never be first class.

Schenectady, N. Y.—During the past year we have made radical changes in our milk-inspection work. July 1, 1912, we adopted a new set of rules governing the production, sale, and care of milk in the city of Schenectady, after having studied the milk question thoroughly. At present we are contemplating several further changes, and we hope to get an ordinance which will prohibit milk being dipped on the streets and of enforcing the sale of bottled milk only. In fact, we are trying to get our milk-inspection system as near the ideal as possible. When all is said, perhaps the most important factor of a baby-saving campaign is pure milk.

To trace the cases of intestinal diseases from the cow or the dairy farm to the nursing bottle of the infected child, just as was done in the case of diphtheria in the towns of Dorchester, Milton, and Hyde Park, Mass., is a very effective and conclusive method of securing ordinances which permit either the establishment of municipal milk supply or complete control of private sources.<sup>1</sup>

Cartoons descriptive of well-known local conditions are always good to emphasize local needs. The Chicago Health Department very effectively illustrates the superiority of breast feeding by a cartoon which it calls "The Long and Short Haul," which is reproduced on the opposite page. Local illustrations along similar lines have been made very effective elsewhere.

The larger cities, such as New York, Chicago, Boston, Philadelphia, and particularly Washington, D. C., have made every effort to control the milk supply from its source.

The following quotation from "The Milk Question," by M. J. Rosenau, gives some idea of the problem involved in a survey of the milk supply for large cities:

The extent to which this separation of consumer and producer has taken place in the milk industry is patent when we recall that Boston gets most of its milk supply outside of a 50-mile circle, and some milk starts 243 miles from the city. New York receives practically no milk within 50 miles, and

<sup>&</sup>lt;sup>1</sup> See Monthly Bulletin of the State Board of Health, Mass., May, 1907, Vol. II, No. 5, p. 117; also Bulletin 56 of the Hygienic Laboratory, U. S. Public Health Service, entitled "Milk and its Relation to the Public Health," p. 36.



Cheago Health Department Educational Poster No. 72. Designed by Dr. C. St. Clair Drake. 31390°—14——2

some of its supply comes from points as far away as 400 miles. New York City uses about 1,600,000 quarts of milk a day, derived from 40,000 dairy farms.

Most of the milk supply of Chicago is produced within 60 miles of the city. A 100-mile circle about the city would include nearly all the dairies producing its supply. In times of exceptional scarcity in summer sweet cream is shipped 200 miles. The production of Chicago's milk within such a short distance of the city is in marked contrast with conditions in Boston and New York. Chicago uses about 1,000,000 quarts of milk a day. The health commissioner estimates that, in 1910, 120,000 milch cows were necessary to furnish the city supply, making an average production of 6.3 quarts per day per cow.

The District of Columbia consumes about 76,000 quarts of milk a day, or about 0.4 of a pint per capita. This milk is produced on 1,091 dairy farms from 17,688 cows. About one-third is brought in by wagons and two-thirds by steam and electric railroads. The cream is largely received from Philadelphia and New York.

Smaller cities or cities situated in the center of rural districts do not, of course, have a problem so serious as this. Nevertheless, the survey and control of the milk supply is not the province of private philanthropies and should not be expected of them.

#### RECOGNIZED GRADES OF MILK.

Beyond milk inspection and survey of the milk supply, the next step is the establishment of milk depots to furnish pure milk for babies who for any reason can not be breast fed. The health department usually examines and certifies the character of the milk. The milk is usually graded in three classes: (1) Certified milk, (2) inspected milk, and (3) pasteurized milk, and these classifications are embodied in the laws or the regulations and enforced by public-health authorities.

The following definitions or specifications for the grades of milk named are taken from a paper on "The Classification of Market Milk," by Dr. A. D. Melvin, chief of the Bureau of Animal Industry, United States Department of Agriculture, published in Hygienic

<sup>&</sup>lt;sup>1</sup> There are, of course, numerous private publications on methods of dairy and milk inspection. Health officers will, however, find most concise and helpful "Twenty Dairy Suggestions with Special Reference to Sanitation," a stable placard obtainable from the Bureau of Animal Industry, United States Department of Agriculture. In "Municipal Ordinances, Rules, and Regulations Pertaining to Public Hygiene," reprint from Public Health Reports, No. 70, of the U. S. Public Health Service, Washington, 1912, will be found ordinances and regulations from a large number of cities (pp. 70-150), from which a satisfactory ordinance could be selected or drafted to suit any locality. The city ordinance of Berkeley, Cal., contains a score card used in grading dairies. Other reports published by the U.S. Public Health Service which health officers will find extremely useful are "Milk and Its Relation to Public Health," issued as Hygienic Laboratory Bulletin No. 56, second edition, 1912, and "Methods and Standards for the Production and Distribution of 'Certified Milk,'" reprint from Public Health Reports, No. 85, 1912. Bureau of Animal Industry is sometimes able to help raise the standard of local conditions, by sending, upon request of a city or State health officer, an expert to assist in making a survey of the milk and milk supply.

Laboratory Bull. No. 56, second edition, 1912, entitled "Milk and Its Relation to the Public Health," pp. 608-610:

Class 1: Certified milk.—The use of this term should be limited to milk produced at dairies subjected to periodic inspection and the products of which are subjected to frequent analyses. The cows producing such milk must be properly fed and watered, free from tuberculosis, as shown by the tuberculin test and physical examination by a qualified veterinarian, and free from all other communicable diseases, and from all diseases and conditions whatsoever likely to deteriorate the milk. They must be housed in clean and properly ventilated stables of sanitary construction and must be kept clean. All persons who come in contact with the milk must exercise scrupulous cleanliness and must not harbor the germs of typhoid fever, tuberculosis, diphtheria, or other infections liable to be conveyed by the milk. Milk must be drawn under all prerautions necessary to avoid infection and be immediately strained and cooled. packed in sterilized bottles, and kept at a temperature not exceeding 50° F. until delivered to the consumer. Pure water, as determined by chemical and bacteriological examination, is to be provided for use throughout the dairy farm and dairy. Certified milk should not contain more than 10,000 bacteria per cubic centimeter, and should not be more than 12 hours old when delivered, Such milk should be certified by public health officers or by some other properly constituted authority.

Class 2: Inspected milk.—This term should be limited to clean raw milk from healthy cows, as determined by the tuberculin test and physical examination by a qualified veterinarian. The cows are to be fed, watered, housed, and milked under good conditions, but not necessarily equal to the conditions prescribed for class 1. All persons who come in contact with the milk must exercise scrupulous cleanliness and must not harbor the germs of typhoid fever, tuberculosis, diphtheria, or other infections liable to be conveyed by the milk. This milk is to be delivered in sterilized containers and is to be kept at a temperature not exceeding 50° F. until it reaches the consumer. It should contain not more than 100,000 bacteria per cubic centimeter.

Class 3: Pasteurized milk.—Milk from dairies which do not comply with the requirements specified for classes 1 and 2 should be pasteurized before being sold, and should be sold under the designation "pasteurized milk." Milk for pasteurization should be kept at all times at a temperature not exceeding 60° F. while in transit from the dairy farm to the pasteurizing plant, and milk after posteurization should be placed in sterilized containers and delivered to the consumer at a temperature not exceeding 50° F.

All milk of unknown origin should be placed in class 3 and subjected to clarification and pasteurization. No cow in any way unfit for the production of milk for use by man, as determined upon physical examination by an authorized veterinarian, and no cow suffering from a communicable disease should be permitted to remain on any dairy farm on which milk of class 3 is produced, except that cows which upon physical examination do not show physical signs of tuberculosis may be included in dairy herds supplying milk of this class.

This milk is to be clarified and pasteurized at central pasteurizing plants, which should be under the personal supervision of an officer or officers of the bealth department. These pasteurizing plants may be provided either by private enterprise or by the municipality, and should be located within the city.

By the term "pasteurization," as used herein, is meant the heating of milk to a temperature of 150° F. or 65° C. for 20 minutes, or 160° F. or 70° C. for 10

minutes, as soon as practicable after milking, in inclosed vessels preferably the final containers, and after such heating immediate cooling to a temperature not exceeding 50° F. or 10° C.

Other conditions.—No milk should be regarded as pure and wholesome which, after standing for two hours or less, reveals a visible sediment at the bottom of the bottle.

No dairy farm should be permitted to supply milk of a higher class than that for which its permit has been issued, and each dairy farm supplying milk of a specified class should be separate and distinct from any dairy farm of a different class. The same owner, however, may supply different classes of milk, providing the dairy farms are separate and distinct.

The term "milk" as herein used includes cream.

The New York City Board of Health adopted the following resolutions in regard to the sale of "loose" or "dipped" milk, on September 17, 1912, effective on June 1, 1913:

Whereas the interest of the public health requires that milk should be protected from contamination by human agencies and by dust, dirt, and flies; and.

Whereas many of the premises in the city of New York where milk is sold by dipping from cans are grocery stores in which foods and food products and other commodities not in sealed packages are sold in a manner which causes much dust; and,

Whereas the facilities for proper icing, the proper cleansing of utensils, and the proper protection from flies are often inadequate in such stores, many of which are so arranged that the living rooms open directly into the store: Therefore be it

Resolved, That after June 1, 1913, the sale of milk dipped from cans will be permitted only in milk stores approved by this department, and for which a permit has been issued, or in places in which foodstuffs, other than milk products, are sold in original packages only.

#### MILK STATIONS.

#### RECENT INCREASE IN NUMBER.

A constantly increasing number of cities of all sizes are establishing milk stations and dispensing milk, whether pure whole milk, certified, modified, pasteurized, or sterilized milk, to mothers of babies that must be bottle fed. The U. S. Public Health Service, published a compilation 1 from schedules received by that Service from certain cities in which such work is being carried on. The report covers 43 institutions located in 30 cities of over 50,000. These cities are Albany, Baltimore, Boston, Buffalo, Chicago, Dayton, Detroit, Hartford, Honolulu, Indianapolis, Kansas City, Mo., Lawrence, Louisville, Lowell, Milwaukee, Newark, New Bedford, New Haven, New York City, Peoria, Pittsburgh, Providence, Rochester, St. Louis, Springfield, Ohio, Washington, D. C., Waterbury, Wilkes-Barre, Worcester, Yonkers.

<sup>&</sup>quot; Data Regarding the Operation of the Infants' Milk Depots in the United States." Reprints from Public Health Reports No. 64, U. S. Public Health Service.

Twenty-nine of the institutions are maintained by private benevolence; 11 did not report on this point; while one was reported as maintained partly by private means and partly by public appropriation.

Forty-three of the institutions mentioned distribute milk, 23 of them to infants only, and 20 to both infants and adults. At some depots the milk supplied is for expectant or nursing mothers, thus contributing indirectly to the welfare of the children.

Of the 36 institutions furnishing information as to the average age of the children fed, in the majority the children are under 1 year of age, and in practically all they are under 3 years.

At 30 of the institutions reporting, literature on infant hygiene is distributed with the milk; one of the circulars is issued in seven languages. Twelve institutions distribute no literature, and one institution distributes practically none.

Every institution which reported except one takes special measures for the education of mothers in infant hygiene. These instructions are given by physicians and nurses or by means of literature or by both. In 2 cases the educational work was carried on in the homes; in 2 only at central stations; in 38 both in the homes and at central consultations.

The letters received by the Children's Bureau indicate a number of cities of the class named having milk stations in 1912, or intending to establish them in 1913, not in this tabulation. Salem, Mass., for instance, has conducted a certified milk station for four summers and continues it for 1913. During the 60 days of 1912 in which it was operated, 35,863 feedings were dispensed to an average of 66 cases per day. Of course, a large number of cities under 50,000, and many, like Montclair, N. J., under the 25,000 class, have excellent milk stations and are doing splendid work along many child-saving lines. It is the intention of this Bureau to obtain, so far as possible, complete returns from all cities and towns having more than 15,000 inhabitants and to present the result of the investigation in tabular form in next year's bulletin.

The magnitude of the movement in New York City is shown in the report on "Milk Stations" issued by the Clean Milk Association. In mothing is the importance of cooperation between the municipal health office and private philanthropies and civic associations so apparent as in this matter of summer milk supply. Where municipal milk stations and municipal milk supply are impossible it is nevertheless usually possible to organize a local charity that will supply the needed funds for a sufficient number of pure-milk stations. The experience of Utica, N. Y., previously referred to in this report, could no doubt be duplicated in scores of cities from which reports have not yet been received. The frequent and persistent publication of the

local infant death rate and its relation to the nature of the milk supply will sooner or later arouse sufficient public interest in any locality to insure to the health office sufficient funds and cooperation to apply the remedy.

#### NOT A MEANS OF ENCOURAGING BOTTLE FEEDING.

Usually the first step taken toward a summer campaign for saving babies' lives, whether by a municipal health department or by private benevolence, is to establish a pure-milk station. Since the largest part of the summer infant mortality comes from bottle-fed babies and is traceable to dirty milk, the pure-milk station suggests itself as the most obvious and direct remedy. From a number of sources, however, comes a warning that the pure-milk station as a separate institution must not be too much accentuated. The danger comes from the fact that it deals only with bottle-fed babies. Since the bottle-fed baby's risk of dying is so much greater than the breast-fed baby's, it is perfectly natural that preventive efforts should first be directed toward the most potent causes of high death rate, but there may be and in some places there have been certain attending dangers where the furnishing of milk has been the only thing attempted. On this account in many, if not most, milk stations positive proof is required that the mother either can not or ought not to nurse her baby before she can get the pure milk, and this precaution has been found necessary in order to prevent an increase in bottle feeding in the community as a result of the feeling of greater safety which the puremilk station gives to mothers who, while perfectly able to nurse their children, would prefer, for insufficient reasons, not to do so. It is never intended that there should be less insistence upon the duty of breast feeding because of the milk station, for while the death rate among the bottle fed is reduced by pure milk, the death rate among the bottle fed from the purest milk possible is still much higher than the death rate among the breast fed, and if there is any perceptible increase in bottle feeding as against breast feeding because of the milk station the latter might thus become an agency to increase rather than decrease infant mortality.

## INSTRUCTION OF MOTHERS A NECESSARY FEATURE.

It has been the experience of practically all milk dispensaries that it is useless to send pure, clean milk into a dirty home to be handled by an ignorant, dirty mother or older child. It is necessary to reach the mothers, and not only to teach them how to care for the baby's milk, but to convince them of the necessity of cleanliness where the baby's food is concerned—convince them of the deadliness of dirt, especially of dirty milk.

In many cities it is believed that the principal good to be derived from milk stations consists in the opportunity given for those in charge to come in contact with the mothers and with the home surroundings of the babies in the high death-rate districts. The nurse and the physician in consultation with the mother thus become a necessary adjunct of the milk station. No milk, however pure or clean, agrees at all times with all babies, and the distribution of modified milk become necessary almost immediately in a number of cases. To modify the milk to serve the needs of a given child that child's case must be studied; hence the child clinic, which almost at once grows out of the necessities of the milk station.

#### EQUIPMENT AND MANAGEMENT.

A milk station is simply a room from which pure milk is given out for the use of babies that can not be breast fed. The best location is in or as near as possible to the congested part of the city. It is only necessary that the room shall be sufficiently large to accommodate the patrons and the equipment and that it be light and clean. In the case of Utica, N. Y., for instance, the first milk station was opened in a schoolhouse, and it would seem that schoolrooms, thoroughly scrubbed and cleaned, might more generally be turned into this use during the summer vacation. The equipment is simple: A good ice box, large, and kept clean, a desk, some chairs, and a table. The walls and woodwork are usually painted white, and the floor is covered with linoleum, which makes easier the task of keeping it clean.

Signs in large letters and in all needed languages are usually put up, stating that pure milk is furnished at the lowest possible price (sometimes free to the poor), for the use of babies only. Most cities find it better to sell the milk at practically the ordinary price at which milk is sold in the city. This avoids conflict with the dairy interests, and allays the suspicions of the ignorant, that the pure-milk station is but a scheme to get higher prices. The following from the report for 1910 of the Babies' Milk Fund Association, of Louisville, Ky., is illustrative of the practices and experiences of all:

At each of the seven stations certified milk was sold below cost for the children of the poor. The regular retail price of certified milk, 12½ cents a quart, being prohibitive in our station neighborhoods, we made our price at first 8 cents a quart, meeting exactly the price of the ordinary market milk our patrons had been accustomed to buy, and raising our price to 9 cents later, when market milk was advanced to that price by the retail dealers throughout the city.

We paid 10 cents a quart for this certified milk, and so we lost at first 2 ents, later 1 cent, on every quart sold.

The modified milk, which costs the association about 17 cents a day for each aby, was sold for 10 cents a day.

While payment of our low charges was exacted of all families able to pay, the milk was furnished entirely free of cost to those unable to pay, and to some others at half price, when the applicants were recommended after careful investigation by the Associated Charities or the Federation of Jewish Charities.

#### BABY CLINICS.

It has been found generally advisable to put the milk station in charge of a competent nurse, who is on duty at the station during stated hours of the day to distribute the milk. In many cases she finds it imperative to give mothers instructions in the care of the milk in the home—for pure milk will not stay pure in a dirty home if it is exposed—and as well to teach them how to take care of their babies. Thus, the milk station unavoidably and inevitably becomes a "consultation," like the French institution of the same type. A consulting nurse is the first feature; later, in most cases, "modified milk" is added to the pure milk supply; with modified milk comes the frequent necessity of bringing certain babies to the station to be examined by a physician for the purpose of determining just how the milk should be modified to meet the case. And thus begins the "baby clinic," all as the inevitable outgrowth of the milk station. At first, milk modifications proceed along the line of a few formulæ, and graded by numbers this milk is furnished according to the age or apparent condition of the child. The tendency here, of course, is to diagnose the child to fit the milk, as Dr. Newmayer says: "Modified-milk stations with set formulæ Nos. 1, 2, 3, try to make the baby fit the milk modifications instead of the milk to fit the baby." But this does not usually last long and seldom becomes serious. The baby clinic soon becomes a recognized necessity of the modified-milk dispensary, and out of this grows the visiting-nurse system, since the nurse must go to the mother's house and teach her how to modify the milk for her particular baby according to the prescription given by the physician at the clinic.

Although the methods employed in the conduct of infants' milk depots have varied somewhat both in this country and abroad, their objects have been the same. It is recognized that all milk dispensed should be produced and transported under conditions insuring a product of the highest purity, that it should be prepared and modified in the depot under medical supervision, and that strict bacteriological precautions should be taken in every step of the process.

In addition to the care exercised in the depot, the milk is packed in a manner to guard against contamination in the home. Each bottle contains but one feeding, and is so designed that it will not stand on end, and therefore can not be left standing open. The milk is modified in accordance with standard formulæ in use at the various depots, and, in addition, special modifications are made apon the prescriptions of physicians.

The following are formulæ now in use at the Straus milk depots

in New York:

#### Formulæ for modified milks.

Formula No. 1 (Dr. Arthur R. Green):	Ounces.
Milk	
Cane sugar	
Salt	083
Oat water	32
Formula No. 2 (Dr. Rowland G. Freeman):	
Milk	64
Limewater	4
Milk sugar	6
Filtered water	60
Formula No. 3 (Dr. A. Jacobi):	
Milk	64
Barley water	64
Cane sugar	4
Table salt	
Formula No. 4 (Dr. Rowland G. Freeman):	
Cream (16 per cent)	103
Milk	04.1
Milk sugar	$6\frac{1}{2}$
Limewater	
Filtered water	92
Formula No. 5 (Dr. Arthur R. Green):	
Cream (16 per cent)	4
Milk	
Limewater	
Milk sugar	
Filtered water	
P. 2200 - W. 1100	

The three former mixtures are placed in 6-ounce bottles, the two latter in 3-ounce bottles and pasteurized by exposure of 20 minutes to 157° F. Whole milk is also pasteurized in 8 and 16 ounce bottles.

Practically all infants' milk depots in the United States are under general medical supervision, and, in addition, many depots are in direct charge of graduate nurses who prepare the milk and give instructions to mothers in the care of infants. In some instances, visiting nurses also enter the homes of the children for the purpose of imparting instruction.

It frequently happens that several physicians will volunteer to give a few hours each week to the baby clinics, and when this is done the clinics are held at the milk station, at stated hours, either daily or on certain days, the hours being made to conform to the proffered services of physicians. The baby clinic necessarily develops into a mothers' "consultation" and these usually lead to the public

1 Grains.

lectures to mothers which, although held in connection with the general organization controlling the milk stations, are themselves given in a church or a schoolroom. The natural growth of the work and methods is perhaps best seen by the following description of developments in the case of a few typical cities, such as Indianapolis, New York, and Philadelphia:

## OPERATION IN CERTAIN CITIES.

Campaign in Indianapolis.—An interesting letter, accompanied by a report on the work of the stations comes from Indianapolis. Dr. H. G. Morgan, health officer, writes: "The Indianapolis City Board of Health is working in conjunction with the Children's Aid Association in the care of infants in summer. If there is any one feature of the work I would especially recommend, it would be an increase in the number of nurses." The report of the association follows:

The pure-milk stations of the Children's Aid Association were open and in operation daily during the year 1912. The most important feature of this department is the educational work of trained, graduate nurses. In the early part of the year we had two such nurses, in May there were three, through the summer there were five, and then in the fall the number began to be decreased until in December we had only one. These nurses made during the year 4,929 professional visits to the homes of babies, besides attending clinics and helping many babies in other ways outside of their homes.

Where special modifications were prescribed by the physicians, either private or as members of the medical staff, the nurses visited the homes and showed the mothers how to prepare the milk according to directions. More complex modifications for very sick babies were made by the nurse at the central station and distributed through the regular distributing stations.

Nursing or prospective mothers were registered in some cases, to the number of 63, and received the same personal attention of the nurse, if required, as did the babies.

Most of the clinics of the year were held at the central station in the Baldwin Block. Some, however, were held at the branch distributing stations as occasion required. During the lighter seasons of work two clinics a week were held, but in the summer clinics were held daily except Sundays and holidays. These clinics were in charge of physicians, one or two being present each day. In all 210 clinics were held and 882 children examined.

The milk for children who required special feeding was distributed through milk stations, of which during the summer there were five. Two others were open for a short period, but were discontinued on account of the expense in reaching them in proportion to the number of children obtaining milk there. At each of these stations a woman was employed at a small monthly fee to distribute milk, check up the return of bottles, a plan which was found to be more economical than in using salaried nurses for this purpose. In this way the larger stations near the center of the city can be maintained economically, but small stations, and at a distance from the center of the city where considerable time is required daily to haul the milk, are too expensive. To be conducted economically some way of distribution through a retail distributing milk company is necessary to make it possible to reach the babies scattered over the city who need the help of the milk stations.

The milk used in this work was obtained principally from ———. Both of these herds consist of high-grade cattle, tuberculin tested, properly housed, grain fed; and the milk was handled with such care, being bottled at the dairy in bottles furnished by the association and shipped in ice, that the tests for cleanliness were uniformly excellent. During the year approximately 46,000 quarts of this milk were used.

Six public educational meetings for mothers were held in the summer, one at the Jewish Federation, South Meridian Street, two at Mayor Chapel, Norwood and West Streets, one at Christamore Settlement, and one at the Church of the Assumption, Blaine Avenue, West Indianapolis. These meetings were addressed by physicians on subjects of practical interest to mothers on the care of small babies. The aggregate attendance at the meetings was 117, which indicates a fair beginning.

The total expense for the year amounted to \$8,317.56, of which the greater part was used for milk and for personal service of trained nurses. This expense was covered in part by a city appropriation, through the department of health, of \$4,000; by receipts from sales of milk amounting to \$1,827.07; by specific contributions from churches, lodges, Sunday school classes, and individuals aggregating \$900 for certain stations or certain babies; the balance being provided through the general contributions to the Children's Aid Association. Voluntary services of many kinds, professional and otherwise, and useful materials have been generously donated. For all these kindnesses and to all those who have assisted, the association is deeply grateful.

#### Milk Commission Statistics, January 11 to December 31, 1912.

#### WORK DONE.

WORK DONE.	
Number of babies helped—	
Feeding cases	468
Nonfeeding cases	. 568
Total	1, 036
Visits of trained nurses to the homes of children	
Number of clinics held, doctor and nurse attending	210
Number of children examined at clinics	. 882
Special treatment given by nurses	. 895
Special day cases (sick babies cared for during the day by nurses)	. 245
Special modifications made by nurses	
Quarts of milk distributed to feeding cases	45,912
Deaths among feeding cases	
Nursing mothers registered	. 63
Mothers' meetings held	
Attendance	. 117
EXPENSES.	
Milk account\$5	5, 640. 91
Salaries 2	2, 178. 00
Car fare	155.00
Printing and stationery	71.00
Feeding supplies	15.00
Miscellaneous	87.85
Total8	3, 317. 56

Campaign in New York City in 1911. The 27 stations founded by the milk committee were situated in the most congested parts of the city. The object of the committee's campaign was to make a demonstration of the value of milk stations in reducing infant mortality, to show that these stations should be situated in the most densely populated districts of the city, and that the ordinary store was suited for a milk station.

The plan of campaign was as follows: Each station was in charge of a graduate nurse, especially chosen for her knowledge of infant hygiene, for her interest in the problem, and her willingness to give herself as well as her time to the work. She was assisted by a matron. In certain districts where the population was almost entirely foreign and where English was spoken and understood as rarely as in Italy or Russia, a matron was selected, when possible, who was able to talk the language of the district. When two or more languages must be spoken an interpreter was provided in addition.

Each nurse canvassed her district from house to house, looking for babies, leaving the folder of the station with the mother, and offering to help her keep her baby well. That was the great thing the stations tried to teach—to prevent sickness. The windows of each station were adorned with placards in various languages inviting mothers to make use of it. The outside of each station was painted a light, bright blue, and the "blue fronts" became a regular expression of the district, being incorporated into many foreign languages.

The milk-committee stations tried first and foremost to encourage maternal nursing. Mothers were told how necessary it was and how it would save the baby many of the dangers of the hot weather. Not only were they urged to nurse their babies, but they were taught to care for themselves so that they could nurse them. They were told what to eat and, more important, what not to eat and drink. When breast milk seemed to be failing they were provided with milk and, if necessary, nourishing food, to try to increase the ability to nurse. When nursing was impossible, artificial feeding was ordered by the doctor in attendance at the station. Each baby was treated as an individual and the food ordered according to its individual needs.

Let us trace a baby through its whole progress at the station. The doctor was in attendance at definite hours twice or three times a week. If a new baby was brought to the clinic it was seen by the physician and its food ordered by him. If brought in at another time, after a preliminary talk from the nurse in which the whole system was explained, the mother was asked if she wanted to enroll her baby. If so, it was stripped and weighed by the nurse and the weight recorded on the individual chart. The nurse's record and the history card were then filled out and the nurse ordered a temporary feeding for the child, according to instructions very carefully prepared by the supervising physician and indorsed by the medical council. If the baby was sick it was sent to a station where a doctor was in attendance that day, or the station doctor was communicated with and arranged to see the baby.

Its milk having been ordered, the mother procured her supply of milk bottles, barley flour, etc., and returned to her home, whither the nurse speedily followed her. At this visit she was taught how to prepare the food and in her own home given a lesson in general hygiene. The formulæ ordered for the babies were of the simplest kind possible. Whole-milk mixtures were used almost exclusively. She was then told to bring the baby back to the station on the next clinic day and to come every morning for her supply of milk. She was also urged, at the first sign of illness, however slight, to report

<sup>&</sup>quot; Infant Mortality and Milk Stations," Special Report of the Committee for the Reduction of Infant Mortality, New York Milk Committee, 1912.

at once to the station. On clinic days every baby was stripped, weighed, and examined by the station physician, its progress discussed with the mother, any necessary changes ordered, and the nurse instructed what to do. Very sick babies were referred to hospitals or to private physicians.

If the mother was unable to buy milk, through an arrangement with the Charity Organization Society, the Association for Improving the Condition of the Poor, and the United Hebrew Charities, such cases were immediately reported to them, and were at once investigated. \* \* \* As the nurse went about from house to house, from family to family, she found many expectant mothers. Part of the campaign was to get in touch with these women and to try to advise and teach them so that they might pass successfully through their pregnancy and be in physical condition to nurse their babies. \* \* \* The milk used came from tuberculin-tested herds and was of the highest standard. It was sold for 7 cents a quart. The contract for this milk was awarded after bids had been asked for from the chief milk dealers of this city. A constant watch was kept on the quality of this milk. Bacterial counts were made daily from samples taken from various stations. \* \* \* In order to estimate the mortality among the babies in the areas under the influence of the milk stations, the following method was adopted: A map was made and plotted out showing the location of the station and the number of babies enrolled in each block surrounding the station. In this way the actual sphere of influence of the station was determined. A few babies came from longer distances and therefore from outside the district. In order to determine the mortality in the district thus established, a search of the records at the health department and a tabulation of all deaths occurring in the months of June to November were made for the years 1910-11. In order to determine the infant mortality it was necessary to tabulate the births by blocks in the same area. \* \* \*

The following conclusions seem to be warranted:

First. That milk stations did have a distinct influence in diminishing the mortality among the babies in the districts in which they were situated.

Second. That the milk stations did not indirectly encourage artificial feeding—32.4 per cent of all babies under 1 year of age were entirely breast fed; 60.6 were partly breast fed.

Third. That home modification, even among the very poor and ignorant, is possible.

Fourth. That the results, as shown by the mortality and by the condition of the surviving babies at the end of the period of demonstration, prove that as **g**ood results can be obtained as when already modified milk is distributed.

Campaign in Philadelphia. —A conference was held early in the summer (1909) at which plans were considered for reducing infant mortality. As a result, the Modified Milk Society, various settlements, and a number of women's clubs conducted work along independent lines. The health department placed its medical inspectors in the most congested parts of the city to canvas for sick babies and to instruct mothers in their care. Milk dealers were provided with bags upon which were printed simple directions as to the care of the milk and the feeding of the baby.

In 1910 a conference was called by the mayor. This was attended by representatives of some 200 agencies, the object being to bring about a better working relation between the various organizations engaged in summer work for mothers and children. As a result of this conference a bureau of registration

<sup>1&</sup>quot; Infant Mortality and Milk Stations," Special Report of the Committee for the Reduction of Infant Mortality, New York Milk Committee, 1912, p. 90.

and information was established at the city hall. A directory was published and distributed giving the names of the agencies and the kind of service each was prepared to render.

The Modified Milk Society established 10 distributing stations and later opened 8 more. The city council appropriated funds to maintain a corps of eight nurses, and by utilizing the medical inspectors and district physicians, a temporary division of child hygiene was established. This division began intensive work in June in four of the most congested wards. Other organizations assisted by furnishing nurses, who reported daily to the health department and worked with their nurses.

Previous to the closing of the schools in the four wards selected, demonstrations were given to girls in the grammar schools in the care of babies. This work was done by medical inspectors and school nurses through the cooperation of the school authorities. A house-to-house canvass was carried on in the district by the health department nurses to instruct mothers in their homes.

At the central office a careful system of record keeping for each case was installed. Day and night telephone service was established for receiving requests for aid in emergency cases. The police and fire departments cooperated by instructing all police stations and fire houses to forward by telephone any request for medical or nursing aid. A large number of bulletins, posters, and circulars were distributed, chiefly through the police department.

Free ice was distributed, midwives were brought under inspection, and several baby farms were closed.

There was a reduction of 40 per cent in the deaths of children under 2 years in the four wards where the work was concentrated. In the city itself, during the three summer months, there was an increase of 132 deaths over those in 1909, though the proportion of the total deaths which occurred under 1 year fell 0.5 per cent.

In 1911 a still more vigorous campaign was waged. A "milk show" was held, which was attended by 110,681 people.

The city council voted \$5,000 for the summer work and the nursing staff was increased. The work was carried on in four wards. The mayor appointed a strong commission to investigate and report upon the whole subject of milk supply. The refrigeration of milk in transit was required for the first time. In the four wards where the nurses were working there was a reduction of 11.3 per cent in all deaths under 1 year from the 1910 figures and of 34.6 per cent in diarrheal deaths under 2 years.

#### LITTLE MOTHER LEAGUES.

"Little Mother Leagues" and "Little Mother Classes" in the public schools represent efforts made in New York, N. Y., Kansas City, Mo., Cleveland, Ohio, and Milwaukee, Wis., to carry instruction into the home from another angle. "Little Mothers" are the school girls who have to help care for babies or for younger children at home. Of course the schools of every city have many such, and as they live in all parts of the town and come from every class, it follows that to reach them is to influence an ever-widening circle of mothers and homes where instruction is most needed. The policy in New York City was to organize these school girls who were caretakers of little

children into groups and teach them the care of babies. These groups were called "leagues" and the whole organization was "The Little Mothers' League." Dr. Josephine Baker, of the New York division of child hygiene, in a paper before the International Congress of Hygiene and Demography, in September, 1912, says:

The aid of over 20,000 girls from 12 to 14 years of age was enlisted and made of practical value by the formation of "Little Mothers' Leagues." These are still one of the most important branches of our work. The girls are taught all practical methods of baby hygiene and feeding. The potential value of training young girls for intelligent motherhood is not only of immense importance, but the immediate results have been striking in the improved care that is given to the babies who are directly under the care of these young girls. As true prevention work, it ranks of first importance in the prevention of infant mortality in this and the next generation. In all, 239 of these leagues were found in 1911, and practically an equal number have been organized this year (1912). Weekly meetings are held for instruction. Each league is under the supervision of a doctor and a nurse from the division of child hygiene. Each weekly lesson takes up some particular phase of baby care. The doctor gives a short, simple talk; then, with the nurse, demonstrates his subject. Our outline embraces the importance of breast feeding, hygiene of the home, cleanliness, ventilation, etc., hygiene of the infant, including bathing, dressing, and value of fresh air, infant feeding, with methods of milk modification. lessons are simple and practical, and the children are required to carry out each part of the work. Babies are not lacking for demonstration purposes, for nearly every little mother brings her own charge to the meetings, and often the rivalry is great to have "my baby" chosen as an object lesson of health and right living. The members write and act little plays, the play always hinging upon some newly discovered way to keep the baby well. The real iniquity of lollypops and dill pickles as baby food is being uncovered, and these and kindred baby pacifiers of former days are being relegated to oblivion.

In Kansas City and in Milwaukee all girls desiring to enter these classes are enrolled, whether or not they are caretakers of babies at home. The health department undertakes to teach baby hygiene through the public schools to all girls who care to avail themselves of the opportunity by joining the classes—a step, in short, toward the movement in French and German schools in education for mother-hood.<sup>1</sup>

In Cleveland, Ohio, instruction is given to girls in the seventh and eighth grades by the introduction of an infant hygiene division in the domestic science department of the schools. On June 9, 1913, there were 48 classes a week, with 884 girls taking the work. The course consists of six lessons, as follows:

Lesson I.—How to keep baby well. Causes and prevention of high death rate.

At the last International Congress of School Hygiene, at Paris, on the proposition of Irr. Pinard, a resolution was passed that in schools for girls the care of infants should form an integral part of obligatory instruction in all the primary schools, and examinations should be passed in these subjects.—American Journal of Sociology, January, 1912.

Lesson II.—Growth and development of normal baby.

Lesson III.—Pattern demonstration. Each pupil cutting patterns for baby's outfit.

Lesson IV.—Feeding: Maternal nursing, artificial feeding, dangers of patent foods. (Charts for five lessons.)

Lesson V.—Bath: Things necessary, preparation, how much good it does baby.

Lesson VI.—Common illness among babies. First home treatment in beginning of intestinal disturbances.

#### VISITING NURSES.

#### VALUE OF SERVICE IN PRENATAL AND POSTNATAL WORK.

The warning note against placing too much dependence upon the simple pure-milk station which comes up from so many cities is struck with more certain sound from a number of cities which place practically all of the emphasis upon visiting nurses and the instruction of the mothers in the homes.

In an address before the International Congress of Hygiene and Demography, held in Washington in September, 1912, Dr. Josephine Baker, director of child hygiene, department of health, city of New York, on the reduction of infant mortality in New York City said:

The evolution of the infants' milk station is essential. Pure milk, however desirable, will never alone solve the infant-mortality problem. Under our system of home visiting to instruct mothers in the care of babies we have demonstrated that babies may be kept under continuous supervision at the cost of 60 cents per month per baby, and the death rate among babies so cared for by us has been 1.4 per cent. The death rate among babies under the care of the milk stations has been 2.5 per cent, and the cost \$2 per month per baby. Without overlooking the value of pure milk, I believe this problem must primarily be solved by educational measures. In other words, the solution of the problem of infant mortality is 20 per cent pure milk and 80 per cent training of the mothers. The infants' milk stations will serve their wider usefulness when they become educational centers for prenatal instruction and the encouragement of breast feeding and teaching better hygiene, with the mother instructed to buy the proper grade of milk at a place most convenient to her home.

The value of pure milk where babies can not be breast fed, however, must not be underestimated. No amount of cleanliness or care on the part of the mother can entirely offset the dangers that come through polluted milk from dirty dairies. The city health officers, placing most stress upon nurses and instrucion, do not go so far as to recommend that the milk problem be allowed to take care of itself.

"The Work of the Public Welfare Committee of Essex County for the Reduction of Infant Mortality in Newark," written by Dr. Julius Levy, says:

Our survey of the infant-mortality problem in Newark revealed the following facts:

During the past decade there were more deaths of infants under 1 year of age than from tuberculosis in all forms and at all ages. That is why the section on health of the public-welfare committee felt called upon to devote itself to the subject.

While it was found that the greater part of these deaths occurred in about four districts, the clinics and hospitals were often not in the center of these districts and therefore not where they could do the greatest amount of good.

It was found, further, that the doctors and nurses usually could not speak the Language of the mothers; and so at best could have very little effect in eliminating what I believe is the greatest single factor in this problem—ignorance made hidebound by prejudice.

It was further found that though modified milk could be obtained at a milk depot, relatively very few mothers could avail themselves of it on account of the distance, and though certified milk has been sold here for more than 15 years, practically all of the mothers in districts of highest mortality were buying very filthy store or bottle milk. The one fact, however, that was most astounding of all, was that while there has been a reduction of infant mortality in Newark during the past 10 years and though certified milk has been introduced and a milk depot operated, the infant mortality from diarrheal diseases showed a very marked increase in the first half of the past decade and was actually higher at the end of the decade than at the beginning. The reduction of infant mortality has been due to factors not directly influenced by milk supply and feeding.

As a result of these and other studies and observations, we were convinced that milk is not the greatest single factor in the infant-mortality problem and that the distribution of modified milk is not the way to solve this complex problem. Indeed, I have long felt that the milk depot, in the first place, increases the number of artificially fed, and, secondly, does not reach the infants that require it most—those with the most ignorant and indifferent mothers—or, indeed, when the mortality among infants is highest, before the third month of life.

Our plan found its basis in the common knowledge, obtained both empirically and biologically, that mothers' milk is the only proper food for infants; that mothers can nurse their infants successfully in greater numbers and for longer periods than obtains to-day—that the failure to nurse wholly or partly is due, in large part, to ignorance, inherited prejudices and superstitious beliefs that the fostered by anxious grandmothers, ignorant midwives, and I am sorry to admit, indifferent doctors; in a lesser degree to the equally preventable social and economic conditions of overwork, undernourishment, tuberculosis and other defilitating diseases. Our plan is nothing more than to try to induce mothers to accept our knowledge of the importance of maternal nursing and its rationale, of the hygiene of infancy, of the importance of obtaining a clean tuberculintested milk and then taking proper care of it in the home. Our method has for its fundamental thought that mothers can only be convinced of these somewhat recently emphasized facts by doctors and nurses who see the mothers frequently, know their customs, habits, and prejudices, speak their language—yes,

31390°--14----3

and even their dialect. Our ultimate purpose is to conduct our work in such a manner that the public and the authorities will be convinced that infant-welfare work is of such value and importance to the entire community that it shall become a part of the municipal activity for the conservation of public health.

### WORK IN DIFFERENT CITIES.

Boston is one of the cities where special attention has been given to the question of nurses and in a letter to this bureau, dated February 25, 1913, the health department says:

At present we have 10 nurses in the division of child hygiene doing prenatal and postnatal work. The work consists in instructing and advising expectant mothers and mothers of young infants, and in visiting regularly such mothers to see that proper care and attention is given to the child. This continues during the first year of infancy. Special attention is given to bottle-fed infants, as the mortality among these has been high, as you will note by the reports I am sending. The recent law passed by the Massachusetts Legislature compelling physicians to report births within 48 hours after birth has been a great aid in this work.

The board of health is at this time making estimates as to the cost of providing milk stations in this city, as in New York, and believes that this will help greatly during the summer months in saving the lives of infants.

During the summer months it is recommended that mothers take their infants on the Floating Hospital, which is a large steamer supported by public contributions. The steamer leaves the wharf daily at 9 a. m. cruising about the harbor and at times anchoring in the lower bay and returning about 5 p. m. Physicians and nurses are in attendance on this steamer to take care of on an average 200 per day. This is shown to be very beneficial and a great aid in the campaign to save the lives of babies.

The instructions to the Boston nurses are thus condensed in the report of the department:

These nurses will be expected to have accurate information concerning every baby in the district assigned to them.

Breast-fed babies will cause little or no anxiety. The nurse will visit these cases to make sure that breast feeding is maintained; to advise the mother on the care of the breasts, and on general hygienic rules for the preservation of her milk and the care of the baby.

Bottle babies who are under the care of the family physician will be visited by the nurse to make sure that such care is continuous; the services of the nurse will be offered to the tired-out mother in assisting in preparing the baby's food and in carrying out the directions of the family physician. It is expected that the bulk of the work will be among the bottle babies of those who are unable to employ a physician. Recommendations will be made to these mothers to place their babies under the care of the nearest pediatric clinic at once before they show any signs of illness. Every assistance will be rendered these mothers by the nurses in carrying out the advice and instructions given at the clinic, and unceasing attention will be given by the nurses to the sick babies of this class, particularly during the summer months.

The division of child hygiene is entitled only to a portion of the money appropriated for the maintenance of the board of health. The erection of tents at the seashore, the employment of additional nurses in such tents to assist in

the care of sick babies, the maintenance of milk stations have been considered, but the amount of money available for this division prohibits the undertaking of such projects this year.

In Bridgeport, Conn., a nurse visits all the families where a newborn baby has arrived, and where her services are likely to be an advantage, and gives advice and instruction in the care of the baby. Leaflets containing such information printed in the mother's own language are left with the mother. Where breast feeding is impossible the nurse urges the mother to send daily to the milk station for the baby's milk supply.

Fall River, Mass., reports:

Since last July a visiting nurse has been employed who is continually visiting the homes of newly born infants whose addresses are furnished her daily. She supplements the verbal instructions to the mother by explaining and demonstrating the proper care of infants, urging breast feeding, modification of milk, etc. Since the nurse's employment the mortality among infants has been very materially reduced, and we hope during the coming year, by an appropriation asked for, to be able to employ an additional nurse.

In Jacksonville, Fla., the city health department directs nurses employed by private organizations. Jersey City, N. J., Cambridge, Mass., Duluth, Minn., Evansville, Ind., Fort Worth, Tex., Grand Rapids, Mich., Memphis, Tenn., Rochester, N. Y., and other cities resort primarily to the nurse system. The health officer at Grand Rapids says: "I will recommend a special feature that we have used in our city for the past two years for general adoption, as follows: The visitation by trained nurses within 24 hours to every household reporting a birth."

Some cities do not attempt to visit the homes of all newly born infants but have various methods of selecting by districts or otherwise; for instance, the Los Angeles, Cal., authorities report that:

During the school vacation the municipal nurses make home calls on all maternity cases, in the house courts and in the congested districts, reporting to the milk station all cases where breast feeding is impossible, obtaining modified wilk for infants, or assistance where mothers need such.

The report from Richmond, Va., states that:

We believe the instructive end of the work to be all important, and we have nurses for this purpose (five in number) at the present time. Babies are selected by assuming that all babies in some districts should be under supervision and that all twins and illegitimate babies are proper subjects wherever found. This information is obtained from our certificates of births, while babies in special districts are located both by birth certificates and by house-to-house canvass. \* \* \* I have been for some time convinced of the infectious origin of a very considerable part of infantile diarrhea. For this reason our nurses are now told to give special instructions regarding the disinfection of diapers. The other points covered by them are, of course, seeing that the baby gets proper food and clothing—both as regards warmth of clothing in winter and as little clothing as possible in summer.

The health department of Kansas City, Mo., writes this Bureau, under date of March 17, 1913, as follows:

I would say that we were among the first of the western cities to take up the work of prevention of the number of infant deaths during the hot summer months, and we have established stations over the city, with nurses and physicians attending, where the poor can go to receive medical advice and examination of the baby, and, if placed on artificial feeding, to get pure milk at cost. We also give milk to those mothers who are unable to purchase the same, and instructions are given by the nurse at the dispensary how to prepare milk for modification.

We intend to employ six nurses and utilize six of the medical school inspectors this summer at our stations to care for those babies who become ill. It is my opinion that, in order to cut down the death rate among infants under one year old, prenatal instructions should be given at all dispensaries, and that a follow-up system should be employed among parents where births are registered in certain districts which have a high death rate. They should be visited by nurses and carefully looked after, with instructions how to raise the baby intelligently and not to remove the child from breast feeding unless there is good reason for doing so. I think a false security has been given out over the United States with regard to milk stations saving babies, and this false idea should be corrected in the minds of many who have expected to accomplish the object sought. I can not help but emphasize that prenatal instruction, with advice from competent authority regarding the sanitation of the home, will in time bring about the desired results, rather than a dependence upon the milk depots.

Johnstown, Pa., begins this year with a visiting nurse under the control of the Civic Club. Smaller cities make a beginning by employing a nurse, whereas a more elaborate plan of campaign would not be possible. Montclair, N. J., reports for 1912:

Prevention of infant mortality.—Nurse gave part of her time to the instruction of mothers in the proper modification of milk for infant feedings. A clinic was maintained and milk sugar and other supplies were furnished when needed. The total clinic attendance was 286, and the number of feedings taught was 414.

Dr. Charles V. Chapin, health officer of Providence, R. I., says, "We attempted for two years to distribute clean milk to the babies of the poor, but we decided the money could be better spent on trained nurses." Writing to this Bureau, under dates of February 19, and May 5, 1913, Dr. Chapin says:

I would say that most of the baby-saving work in this city is carried on by the Providence District Nursing Association. They employ five nurses for this purpose all the year around, and are likely to put on another during the summer. A very large number of babies are referred to the nurses by the doctors, and are cared for under the direction of the latter. Some of the most effective work is in connection with babies attended by midwives, amounting to about 25 per cent of all. The midwives report each birth immediately, and a nurse employed by this department at once visits each case and refers all that need them to the district nurses.

There are two consultations maintained by the Congress of Mothers and the district nurses, and another is projected for the coming summer.

Three very efficient dispensaries are maintained by different agencies.

There is no very pressing need for milk stations in this city, but the establishment of one or two on a small scale is being considered. \* \* \*

Milk inspection in Providence is not a function of the health department. The milk inspector is an independent officer elected by the board of aldermen. Our inspector is a very efficient officer, and has done much to improve our milk supply. Unfortunately more and more of our milk is railroad milk, coming chiefly from Connecticut, but a large amount is still brought in by the producers themselves or their neighbors. The milk inspector has done much by personal visits to the farms and insistence on essentials: (1) sterile utensils, (2) ice, (3) clean barns. A "call down" when "bacteria run up" is his motto.

The midwives are required to report all births immediately on postal cards. They report very well, as a rule. About 25 per cent of all births are by midwives. The baby nurse of the health department promptly visits all babies, and turns over to the district nurses all cases needing attention. The District Nursing Association has five baby nurses. They not only supervise all midwives' babies under my general supervision, but they look after a large number who are referred by physicians.

All these nurses apply treatment for ophthalmia, but call in the health department oculist whenever it is at all necessary, or get the child to the hospital.

Dr. Chapin has issued, for 1913, from the health department a "List of Milk Dealers Who Produce the Milk Which They Sell." It is issued for the convenience of physicians and nurses, and gives the name of each local dealer, the analysis of the milk he handles, both as to fats and total solids, and the bacteria count per cubic centimeter, giving the lowest, highest, and average for his product. It thus serves as a guide in the selection of milk for bottle-fed babies wherever found in the town.

Montclair, N. J., in its annual report gives a somewhat similar survey of the milk, as does Erie, Pa.

The Nashville, Tenn., city health department reports:

In connection with the operation of the milk dispensaries, the district nursing feature with home modification, distribution of literature, organizing of clubs, instructions given by lectures and personal work of the nurses, we also furnished gowns, napkins, and other articles of clothing where needed. In connection with this we also looked after expectant mothers, referring them to hospitals for confinement, or where this was impractical we furnished physician, nurse, or sterile sheets and all accessories to insure against infection in their homes. For the year 1913 we have increased our nursing force to four, we will operate four milk stations, and in the future will use these stations as a basis of operation in our baby-saving work. You also asked, "What special feature of your system would you recommend for general adoption?" I believe the making of milk dispensaries the basis of operation to be the best way to handle this work. We have furnished from stations modified milk free, and this work is strictly a part of the operation of the health department, and has no connection further than cooperation with private charity.

#### PRENATAL WORK.

When it is realized that practically 38 per cent of deaths under 1 year of age are due to causes mainly dependent upon the health and condition of the mother during her pregnancy and confinement; that within the registration area of the United States, of 154,373 infants under 1 year of age, who died in the year 1910, 14,946, or nearly 10 per cent, lived less than one day; that 36,351, or practically 23.5 per cent, lived less than one week, it will be seen that the infant mortality problem can not be solved adequately by any measures which leave out of their scope some attention to the care of expectant mothers. Since the above sentence was written "Mortality statistics" for 1911 has been issued by the Bureau of the Census, showing a more distressing situation than was revealed by the figures for 1910. With an increased death registration area (now covering 63 per cent of the total population) there was a decrease in deaths of children under 1 year to 149,322 as against 154,373 in 1910. But those who lived less than one day increased not only relatively but absolutely, i. e., from 14,946, or not quite 10 per cent, in 1910 to 18,074, or 12.1 per cent; those living less than one week increased from 36,351, or 23.5 per cent, in 1910 to 40,883, or 27.4 per cent, in 1911. These figures show that the efforts made to save babies through pure milk and more intelligent care have produced results, while the lack of organized effort to reach prenatal conditions for a very considerable period or over any extended area has further emphasized its need. This has been realized by a number of cities, as is shown by the following list, which is not, however, claimed or assumed to be in any way complete:

New York, N. Y.—The department of health is working in cooperation with the New York Milk Committee in a system of prenatal work among mothers, and the department intends to take up this work first in connection with the Infants' Milk Stations and later with a special force of nurses.

The New York Association for Improving the Condition of the Poor, the pediatric department of the New York Medical Clinic, and the New York Diet Kitchen include prenatal instruction in their work.

The Sixth Annual Report of the New York Milk Committee, 1912, contains the following statement on prenatal prevention of infant mortality:

During the summer of 1911, as part of the milk-station work, an experiment was tried looking to the reduction of the deaths of babies under 1 month of age. Appalling as is the fact that from 1 in every 10 to 1 in every 6 babies die during the first year of life, even more terrible is it that nearly 1 in 3 of all these deaths occurs during the first month of life. The baby does not even have the chance of a good start. This is generally admitted to depend largely on conditions acting before and during the birth of the baby, and it

is exactly during this time that the least systematic effort has been made to improve conditions.

This preliminary attempt to meet this condition, which was carried on by two special nurses, promised such excellent results that it was decided to make this our chief work during 1912. \* \* \*

The attempt is being made to reach expectant mothers as early as possible during their pregnancy. The nurse comes in touch with these women through experation with the city milk stations, relief organizations, settlements, churches, charity organizations, etc. Each woman is visited in her home by the nurse, who explains the purpose of her visit and gains her confidence by showing interest and a desire to help. Thus the nurse is able to appreciate the actual conditions of life and to give advice which can be followed under existing conditions.

The expectant mother is told how important it is for her to put herself in as good physical condition as possible, both for her own sake and for that of her unborn child. She is taught how to keep herself in this condition, what to eat, what not to eat, what kind of work she should avoid, and all the details which a woman in better financial circumstances would be told by her physician. She is encouraged to begin early to provide for the arrival of her baby. She is told what clothes it will need, and she is shown how to make them. The subject of her confinement is discussed. She is advised as to what arrangements she should make and encouraged to make them well in dvance. The greatest stress is laid upon the value of nursing, both for the mother's sake and that of the baby. All the instruction that is given is of a practical character and the reason for doing certain things is always explained carefully by the nurse.

With each expectant mother is left a post card addressed to the nurse and filled out by her, to be sent to her headquarters if she is needed at any time. Visits are made every 10 to 12 days—oftener if needed. Examination of the urine is made at each visit, and if any abnormalities are found it is immediately reported to the office. The physician then visits the case, if necessary, or advises the nurse what to do under the circumstances.

The object of this campaign is to show that, under existing conditions, the mortality during the first month of life can be greatly reduced; also that the number of stillbirths and premature births can be reduced. With this idea in mind any woman is accepted as a patient, regardless of whether she is to be confined by a physician, in a hospital, or by a midwife. Whenever advice can be given on this subject a physician or a hospital is urged. Every effort is made to persuade the woman to put herself under the care of whoever is to have charge of her confinement at an early date. An effort is made to utilize the facilities already at hand, and whenever minor ailments or difficulties arise during the pregnancy the case is referred to a dispensary or to the physician, and the nurse's duty is not done until she sees that this advice is carried out. It is only in exceptional cases that the committee's physician cares for these women. \* \*

Up to December 31, 1912, 1,375 women had been watched, helped, and cared for through their pregnancies and for a month after the baby was born. \* \* \* Results among supervised cases, as compared with the borough of Manhattan, show reduction of 32 per cent in deaths under 1 month and of 28 per cent in stillbirths among 1,398 babies, with two deaths among 1,375 mothers. \* \* \*

Also it is encouraging to see that over 92 per cent of the babies living at the end of one month were being nursed entirely; that only 3.7 per cent were altogether deprived of the breast.

Kansas City, Mo.—The health department contemplates the establishment of several stations in those districts where mortality was highest last year, where expectant mothers can receive advice from the doctors and nurses in attendance.

Indianapolis, Ind.—On a small scale; the funds allowed are not sufficient to carry on the work in any extensive way. The expectant mothers in the poor quarters of the city are instructed at different times during their pregnancy, the majority from the third month on to term, others varying from the sixth to the eighth month and just before delivery. They are instructed as to proper care of themselves in regard to exercise, need of rest, freedom from worry. They are also instructed as to the care of the baby, its feeding, and the need of general hygienic precautions. In some cases the expectant mother is taken to the country or to the summer mission for rest.

Providence, R. I.—Health department issues a leaflet containing advice to women who are about to become mothers.

Baltimore, Md.—The Maryland Association for the Study and Prevention of Infant Mortality visits and instructs all expectant mothers registered in four leading hospitals.

Chicago, Ill.—The Mary Crane Day Nursery carries on prenatal work for the women of the Hull House Neighborhood. The Visiting Nurse Association gives some instruction.

St. Louis, Mo.—The Visiting Nurse Association carries on prenatal work as a part of their daily routine. The social service department of Washington University sends a nurse to visit all women who register in the obstetrical clinic.

Detroit, Mich.—Pregnancy clinics are in operation in connection with the stations of the Babies' Milk Fund.

Richmond, Va.—To a limited extent the health department carries on prenatal work. The nurses visit expectant mothers and give advice covering the usual well-known points.

Louisville, Ky.—The Babies' Milk Fund Association does a certain amount of prenatal work in connection with other educational effort

Milwaukee, Wis.—The Milwaukee Child Welfare Division purposes sending out a folder containing instructions to expectant mothers, and has opened classes for mothers at three of its stations. The Milwaukee Maternity Hospital and Free Dispensary Association is also active in this work.

Nashville, Tenn.—In connection with the operation of the milk dispensaries the health department looks after expectant mothers referring them to hospitals for confinement, or where this is impracticable, furnishes physician, nurse, sterile sheets, and all accessories to insure against infection in their homes. Cincinnati, Ohio.—Extensive work toward caring for and educating expectant mothers is carried on by private organizations.

Fall River, Mass.—The District Nursing Association does excellent work in caring for expectant mothers.

Buffalo, N. Y.—The Visiting Nurse Association carries on prenatal work as part of the regular routine.

Boston, Mass.—The Boston Board of Health has a prenatal and postnatal subdivision of its division of child hygiene. Systematic and extensive work is carried on by the committee on infant social service in the Women's Municipal League, by the pregnancy clinic of the Boston Lying-in Hospital, and by South End House, one of the social settlements.

Inasmuch as this feature in the work of the prevention of infant mortality is comparatively new, the methods and instruction required under it are difficult of access. We here reproduce the prenatal bulletin of the city of Providence, R. I., issued in 1910, and also the circular of the Oregon State Board of Health, very recently issued, believing that these will be especially acceptable to health officers in the smaller cities.

## EFFECT OF HOUSING CONDITIONS ON INFANT MORTALITY.

In organizing a baby-saving campaign the first and main point of attack is usually the milk supply. There seems to be general agreement that this emphasis is justified, but there are also warnings from health experts against classing milk as the sole factor which brings about the high death rate among babies. A large number of diseaseproducing conditions are covered by the term "bad housing conditions." In a broad sense the remedy lies in having better building regulations, more supervision of tenement construction, more serious study of the congestion question in the large cities, and the field is so large that it is not possible to accomplish much in a quick campaign, beyond what good may result from giving the question publicity. But many of the accompanying evils, such as bad ventilation and lack of cleanliness, are being attacked through the influence of the visiting nurses, through instructions to "little mothers" and through educational printed matter, and doubtless the effort has an effect in lowering the death rate from "bad-air" diseases, such as pneumonia and bronchitis, which make up approximately 15 per cent of the total causes of infant mortality.

<sup>&</sup>lt;sup>1</sup> See Appendix, pp. 90 and 91.

## FIGHT AGAINST FLIES, GARBAGE ACCUMULATION, DUST, ETC.

While it is quite generally agreed that the germ of cholera infantum originates with the cow excreta, and that dirty milk is the principal carrier of the infection, it is by no means admitted that it is the only carrier—the house fly, as a death distributor, is only recently receiving the attention it deserves. Flies carry the infection not only to exposed milk but directly to the baby's mouth or to the nipple of its bottle. To limit the breeding of flies is the essential thing, and this can be done most effectually by giving the health office of the city power to enforce the collection of garbage and regulation of the city dumps. Insistence upon screens for the baby's rooms and for the baby's bed is a part of the campaign against infant mortality. Not only the flies, but dust, as is now well known, is a carrier of enteritis germs and through this the breast-fed child no less than the bottle-fed is exposed to the dangers of this summer terror. When it is understood that this germ when developed can and does use dust particles as a vehicle upon which to ride from pastures to the dusty streets and thence into homes, however carefully guarded and protected its little ones may be, the importance of permitting the health department to have supervisory control over street sprinkling in poor residence districts during June, July, August, and September becomes very apparent. The need for this precaution will be more readily understood when it is realized that the infant death rate in the hot weeks almost invariably falls for a few days after a general dust-settling rain.

#### STABLES AND STABLE FLIES.

Upon the opening of summer a thorough listing of all horse stables and livery barns, whether public or private, is made by cities like Seattle and Indianapolis, and complete measures for the control of the fly-breeding places instituted. Whether or not the stable fly is the only carrier of infantile paralysis it is certainly one, probably the principal carrier. Certain cities have issued circulars with magnified cuts of the stable fly to show the distinction between that and the common house fly. This distinction is not generally known and is not readily ascertainable by the eye. In fair weather the stable fly rarely enters the house; just before a rain or a storm it does enter the house and the common saying that "just before a storm the flies bite" is indicative of this. The house fly does not "bite"; it is always the stable fly that bites and it is its bite which is so often fatal to small children.

Below is the form of stable score card used in Seattle, Wash., in its inspection service to eradicate the breeding places of flies and control stable flies:

DEPARTMENT OF HEALTH AND SANITATION, CITY OF SEATTLE.

DIVISION OF INSPECTION.

## 

If any manure be on premises, exposed to flies, score will be limited to 49. If floors are not properly cleaned, deduct 5 from total. Filthy catch basins, deduct 5 from total.

#### FRESH-AIR CAMPS AND HOSPITALS.

Fresh-air camps have been operated during the summer months with good results in many cities. These are usually private philanthropies.

Although prevention is the chief end and aim of all work in behalf of children, nevertheless there must be hospital accommodations for those cases of illness which can not be properly cared for at home. As a city grows a hospital of some sort sooner or later becomes a necessity. However small such a hospital, it may contain from the first beds for children. As an example of what is possible on a large scale, Cleveland, Ohio, has a finely equipped Babies' Hospital, devoted entirely to the care of infants and young children. In almost any hospital it is possible to turn over to the exclusive use of children some of the beds and facilities, so that in case of emergency there will be some place where sick children may be taken care of.

# EDUCATIONAL WORK THROUGH THE DISTRIBUTION OF CIRCULARS, PAMPHLETS, ETC.

The volume of printed instructions annually issued, as well as the character of the material, improves each year. State boards of health have issued exceedingly valuable pamphlets appealing alike to city authorities to bestir themselves and to parents to instruct themselves in the care of babies. These two audiences have not always been kept distinct, as much material directed at both is sometimes contained in the same pamphlets.

The North Carolina State Board of Health issued in 1912, as Special Bulletin No. 10, a pamphlet on "The Baby," using most effectively a cartoon of a mother gazing into the empty cradle. A part of the legend is "In future men will stop locking the stable door after the horse is stolen. They will not be content with spending on a funeral the money that would have saved the child; they will not tolerate the thought that a poor mother must bear 10 children to raise 5." "Save the Baby" articles are prepared by a number of the State boards, and furnished to the papers throughout the State. In North Carolina these are included from time to time in the State Board of Health's "Daily Press Service" publications. In other States as Iowa, Idaho, etc., where the general scheme is adopted the articles are prepared only on special occasions. A bibliography of these State and city publications would be valuable and may form a part of this report next year, but can not be attempted now.

Some cities, notably Chicago and Seattle, issue weekly or monthly bulletins which in addition to statistical matter contain much that is instructive as to the care of babies' food.

The health officer of Washington, D. C., issues instructive pamphlets on such subjects as the care of milk, the fly menace, methods of destroying flies, etc.

Lectures to mothers and moving-picture films, illustrative of the principles of baby hygiene, are also among the educational features which some cities have successfully adopted.

Of prime importance are the folders addressed to mothers and dealing directly with the care and feeding of the child. These are mailed immediately upon receipt of notice of birth of a child, or are delivered by the nurse who calls as the result of such birth notification. Such folders are issued in all of the principal languages spoken in the locality, as, for instance: Bridgeport, Conn., prints in four languages; Providence, R. I., in five; the State Board of Health of Pennsylvania publishes such circulars of instructions in five or six languages, and furnishes these to the various cities of the State.

Likewise the Department of Health of New York issues a pamphlet on "How to Save the Babies," which is distributed through the city health bureaus. Selected copies of these circulars in various languages will be found in the appendix. The importance of having these instructions in many languages will be apparent. It very often happens that the mother does not understand the language either of the visiting nurse or of the physician, and is hence thrown back, as soon as they leave the house, upon her own resources, or left to the mercy of advisory neighbors as ignorant as herself. It may frequently happen, also, that where health officers have no means or opportunity of doing anything more they can have such circulars distributed among mothers, or have the material printed in the local papers. Experience has shown that the editor, for instance, of the Italian paper is glad to print this material if the copy is furnished to him in Italian; the publisher of the Yiddish paper is entirely willing to publish it if it can be furnished to him in Yiddish, etc. It should be noted that these "Care of the Baby" and "Save the Baby" circulars frequently contain some information as to the care of the mother immediately before the birth of the child.

#### CONCLUSION.

It is evident that no universal program for civic baby-saving work can be laid down, because each community must begin at the point which is practicable or most urgent as shown by local conditions, but the following summary is offered as universally applicable:

(1) A continuous graphic statement of the births and deaths of babies, kept by means of different-colored pins to be placed day by day on a city ward map or, preferably, a block map showing each dwelling, is a simple means of keeping informed as to the points of danger.<sup>1</sup>

(2) Complete registration of births is necessary in order that the baby may be brought under observation as soon after birth as possible.

(3) The appeal to mothers to nurse their babies can not be made too strong, since it is estimated that bottle-fed babies have only one-tenth the chance to live that breast-fed babies have.

(4) A clean milk supply is a fundamental need. The ideal is: Nothing short of clean milk for everybody. This calls for intelligent and effective inspection of farms, the means of transportation, and the shops where milk is sold.

Milk stations for distributing clean milk to babies, maintained by private philanthropy, are a useful beginning.

(5) The organization of "Little Mother Leagues" or similar classes in the public schools, through which girls from 12 to 14 years of age are taught all practical methods of home making, including baby hygiene and feeding, ranks as important work in the prevention of infant mortality in this and in the next generation.

(6) All efforts for civic cleanliness serve the babies no less than

the rest of the population.

In conclusion, as summing up the significance of the work described in this publication it seems fitting to recall the statement of a great sanitary authority that the infant death rate is the truest index of the welfare of any community.

### APPENDIX.

## HOW TO SAVE THE BABIES-IT IS NOT THE BABIES BORN BUT THE BABIES SAVED THAT COUNT.

[Suggestions to Mothers from the New York State Department of Health, Eugene H. Porter, A. M., M. D., commissioner. Written by H. L. K. Shaw, M. D., consulting pediatrician, and issued by the division of publicity and education of the State department of health, Albany.]

#### SAVE THE BABIES.

This booklet is prepared and placed at the free disposal of the mothers of the State of New York to assist them in the care of themselves during pregnancy and in the care of the baby after it is born. Copies can be obtained through the local health officer or the registrar or direct from the State Department of Health, Albany, N. Y.

At present it is published only in English; as the need is demonstrated it will be issued in other languages. It is by no means intended to take the place of the physician, whose advice should be

frequently sought and followed.

It is the desire of the commissioner of health that a copy of these suggestions be placed in the hands of every expectant mother, or that it reach her as soon as possible after the birth of her child. The local registrar or health officer will cooperate in seeing that this wish is fulfilled.

## HOW TO SAVE THE BABIES.

Do you know that out of every five deaths in New York State one is that of a baby less than a year old? A large percentage of these are due to causes which could and should be prevented.

An epidemic of smallpox gives rise to startling headlines in the newspapers and the entire community is aroused and alarmed. Public opinion demands prompt and vigorous action on the part of the health officers. Yet the number of deaths in this disease is exceedingly small in comparison with the number of preventable deaths among infants.

The New York State Department of Health is endeavoring to

"save the baby" and enlists your support.

A large number of deaths among infants indicates the existence of insanitary conditions or of ignorance that will affect not alone the little children but the entire community.

The most important factor in the solution of this problem is the mother. She is the natural caretaker of her baby. A lower death rate among the babies can only be accomplished through intelligent motherhood, maternal nursing, cleanliness and fresh air, and pure and properly prepared milk for the babies who have to be artificially fed.

The following suggestions are made in order that the mother can intelligently prepare and care for her baby.

### BEFORE THE BABY COMES.

Health of mother.—A poorly fed or sickly mother can not give birth to a vigorous, healthy infant and successfully nurse it. Such a mother rarely carries her baby for the full 280 days. A woman who has had repeated miscarriages or whose labors have come on before time should, early in pregnancy, consult her physician in order that the underlying cause can be cured or alleviated. During pregnancy, and especially in the latter months, the expectant mother must have abundant rest and spare herself as much as possible. An extra amount of sleep is required by the pregnant woman, and a daytime rest for an hour or two is desirable. Select and consult your physician early in pregnancy. Keep yourself in good health. Hard household labor or factory work during the latter months of pregnancy tend to bring about miscarriages or the birth of puny and undersized children.

Exercise.—Exercise in the open air in the form of walks should be taken throughout the entire course of pregnancy. Violent exercise in any form should be prohibited, and unnecessary stair climbing must be avoided in the latter months. The sewing machine must not be used toward the end of pregnancy.

When labor is threatened before the proper time the mother should go at once to bed and remain perfectly quiet until the danger is well passed.

Care of nipples.—Small, flattened, or depressed nipples should be drawn out with the forefinger and thumb and held for five minutes night and morning during the two months preceding labor. The nipples should be carefully anointed each night with white vaseline and washed each morning with castile soap and warm water. This will soften and remove the milk which is secreted in the latter part of pregnancy, and which if not removed would form hard crusts and ulcerate the soft tissue beneath. Proper attention to the care of the nipples during pregnancy will make the act of nursing one of pleasure and satisfaction instead of one of pain and discomfort.

Diet.—The diet should be carefully regulated. A full, whole-some, and liberal diet is essential. This depends on the woman's tastes and habits, as food which agrees with one will not agree with another. Highly seasoned or very rich food should be avoided as well as fatty foods and coarse vegetables.

The following dietary is recommended during pregnancy and nursing:

Soup.—Any kind.

Fish.—Fresh fish of any kind, boiled or broiled. Raw oysters and raw clams.

Meats.—Chicken, beef, ham or bacon, veal, lamb, tender lean mutton. Red meat should be allowed in moderation and only once a day.

Cereals.—Hominy, oatmeal, farina, cream of wheat, rice mush, shredded wheat biscuits, etc.

Breads.—Stale bread, corn bread, Graham bread, rye bread, brown bread, toast, crackers.

Vegetables.—Potatoes, onions, spinach, cauliflower, asparagus, green corn, green peas, beans, lettuce, or other salads with oil.

Desserts.—Plain puddings, custard, junket, ripe raw fruits, stewed

fruits, ice cream. No pastry.

Drinks.—Tea and coffee very sparingly, never more than one cup a day. No alcoholic beverages, beer, etc. At least two quarts of water a day. Milk, buttermilk, cocoa, malted milk.

At least one satisfactory movement of the bowels should take place

daily; if there is any difficulty about this consult a doctor.

#### WHEN THE BABY COMES.

Send for the doctor.—Send for the doctor when the labor pains begin. He prefers being called too early than too late. A sudden gush of water signifies that the membranes have ruptured, and the mother should go to bed at once.

The bed should be prepared as follows: Place a rubber sheet or three thicknesses of newspapers next to the mattress and over this a clean sheet. Next place three thicknesses of newspapers over the middle and edge of the side of the bed and cover with a folded sheet, and then cover with a clean sheet. This top layer of papers and sheets can be easily removed after the labor and the mother lies on a clean dry sheet.

Everything should be in readiness for the reception and care of the baby. A warmed flannel blanket in which to place the baby after birth, and hot-water bottles to surround it, if the room is cold, are desirable. The baby should be exposed as little as possible during the bath, and the clothes and diapers should be warmed. Everything that comes in contact with the baby should be scrupulously clean

Save the baby's eyesight.—The mother should insist that a drop of silver solution, as provided free of charge by the New York State department of health, be placed in the baby's eyes. This will prevent blindness. If the baby weighs less than four pounds it can best be taken care of in incubators, which are to be found in any well-equipped hospital. Your physician is required to make a prompt report of the birth to the registrar or local board of health. This is a matter of great importance, and don't let him forget it. The mother should remain in bed for at least two weeks after confinement. The womb does not return to its normal state for five or six weeks, and no hard work or active exercise should be taken during this period.

#### AFTER THE BABY COMES.

Nurse your baby.—If you love your baby, nurse it. Mothers' milk is nature's food, and no other food is as good. The chances of your baby living are nine times greater on breast milk than cow's milk or any other kind of food. Even though you have but little

31390°-14---4

milk at first, do not get discouraged. Be patient and try, try again. There are very, very few mothers whose breasts will not give sufficient milk if they will but encourage the baby to suck. This keeps the milk flowing and increases its flow. Even though you feel weak you can nurse your baby without danger to yourself. Only a few serious diseases forbid nursing. If you are in doubt consult your

doctor. His advice is better than that of your neighbors.

Nurse your baby until the tenth month.—If you really can not nurse him as long, give him your milk as long as you can, for every drop he gets adds to his strength for his hard fight in life as no other food does or ever will. Keep your bowels regular. Constipation in the mother often causes colic in the baby. Follow the dietary shown on a preceding page and eat three plain, well-cooked meals a day at regular intervals. Drink plenty of water, but avoid tea, coffee, and beer. So long as the mother keeps well the baby will be

Nurse the baby regularly.—Feed him by the clock. From birth to three months feed every two and a half hours during the day with only one nursing between 10.30 p. m. and 6 a. m. After the third month feed him every three hours and do not nurse during the night. Do not let the baby remain at the breast more than 20 minutes. Never allow the baby to sleep at the breast at night. When the baby cries between feedings give him pure, warmed water without anything in it. Then let him alone. The mother should wash the nipple with plain, cold water before each nursing.

Wean gradually by substituting bottle feedings for breast meals one each day during the first week of weaning, two each day during the second week, and so on until all are bottle feedings. If possible

do not wean during the hot summer.

#### WHEN THE MOTHER CAN NOT NURSE THE BABY.

Substitute for mother's milk.—Cow's milk is the only good substitute for mother's milk.

It should come from healthy, consumption-free, and clean-kept cows and be promptly cooled. It should be milked in a clean stable by clean milkmen and bottled in clean bottles. It must be kept continually on ice until used for the baby. Common store or milkman's milk is not safe food for the baby, even though it tastes and looks good. The patent baby foods, condensed milk, etc., harm the babies in most cases and should not be used. They often make the baby fat, but not strong. If you can not afford the best milk get the best you can from a milkman whom you know to be clean. Place in a clean dish and boil the milk from 5 to 10 minutes. Cool as quickly as possible by placing the dish in another filled with ice water.

As soon as the milk is cooled prepare the food as directed by the doctor, using only clean dishes. The food is then poured in the nursing bottles and clean cotton batting is used for stoppers. These

bottles are kept on ice if possible.

Homemade ice box.—A cheap ice box can be made as follows: Get a box about 18 inches square from your grocer and put 3 inches of sawdust in the box. Place two pails in the sawdust, one inside the other, and fill the space between the outer pail and the box with sawdust. The nursing bottles filled with milk are placed in the inner pail and the pail is surrounded with cracked ice. The inner pail should have a tin cover. Nail several thicknesses of newspapers on the under surface of the cover of the box. This ice box should be kept covered and in a shady, cool place.

kept covered and in a shady, cool place.

Care of nursing bottles.—The bottles should be cleaned immediately after feeding by first rinsing with clear water and then soaking in soda, borax, or soap water. Then clean well with a clean brush and rinse with boiled water. They should be filled with boiled

water until ready for use.

Use only nipples which are slipped over the neck of the bottle. Nipples with tubes are convenient for a lazy mother, but they can not be cleansed thoroughly and may mean death to the baby. After each feeding cleanse the nipple thoroughly inside and outside. Boil the nipple at least once daily, and keep it dry in a clean covered cup or glass.

Early feeding.—Feed the baby one part milk and two parts water during the first month at intervals not less than two and a half hours

and in amounts not more than four ounces (eight tablespoons).

During the second and third months use one part milk and one part

During the second and third months use one part milk and one part water at three-hour intervals and five ounces (10 tablespoons) in amount

After the fourth month give two parts milk and one part water at three-hour intervals and six ounces (12 tablespoons) in amount, increasing one ounce at each meal during each succeeding month. Barley water or oatmeal water can be used to dilute the milk. One level teaspoon of granulated sugar should be added to every three ounces (six tablespoons) of diluting solution (water, barley, or oatmeal water).

Warm the bottle to about body heat before giving it to the child, by placing the bottle in a dish of hot water. If the milk is not sweet do not give it to the baby. Wash your hands before touching the nipple. Shake the bottle before using. Never put the nipple in your own mouth to find out whether the milk is warmed enough. Try it on your wrist. Hold the baby in your arms while feeding it, and do not allow the baby to drink from the bottle longer than 20 minutes. If he does not take the whole feeding throw it out and do not save for the next time.

Don't overfeed.—Never coax the baby to take more food than he wants. Too much food and too frequent feedings overtax the digestion and lead to stomach and intestinal disturbances. This is what makes the baby cry. He cries because he has indigestion from too much food, not because he is hungry. Boil a pint of water every morning and put in clean bottle. Keep in cool place. Warm it before giving to the baby. Give as much as he will take between

feedings.

After the eleventh month.—A well cooked cereal (farina, cream of wheat, strained oatmeal, etc., cook three hours) can be given once a day after the eleventh month in place of the noonday feeding. Beef juice with stale bread crumbs, broths, or a soft-boiled egg can be given in addition to the cereal after the twelfth month. A well-baked potato, boiled rice, rare roast beef, custard, corn starch, rice pudding, baked apple, apple sauce, stewed prunes, and bread and butter can be given after the fifteenth month.

Ham, bacon, or pork, cabbage, pickles, tea, coffee, or beer, bananas, berries, cake, candy, or ice cream should not be given to babies or little children.

Teething.—Teething rarely causes serious illness. If the child seems to be ill, do not put it down to teething, but consult the doctor.

Diarrhea.—As soon as the baby has diarrhea or vomiting, stop all food at once and give only boiled water or clear barley water until the doctor sees the baby.

Fresh air.—Give the baby pure fresh air day and night and keep the windows open but screened to exclude flies and mosquitoes. Keep the baby in the open air when possible, but avoid the sun during hot weather. Select the shady side of the street.

Avoid infection.—Keep the rooms free from soiled clothes and rubbish. Do not encourage the baby to play with cats or dogs; they often have disease germs in their fur. Do not let the child crawl around on a dirty floor or dusty carpet. Do not let it put playthings into its mouth.

Bath.—Every child should have one tub bath daily. On very warm days the 10-minute spongings with cool soda water (one teaspoonful of bicarbonate of soda to a pint of water) will add greatly to the baby's comfort.

Clothes.—Do not put too many clothes on the baby. A band, shirt, petticoat, and dress are all that are needed in the house. During very hot days a napkin, band, and a thin muslin slip are all that the baby needs.

Sleep.—Be sure the baby gets two naps a day and at least twelve hours of sleep at night. Do not let him sleep on a feather pillow. The baby should sleep in a bed or crib by itself—never in bed with its mother. Do not rock or jounce the baby and remember that constant handling is harmful. Keep the baby and bedclothes clean. Diapers should be carefully washed as soon as they become soiled and then dried in the open air. Do not use a diaper a second time before washing it.

Soothing sirups.—Under no circumstances should soothing sirups be given to the baby. They contain opium and are dangerous.

Good habits.—Train the baby into good habits. Do not get the child into the habit of expecting to be carried about if it cries. Train the baby to go to sleep by itself in the dark. A well-trained baby makes a well-behaved child.

#### RECIPES.

Barley water.—This is often used instead of water to dilute the milk and tends to make the curds of the milk more digestible. One heaping tablespoonful of barley flour and a pinch of salt are mixed with a little water into a thin paste and added to 1 quart of boiling water. Stir well and boil for 20 minutes. Add enough water to make 1 quart. Pearl barley requires more cooking. It should be boiled for at least 3 hours and must be strained before using. Make fresh daily.

Oatmeal water.—This is used in the same way as barley water, but it has a laxative effect. Stir two tablespoonfuls of oatmeal and a pinch of salt in a quart of boiling water and let it simmer for three

ours. Replace the water that evaporates so that there will be a

uart when done. Strain. Make fresh daily.

Egg water.—To be used when the baby can not digest milk. Stir the white of one egg into 1 pint of boiled water, add a pinch of salt, hake thoroughly, and strain. This should be kept in the ice box or ther cool place.

Beef juice.—Take rare broiled beef and cut into small pieces and press out the blood. This can be diluted with plain boiled water or

Broths.—Take 1 pound of meat, free from fat, and cook for 3 hours in 1 quart of water. Add water from time to time so that there will be 1 quart of broth. Cool, remove fat, strain, and add a little

Whey.-Warm one pint of milk to blood heat and add one teaspoonful essence of pepsin or junket tablet. Let it stand until it jellies and then break up the curds with a fork. Strain through a cloth. What goes through is called whey and is used when babies can not digest cow's milk.

#### TEN REASONS WHY A MOTHER SHOULD NURSE HER BABY.

1. One death out of every five which occur at all ages is that of a

baby under 1 year of age.

2. In the city of New York during 1910, 4,794 babies under 1 year of age died from bowel trouble, and 9 out of every 10 of these babies were bottle fed.

3. Out of the 16,213 babies under 1 year of age who died from all causes in New York city during 1910, one-third died before they were

1 month old.

4. A large proportion of these babies would have lived if they had

been nursed by their mothers.

5. Mother's milk is the only safe food for a baby during the first six months of its life. If the weather is warm the baby should not be weaned until it is at least 9 months old. Cow's milk or prepared food can never equal breast milk as the proper food for the baby.

6. Breast-fed babies rarely have bowel trouble. Bottle-fed babies

rarely escape having it, particularly during warm weather.

7. Babies fed on breast milk show the best development; the teeth will appear at the proper time, the muscles and bones will be stronger, and walking will not be delayed.

8. A breast-fed baby is not so likely to have bronchitis or croup, and if attacked by any disease has a much better chance of living

than a bottle-fed baby.

9. Pneumonia in babies is fatal more often in bottle-fed babies than in breast-fed babies.

10. Your baby will have the best chance of living that you can give it if it is breast fed.

Surely these facts are worth considering before deciding not to nurse your baby.

Issued by order of the board of health.

### SAVE THE BABIES.

## RULES TO BE OBSERVED IN THE CARE AND MANAGEMENT OF INFANTS DURING THE SUMMER.

The hot weather of this season of the year is extremely dangerous to the lives of infants and young children, not only because of the depressing effects of high atmospheric temperature in general, but more especially because of the effect of hot weather upon all perishable articles of food, among which cow's milk holds the first place.

It is therefore highly important that cow's milk to be used for infant's food should be the purest and freshest that you can afford to buy. During the hot weather ice is absolutely necessary for the preservation of milk, and all milk used for food should be cooled by ice as soon as it comes from the cow and should be kept next to the ice until ready to be used. A little money spent for ice may prevent illness and its much greater expense for medicine, nursing, and medical attendance. As water is often a carrier of disease it is safest to use only boiled water for drinking or the preparation of a baby's food.

The following rules will aid you in keeping your baby well during the hot weather:

Breast feeding.—Every mother should endeavor to nurse her baby. Breast milk is the natural food of the newborn baby. There is no other food that can compare with it. A breast-fed baby has a much greater chance of living than a bottle-fed baby.

Immediately after birth do not give any kind of artificial food to the baby, while waiting for the breast milk to come. Put the baby to the breast every four hours, and give nothing else but water that has been boiled. The baby needs nothing else, and will not starve.

After the milk comes into the breast nurse the baby every two

hours during the day and two or three times at night.

Don't nurse the baby whenever he cries; a moderate amount of crying helps to develop the lungs. Babies who are nursed irregularly, or whenever they cry, are likely to get indigestion and then cry the harder from pain. Nurse regularly and the baby will soon learn to expect its nursing only at the proper intervals. Give the baby a little boiled water several times a day.

After the baby is 2 months old lengthen the time between feeding

to 2½ or 3 hours, with only one or two feedings at night.

Do not wean the baby as long as he is gaining and never do so except by advice of your doctor. Do not follow the advice of friends or neighbors about weaning. If the baby remains well but after a time stops gaining in weight, do not think that your milk is of no value, but consult your doctor about adding one or two bottles to help you out.

Bottle feeding.—If it becomes necessary to feed the baby either entirely or only in part upon the bottle, remember that the greatest cleanliness is necessary in all details of the feeding. As soon as a bottle is finished, it should be thoroughly washed with cold water, then cleansed with hot water and borax (1 teaspoonful to a pint of water) and put aside for further cleansing, before being used again. If you have only a few bottles and it becomes necessary to use the same bottle for the next feeding, boil it for a few minutes before putting fresh food into it. Never let the baby nurse from the remains of a bottle which he has not finished at once. Take it away from the crib, pour out the milk, and cleanse at once. Stale milk curds sticking to the inside of a bottle after a few hours become poisonous and may contaminate fresh milk coming in contact with them. It is better to have as many bottles as the number of the baby's daily feedings, so that all the bottles can be boiled together before the food is prepared in the morning.

Nipples.—The simpler the nipple the safer for the baby. Do not use complicated nipples, and under no circumstances buy a bottle with a long rubber tube attached to the nipple. It can not be kept clean and will certainly cause bowel trouble. After the bottle is finished the nipple should be removed at once, turned inside out over the finger and scrubbed with cold water and a brush kept only for this

purpose. After use, always boil the brush.

The cleansed nipple should be kept in fresh borax water (1 teaspoonful of borax to a pint of water) in a covered glass. Rinse the

nipple in boiling water before using it.

Do not put the nipple into your own mouth to find out whether the milk is warmed enough. Let a few drops of the milk fall on your wrist; if it feels too hot to your wrist it is too hot for the baby's mouth.

No general instructions can be given about the preparation of a milk mixture for your baby. Each baby needs a combination suited to his digestion. The mixture upon which some other baby is thriving may be too strong or too weak for your baby. Let the doctor tell you how to mix the food. If it is necessary to use cream in the mixture do not buy cream—it is likely to be stale—but get it by pouring off half a pint from the top of a quart bottle of milk, after cleansing the lip of the bottle.

Do not be guilty of constantly changing food for the baby as mothers are apt to do through the advice of "good" neighbors. Fol-

low the instructions of your doctor.

During the summer the baby's food should be brought to a scald after it is prepared. It should then be poured into the clean bottles, corked with baked clean cotton wool and kept next the ice until needed. Do not heat a bottle when you go to bed and keep it in bed until nursing time, because you do not want to go to the ice box for it and heat it when the baby needs it. This is a certain way to make the baby sick.

Bowel movement.—A bottle-fed baby should have at least one and not more than two or three bowel movements a day. If the milk is clean to start with and has been kept cold, and all the feeding utensils cleaned as you have just been told, the baby's movements should be yellow in color, and not too hard to be passed

easily. If the movements become greenish in color, but not more frequent than two or three a day, give one or two teaspoonsful of castor oil. If the color does not improve after the oil has worked off, consult your doctor. At this time he will be able to prevent the serious bowel trouble with which the baby is threatened. If the movements remain green in color and increase in number to five or six or more in the 24 hours, your baby is beginning to have bowel trouble, or summer diarrhea. Stop milk at once, give pure boiled water instead and call the doctor. It may not be too late.

Do not begin milk feeding again until the doctor orders it. You

Do not begin milk feeding again until the doctor orders it. You will not starve your baby by stopping the milk; every drop of milk that goes into his mouth after this warning simply adds to the poison already there. You will cause serious or fatal illness by keeping up milk food after the bowels become loose and the movements green in

color.

Vomiting.—A bottle-fed baby should not vomit if its food is pure and properly adjusted to its needs. If vomitings occur it is usually a sign of approaching illness, either of one of the serious diseases of childhood, or more commonly in hot weather, of summer diarrhea. Vomiting due to this cause may be the first sign of trouble and the bowels may not become loose until several days later. If vomiting is repeated, stop milk feeding, give boiled water, cool or of the temperature at which the milk is given, and consult your doctor at once.

Clothing.—Do not put too much clothing on the baby in summer. During the hottest weather, remove most of the clothes; a thin loose shirt and a diaper are sufficient during the day and on very hot,

close nights.

Never use clothing made with tight waistbands. Petticoats and

skirts should be supported by straps over the shoulders.

Bathing.—Bathe the baby every day. In hot weather a quick sponging all over later in the day will give comfort and make him sleep better. Wash the baby each time the diaper is changed and dry the parts thoroughly before using powder. Wash all soiled diapers and boil them. Never use a dried wet diaper without first washing it.

Flies.—Be careful to exclude flies from the baby's bottle and food and do not allow them to light on the baby's lips while sleeping.

Flies carry disease to thousands of infants every summer.

Fresh air.—Fresh air is as important for the baby's health as fresh food. During the summer, keep the baby out of doors as much as possible. Keep the baby out of the kitchen; he may get a "sunstroke" from too much heat indoors.

Eruptions of the skin.—If the baby has an eruption or breaking out of the skin, consult a doctor. Do not think that every rash is prickly heat; it may be some serious disease like scarlet fever, measles, smallpox, or chickenpox.

If a baby is worth having it's worth saving. Half of the babies that die in Pennsylvania each summer could be saved by following

the advice given in this circular.

Issued May 15, 1909.

FORM 20B .- Italian.

#### SALVATE I BAMBINI.

## CONSIGLI E SUGGERIMENTI PER LA CURA DEI BAMBINI DURANTE L'ESTATE.

Il caldo della stagione estiva è assai pericoloso per la vita dei bambina di tenera età, specialmente per i neonati, non tanto per le conseguenze dell' alta temperatura in generale, quanto, ed in modo speciale, per l'effetto che il caldo può avere su tutti quei cibi che possono andare soggetti a decomposizione. Fra questi, il latte di vacca occupa

il primo posto.

È, di conseguenza, d'importanza massima che il latte di vacca che voi destinate all' allattamento dei bambini sia il più puro ed il più fresco che i vostri mezzi vi permattano di comprare. Durante la stagione calda, il ghiaccio è assolutamente necessario per mantenere fresco il latte. Questo, quando viene usato come cibo, deve essere raffreddato col ghiaccio non appena munto dalla vacca e deve essere tenuto in ghiaccio fino al momento in cui è usato. Pochi soldi spesi per un po' di ghiaccio possono tener lontane le malattie e qualunque spesa per visite mediche, medicinali o altro da esse derivanti. Siccome l'acqua, spesso e volentieri, è veicolo d'infezione e, quindi di malattie, si deve usare soltanto acqua bollita, quando deve essere bevuta, oppure una qualunque altro preparazione speciale per bambini.

I seguenti consigli e suggerimenti vi aiuteranno a mantenere i vostri bambini in buone condizioni di salute durante il caldo dell' estate:

Allattamento.—Ogni madre deve fare il possibile di allattare da sè il proprio bambino. Il latte materno è il cibo naturale del neonato e non vi è alcun altro cibo che può reggere al paragone. Un bambino che ha succhiato il latte dal seno materno ha molte più possibilità di vita di qualunque altro bambino allattato col biberon. Al bambino appena nato non date mai cibo artificiale. Avvicinatelo alla mammella ogni quattro ore e non dategli altro che acqua che sia stata ben bollita. Il neonato non ha bisogno di piu' e siate pur sicuri che esso non morrà certamente per mancanza di nutrimento. Non appena la mammella à colma di latte, allattate il neonato ogni due ore, durante il giorno, e due o tre volte durante la notte.

Non allattate il neonato ogniqualvolta esso piange o grida.— Il piangere moderato è una delle funzioni che, nel neonato, contribuisce ad accrescere lo sviluppo dei suoi polmoni. Quei bambini ai quali il latte non vien dato regolarmente oppure ad ogni minimo accenno di pianto, possono spesso andar soggetti ad indigestione ed alle sue conseguenze. Allattate il bambino regolarmente e vedrete ch'esso

imparerà do sè stesso a chiederlo a tempo debito. Dategli pure spesso un poco d'acqua durante il giorno ed abbiate cura ch'essa sia stata

prima ben bollita.

Lo svezzamento del bambino non deve assolutamente avvenire durante il suo sviluppo e se non prima non si è consultato in proposito un medico. Non state ad ascoltare i consigli e gli avvertimenti di amiche e di vicine, quando si tratta di svezzare il bambino. Se esso gode buona salute puranco non aumentando affatto di peso, non state a credere che la potenza benefica del vostro latte sia venuta meno. Consigliatevi invece con un medico e domandategli se una o due bottiglie di latte possono aiutarvi ad assolvere il compito materno.

Allattamento col biberon.—Qualora sia realmente necessario allatare il bambino, interamente o in parte, col biberon, tenete ben presente che la pulizia è cosa prima ed indispensabile in tutti i processi dell' allattamento. Non appena il biberon è vuoto, deve essere ben lavato con acqua fredda e poscia accuratamente pulito con acqua calda e borace (un cucchiaino sciolto in una pinta d'acqua). Più tardi, al momento in cui è necessario usarlo nuovamente, il biberon deve essere di nuovo lavato e pulito. Nel caso che voi abbiate poche bottiglie soltanto, e che sia indispensabile usare la stessa bottiglia, tenetela in un recipiente d'acqua bollente per qualche minuto, prima di mettervi dentro altro latte. Abbiate bene cura di non dare mai al bambino il rimenente di un biberon vuotato solo in parte. Togliete questo biberon dalla culla, vuotatelo del contenuto e pulitelo immediatamente. I filamenti del latte stantio o acido che rimangono attaccati al vetro divengono ricettacolo d'infezione e possono, di conseguenza, contaminare il latte fresco che ad essi va ad aggiungersi. È quindi consigliabile avere tante bottiglie per quante volte, durante il giorno, voi devete allattare il bambino. In questa guisa voi le potreste lavare e pulire insieme in acqua bollente ogni mattina.

Capezzoli di gomma.—Più semplice è questo capezzolo, tanto più consigliabile esso è per la salute del bambino. Non usate altri capezzoli e per nes suna ragione al mondo comprate biberons che abbiano tubi di gomma attaccati al capezzolo. Essi non possono essere mai tenuti abbastanza puliti e possono quindi causare disturbi viscerali. Esaurito il contenuto di un biberon, liberatelo immediatamente del capezzolo. Ciò fatto, col dito rovesciate questo capezzolo, come fareste con un guanto e pulitelo bene, in acqua fredda, con uno spazzolino che avrete cura di conservare esclusivamente per questo uso. È necessaria pulire lo spazzolino con acqua bollente ogni volta

che lo si usa.

Il capezzolo, una volta pulito, deve essere costantemente tenuto in una soluzione d'acqua e di borace (un cucchiaino di borace in una pinta d'acqua) in un recipiente di vetro ben chiuso. Quindi, prima di essere nuovamente usato, è necessario sciacquarlo in acqua bollente.

Non mettete mai in bocca il capezzolo artificiale per accertarvi se il latte è caldo abbastanza.—All' uopo basterà che lasciate cadere qualche goccia sul vostro polso. Se è troppo calda vuol dire ne che è troppo calda per la bocca del neonato.

Ñon é possibile dare, in generale, consigli e suggerimenti circa il modo in cui deve essere fatta una preparazione di latte per il vostro bambino. Ogni bambino ha una costituzione fisica speciale ed abbisogna di una speciale preparazione adatta alle sue facoltà digestive. Una preparazione che può essere buona per questo o quel bambino può essere troppo pesante o troppo leggera per il vostro. Lasciate che il medico vi consigli a questo proposito. Se é indispensabile usare della crema, non comprate mai della crema bell'e fatta— può benissimo essere stantia o acida. Prendetela invece dalla parte superiore della bottiglia del latte (quelle da un quarto) e soltanto

dopo aver bene puliti gli orli del recipiente.

Durante l'estate, il latte destinato ai bambini deve essere alquanto riscaldato dopo la sua preparazione. Ciò fatto, esso deve essere versato in un recipiente ben pulito ed accuratamente chiuso da turaccioli di cotone sterilizzato, recipiente che deve essere costantemente mantenuto nel ghiaccio fino a quando il suo contenuto non viene usato. Non riscaldate mai la bottiglia allatto di andare a letto, ne' tenetela mai con voi fino al momento opportuno, affine di risparmiarvi l'incomodo di andarla a togliere dal ghiaccio e riscaldarla. Ricordatevi che questa trascuratezza e negligenza, spesso e volentieri,

sono cause prime delle malattie dei figli vostri.

Funzione dei visceri.—Un bambino allattato artificialmente, cioè col biberon, dovrebbe, in condizioni normali, evacuare almeno una volta al giorno ma non più di due. Se, a buon conto, il latte è buono ed è stato mantenuto in fresco e se tutti gli altri ingredienti per l'allattamento sono stati anch'essi mantenuti nel modo dovuto, gli escrementi del bambino dovrebbero essere di color gialliccio e non troppo duri, in guisa tale da renderne difficile l'uscitta. Se gli escrementi diventano di color verdiccio ma l'evacuazione non avviene più di due o tre volte al giorno, sarà bene somministrare al bambino un cucchiaino d'olio di ricino. Se, con totto l'olio, il colore degli escrementi non tende a migliorare, consultate subito il vostro medico. Se lo farete immediatamente il medico sarà in grado di poter scongiurare a tempo quella serie complicazioni e malattie viscerali che minacciano di solito i bambini. Se gli escrementi rimarranno di color verdiccio e le evacuazioni aumenteranno sì da raggiungere il numero di cinque o sei nel periodo di ventiquattro ore, il vostro bambino soffre di visceri o è affetto da diarrea estiva. In questo caso non date più latte al bambino, ma soltanto acqua ben bollita fino a quando non arriverà il medico. Non sarà mai troppo tardi.

Non incominciate di nuovo l'allattamento fino a quando il medico non ve lo avrà permesso. State pur sicuri che il vostro bambino non morirà d'inedia se avrete sospeso l'allattamento e ricordate invece che ogni goccia di latte che date al bambino, in queste contingenze, non fa altro che peggiorare il suo stato. In queste condizioni, continuando l'allattamento voi causerete serii e gravi danni al bambino.

Vomito.—Un bambino allattato artificialmente, cioè col biberon, non vomita se il latte è puro e nella quantità adattata al suo fisico. Il vomito, di solito, è il primo indizio di una malattia, sia essa una della più pericolose oppure, se nell' estate, una diarrea estiva. Il vomito che avviene in queste condizioni può essere il primo indizio d'indisposizione e può far sì che i visceri non riprendano la loro funzione normale se non dopo parecchi giorni. Se il vomito si ripete, sospendete l'allattamento e date al bambino acqua soltanto, ma che sia stata prima bollita, tanto fresca quanto della temperatura solita del latte e consultate immediamente il vostro medico.

Vestiti.—Non vestite di troppi panni il vostro bambino durante l'estate. Nei giorni di temperature torrida, liberatelo di gran parte dei panni che l'avvolgono; una leggera camiciola aperta ed un pannolino sono più che sufficienti durante giornate e nottate afose. Non usate mai vestitini stretti alla vita. Sottanine e camiciole devono

essere a spalla.

Bagni.—Fate fare al bambino un bagno al giorno. Nelle giornate calde passategli sollecitamente su tutto il corpo una spugna bagnata. Il bambino ne risentirà subito il benefico effetto e dormirà meglio. Ogni volta che il pannolino è bagnato d'urina bisogna cambiarlo, dopo aver lavate bene ed accuratamente asciugate con cipria le parti basse del bambino. Lavate sempre in acqua bollente tutti i pannolini sporchi e non usate mai pannolini che sono stati bagnati d'urina e che sono asciutti senza essere stati lavati.

Le mosche.—Abbiate cura di tener le mosche lontano dalle bottiglie del latte e da qualunque altro cibo destinato ai bambini. Scacciatele quando le vedete posare sul volto dei vostri piccoli e ricordatevi che le mosche, ogni anno, sono causa di molte malattie a migliaia di

Aria fresca.—L'aria fresca è un così importante fattore nelle buone condizioni di salute del bambino quanto lo è il latte fresco. Durante l'estate, cercate per quanto più vi è possibile di tenerli all' aperto. Teneteli sempre lontano dalla cucina. Il troppo calore, in luoghi chiusi può essere spesso causa di malesseri.

Eruzioni cutanee. (Sfogo della pelle.) Se vedete dello sfogo sulla faccia e sul corpo del bambino, chiamate il medico. Non tutte le eruzioni cutanee sono causate dal calore. Lo sfogo potrebbe benissimo essere indizio di malattie gravi, quali la febbre scarlattina, il morbillo,

il vaiuolo, la varicella.

Se desiderate con tanta ansia avere un bambino, perchè non allevarlo e mantenerlo come si deve? La metà dei casi di mortalità di neonati nella Pennsylvania potrebbero essere evitati se si seguissero i consigli ed i suggerimenti contenuti in questa circolare.

Issued May 15, 1909. Translated May 20, 1912.

## Erhaltet die Sänglinge!

## Regeln, welche bei der Pflege und Behandlung von fleinen Kindern während des Sommers befolgt werden follten.

Das heiße Wetter dieser Jahreszeit ist äußerst gefährlich für das Leben von Sänglingen und fleinen Rindern, nicht nur wegen ber niederbrudenben Wirfung hoher atmosphärischer Temperatur im allgemeinen, sondern mehr invbesondere wegen ber Wirkung der heißen Witterung auf alle leicht verderbenden Nahrungsmittel,

unter denen Ruhmilch den ersten Plat einnimmt.

Es ist deshalb überaus wichtig, daß Kuhmilch, welche zur Nahrung von kleinen Kindern gebraucht wird, so rein und frisch ist, wie man sie nur kausen kann. Während des heißen Wetters ist Eis absolut nothwendig zur Erhaltung von Milch, und alle Milch, welche zur Nahrung verwendet wird, sollte durch Eis abgefühlt werden, sobald fie von der Ruh kommt, und in der Nahe von Gis gehalten werden, bis fie gebraucht wird. Gin wenig Gelb bas für Gis verausgabt wird, mag Krankheit verhüten und ihre viel größeren Kosten für Medizin, Bflege und ärziliche Behandlung. Da Waffer oft ein Krankheitsträger ift, so verfährt man am sichersten, nur gekochtes Wasser zum Trinken oder zur Zubereitung von Nahrung für den Säugling zu gebrauchen.

Die folgenden Regeln werden dazu helfen, die Sänglinge mahrend bes heißen

Wetters zu erhalten:

Stillen an der Bruft — Jede Mutter follte fich bestreben, ihr Kind zu säugen. Muttermilch ist die natürliche Nahrung für das neugeborene Kind. Reine andere Nahrung läßt sich damit vergleichen. Gin Kind, das an der Mutterbruft aufgezogen wird, hat eine bedeutend beffere Ausficht, zu leben, als ein Kind, welches an

der Flasche aufgezogen ist.

Man gebe bem Kinde unmittelbar nach ber Geburt feine fünftliche Nahrung, während man auf das Kommen der Muttermilch wartet. Lege das Kind alle vier Stunden an die Brust und gib ihm weiter nichts als abgekochtes Waffer. Das Rind braucht nichts Anderes und wird feinen hunger leiden. Wenn bie Milch in der Bruft kommt, fänge das Kind alle zwei Stunden mahrend des Tages und zwei bis drei Mal während der Nacht.

Stille das Kind nicht jebesmal wenn es schreit, mäßiges Schreien fördert bie Entwicklung der Lungen. Kinder, die unregelmäßig gestillt werden, ober jedes Mal wenn sie schreien, werben höchst wahrscheinlich Unverdaulichkeit bekommen und schreien bann nur noch heftiger infolge von Schmerzen. Stille bas Kind regelmäßig, und es wird sich bald daran gewöhnen, die Nahrung nur in den rechten Zwischenräumen zu erwarten. Gib dem Kinde mehrere Male bes Tages ein wenig abgekochtes Waffer.

Entwöhne bas Kind nicht, so lange es zunimmt, und thue es nicht, außer auf ärztlichen Rath. Befolge in diefer Beziehung nicht den Rath von Freunden oder Nachbarn. Bleibt das Kind gesund, hört es aber nach einer gewissen Zeit auf, an Gewicht zuzunehmen, fo glaube nicht, daß die Milch werthlos ift, sondern ziehe einen Arzt zu Rathe und befrage ihn, ob es weislich ist, eine ober zwei Flaschen

zur Aushülfe hinzuzufügen.

Anfziehen an der Flasche. —Wirdesnothwendig, das Kind ganz und gar oder theilweise an der Flasche aufzuziehen, so denke daran, daß die größte Keinlichseit in allen Einzelheiten der Ernährung nothwendig ist. Sobald die Flasche leer ist, sollte sie gründlich mit kaltem Wasier gewaichen und dann mit heißem Wasser und Borar (1 Theelössel für eine Kinte Wasier) gereinigt werden, ehe sie wieder gebraucht wird. Wenn man nur ein paar Flaschen hat und dieselbe Flasche das nächste Mal gebrauchen muß, so koche man dieselbe erliche Minuten aus, ehe man neue Nahrung in dieselbe hineinthut. Man lasse das Kind nie die Überreste aus einer Flasche trinken, welche es das erste Mal nicht gleich gesert hat. Nimm die Flasche vom Kinderbett hinweg, gieße die Milch aus und nimm sogleich die Reisnigung vor. Abgestandene Milch gerinnt, setzt sich im Junern der Flasche setz, wird nach etlichen Stunden gistig und verunreinigt friiche Milch, welche in Berühsrung mit derselben kommt. Es ist besser, so viele Flaschen zu haben, als die Unsahl der Mahlzeiten des Kindes beträgt, so daß alle Flaschen zusammen ausgekocht werden können, ehe man die Nahrung des Morgens zubereitet.

Saughütchen, um so sicherer für bas Kind. Brauche keine komplizirten Saughütchen und kaufe unter keinen Umstänsben eine Flasche mit einem langen Gummischlauch, welcher an dem Saughütchen bes festigt ist. Derselbe kann nicht rein gehalten werden und wird sicherlich Störung in den Gedärmen hervorrufen. Sobald das Kind mit der Flasche fertig ist, sollte das Saughütchen abgenommen, das Innere mit dem Finger nach außen gewandt und mit kaltem Wasser abgebürstet werden; für diesen Zweck sollte man eine bes

sondere Burft halten. Rach dem Gebrauch koche man die Burft aus.

Das gereinigte Saughütchen sollte in frisches Borazwasser (1 Theelöffel Boraz auf eine Pinte Wasser), in ein zugedecktes Glas gelegt werden. Vor dem Gebrauch

fpule man das Saughutchen in kochendem Waffer aus.

Nimm das Saughütchen nicht in deinen eigenen Mund, um auszufinden ob die Milch warm genug ist. Laß etliche Tropfen von der Milch auf dein Handgelenk fallen; wenn es zu heiß für dein Handgelenk fühlt, so ist es auch zu heiß für den Mund des Kindes.

Für die Zubereitung einer Milchmischung für das Kind lassen sich keine allgemeinen Instruktionen geben. Jedes Kind braucht eine Combination, welche seiner Verdanung angepaßt ist. Die Mischung, welche für ein anderes Kind zuträglich ist, mag für dein Kind zu stark oder zu schwach sein. Frage den Doktor, wie die Nahrung zu mischen ist. Wenn es nothwendig ist, bei der Mischung Rahm zu verwenden, so kause keinen Rahm — derselbe ist möglicherweise abgestanden — sondern verschaffe dir denselben, indem du nach Reinigung des Flaschenrandes eine halbe Pinte von der Obersläche einer Quartslasche Milch abgießest.

Bechsele nicht beständig mit der Nahrung für das Kind, wozu Mütter auf den Rath "guter" Nachbarn leicht geneigt sind. Befolge die Anweisungen deines

Dottors.

Während des Sommers sollte die Nahrung für das Kind, nach ihrer Zubereistung, auf den Siedepunkt gebracht werden. Sodann sollte sie in reine Flaschen gegossen, mit reiner Watte verschlossen und dis zum Gebrauch in der Nähe des Sizes gehalten werden. Mache die Flasche nicht heiß, ehe du dich zur Ruhe legst, und behalte sie nicht im Bett, dis die Zeit zum Stillen des Kindes kommt, weil du nicht zum Eissch ank gehen willst, wenn das Kind dieselbe braucht. Dies ist ein sicherer Weg, das Kind krank zu machen.

Stuhlgang.—Ein Kind, welches an der Flasche aufgezogen ift, sollte wenigstens einmal und nicht mehr als zweis bis dreimal täglich Stuhlgang haben. Wenn die Milch beim Anfang rein ist und fühl gehalten wird und alle Fütterungsutens sillen gereinigt sind, wie soeben angegeben, sollte der Stuhlgang des Kindes eine

gelbliche Farbe haben und nicht zu hart sein, so daß derselbe leicht abgeführe wersen kann. Wenn der Stuhlgang eine grünliche Farbe annimmt, aber nicht häufisger als zweis dis dreimal des Tages eintritt, so gib einen bis zwei Theeröffel Ricinusöl. Wenn sich die Farbe nicht bessert, nachdem das Del gewirft hat, so ziehe den Doktor zu Rathe. Zu dieser Zeit wird er im Stande sein, die ersten Darmbeschwerden zu verhüten, von denen das Kind bedroht ist. Wenn der Stuhlsgang eine grüne Farbe behält und dis auf fünf oder sechs oder mehr Mal in 24 Stunden steigt, fängt das Kind an Darmstörungen oder Sommer-Diarrhöe zu bestommen. Höre sogleich mit Milch auf, gib anstatt dessen reines gekochtes Wasser und ziehe den Doktor zu Rathe. Es mag nicht zu spät sein.

Fange nicht wieder an, dem Kinde Milch zu geben, bis der Doktor es verordenet. Das Kind wird keinen Hunger leiden, wenn man aufhört, demfelben Milch zu geben; jeder Tropfen Milch, welcher nach dieser Warnung in seinen Mund geht, vermehrt das Gift, welches bereits da ist. Ist der Stuhlgang los und grün in Farbe, so wird man durch Berabreichung von mehr Milch-Nahrung eine ernste

oder verhängnisvolle Krankheit hervorrufen.

Er brechen. Sind, welches an der Flasche aufgezogen wird, sollte sich nicht brechen, wenn die Nahrung rein und seinen Bedürsnissen in der rechten Weise ans gepaßt ist. Wenn Erbrechen eintritt, so ist dies gewöhnlich ein Zeichen einer heransnahenden gefährlichen Kinderkrankheit, oder von Sommer-Diarrhöe, wie es bei heißem Wetter mehr allgemein der Fall ist. Erbrechen, welches dieser Ursache zu Grunde liegt, mag das erste Zeichen von Störung sein und Stuhlgang mag nicht bis etliche Tage später eintreten. Wenn sich das Brechen wiederholt, stelle die Fütterung mit Milch ein, gib abgekochtes Wasser, kühl oder in der Temperatur, wie die Milch gegeben ist, und ziehe sogleich einen Arzt zu Kathe.

Kleidung.— Ziehe bem Kinde im Sommer nicht zu viele Kleider an. Entferne während des heißesten Wetters die meisten Kleider; ein dünnes loses Hemd und eine Windel genügen während des Tages und in sehr heißen, schwülen Nächten.

Gebrauche nie Kleider mit engen Leibchen. Unterrocke und hemden follten

burch Träger über die Schultern gehalten werden.

Baben.—Bade das Kind jeden Tag. Bei heißem Wetter verschafft ein schnelles Abwaschen mit dem Schwamm später am Tage Linderung und fördert den Schlaf. Wasche das Kind jedes Mal wenn die Windeln gewechselt werden, und trockne die Theile vor dem Gebrauch von Pulver gründlich ab. Wasche alle beschmutzten Windeln und koche sie aus. Gebrauche nie eine getrocknete nasse Windel, ohne sie erst zu waschen.

Fliegen.—Sei vorsichtig, daß keine Fliegen in die Flasche und Nahrung des Kindes gelangen, auch lasse man dieselben nicht auf den Lippen des Kindes sigen,

wenn es schläft. Fliegen find die Ueberträger zahlloser Krankheiten.

Frische Luft.—Frische Luft ist ebenso wichtig für die Gesundheit des Kindes, wie frische Nahrung. Halte das Kind während des Sommers so viel als möglich in der frischen Luft. Halte das Kind aus der Küche — es möchte vielleicht einen Somnenstich infolge zu viel hie im Hause bekommen.

Hantausschlag.—Wenn das Kind einen Ausschlag oder Ausbruch der Haut bestommt, so ziehe einen Arzt zu Rathe. Glaube nicht, daß jeder Hantausschlag Hisblasen (prickly heat) sind; es mag eine gefährliche Krankheit sein, wie Schars

lachfieber, Masern, Blattern ober Hühnerpocken.

Wenn es sich lohnt, ein Kind zu haben, so lohnt es sich auch dasselbe zu erhalsten. Die Hälfte der Kinder, die zeden Sommer in Pennsylvanien sterben, könnten durch Besolgung der Rathschläge, welche in diesem Zirkular ertheilt werden, gesrettet werden.

Erlassen am 15. Mai 1909. Uebersetz am 1. Juni 1912. FORM 20 C .- Polish.

#### STRZEZ SWE DZIECI.

### REGULAMIN MAJĄCY BYC PRZESTRZEGANY PODCZAS MIESIEĘY LETNICH CELEM UCHRONIENIA DZIECI PRZED CHOROBAMI.

Gorace powietrze w tej porze roku jest najbardziej niebezpiecznem dla życia niemowląt i małych dzieci, nie tylko z przyczyny ociążałej i wysokiej atmosferycznej temperatury w ogólności, lecz więcej z wpływu jakie gorące powietrze wywiera na wszystkie pokarmy, które łatwo poddają się zepsuciu a między któremi krowie mleko zajmuje pierwsze miejsce.

Dlatego też jest bardzo ważne, ażeby krowie mleko, które ma być ażyte za pokarm dla niemowląt, było najczystsze i najświeższe na

jakie nas tylko stać.

Podczas upału lód jest koniecznie potrzebny do zakonserwowania mleka, a mleko przeznaczone na pokarm ma być lodem wystudzone zaraz po odebraniu od krowy i utrzymane zimno aż do przyrządzenia.

Mala suma pieniędzy wydana na lód może zapobiec, większemu

wydatkowi na lekarstwa, opiekę i lekarza (lekarska opieka). Z powodu iz woda jest często roznosicielką chorób, jest bezpieczniej używać tylko gotowanej wody do picia lub też przyrządzonego pokarmu do picia dla dziecka.

Następujące reguly pomogą do utrzymania zdrowia dzieci podczas

upałów.

Karmienie piersia.—Każda matka powinna się starać aby karmić dziecko piersia.

Pokarm z piersi jest naturalnym dla nowonarodzonego dziecka.

Niema innego pokarmu któryby mógł być porównywany. Dziecko karmione piersia ma większe szanse do życia.

Natychmiast po urodzeniu nie dać dziecku żadnego sztucznego pokarmu, nim nadejdzie pokarm piersi.

Przykładać dziecko do piersi co cztery godziny, a poić niczem

innym tylko wodą przegotowaną.
Dziecku nie potrzeba nic więcej i ono z głodu nie umrze.

Gdy nadejdzie pokarm do piersi karmić dziecko co dwie godziny podczas dnia, a dwa lub trzy razy w nocy.

Nie karmić dziecka kiedy tylko zapłacze, umiarkowany płacz

pomaga do rozszerzania płuc.

Dzieci karmione nieregularnie i kiedy tylko zapłaczą, podpadają niestrawności, a wtedy płaczą z bólu.

Karmić regularnie, a dziecko nauczy się spodziewać pokarmu tylko w oznaczonym czasie.

Dać dziecku pić trochę gotowanej wody kilka razy na dzień.

 $31390^{\circ} - 14 - 5$ 

65

Gdy dziecko dojdzie do dwóch miesięcy, przedłuzyć czas karmienia od 2½ do 3-ch godzin dziennie a tylko raz lub dwa razy na

Nie odłaczać dziecka od piersi gdy dziecko zyskuje a w każdym razie uczynić to za porada lekarza.

Nie słuchaj porady sąsiadów lub przyjaciół w odłączeniu od piersi

Jeżeli dziecko pozotaje zdrowe, ale po pewnym czasie nie zyskuje na wadze nie sadž iż pokarm twój nie jest pożytecznym ale poradiż się lekarza, co do dodania jednej lub dwuch flaszeczek mleka celem wzmocnienia.

Karmienie flaszką.—Jeżeli koniecznie potrzeba dziecko karmić calkowicie lub częściowo flaską, pamiętać należy aby zachować, jak

największą czystość we wszystkich szczegółach.

Gdy tylko flaszka jest próżną, trzeba ją starannie wypłukać zimną wodą, a potem wymyć gorącą z buraksem (łyżeczkę boraksu do pół kwarty wody) i odłożyć na bok do dalszego czyszczenia zanim będzie znowu użyta.

Jeżeli ma się tylko parę flaszek i potrzeba użyć te same flaszki do następnego karmienia, trzeba ją przez kilka minut wygotować

zanim się do niej świeży pokarm naleje.

Nigdy nie powawać dziecku ostatków pokarmu w flaszce jeżeli go przedtem nie spożyło.

Wziąść natychmiast flaszkę z kołyski, wylać mleko i wyczyścić

odrazu flaszkę.

Zwietrzałe mleko zsiada się i lepi na wnętrzu flaszki a po upływie kilku godzin staje się trującem i może zanieczyścić świeże mleko.

Najlepiej mieć tyle flaszek ile się razy dziecko karmi dziennie, a wtedy można wszystkie razem wygotować zanim się przygotuje pokarm z rana.

Smoczki gumowe.—Czem prostszy smoczek tem bezpieczniejszy

dla dziecka.

Nie używać zkomplikowanych smoczków a pod żadnym warunkiem nie kupować flaszki z długa gumową rurką przyczepioną do smoczka. Takowa nie moze być wyczyszczoną i napewno sprowadzi zaburz-

enie żoładka.

Gdy flaszka wypróżniona smoczek ma być natychmiast zdjęty odwrócony na palcu i wyczyszczony w zimnej wodzie szczotką, tylko do tego przeznaczona.

Po wyczyszeceniu potrzeba szczotkę zawsze gotować.

Oczyszczony smoczek umieścić w świeżej boraksowej wodzie (lyżeczk boraksu do pół kwarty wody) w zakrytej szklance.

Wypłukać smoczek w gorącej wodzie przed użyciem.

Nie wkładaj nigdy smoczka do swych ust aby się przekonać czy mleko jest dość ciepłe.

Spuść kilka kropel mleka na rękę, jeżeli mleko parzy wtedy jest

za gorące dla dziecka.

Nie można podać szczegółowych przepisów dla przyrządzenia pokarmu dla dzieci.

Każde dziecko potrzebuje odmiany stosownej do jego strawności. Mieszanina na której jedno dziecko chowa się dobrze, moze być za mocne lub tez za słabe dla drugiego.

Niech lekarz osadzi jak przyrządzić pokarm.

Gdy śmietana jest potrzebną w przyrządzaniu, nie należy tejże kupować, gdyż może by starą, najlepiej zlać pół kwaterki z kwartowej butelki mleka po oczyszczeniu nakrywki z flaszki.

Nie zmieniać ciągle pokarmu dla dziecka jawo matki zwykle

czynią, przez poradę dobrych sąsiadów.

Trzymać się przepisów lekarza.

Podczas lata pokarm dziecka powinien być przegotowany po przyrzadzeniu.

Wlany w czyste flaszki, zakorkowany czystą pażoną bawełną i

trzymany przy lodzie aż do użycia.

Nie grzać flaszki gdy się odchodzi spać i nie trzymać w łóżku aby nie wystygła, gdy się nie chce iść do lodowni i zagrzewać, gdy dziecko pokarmu potrzebuje, bo w ten sposób najpewniej można przyprowadzić chorobę dziecku.

Rozwolnienie żoladka.—Dziecko karmione flaską powinno mieć

stolec przynajmniej raz na dzień a nie więcej jak dwa albo trzy.

Jeżeli mleko jest czyste i utrzymane czysto i zimno a wszystkie

naczynia czyszczone w sposób przedtem podany.

Dziecka stolec powinien być austryackiego koloru i nie za twardy. Jeżeli stolec zmienia się na (ajryski) kolor lecz nie powtarza się więcej jak dwa lub trzy razy dziennie, dać jedną lub dwie łyżeczki rycynowego oleju.

Gdy kolor się nie zmieni po użyciu oleju poradź się lekarza.

W tym czasie on będzie zdolny zapobiec poważnej chorobie kiszek

zagrażającej dziecku.

Jeżeli stolec pozostaje zielonego koloru i częściej się powtarza, pięć lub sześć razy dziennie (na 24 godzin), twoje dziecko dostaje choroby letniej.

Zatrzymać mleko natychmiast a dać gotowaną wodę i zawołać

doktora, a może nie będzie za późno.

Nie dać pokarmu mlecznego aż doktor pozwoli.

Dziecko się nie zagłodzi przez wstrzymanie mleka, a każda kropla mleka podana do ust dziecka po tym ostrzeżeniu tylko dodawałaby truciznę, już tam się znajdującej.

Byłaby to przyczyna poważnej lub fatalnej choroby przez danie

Przyczyniłabyś się do poważnej a może i fatalnej choroby dając dziecku mleko, za pokarm, może nastapić rozwolnienie żolądka, a stolec byłby zielony.

Wymioty.—Dziecko karmione butelką nie powinno wymiotować, jeżeli pokarm jest czysty i należycie przyrządzony do potrzeb dziecka.

Jeżeli wymioty się zdarzą, to jest czysty objaw zbliżającej się choroby, może być, albo jedna z poważnych chorób dziecinnych, lub też więcej rozpowszechnionej w czasach gorączki letniej (diarrhea).

Wymioty z tej przyczyny mogą być pierwszą oznaką zaburzenia, rozwolnienie może nastąpić w kilka dni później.

Jeżeli wymioty się powtórzą, przestać karmić mlekiem, dać gotowana wodę studzoną, lub tej samej temperatury co podawane mleko i poradzić się natychmiast doktora.

Ubranie.—Nie wkładać za wiele ubrania na dziecko podczas let-

nich miesięcy.

Podczas największej gorączki, zdjąć jak najwięcej sukieniek, a także tylko cienka i lużna koszulka i pieluszka zupełnie wystarczy podczas dnia, a także w bardzo gorące i duszne noce.

Nigdy nie używać ciasnego ubrania, spodniczki i sukienki powinne

się zwieszać z ramion.

Kapiel.--Kapać dziecko codziennie.

Podczas wielkich upałów szybkie wycieranie całego ciała przy końcu dnia orzeźwi dziecko i pomoże mu spokojnie spać.

Umyć dziecko po zmianie każdej pieluchy, wytrzeć starannie

przed użyciem proszku.

Prać zwalane pieluchy i wygotować je.

Nigdy nie zakladać suszonej pieluchy, wpierw potrzeba ją wyprać. Muchy.—Zachować największą ostrożność aby muchy nie siadaly na flaszce i pokarmie dziecka i nie pozwolić im usiąść na ustach dziecka podczas snu.

Muchy niosą zarazę tysiącom niemowląt co lato.

Świeże powietrze.—Świeże powietrze jest tak potrzebne ku zdrowiu dziecka jak zdrowy pokarm.

Podczas lata umieścić dziecko o ile możności na dworze.

Nie trzymać dziecka w kuchni, ono może także dostać udaru słonecznego z bytniego gorąca w domu.

Wyrzuty skórne.—Jeżeli dziecko ma wysepkę lub pękniecie skóry,

porad sie lekarza.

Nie myśl, iż każdy wyrzut jest wysepką lub krostą z gorąca, może to być poważna choroba, jako szkarlatyna, odra lub ospa.

Jeżeli warto mieć dziecko, warto je też odpowiednio wychować. Polowa dzieci, które umierają w Pennsylwanii każdego lata, możnaby ocalić przez zachowanie powyższych rad podanych w tym cyrkularzu.

Wydane 15-go Maja 1909. Przejrzane 1-go Czerwca 1912.

## רעטעט די בייבים:

רענעלען וועלכע מוזען אבגעהים ווערען ווי אזוי אכטונג צו געבען און בעהאנדלען קינדער אין די זומער מאָנאַמען.

דאם הייםע וועמער אין דיעזער ציים פון יאהר איז זעהר געפעהרליך פיר דאם לעפען פון פייפי׳ם און יונגע קינדער, ניט נור דורך דעם דרוקענדען עפעקט פון דער אלגעמיינער אַטמאָספערישער מעמפּער און יונגע קינדער, ניט נור דורך דער ווירקונג פון הייסען וועטער אויף אלע שמערבענדע נאַהרונגס מיטלען צוושען וועלכע דער קוה'ס מילך פערנעמט דאס ערשטע פּלאַץ.

עם איז דארום פון גרויסער וויכטיגקייט דאס מולך פון קוהען וועלכע ווערט געברויכט פיר דער נאַרונג פון קיבדער זאל זיין די ריינסטע און פרישסטע וועלכע איהר קענט זיך נור פערשאַפען צו קופען. דארר בויטג מון קיבדער זאל זיין די ריינסטע און פרישסטע וועלכע איהר קענט זיך נור פערשאַפען צו קופעוהאלטען; דורך די הייסע מאָנאטען איז עס זעהר נויטג צו האבען אייז אום די מולך גוט אויפצוהאלטען; מילך וועלכע ווערט געברויכט אלס נאַהרונג זאל געלד וועלעס אויה אווע מוסגעבען אויף אייז קען אייף אבהיטען דער קוה ביז צום געברוינען. א ביסעל געלד וועלכעס איר וועט אויסגעבען אויף אאיז אין אין איך אבהיטען פון קראנקהייטען און גאך מעהר פון עקספענסעס פיר מעריצינען: גוורסעס און דאָקשאר בעהאגדלונג. אזו ווי פיעלע מאהל איז וואַסער די אורזאכע פון קראנקהייטען, איז עס זיכערער צו געברויכען נור געזאַטענע וואַסער צום טרינקען אדער צום פארבערייטונג פון דער פייפיס נאַהרונגס מיטלען.

פאלגענדע רעגעלען וועלען אייך בעהילפיג זיין צו האלמען אייער בייבי געזונד אין פערלייף פון

רעם חייםען וועטער:

ברוסם נאַהרונג. יעדע מוטער זאל זיך בעמיהען צו געכען זייגען איהר בייבי. ברוסט מילך איז די נאַטירליכע נאָהרונג פיר דער ניי-געפאָרענע בייבי. עס איז ניטאָ קיין אנדערע נאהרונג וועלכע זאל קענען צוגעגליכען ווערען דאצו. א בייבי וועלכע ווערט ערנעהרט דורך דער ברוסט האט מעהר אווס־ זיכטען צו לעבען אלס א קינד וואס ווערט ערנעהרט דורך א פאָטעל.

באלר נאך דער געבורט זאלט איהר קיינע ארטיפישעל נארונג געבען דער בייביי וועהרענד איהר הארט אדר קיינע ארטיפישעל נארונג געבען דער בייביי וועהרענד איהר ווארט אז די ברוסט מילך זאל קומען. לעגט דאס קינד צו צו אייער ברוסט אלע 4 שטונדען און גיט עס קיין אנדערע זאך ווי געזאָטענע וואסער. די בייבי ברויכט קיין אנדערע זאך און וועט ניט פערהונגערען. נאכדעם ווי די מילך קומט אין דער ברוסט גיט דער בייבי צו זויגען אלע 2 שטונדען דורך דעם טאָג און 2 אדער 3 מאָהל דורך דער נאַכט.

גיט ניט דער בייבו צו זויגען אלע מאהל ווען עס ווינט. אביסעל וויינען העלפט צו ענטוויקלען די לוגגען. בייביס וועלכע ווערען ניט רעגעלמעסיג ערנעהרט, אדער דאמאלס ווען זיי וויינען זיינען אונד די לוגגען. בייביס וועלכע ווערען ניט רעגעלמעסיג ערנעהרט, אדער דאמאלס ווען זיי וויינען זיינען אונד טערווארפען צו קריגען אינדיידזשעסטשען (ניט פערדייהונג) און מוזען נאכהער מעהר וויינען פון שמערץ. גיט די קיבוער צו וויגען רעגעלמעסיג און די ביובי וועט זיך אווסלערען צו ערווארפען דאס אווער צו די או דייר בורמוניה עול אוייר ביידי וויינען דער און דייר בורמוניה עול אוייר ביידי ווער אוויר און דייר בורמוניה עול אוייר ביידי ווער זיידי און אווער בורמוניה עול אוייר ביידי ווער אוויר אווייר וויינען דער אווייר ביידי ביידי ביידי אווייר ביידי ביידי ביידי אווייר ביידי אווייר ביידי ביי

זויגען גור אין דער ריכטיגער צייט. גיט דער בייבי אביסעל געזאטענע וואסער עטליכע מאחל אין מאג. זויגען גור אין דער ריכטיגער צייט. גיט דער 3 מאָנאטה אַלט. גיט עס גור צו זויגען אלע 2½ אדער 3 נאך דעם זווי די פּייבִי איז

שטונדען - און נור 2 מאהל דורך דער נאַכט.

ענטוועהנט ניט די בייבי אין דער־צייט ווען דאס קינד נעמט צו. מהוט עס קיין מאהל בעפאר איהר בעראטה זיך מיט אייער דאָקמאָר. הערט ניט דעם ראטה פון פריינדע אדער שכנים וועגען דער ענטר איהר בעראטה זיך מיט אייער דאָקמאָר. הערט ניט רעם ראטה פון פריינדע אדער שווף צו געווינען אין וועהנוגג. אויב די בייבי בלייבט געזונד אבער נאָך א געוויסע צייט הערט עס אויף צו געווינען אין געוויכט, דענקט ניט א זיער מילך טויג ניט מעהר. בעראטה זיך מיט אייער דאָקטאָר אויב איהר זאלט צו זעצען איין אדער צוויי באָטעלס אום אייך ארוט צו העלפען. זויגען דער בייבי אין גאנצען אדער זויגען דורך באָטעלס. אויב עס איז נויטהווענדיג צו געכען זויגען דער בייבי אין גאנצען אדער בייבי אין גאנצען אדער בייבי אין בארווי בירד פי דימים אין נוייני אין גאנצען אדער בייבי אין בירד פי דימים אייני גייני אין גאנצען אדער בייבי אין בירד פי דימים און וויינות בייבי אין גאנצען אדער בייבי אייני אין גאנצען אדער בייבי אין בייבי אין גאנצען אדער בייבי אייני אייני גערען אייני אייני גערען אייני אייני גערען אייני אייני גערען אייני אייני אייני אייני אייני גערען אייני אייני אייני גערען אייני גערען אייני אייי אייני אייני אייני אייני אייני אי

יווגען דורך באָשעלם. אוי ביסטקים אום אין אוים בי זונים אויגען דער בייבי אין גאנצען אדער זויגען דורך באָשעלם. אויב עם איז נויטהווענדיג צו געבען זויגען דער בייבי אין גאנצען אדער פהיילווייז דורך אַ בּאָשעל געדענקם דאס די גרעבשע ריינליכקייש איז נויטיג אין יעדער חינזיכט פון דער נאַהרונג. אזוי שנעל זוי א באטעל האט זיך געפינישט זאל עס גוט אויסגעוואשען ווערען מיט קאלטע וואסער אין נאכהער געקלינט מיט הייסע וואסער אין באפאר עס ווערט נאך אמאָהל גער וואסער) און שטעלט עס אוועק אום וויטער אויסגעקלינט צו ווערען בעפאר עס ווערט נאך אמאָהל גער ברוכט. אויב איהר האט גור עשליכע במעלט און איהר דארפט געברויכען דאס זעלתע באָטעל פאר דער נעקסטער נאהרונגו לאזט עס זעדען עטליכע מינוט בעפאר איהר מהוט אריין די פרישע מילך. דער נעקסטער נאר געמטעל אין וועלכען עס איז איבערגעבליעבען א ביסעל מילך וואס די בייבי האט ניט געשינישט פון בעפאר. נעמט עס אוועקי גיסט אויט די מילך און קלינט זאָאַרש מוער באָטעל. די ניט פרישע מילך ווערט צו געקלעפט צו די אינסייד פון דעם פאַטטעל און אין א פּאָאר שטונד בעַטל. די ניט פרישע מילך ווערט צו געקלעפט צו די אינסייד פון דעם פאַטעלס ווי פעל מאהל די בייבי אין דעם זעלבען באַטעל. עס איז דארום בעסער צו האבען אזוי פועל באָטעלס ווי פעל מארל די נאהרונג דורך דעם טאָג אום זיי זאלען אלע צוואמען קענען געזאַטען ווערען בעפאָהר די נאהרונג דורך דעם טאָג אום זיי זאלען אלע צוואמען פענען געזויש ערען מאָרגען.

נופעלם. וואס איינפאכער די נופעלס זיינען איז עם אלץ זיכערער פאַר דער געזונדהיים פון די בייביים. געברויכט ניט קיין פערוויקעלטע ניפעלס, און אונטער קיינע בעדונגונגען זאלט איהר ניט קייפען קיין באָבעל ביי וועלכען עס איז צוגעזעצט א לאנגער ראַבפער בייפ צום ניפעל. עס קען ניט קויפען קיין באָבעל ביי וועלכען עס איז צוגעזעצט א לאנגער ראַבפער בייפ צום ניפעל. נאסרעם ווי דאס באָטעל ווערט געהאלפען ווערען ריין און עס וועט זיכער פערארזאכען פויך ווייטאָג. נאסרעם ווי דאס באָטעל ווערט אויסגעלעדיגט זאל מען דעם ניפעל זאָפארט אוועל געמען, מען זאל עס איבערקעהרען און עס אויסרייי בען מיט פאלטע וואסער מיט א בראָש וועלכע זאל נור פיר דיעזען צוועק געברויכט ווערען. און נאסרער די מראש בעואטיין וויירעו.

זאל די פראָש געזאָפען ווערען. דאס געקלינמע ניפעל זאל געהאלמען ווערען אין פריש פאָראַקס וואסער (1 מהעע לעפעל פאָר ראַקס צו א פּאַינט וואַסער) אין א פערמאַכטע גלאָז. שווענקט דאס ניפּעל אין ווארמע וואסער בעפאָר דעם געברויכען. לעגם נים אריון דאס ניפעל אין אייער מוול אום אויסצוגעפינען אויב די מילך איז גענוג וואַרם. לאָזם אראָפּפּאַללען עטליכע מראָפּפּען מילך אויף אייער האנדי און אויב איהר פיחלם צו היים. איז עס צו היים פאר דער בייבייס מוול.

קיין אלגעמיינע פארשריפט קען ניט אנגעגעבען ווערען פאר דער פארבערייטונג פון צוואמען מיד שונג פון מילך פיר אייער בייבי. יעדע פייבי ברויכט א געוויסע קאמביניישען וועלכע זאל זיך צופאסען צו מיך פערדייהונג. די מיקסטשור וועלכע זאל זיין גוט פאר איין אנדערער פייבי קען זיך ארוסצייגען צו שטארק אדער צו שוואף פאר אייער בייבי. זאל זיין גוט פאר אקטאר זאגען ווי אווי צומישען די נאחרונג. אוב עס איז נויטיג צו געברויכען קרים אין דער מיקסטשור קויפט ניט קיין קרים ווייל עס קען זיין אויר געמט ארונטער א מאלבען פאינט פון דעם אויבערשטען פון א באָטעל מילך. נאכדעם ווי אידר האט דאס פאַטעל גוט ארום געקלינט.

דורך דעם זומער זאל דער בייביים נאחרונג געקאכט ווערען נאכדעם ווו עם ווערט פארבערייםעט. עס זאל דאן ארינגעגאסען ווערען אין די ריינע פאטעלס. און גוט פערמאכט ווערען מיט ריין קאטאןוואול און געהאלטען נעבען אייז ביז צום געברויכען. ווארעמט ניט אן א באטעל בעפאר איהר געהט צום
בעט און האלט עס ניט אין בעט ביז צו דער צייט ווען איהר ברויכט עס צו געבען דער פייבי. גור דאפיר
ווייל איהר ווילט ביט געהען צום אייז באקס און עס דערווארמען ווען די בייבי ברויכט עס. דאס קען
זיכער מאכען די פייפי קראַנק.

צפען צו זיין. א פייפי וועלכע ווערם ערנעהרם דורך א באַפעל זאל נים מעהר ווי 2 אדער 3 מאחל א מאג אַפען זיין. אויב די מילך איז ריין אין אין איז געהאלפען געווארען קאלט און אלע גאהד רוגם געשיהרען געקלינט ווי עס איז אייך שויז געואגט געווארען, זאל דער פייב'יס ארויסגאנג זיין געל און קאליר, און זאל נים זיין צו הארם און לייכם צום ארויסגאנג. אויב דער ארויסגאנג ווערט גרינד ליד אין קאליר, אבער נים מעהר ווי 2 אדער 3 מאהל א מאג גומ 2 אדער 3 מהעעלעפעל קאַסטאר איל. אוב דאַ סאָליר פערבעסערט זיך נים, נאכדעם ווי דער איל האם געמאכט זיין ווויקונג, פעראפה זיך מים אייער דאָסטאר. צו דיעזער ציים וועם ער קענען פערמיידען די געפעהרליכסטע מראופעלס אין וועלכע די בייבי איז אין געפאַהר. אויב דער ארויסגאנג פלייבט גרין אין קאָליר און פערגרעסערט זיך אין צאהל פון 5, 6 אבער מעהר מאַהל אין 24 שטונדען, פאנגט אייער בייבי אן צו האבען פויך טראַובעל אדער זומער אבוויכען. סטאפט זאכארט געבען מילך און גים איז גער און פור בער בער און רופט א דאר זומער אבוויכען. סטאפט צו שפעט.

לא אייר. איתר וועט ניט אויסהונגעד פאלגט ניט אן צו געבען נאך א מאהל ביז דער ראַקטאר הייסט אייך. איתר וועט ניט אויסהונגעד פאלגט ניט אן צו געבען נאך א מאהל ביז דער ראַקטאר הייסט אייך. איתר וועט געהט אריין אין רען אייער בייבי דאמיט וואס איהר וועט סטאַפען די מילך. יערער טראָפען מילך וואס געהט אריין אין זיין מוול נאך דיעזער וואַרנונג פערגרעסערט די גיפט וועלבע געפינט זיך שוין דאָרט. איהר וועט פער־ אורזאַכען ערנסטע אדער געפעהרליכע קראָגקהייטען אויב איהר וועט ווייטער געבען מילך נאכדעם ווי דער ארויסגאנג ווערט לויז און גרין אין קאָליר.

פרעכען. א פייפי וועלכע ווערם ערגעהרם דורך א פּאָמעל וועט נים פרעכען אויב.די נאַהרונג איז ריין און ריכטיג צוגעפּאָסט צו די בעדירפניסע. אויב עס קומם פאר פרעכען איז עס א צייכען אז ריין און ריכטיג צוגעפּאַסט צו די בעדירפניסע. אויב עס קומם פאר פרעכען איז עס א צייכען אז קראנקהיים דערבעהנמערם זיך, אדער איינע פון די ערנסטע קראנקהייםען פון קינדהיים, אדער, וואס איז מערר געוועהנליך אין הייסען וועטער, זומער אפוויכען. דאס ברעכען ווערס דערפאר נים לויז ביז אין אורדאכע איז דער ערשטער צייכען פון פראַפעל, און דער ארויסגאנג ווערם דערפאר גים לויז ביז אין עטליכע טעג שפעטער. אויב דאס ברעכען קומם נאך א מאהל פאר, סטאפט געבען מילך, גים געקאַכמע עואסער, קיהלע אדער עס זאל האבען די זעלכע טעמפעראַטור ווי די מילך וועלכע ווערם געגעבען, און בעראטה זיך ואַפאַר מיט אייער דאָסמאָר.

בעראטה זיך זאַפאָרט מוט אייער דאָקטאָר. בעראטה זיך זאָפאָרט מוט אייער דאָקטאָר. קליירונג. לעגט ניט ארויף צו פיעל קליידער אויף דער בייבי אין זומער. אין די הייסע וועטערען געמט אַוועק די מיינסטע פון די קליידער; א דין לויז העמדעל און א דאַיפער איז גענוג איבערץ טאג און אין א זעהר הייסע נאַכט.

קיין מאחל זאלט איחר ניט געברויכען קיין קליידער מיט ענגע ווייסט בענרס. פעטיקאוטס און סקוירטס זאלען זיין אונטערגעהאלטען מיט סטרעפס איבער די אַקסלען.

באַדען. באַדעט די בייפּי יעדען מאג. אין הייסען וועטער, גיט איהם שנעלע ספּאָבּדזשינג איבערץ גאַנצען קערפּער. שפעטער דורכץ טאג וועט עס דער פייבי ערפרישען און מאבען שלאפען בעסער. וואַשט די בייבי ועדעס מאַהל ווען איהר געברויכט דעם דאַיפּער און טריקענט אָפּ די נאַסע טהיילען פון קערפּער בעפאר איהר געברויכט דעם פאַורער. וואַשט אלע געפלעקטע דאַיפּערס און קאָכט זיי. קיין מאָהל זאלט איהר ניט געברויכען אַ אויסגעטריקענטען דאַיפּער בעפאר איהר וואַשט איהם אויס. פרישע לופט. פרישע לופט איז אזוי וויכטיג פאר דער פייבייס געזונד ווי פריש שפייז. וועהרענד

פרישע לופט. פרישע לופט איז אזוי וויכטיג פאר דער פייביס געזונד ווי פריש שפייז. וועהרענד דעם זומער האלט די פייבי אויטער דעם הויז ווי פיעל מעגליך. האלט ניט די פייבי און קיטשען. עס קען קריגען א "זאנענשטיך" פון צו פועל אינסיידיגע וואַרם.

אווסשלעגע פון דער הווט. אווב די בוובי האט אן אווסשלאג אווף דער הווט. בעראטה זיך מיט א דאקטאר. דענקט ניט אז יעדער אווסשלאג איז פון הושץ; עס קען זיין אן ערנסטע קראנקהייט מיט א דאקטאר. דענקט ניט אז יעדער אווסשלאג איז פון הושץ; עס קען זיין אן ערנסטע קראנקהייט זוי סקארלעט פיפער, מוזלען, סמאל פּאָקס אדער טשיקען פּאָקס.

פליעגען. זיים פארזיכטיג אויסצומיירען פליעגען פון דער בייביים פאטעל און שפייז, און ער־ לויכט זיי נים זיי זאלען שטעהען אויף דער בייביים ליפען וועהרענד עם שלאפט. פליעגען פערשלעפען קראנקהייטען צו טויזענדער קינדער יעדען זומער.

אוופ עס איז ווערטה צו האבע א בייבי, איז עס ווערטה דאס זעלבע צו רעטען. האלב פון די קינדער וועלכע שטארבען אין פענטולווייניא וואלטען געקענט גערעטעט ווערען אויפ מען זאל די קינדער וועלכע שטארבען אין פענטולווייניא וואלטען צירקולאר.

סעמועל דוש. דיקסאן,

געזונרהייםם קאמישיאנער,

דען לטען רושון, 1912.

FORM 20 D .- Slovak.

#### ZACHRÁNTE DETI.

## PRAVIDLÁ, KTORÝMI TREBA SA RIADIT PRI OPATROVASÍ A KOJENÍ NEMLUVNAT V LETE.

Horúce počasie tohoto obdobia je veľmi nebezpečné životu nemluvňat a malých dietok, a to nielen následkom stiesňújúcich účinkov vysokej vzdušnej temperatúry vo všeobecnosti, ale zvlášt pre účinok, aký má horúce počasie na všetky záhube podliehajúce články potravné medzi którými na prvom mieste stojí kravské mlieko.

Je preto najvýš dôležité, aby kravské mlieko, ktoré má slúžiť za potravu nemluvňatám, bolo to najčistejšie a najčerstvejšie, aké vôbec možno kúpiť. Počas horúceho počasia ľad je nezbątue potrebný k zachovaniu mlieka a všetko mlieko, ktoré má slúžiť za pokrm, má byť najprv ľadom vychladené, akonáhle výnde z kravy a pri ľade

má byt držané do tých čias, kým ho nedáme k použitiu.

Tých málo peñazí, čo stojí ľad, môže zabrániť nemoci, a o mnoho viac stoja lieky, ošetrovanie a opatera lekárska. A pretože voda je často nosičom nemoci, je najbezpečnejšie uživať vodu len v stave prevarenom tak na pitie, ako i pri pripravovaní detského pokrmu.

Nasledovné pravidlá pomôžu Vám udržať Vaše dietky v zdraví

počas horúceho počasia:

Kojenie.—Každá matka má kojiť svoje nemluvňa mliekom svojim. Prsné mlieko je prirodzenou potravou novonarodeného decka. Žiaden iný pokrm nevyrovná sa tejto. Prsy živené dieť a má o mnoho väčšiu

možnosť, že ostane na žive, ako dieť a chované flaškou.

Po narodení, kým čakáte na príchod prsného mlieka, nedávajte dietku žiadnej umelej potravy. Vezmite si dietko k prsiam každé štyri hodiny a nedávajte mu nič iného ako vodu, ktorá bola prv prevarená. Nemluvňa nepotrebuje nič iného a nezahynie hladom. Ked príde mlieko do prs, dajte nemluvňatu cicať baždé dve hodiny čez den a v noci dva lebo tri razy.

Nekojte dieta zavše, keď kričí.-Mierne množtvo kriku napomáha vývoj pľúc. Nemluvňatá, kojené nepravidelne, alebo zavše, akonáhle sa dajú do kriku, obyčajne trpia na nezáživnost a potom následkom bôl'ov kričia ešte väčšmi. Kojte pravidelne vždy v riadnych prestávkach. Dávajte dietku trocha prevarenej vody niekoľko razy čez deñ.

Ked nemluvňa je dvamesačné predlžte čas medzi kojením na 2 i pol lebo tri hodiny čez deñ a v noci dajte mu prse len raz lebo dva razy.

Neodstavujte diet'a, kým toto priberá na sebe a nečinte tak nikdy prv, kým sa neporadíte so svojim lekárom. Nenasledujte radu priateľov alebo susedov straniva odstavenia. Ak dieta zostáva zdravé, ale po istom čase prestane priberat' na váhe, nehl'adajte príčinu toho, akoby mlicko Vaše nebolo viac dobré ale porad'te sa s lekárom, či nemáte si pribrat' jednu lebo dve flašky na výpomoc.

Zivenie flaškou.—Ak sa stane potrebným, krmiť nemluvňa úplne lebo čiastočne flaškou, pamätajte, že pri takomto živení je potrebná čistota vo všetkých podrobnostiach. Akonáhle sa flaška vyprázdni, vypláchnite ju studenou vodou, za tým vymyte ju horúcou vodou a boraxom (1 čajová lyžka do 1 pajntky vody) a odložte ju k ďalšiemu vymytiu. Ak máte len málo flašiek a stane sa potrebným použiť tú istú flašku k nasledujúcemu kojeniu, dajte ju na niekoľko minút do vriacej vody a len potom naplňte ju čerstvou. Nikdy nedajte dieťaťu požívať pozostatky z flašky, ktorú ono nevyprázdnilo naraz. Vezmite flašku z kolísky, vylejte z nej pozostalé mlieko a vyčistite ju bezodkladne. Tvarôžky zo starého mlieka, nalepené na vnútorných stenách flašky stanú sa po niekoľko hodinách jedovatými a môžu zanečistiť čerstvé mlieko, akonáhle s týmto prídu do styku. Je lepšie mať toľko flašiek, koľko razy dávame dieťaťu denne potravu. Takže všetké flašky môžu byť každé ráno pred pripravením potravy spolu vyvarené.

Cmúlky.—Čím jednoduchší je cmúlok, tým bezpečnejší je pre nemluvňa. Neužívajte komplikovaných cmúlkov a za žiadných okolností nekupujte flašku s dlhou ku cmúlku pripojenou gummovou rúrkou. Taká flaška nemôže byt udržovaná v čistote a iste zapríčiní brušné nesnádze. Akonáhle je flaška vyprázdnená, cmúlok má byť ihneď odstránený, obráťte ho rubom na palci, ošuchajte kefkou namočenou v studenej vode. Kefka táto má byt držaná jedine k tomuto účelu. Po použití vyvarte kefku v horúcej vode.

Vyčistený cmúlok má byt držaný v čerstvej boraxovej vode (1 čajová lyžka boraxu do 1 pajntky vody) v zakrytom pohári. Vypláchnite cmúlok vo vriacej vode pred každým použitím.

Neberte cmúlok do svojich úst za účelom, aby ste sa presvedčili, či je mlieko dosť teplé. Nechajte padnúť niekoľko kvapôk mlieka na svoje zápästie, ako pocítite, že je veľmi horúce na zápästí, je veľmi horúce pre ústočká decka.

Pre prípravu mliečnej miešaniny pre dieťa neplatia žiadne všeobecné pravidlá. Každé dieťa potrebuje složku primeranú jeho záživnosti. Složka, ktorá je dobrá pre druhé dieta, môže byt prisilnou lebo prislabou pre Vaše decko. Porad'te sa preto lekára, ako máte pripravit' pokrm. Ak je potrebná smotánka, nekupujte túto—bude pravdepodobne stará—ale získajte si ju tak, že slejete asi polpajntky s vrchu kvartovej flašky mlieka, ale prv očistite okraj flašky.

Neprehrešte sa stálym menením potravy pre decko, ako to zvyčajne matky rady robievajú na radu "dobrých" susedov. Nasledujte úpravy svojeho lekára.

V lete pokrm pre nemluvňa po jeho pripravení má byť prinesený do stavu oparenia. Potom nech sa vleje do čistých flašiek, tieto zapchajú sa suchou bavlnou a držia sa pri ľade až do času použitia.

Nesohrievajte flašku, ked idete do postele, a ne-držte ju v posteli, kým nepríde čas kojenia, pretože sa Vám nechce ísť po ňu do skrine s l'adom a sohrievať ju, kedy nemluvňa ju potrebuje. Toto je istý spôsob urobiť dieťa chorým.

Stolica.—Flaškou krmené diet'a má mat' raz a nie viac ako dva lebo trirazy denne stolicu. Ak mlieko je čisté pri začiatku, držané bolo v chlade a vštké nádoby sú čisté, jako Vám o tom hore bolo pove-

dané, stolica diet'at'a má byť žltej barvy, nie veľmi tvrdá, aby snadno vyšla. Ak stolica stane sa zelenkavou, ale nie častejšou, ako dva lebo tri razy denne, dajte decku jednu lebo dve čajové ližky kastorového oleja. Ak barva stolice po tomto sa nezlepší, poradte sa s lekárom. V tomto čase lekár bude ešte v stave zabrániť vážnejšej brušnej nemoci, ktorá dieťaťu hrozí. Ak barva stolí zostáva i ďalej zelenou a diet'a ide na stolicu častejšie, pät', šest' lebo i viac razy v behu 24 hodín, dieťa Vaše dostáva brušnú nesnádz, alebo letnú nemoc. Zastavte mlieko doraz a miesto neho dávajte dieťať u prevarenú čistú

vodu a povolajte lekára. Možno, nebude ešte neskoro. Nezačnite krmit' s mlekom prv, kým Vám tak nenariddi lekár. Zastavením mlieka neublížite dieťaťu: každá kvapka mlieka, ktorá sa po tejto výstrahe dostane do úst nemluvňaťa mení sa na jed a zhoršuje stav diet'at'a. Zapríčiníte vážnu ba aj osudnú nemoc, ak i ďalej budete dávať decku mlieko potom, ked črevá stanú sa voľnými

a stolica barvy zelenej.

Dávenie.—Flaškou krmené nemluvňa nemalo by dáviť, ak potrava jeho je čistá a primerane pripravená k jeho protrebám. Ak nastane dávenie, je to dl'a vštkého predzvesť blížiacej sa choroby, lebo jednej z tých vážnejších detských nemocí, lebo nemoci takzvanej letnej, ktorá v horúcom období je častou. Dávenie z tejto príčiny môže byť prvým znakom nesnádze a črevá nestanú sa voľnejšími len po niekoľko dňov. Ak dávenie sa opakuje, zastavte dávať dieťaťu mlieko, dávajte mu prevarenú vodu, studenú alebo takej temperatúry, v akej my bolo dávané mlieko a porad'te sa bezodkladne s lekárom.

Odev.—Nedávajte mnoho šiat na nemluvňa v lete. Počas najhorúcejšej povetrnosti, odstráňte s neho väčšinu šatočiek; tenká voľná košieľka a plienka postačí vo veľmi horúcich dňoch a veľmi

horúcich nociach.

Nikdy neužívajte šiat s úzkymi pásy. Košielky a sukničky so

strapcami na ramenách sa odporúčajú.

Kúpanie.—Kúpajte dieta každý deñ. V horúcom počasí v tielko nemluvňať a s mokrou špongiou. To ho obsčerství a bude lepšie spať. Umyte diet'a za každým, keď·mu dávate druhú plienku a usušte najprv dobre čiastku tela, ktorú posypete prachom. Vyperte zanečistené plienky. Nikdy neužívajte usušenú zanečistenú plienku, kým ju prv nevyperiete.

Muchy.—Dávajte pozor, aby muchy nesadaly na flašku die'tat'a a jeho potravu, tiež aby nesadaly na rty nemluvňaťa, keď toto spí. Muchy prinášajú tisícim a tisícim nemluvňatám nemoc každé leto.

Čerstvé povetrie.—Čerstvé povetrie je práve tak dôležitým pre zdravie nemluvňaťa, ako čerstvá potrava. V lete držte dieťa nakoľko možno vonká. Nezdržujte sa s deckom v kuchyni — môže dostať "slnečný úpal" od veľkej horúčosti dnuká.

Kožné vyrážky.—Ak dieťa má vyrážku alebo pukliny kožné, poradte sa s lekárom. Nemyslite si, že každá červená škvrna je ničim iným, ako vypretinou, môže to byť príznakom vážnej nemoci, jako šarlach, záškrt, kiahne malé alebo ovčie.

Ak hodné je mať dieťa, je hodno ho zachrániť. Polovica detí, ktoré zomrú v Pennsylvanii každé leto, mohla by byť zachránená nasledovaním rád v tomto obežníku.

Vydaný 15. mája, 1909. Opravený 1. júna, 1912.

# GENERAL DIRECTIONS FOR FEEDING YOUNG CHILDREN.

[These directions are not intended to take the place of the family physician. Always consult your doctor in regard to the feeding of your child.]

From 12 to 15 months.—Accustom the child to drink from cup and take food from a spoon. Five meals should be given in 24 hours.

Breakfast.—Cup of cow's milk, a saucer of oatmeal or barley-flour jelly, with milk, or cream of wheat with milk. The oatmeal jelly is made by putting two-thirds of a cup of rolled oats and 1 teaspoonful of salt into 3 cups of boiling water. Let it boil 2 minutes, then cook over hot water for 4 hours. Strain. What goes through is oatmeal jelly, and may be kept in a cool place. Make a fresh supply every day. Milk may be warmed to suit taste; it should not be iced.

Forenoon lunch.—Cup of cow's milk.

Dinner.—Broth or beef juice, bread a day old crumbed in milk.

Afternoon lunch.—Cup of milk. Supper.—Bread crumbed in milk.

If possible, give two to four tablespoons of orange juice or other fruit juice in season before morning lunch. Be sure the fruit is sound and ripe. Do not give fruit juice at same time as milk.

Water may be given as desired, but sparingly at meals.

From 15 to 18 months—Breakfast.—Cup of cow's milk, saucer of oatmeal jelly with milk, or flour or Indian meal gruel, with milk, small piece of bread a day old with butter.

Forenoon lunch.—Cup of milk, small piece of bread and butter.

Dinner.—Broth or beef juice with boiled rice or barley, and a small piece of bread and butter.

Afternoon lunch.—Cup of milk.

Supper.—Cup of milk, bread a day old and butter, a little apple sauce or pulp of stewed prunes or baked apples with skin and seeds removed.

Water may be given as desired, but sparingly at meals.

From 18 months to 2 years.—Breakfast.—Cereal and milk. Cup of milk. Bread a day old and butter.

Lunch.—Cup of milk with bread and butter or simple crackers, or

Indian-meal johnny cakes and milk, or corn bread and milk.

Dinner.—Broth with boiled rice or barley, or eggs, soft boiled or poached, baked or mashed potatoes with butter and salt, bread and butter.

Afternoon lunch.—Piece of bread and butter.

Supper.—Milk, bread and butter, or milk toast, pulp of baked apple, apple sauce, stewed prunes or ripe fruit according to season. Water may be given as desired, but sparingly at meals.

74

From 2 to 3 years.—Additions to the diet must be gradually made by selecting articles from the list below, always giving small portions at first, and never trying two new articles at one meal. All food

must be finely cut or mashed, and well chewed.

Select from the following articles: Milk, eggs, soft boiled, poached or scrambled, or mutton or lamb chops, baked or mashed potatoes, young peas or beans, scraped beef, white meat of chicken, boiled fish, oatmeal, hominy, wheat-germ, cream of wheat (all these cereals being thoroughly cooked); broths and soups; white and graham bread a day old, toast, zwiebach, plain crackers, milk toast, junket, plain custard, corn-starch pudding, bread pudding, blanc mange, ice cream, rice pudding; oranges, baked apples, apple sauce, stewed prunes, and pulp of peaches and pears if ripe and sound.

From 3 to 6 years.—From 3 to 6 years select in addition from the following articles: Beef steak, roast lamb, stew of mutton or beef, hash of mutton, beef or fish; bacon, mutton or lamb chop, corned beef; baked beans, string beans, spinach, asparagus, summer or winter squash, beets, tapioca pudding, molasses ginger bread, sugar or molasses cookies, grapes (with seeds and skin removed), ripe

bananas (not more than 1 in one day), melons.

During the 3 to 6 years four meals should be given at regular intervals, as 7 a. m., 10.30 a. m. (a smaller meal than the other three), 1.30 p. m. and 5. p. m.

The following is suitable for a child of 4 years:

Breakfast.—Half an orange, two tablespoonfuls of cereal with milk and sugar or salt, glass of milk, bread and butter.

Forenoon lunch.—Glass of milk or cup of broth, bread and butter

or crackers.

Dinner.—Two tablespoonfuls of stewed meat finely cut, tablespoonful of baked potato with butter and salt, a tablespoonful of green peas well mashed, bread and butter, a cup custard.

Supper.—Milk, bread and butter, cooked fruit.

Do not give articles on the following list till the child is 4 years

or older:

Fried meats and vegetables, tomatoes, carrots, turnips, egg plant, or green corn, hot bread or hot rolls, buckwheat or other griddle cakes, fruit cakes, candy, and nuts.

Never give children wine, beer, or cider.

Do not give celery, cucumbers, lettuce, radishes, cabbage, onions, or pies, tarts, doughnuts, tea, or coffee until the child is 7 years old.

Tea and coffee should even then be weak.

When children are constipated, do not dose them with medicines but consult a physician. If children over 2 years of age are constipated give them more vegetables, ripe fruit, stewed prunes, oatmeal, molasses gingerbread, rye mush and molasses, rye bread and graham bread. Avoid wheat bread and crackers.

PROVIDENCE, May, 1911.

## COMMENT PRENDRE SOIN DES BÉBÉS.

#### POUR CONSERVER UN BÉBÉ EN BONNE SANTÉ.

1. Donnez à l'enfant de l'air pur et le jour et la nuit.

- 2. Ne lui donnez d'autre aliment que le lait de sa nourrice, le biberon ou autre nourriture d'après ordonnance du médecin.
- 3. S'il pleure, s'il est agité ou nerveux, ne lui offrez que de l'eau.
  4. Donnez-lui suffisamment de sommeil, qu'il dorme au moins deux fois par jour.

5. Ne le surchargez pas trop d'habits.

6. Baignez-le tous les jours.7. Laissez-le seul et tranquille.

## COMMENT PRENDRE SOIN DES BÉBÉS PENDANT LES CHALEURS.

Pour prévenir la diarrhée, la maladie, la mort, le Bureau de Santé

prescrit les règles suivantes:

Air.—Que l'enfant dorme ou non, il a besoin d'air pur et le jour et la nuit. Ne permettez pas au bébé de stationner dans une chambre fermée, ni dans un appartement où se fait cuisine ou lavage. Faites le sortir à une heure matinale, évitez que le soleil lui donne dans les yeux. Gardez-le dehors durant les nuits très chaudes.

Veillez à la propreté et au bon air de la maison. En temps chaud ouvrez portes et fenêtres tant la nuit que le jour. Ayez toujours

une fenêtre ouverte dans la chambre.

Nourriture et eau—Excès de nourriture: Diarrhée.—Autant que faire se peut, chaque mère doit allaiter son enfant; la meilleure nourriture pour un enfant au-dessous d'un an est le lait de sa mère.

Une des principales causes de maladie chez les jeunes enfants provient de l'excès de nourriture, ce qui très souvent occasionne la diarrhée, les maladies de langueur et parfois la mort. La diarrhée ne provient pas de la dentition mais plutôt de l'excès de nourriture, de nourriture trop fréquente, du manque d'eau à boire, du manque de sommeil, ou de ce que l'enfant soit manié trop souvent.

Heures pour allaiter.—Le moyen d'éviter la diarrhée et la maladie est de nourrir l'enfant à la mamelle et de le nourrir très régulière-

ment.

Règles pour nourrir Venfant suivant l'âge.—Depuis la naissance et pendant les deux ou trois mois consécutifs, allaiter l'enfant toutes les deux heures. A partir de deux mois et demi jusqu'à cinq, l'allaiter toutes les deux heures et demie. A dater de six mois jusqu'à douze, toutes les trois heures seulement. Ces régles doivent être observées pendant la journée, depuis six heures du matin jusqu'à six heures du

soir. L'enfant ne doit pas être allaité plus de deux fois pendant la nuit. Eveillez l'enfant régulièrement pour le nourrir durant le jour,

mais non pas entre dix heures du soir et six heures du matin.

Quand l'enfant est élevé à la mamelle laissez-le se satisfaire, quand il en a pris suffisamment faites-le attendre jusqu'à l'heure règlementaire pour l'allaitement suivant. S'il pleure ou s'il est nerveux, impatient, donnez-lui de l'eau froide, bien pure, sans mélange ni addition de sucre ou d'autre chose.

Sevrage.—Ne sevrez jamais un enfant au commencement de l'été. En le sevrant donnez-lui du lait de vache dilué, une fois le jour

d'abord, puis d'avantage jusqu'à sevrage complet.

Enfants élévés au biberon.—Le meilleure nourriture pour un enfant élevé au biberon est le lait de vache, frais et non écrêmé, préparé d'après prescriptions du médecin. Ce lait ne doit jamais être servi a un enfant très jeune sans être mélangé d'une certaine quantité d'eau. Ne donnez jamais à l'enfant de lait condensé, ni pain, viande, pommes de terre, bonbons ou autre chose analogue sans l'avis du docteur.

Conservation du lait.—Le lait destiné aux enfants ne doit pas subir le contact de l'air, mettez-le dans un endroit frais, autrement il s'aigrirait et rend l'enfant malade. En été munissez-vous de glace, si faire se peu, et autant que possible maintenez-y le lait, ou à proximité. A défaut de glace entourez l'ustensile contenant le lait d'un linge bien imbibé d'eau froide. Les enfants au biberon devront être nourris aussi régulièrement que ceux à la mamelle.

Nettoyage des biberons.—Servez-vous d'une brosse pour nettoyer les biberons, rinsez-les d'abord à l'eau froide, ensuite à l'eau chaude contenant du soda, rinsez-les plusieurs fois, ensuite emplissez les biberons d'eau en y ajoutant encore une pincée de soda, laissez-y l'eau jusqu'au moment de se servir du biberon. Ne laissez jamais le lait y

séjourner, ne vous servez pas de biberon à long tube.

Tetines.—Ayez au moins deux nipples. Quand l'enfant a été nourri et que le biberon est lavé, retournez le nipple, lavez-le dans de l'eau chaude, maintenez-le ensuite dans un bol d'eau de soda jusqu'à nouvel usage. Veillez à ce que l'enfant ne prenne pas sa nourriture trop vite, des vomissements pourraient se produire.

Sommeil—Lit.—Ne faites jamais servir à l'enfant un oreiller de plumes, ne le couchez pas non plus sur un lit recouvert de caoutchouc ou de toile cirée; un tel lit échauffe le dos et la tête de l'enfant et le

rend susceptible de prendre froid quand il se lève.

Le meilleur lit pour un enfant est celui d'excelsior recouvert de mousseline (cheese cloth). Cet excelsior se vend dans tout magasin à quelques cents le sac et le prix de la mousseline est de trois ou quatre cents la verge. Ce genre de lit est toujours propre, frais et confortable, il contribue à fortifier l'enfant et le préserver de la toux et des refroidissements. Vu son prix peu dispendieux, si ce lit se trouve sali ou taché, matelas et excelsior se renouvelle à peu de frais. Ce mode de lit est spécialement recommandé en été pour des enfants malades.

Ne bercez pas l'enfant.—Habituez de bonne heure l'enfant à s'endormir sans être bercé. Veillez à ce qu'il sommeille dans la matinée et l'après-midi et cela sans lui faire prendre la mamelle ou

le biberon.

Pleurs.—Très souvent les enfants pleurent quand on les couche; laissez-les tranquilles sans leur parler, ni les manier, leurs pleurs cesseront pour faire place au sommeil. Laissez l'enfant crier un peu, ses poumons s'en trouvent mieux et ces cris ne nuisent nullement à l'enfant.

Laissez l'enfant seul et tranquille.—Quand l'enfant est éveillé ne le tenez pas toujours dans vos bras ou sur les genoux; le faire passer d'un bras dans un autre et d'une personne à une autre, le rend de mauvaise humeur, nerveux et malade. L'enfant aime à jouer seul, par conséquent laissez-le livrer à lui-même, que quelqu'un l'observe

et le surveille mais ne le manie pas incessamment.

Vêtements.—Ne surchargez pas l'enfant de vêtements pendant les chaleurs surtout, il ne doit porter ni bandes, ni ceinture piquée. Excepté le cas où l'enfant serait très délicat, son habillement doit consister en une chemise, un jupon, une robe en coton et une serviette ou couche. Les serviettes soient en "diaper cloth" ou coton flanelle et non en laine ou caoutchouc. Les serviettes devront être changées aussitôt mouillées et immédiatement lavées à l'eau chaude. Après chaque selle, l'enfant devra être bien lavé; il arrive assez souvent qu'il soit écorché, et cela, soit parce qu'il n'est pas bien lavé, soit parce que la poudre est appliquée avant entière propreté, soit encore parce que les couches ne sont pas lavées mais seulement séchées et usagées de nouveau.

Bain.—Le bébé doit être baigné à heure fixe tous les matins, la température de l'eau sera de deux degrés plus élevée que celle de l'enfant. Faites l'essai de cette eau sur votre figure afin de vous convaincre qu'elle n'est pas trop chaude. Servez-vous du savon "Ivory" ou "Castile."

Régles pour enfants malades.—Si l'enfant est indisposé pendant les chaleurs, déshabillez-le à l'exception de la serviette et revêtez-le d'une robe de nuit. S'il est fièvreux et brûlant, appliquez-lui plusieurs compresses d'eau froide, laissant l'eau s'évaporer, ce qui diminuera sa température. Faites lui boire de l'eau froide si possible. S'il vomit, ce qui arrive souvent, ne lui faites prendre ni nourriture, ni remède; donnez-lui une cuillerée à thé d'eau de chaux toutes les heures jusqu'à l'arrivé du médecin. S'il souffre de convulsions, donnez-lui un bain chaud, faites couler de l'eau froide sur sa tête, administrez-lui ensuite une injection de savon et d'eau.

N'arrêtez pas les vomissements en lui faisant prendre aucun thé ou cordial; vomissements et diarrhée sont les suites d'une indigestion,

il faut qu'il s'en débarrasse.

#### SUMMER CARE OF BABIES.

The proper food for babies is mother's milk.

Nurse your baby, if possible.—Ten bottle-fed babies die to one that is breast-fed.

Nurse the baby regularly at certain hours, and not every time it cries. Once in two or three hours is often enough to nurse it until it is 4 or 5 weeks old; after that not so often. Nurse the baby until it is 8 or 9 months old. Do not wean your baby during the hot weather.

Many infants are killed every year by bringing them to the table with the family and giving them food for which the little stomachs are not fitted. While you nurse your baby do not give it a morsel of solid food or give it either tea, coffee, or beer. Wait until the baby gets teeth before giving food which needs to be chewed.

If breast milk fails, feed your baby cow's milk from a clean bottle. Bottle-fed babies must be given only good milk, which is kept constantly covered and on ice. If the milk can not be kept properly

covered, it should be boiled as soon as received.

To keep milk sweet for your baby, put the milk which the baby will need during the next 24 hours in a bottle with tight cork or a glass jar having tight cover. The bottle or jar and the cover must be boiled before the milk is poured in. Set a pan of cold water on the stove. Put in vessel, with top loosely screwed on, containing baby's milk. When water boils take out the vessel with baby's milk, open, add a little less than one-half teaspoonful of baking soda to one quart of milk. Put back the cover of the vessel. Do not allow anyone to touch the milk unless using it for the baby.

Don't overfeed the baby.—A newborn baby's stomach will hold from two to three tablespoonsful, and not more than this amount; rather less should be given at a time during the first week or so of a bottle-fed baby's life. As the baby grows the quantity should be gradually increased, so that at the end of the first month it may be taking about four tablespoonsful at a meal. Some children will require more, and others will not stand so much, but there is more danger of giving too much at a time than too little.

Weigh the baby each week.—A healthy baby should gain a pound a week at this period of life. If your baby does not gain this, consult your doctor about the food to be given and be guided by his advice.

If the baby cries, remember that if it has been fed regularly it is not crying from hunger.

It may be thirsty. It may have colic.

See that its hands and feet are warm. That it is not too hot (sweating). That its diaper is soft, clean, and dry.

That no pins are wounding it.

To prepare milk for baby's meal.—To each cup of milk add two cups of water and white sugar (sometimes sugar of milk is better), enough to make it as sweet as breast milk. Pour it into bottle. Heat this milk until it is as warm as breast milk. Put rubber nipple on bottle.

Don't feed a baby under 6 months of age with a spoon.—Sucking is the natural way by which a baby takes its food. It needs the sucking action of the lips and mouth and tongue to mix its foods with the fluids of the mouth and for the proper development of the mouth and teeth.

Don't use a tube on the bottle.—Use a nipple.

Don't forget to wash bottle and nipple after using.—Babies often get "sore mouth," "wind colic," and "summer complaint" from a want of care of the nursing bottle.

Cleanse the bottle immediately after feeding.

Cleanse the nipple thoroughly outside and inside. Nipples with tubes are convenient for a lazy mother, but mean death to the baby.

To prepare barley water for the baby.—When the baby is 4 or 5 weeks old, barley water should be used in the place of plain water. Put two tablespoonsful of pearl barley into four cups of cold water; boil an hour or more until the amount of water is reduced to two cups; then strain through a clean cloth; add a pinch of salt and sweeten to breast-milk taste. Add this to a cup of scalded cow's milk, as before described, and begin feeding this strength. Use more cow's milk gradually and less barley water until at about 6 months of age the child is getting two-thirds milk and one-third barley water. This will make as good food as the baby can get during teething and weaning. After this time then one can use pure milk, scalded as before; bread and milk; rice and milk; baked potatoes and milk; oatmeal porridge (well cooked) and milk (the milk always to be scalded, not boiled). No other foods are necessary, except those mentioned above.

Bathing.—Keep the baby clean and it will stand the heat better.

Bathing.—Keep the baby clean and it will stand the heat better. It should have at least one full bath every day, and oftener during extreme heat. Never bathe the baby within an hour after feeding it.

Bathe first; feed afterwards.

Clothing and fresh air.—Dress as lightly as possible in hot weather. Keep the baby in the open air out of the hot sun. At night keep the windows open, but have them screened, and keep out the flies. When the weather turns suddenly cool care must be taken to avoid chilling. A thin, soft, flannel binder wound two or three times around the body should be worn. This binder should be only wide enough to cover the belly, and should be wound smooth and free from creases or folds and fitted with a few stitches of soft darning cotton; no pins.

Do not let the baby sleep in the same bed with any other person.—If there is no crib, the mother should put a couple of chairs at her bedside, with a soft covering on them, and let the baby sleep there. It will be more comfortable on a summer night than lying against the hot body of its mother and will not be so apt to disturb others or to be disturbed. The backs of the chairs will keep the baby from falling, and the mother can readily reach over to care for it when necessary.

If the baby vomits, has a diarrhea, or seems sick, stop all milk and give nothing but warm water in the nursing bottle, and send for the doctor.

## אויפפאסונג אויף בייבי׳ם אין זוּמער.

די ריכטיגע נאַהרונג פיר בייבים איז דער מוטער׳ם מילך.

זויגָם איוער בייבי אויב עם איז מעגליך. די שמערבליכקיים איז צעהן מאַל גרעסער ביי באַמעל בייבים ווי ביי ברוסמ בייבים.

ערנעהרם די בייבי רעגעלמעסיג אין געוויסע שמונדען, און נים יעדעם מאָל ווען עם ערנעהרם די בייבי רעגעלמעסיג אין געוויסע שמונדען, און נים יעדעם מאָל ווען עס איז שריום, איון מאָל און צוויי אָדער אין דריי שמונדען איז גענוג צו געבען זויגען ביז עס איז פיער אָדער פּינרְ וואָכען אַלם; נאָכדעם נים זאָ אָפּם, זויגם די בייבי ביז עס איז אַכט אָדער ניין מאָנאַמען אַלם, ענפוועהנט נים אייער בייבי אין די הייסע וועמערען. פיעלע קינדער ווערען יעהרליך געמיומעם דערמים וואָס מען ברענגם זיי צום מיש מים

דער פאַמיליע און מען גים זיי שפּייוּ, וואָס פּאַסט זיך נים פיר זייערע קליינע מאָגענס. ווֹעתרענד אותר זוֹיגם אויער בייבי זאָלם איתר איתם נים געבען קיין ברעקעל סאָלידע שׁפּוֹיז, מהעע, קאָפע אָדער ביער. וואַרט ביז די בייבי האָט צייהנער איידער איהר גיט איהם שפייז,

בותע, קהבע הוער בעור. וופום בין זי בייבי זיים ביינית בייבי היינית בייבי באמעל.
וועלכע מוז צוקיועם ווערען.
ווען ברוסם מילף פעהלמ, ערנעהרם אייער בייבי מים קוה־מילך פון אַ ריונע באָמעל.
באָמעל בייבים מוז מען געבען גומע מילך, וועלכע איז שמענדיג געהאַלמען צוגעדעקמ
און אויף אייז, איים די מילך קען בים געהאַלמען ווערען גומ צוגעדעקמ, מוז עם געקאָכמ

ווערען באַלר ווי מען ערהאַלב עם. אום צו האַלבען די מולך זים פור איוער ביובי, גיסט אַריין די מולך, וועלכע די ביובי אום צו האיפען די מורך זים פיר איוער ביובי, גיסט אַריין די מולך, וועכע די ביובי וועב האיפען אין די מולך, וועכם על ביובי אועב האיפען אין די בעיסטע 24 שמונדען, אין אַ באָטעל מוט אַן ענגען פּראָפען, אָדער אין אַלעינינעם קריגעל מוט אַן ענגען דעקעל. די באָטעל אָדער דער קריגעל און דער דעקעל מון געקאָפט ווערען איודער מען גיסט אַריין די מולך, שטעלט ארויף אויפ'ן אויווען אַ בוטערנע מוט קאָרטע וואַסער, שטעלט אַריין דאָרטען דאָס געשיר, אין וועלכע עס געפינט זיך די מילך, מיט דעם דעקעל ליוז אָנגעשרויפט, ווען דאָס וואַסער קאָכט, געמט אַרויס דאָס געשיר מיט דער בייכו'ם מילך; עפענט אויף, שהוט אַריין אַביסעל וועניגער ווי אַ האַלבע באַק־סאָדאַ צו איין קוואַרט מולך, זעצט אַרויף צוריק דעם דעקעל אויף דעם בעשיר, ערלויבט קיינעם ניט אָנצוריהרען די מילך, סיידען ווען מען וויל עס געברויכען פּיר געריינים

וועגם די בייבי יעדע וואָד. אַ געזונדע בייבי דאַרף צונעהמען אַ פונט אַ וואָך אין דיעזער לעבענסצייט, אויב אייער בייבי נעהמט ניט צו אַזוי פועל, פרעגט אייער דאָקטאָר וועגען די נאַהרונג און מהומ ווי ער הייסט אייך.

אויב די ביובי שריים, געדענקם דאָס אויב עס איז רעגעלמעסיג ערנעחרם שריים עס נים פון הונגער. מעגליך ער אין דורשטיג. מעגליך ער האָט קאָליק.

זעהם דאָס זיינע הענד און פים ייינען וואַרעם. דאָס איהם איז נים צו היים (דאָס ער שוויצם נים).

דאָם דער דייפער איז ווייך, ריין און טרוקען.

דאָם דען דייפעי היי וויין, ייין היין ביייען דען דען דען דען דען פון דען פון פער פער פער פער פער אום איהם.

ווי צו פאָרבעריימען מילך פאָר אַ בייבי'ם מאָלציים. — גים צו צו יעדער קאפע מילך צוויי קאָפעם וואָםער און ווייםע צוקער (אָפט איז בעסער מילך־צוקער) גענוג אום צו מאַכען די מילף זים ווי ברוסט מילך, שמעלם אַרויף אַ גימע ניפעל אויף דעם באָמעל.

ערנעהרם נים אַ בייבי וואָס איז וועניגער ווי זעקם מאָנאַט אַלט מים אַ לעפעל, זויגען ערנעהרבי יישר בייבי וואָס איז וועניגער ווי זעקם מאָנאַט אַלט מים אַ לעפעל. זויגען דער ביידער פיידער אווי דער פיידער די מהאמין אַרונון עם רעדארה דו מהאמין איידער דיידער פיידער אווי ביידער פיידער פיידער ביידער מיידער די מהאמין איידער דער פיידער פיידער פיידער פיידער די מוויגער פיידער פיידער פיידער דער פיידער פ

איז דער נאַטירליכער וועג, אויף וועלכען די בייבי נעהמט נאַהרונג. עס בעדאַרף די מהאַט פון שמאָקצען מיט די ליפען, דעם מויל און דעם צונג אום דורכצומישען זיין שפּייז מיט די

בון שהפקבען היש זי יישקן, זעם מהיא און זעם צובג אום ודובצומישען ויין שפייז מים די פליסוגקיים פון דעם מוול און די צייהנער. פליסוגקיים פון דעם מוול און די צייהנער. געברויכט פון דעם מיין רעחר אויף דעם באָמעל. געברויכט אַ ניפעל. פערגעסט נים צו וואַשען די באָמעל און דעם ניפעל נאָך דעם געברויך. בייבים בעקומען אָפט אַ "קראַנקען מוול", "ווינט קאליקם" און "זומער קראַנקהיימען" פון פערנאַבלעסיגען די זויג־באָמעל.

רויניגט די באַמעלם גלייך נאָכדעם ווי מען האָט דאָט קינד געגעבען עסען.

31390°--14----6

רייניגט גוט אויס דעם ניפעל אינוועניג און אויסענוועגיג, גופעלס און רעהרען זיינען בעקוועם פיר אַ פוילע מוטער, אָבער זיי מיינען טויט פיר די בייבי ווי מען פאָרבערייטעט באַרליי־וואַסער פיר די בייבי

ווי מען פּאָרבעריימעט באַרריירוואַסער פּיר די ביובי.
פיר אַ בייבי פון פּיער אַדער פּינהְ ווּאָכען דאַרהְ מען געברויכען באַרליירוואַסער אָנשמאָט פּיריינע ווּאַסער, שיט אַריין צוויי טהעערלעפעלעך פּערל באַרליי אין פּיער קאָפעס קאָלטע ווּאַסער; לאָזט עס קאָכען אַ שטובדע אָדער מעהר ביז עס בלייבט גור צוויי קאפעס ווּאַסער. דאָן זייט עס דורך אַ רייגעם לייווענט; גיט צו אַ שטעק ואַלץ און מאַכט עס זוס, עס זאָל האָבען דעם געשמאַק פון ברוסט מילך, גיט עס צו צו אַ קאָפּע געבריהטע קוח מילך, ווי אויבען בעשריבען, און הויבט אָן ערנעהרען ביי דיעזער שטאַרקייט, שטופעגוויין געברויכט מעהר קוה מילך און און הווּסעל, זאָ דאָס אוגגעפעהר צו זעקם מאָנאט זאָל דאָס קינד בעקומען צוויי דייטיעל באַרליי וואַסער, דיעועס וועט אויסמאַכען אואַ גושע נאָהרונג דייטעל מילך און איין דריטעל באַרליי וואַסער, דיעועס וועט אויסמאַכען אואַ גושע נאָהרונג דייטעל בירייטעל באַרליי מאַבט די צייהנער און ביים ענטווערנען. נאָך דייטעל בירייטען ריינע געבריהפע מילך, ווי אויבען געוּאָגט ; ברויט און מילך; דייט קען מען געברויכען ריינע געבריהפע מילך, ווי אובען געוּאָגט ; ברויט און מילך; דייז און מילך מוז שטענדיג זיין געבריהט און ניט געקאָכט). קיינע אַנדערע שפּייזע אויסער די וועלכע זיינען אויבען דערמאַנט געוואָרען זיינען נייפיג.

די וועקכע זיינען אויבען דערשפעם געוופוען נוימיגען פערטרפגען די חומץ, ער באַ ד ען. האַלט די ביובי ריון און ער וועט בעסער קענען פערטרפגען די חומץ, ער דארף האַבען וועניגסטענס איין באָד יעדען מאָג, און עפטערס ביי די גרויסע הימצען. באַדעט פוין מאָל ניט פריחער ווי אַ שטונדע נאָך די נאַהרונג. באַדעט פריהער און דערנאָך ערנעהרט, קליידונג און פרישע לופט, קליידעט די בייבי אווי לייכט ווי מעגליך אין אַ חייסען וועבער, האַלט די בייבי אוופ'ן פריוען לופט, אָבער ניט אויפ'ן זון. לאָזט ביינאַכט די פענסטער אַפער, האַלט די בייבי אוופ'ן פריוען לופט מין סרינט צו ערווייטערען די פליגען. ווען דער זערטר ווערט פלוצלינג קאַלט, מוז מען אוופאַסען צו פערמיידען פערקעלטונג, ער דאַרף בראַגען אַ ווייבען דינעס פלאַנעלענעם בינדער אַרומגעדרעהט צוויי אָדער דריי מאָל אַרום דעט קערפער. דיעזער דינדער דאַרף נער באַרף, און דאַרף קערפער. דיעזער בינדער דאַרף נאָר זיין בריים גענוג אום צו בעדעקען דעם בווך, און דאַרף זיין אַרומגעוויקעלט גלאַט אָהן קניימשען, צוזאַמענגעשמוקעוועט מיט ווייכע באַוועל; קיינע

לאַזען פֿאַלען, און די מופער וועם לייכם קענען צוקומען צו איהם ווען עם איז נחפת. אויב די בייבי ברעבט, לאַקפירט אָדער שיינט צו זיין קראַנק, האַלט אַב די מילד און גיש איהם נים אַנדערס ווי וואַרעמע וואַסער און דער זויג־באָמעל און רופט דעם דאָקפאָר,

## OPATRÉNÁ DIETACH V LETÉ.

Zvlastno jedená dietach je materinské mléko.

Ak len mozno, dajte dietatu prsé.—Desat rázy telko dietata zomru,

ćo z flasky piju, ako ćo prsé dostanú.

Dajté dietatu jest' porádné, v istim čase a ne vždy ked plačé. Jedon ráz každé dve alebo try hodiny je dostatočné, kim je dieta štiry lebo pet' tiždne staro; zatim ne tak časte. Dajte dietatu prsé kim jé osem lebo devat mesačno. Ne odviknujte dieta v horucim povetré

Mnoho diety zomrú kaźdy rok skrz teho źe ich nehaju s rodićám ku stolu sednut, a daju im táke jedla, prektoré maly žaludok je nésúcy. Kim dieta pri prsach nedajté mu any len kuśtyk celistvého jedla, any kávu, teú ćy pivo. Cakajte kim dieta má zuby na také jedla ktore po-

trebno źut'.

Ak nématé mleko v prsach, dajte dietatu mleko z čistej flašky. Dieta, ktoro z flašky pijé musy len dobro mleko dostávat, ktoto je vždy zakryto a na ladé. Ked nemožete mleko patrične zakryt, to ma

byt uvareno, ak skoro ho dostaneté.

Aby mleko slatké zostalo pre dieta, dajte mleko, ktoré pre dieta potrebno na nasledné 24 hodiny, do tuhé zapchatej flasky, lebo do skleneho krćaha, ktory je tuhé zakrity. Flaska alebo krćah musy byt vyvareny, kim mléko do teho lejeté. Dajté hrnec zimnej vody na pec a dajté do hrncu flasku s mlekom, otvorté a dajte malou ližickou pekacej sody ku jednim kvarte mleká. Zapchajte zasek flasky a nedovolté nikomu sa dotknut mleka, kim ho pre dieta ne béreté.

Nedajté dietatu pri moc.—Žaludok novorodeneho dietata zdržy dvá lebo try lyžicám a né viac, ako telo. Ráćej by ste maly mené dať v najprvšich tiždnach novorodeneho dietata, ktoro z flasy pijé. Ako dieta narastné dávka može byt postupné zvyššená tak že na koncú prvšeho mesiaca ak štyry lyžican može dostat káždy ráz. Daktoré diety viac požiadaju, druhé any telko ne zdržia, ale vždy nebezpećnejšie viac dať na jedon ráz, ako menéj.

Važite dieta každy tižden.—Zdravo dieta o jedon funt má rástnut' každy tižden v timto času života. Ak nerastné telko, opitajté sa Vašeho lekára jako jedaná máté mu dat' á srobté ako on vám porády.

Ked dieta plaće, pamätájté, že ked dieta dostane poriadné jest', to neplaće, z hladu.

Moźno, źe je smädno.

Moźno że má krćé v bruché.

Pozorujté aby ruky a nohy boly teplé. Aby nebolo pry horuco [úpoténo].

Aby ho spendliky nepichnuly.

Pripravéná mleká pre dieta.—Ku kaźdyn hrnćeku mléka dajté dvá hrnćeky vody a telo bjéleho cukru [dakedy mlekovy cukor je lepśy], aby tako téplo bolo ako mleko prsach, potom dajté ma flaśku cuclik.

Nedajté dietatu pod šest mesiacoch jest' s lyžicou.—Cicaná je prirodny sposob, ako má dieta dostat' svoj potrav. Pry cicania péry, ústá a jazyk zméšaju jedená so slinim ustách a ućinkuju patrićne rozvinuta ustách a zubách.

Ne uživajte rúrku na flašké, len cuclik.

Nezabudnité flašku a cuclik za uzivania umyt.—Diety častné dostanú "bolenia ustách," "vetrové kréy" a "letnú nemoc" skrz teho, že flaška je nedrzaná v patričnom poriadku.

Vyćistté flašku bezodkládné po uživania.

Vyćistté cuclik uplné z nútra a z vonká. Cucliky s rurkou sú po-

bodlé pre lenivu matkú, ale aj usmrtnú dieta.

Ako má byt pripravéná jačmenova voda pre dieta.—Ak je dieta stiry lebo pet tiždné staro, davajté mu jačmenovu vodu mesto običajnej vody. Dajté dvá lyžicé perloveho jacmená ku stiry hrnčykam vody, nehajté jednu lebo viac hodiny variť, kim nezostané viac ako dvá hrnčike vody. Potom precedajté cez čistu handričku, vložté kvapku soly a srobté ho tak sladko, ako mléko prsach. Ku timto prilejté jedon hrnček mleko kravej, tak obáréno ak vyšše spisano, a tak začinajte dávat dietatu. Postúpné berté viac kraveho mléka a menej jačmenovej vody, takom sposobom, že ked je dieta šest mesiačno dostané dva tretiny mléka a jednu tretinu jačmenovej vody. To je najlepšy potráv, čo dieta len dostat može v čase kedy mu zuby idu a pri odviknutia. Za timto časom už možete dávát čisto mléko, obaréno ako vyšše spisano; chléb s mlékom; ryžu pećené bandurky s mlékom; dobre uvarenu múku ovosá s mlékom; mléko vždy má byt obaréno a nie uvareno. Inšé jedená ako te vyšše spomuté su nepotrebné.

Kúpania.—Držte dieta v čistoté a lahkšé vydržy horúčost. Aspon jedon ráz káždy den treba dieta okupát, a vica rázy vo velmy horúcom povetré. Nekupajté dieta nikdy prevj ako celu hodinu za jedená.

Prvej ho kupajté a potom davajte jest.

Sáty a crstvy zdúch.—V horúcom povetré dajte také lahké saty ak len moźno. Drźte dieta na crstvom vzdúché a nie na slunkú. V nocy nehajte obloky otvorené, ale preci zavojené aby muchy nemohly sa dnuka dostat. Ked povétre na zimmé sa obraty, mavajte pozor aby so dieta ne prechladlo. Ténka flanelovat pántla dva alebo try rázy okolo telc okrútena ma byt. Ta pantla nemá byt sirsa, len aby bruch zakryla a musy byt hldaka bez krcé a záhyby, a pripnutá s nekolkim nitkam makej cerneji ne uźiva jte spendliky.

Né nehajte dieta spat s druhym v tej samej postely.—Ak nemáté postelku to matká nech položy kelokolvek stolce ku svojej postely, nech ich s mekou pokrivkou zákrije a dieta tam položy. Tak mu tam lepšie budé v letnej nocy, ako kedb pri horucym telé matkej ležalo, a nebudé vyrušat nikoho a samo tez nebudé vyrušano. Zadok stolca ochrány dieta aby néspadlo a matká má ho pri ruké, ak mu daćo po-

trebno.

Ak dieta vráca, má beháčku alebo nemocnim vyzerá nedávajté mléka a nić inšo len téplu vodu z flaškej z ktorej cicalo a zašlité po lekára.

# A CSECSEMÖK NYÁRI GONDOZÁSA.

A csecsemő tulajdonképeni Tápláléka az Anyatej.

Ha scak lehetséges, szoptassa a gyermekét.—Tizszer annyi haláleset fordul elő a palackon nevelt gyermek közöt, mint azok közt, kik

anyatejjel vannak táplálva.

Etesse a gyermekét rendesen bizonyos meghatározott órákban és nem mindenkor, ha sir. Két vagy három óránkint egy szoptatás elegendő, mig a gyermek öt vagy hat hetes; azután nem szükséges ő annyit etetni. Szoptassa a gyermekét nyolc vagy kilenc k-mapos koráig. Ne szoktassa el a gyermekét forró időszakban.

ráig. Ne szoktassa el a gyermekét forró időszakban.
Számos gyermek hal el évente azáltal, hogy a nagyokkal együtt ül asztalhoz és olyan étket kap, a mit kis gyomra el nem bir. A mig a gyermek anyatejet iszik ne adjon neki egy harapásnyi szilárd ételt, sem pedig teát, kávét vagy sört. Várjon mig megjön a gyerek foga,

ha olyan ételt akar adni, a mit meg kell rágni.

Ha nincs anyatej, adjon a gyermekének tehéntejet tiszta palackból. Ha a gyermek palackból iszik, csakis jó tejet kell neki adni és az állandóan zárva és jégen tartandó. Ha a tej nincsen kellően lefedve,

rögtön megfözendő, a mint megkapja.

Hogy a gyermek teje meg ne romoljék, tegye a legközelebbi 24 órára szükséges tejet palackba, mely szorosan bedugaszolandó, vagy pedig szorosan fedett korsóba. A palack vagy a korsó, valamint a fedő, kifőzendő, mielőtt beleönti a tejet. Tegyen fel egy fazék hideg vizet a kemenczére, abba helyezze a gyermek tejét tartalmazó edényt, lazán elzárva azt. Mikor a viz felfőtt, vegye ki a gyermek tejét tartalmazó edényt, bontsa ki és adjon egy fél teás kanálnyi szódát minden kvart tejhez. Ezután zárja el megint az edényt és ne nyúljon senki sem a tejhez, csak mikor már a gyermeknek adjak.

Ne etesse túl a gyermeket.—Az újszülött csecemő két vagy három kanálnyit elbir, többet nem. Inkább kevesebbet kell adni ennél, a palackon nevelt gyermeknek az első hetekben, egy étkezésre. A mint a gyermek megnő, az adag is nagyobb lehet, úgy hogy az első hónap végén négy evőkanálnyit kaphat egy étkezésre. Némely gyermeknek ennél több kell, némelyiknek meg kevesebb, de mindig veszélyesebb

többet adni, mint kevesebbet.

Mázsálja meg a gyermeket minden héten.—Az egészséges csecsemönek minden héten egy fonttal kell gyarapodnia. Ha az Ön-é nem növekszik ilyen aránvban, kérdezze meg az orvost a tápláléka felöl, és cselekedjék utasitása szerint.

Ha a gyermek sir, ne feledje, hogy ha rendesen van táplálva, akkor

nem sir éhségtöl.

Lehet, hogy szomjas.

Lehet, hogy hasgörcse van. Tartsa melegen kezét, lábát.

Ne tartsa túlmelegen (izzadásig).

Haskötője puha, tiszta és száraz legyen.

Ne sértse valamelyik tů.

A tej elkészitése a gyermek részére.—Minden pohár tejhez adjon két pohár vizet és annyi fehér cukrot (vagy néha jobb a tejcukor)

hogy olyan édes legyen, mint az anyatej. Öntse egy palaczkba és melegitse az anyatej hőmérsékére. Alkalmazzon gummi szopókát a palaczkra.

Hat hónapon alúl ne etesse a gyermeket kanállal.—A csecsemő természetes étmódja a szopás. Az ajkak, a száj és a nyely szopć mozdulata szükséges ahhoz, hogy az étel a száj nyálkáival keverődjön és hogy a száj és a fogazat kellően kifejlődjék.

Ne használjon csövet a palackon.—Használjon szopókát.

Ne feledje el a palackot és a szopókát használat után megmosni.— A gyermek gyakran kap "szájfájást," "szeleket" vagy "nyári bajt," mert a palack niucsen kellő rendben tartva.

Tisztitsa a palackot azonnal használat után.

Tisztitsa a szopókát alaposan kivül és belül. Csövel ellátott szopókák igen kényelmesek a lusta anyára nézve, de a gyermeknek halált

jelentenek.

Hogyan készitendő a gyermek részére árpaviz.—Mikor a gyermek négy vagy öt hetes a közönséges viz helyett árpa-vizet adjunk neki. Tegyen négy csésze hideg vizbe két evőkanállal gyöngy-árpát, főzze egy óra hosszat vagy tovább, úgy hogy a vizből csak két csészényi marad. Azután szűrje át tiszta ruhán; vegyen egy csipetnyi sót és édesitse meg az anyatej ízére. Ehez öntsön egy csészével a fentebb leirt módon melegitett tehén-tejet és evvel kezdje az etetést. Fokozatosan vegyen több tejet és kevesebb árpa-vizet, ugy hogy mikor a gyermek már vagy hat hónapos, két harmad tejet és egy harmad árpa-vizet kap majd. Ez a legjobb táplálék a mi csak adható a gyermeknek fogzás és elszoktatás idjén. Mikor ez az idő elmúlt tiszta tej használható, az előbb leirt módon felmelegitve, tejes kenyér, tejes rizs, sült burgonya tejjel, jól megfőtt zabliszt tejjel (a tej mindenkor melegitve és nem megfőzve). Az emlitetten kivül más táplálék nem szükséges.

Fürdés.—Tartsa a gyermekét tisztán és jobban fogja türni a hőséget. Legalább egyszer naponta teljesen megfürdendő, rendkivüli hőségben még gyakrabban. Ne fürössze a gyermeket evés után egy órán

belül. Először legyen a fürdés, azután az evés.

Ruházat és szabad levegő.—Meleg időben a ruházat oly könnyü legyen, mint csak lehetséges. Tartsa a gyermeket a szabad levegőn, de ne legyen a forró napon. Éjjel tartsa az ablakokat nyitva, de behálózva, hogy a legyek be ne jöhessenek. Mikor az időjárás hirtelen lehül, évakodni kell a hüléstöl. Használjon vékony, puha kötöt, mely kétszer vagy háromszor átéti a testet. Az ilyen kötöt csak olyan széles legyen, hogy a hast befedje és simán, ráncz s csomó nélkül, rácsavarandó, azután illessze oda néhány öltéssel pamutcérnával, ne használjon tüt.

A gyermek ne aludjék más valakivel egy ágyban.—Ha nincs gyermekágya, toljon az anya két széket az ágya mellé, tegyen reájuk puha takarót és fektesse oda a gyermeket. Ez egy nyári éjszakán sokkal kényelmesebb lesz, mint mikor az anyja meleg testéhez döl, azonfelül pedig sem nem zavar másokat, és nincs megzavarva maga sem. A szék háta megóvja az eséstöl és az anyja kezénél van, ha szükséges valami.

Ha a gyermek hány, hasmenése van, vagy betegnek látszik, ne adjon neki semmiféle tejet és semmi mást, mint meleg vizet a szopó

palackkal s küldjön az orvosért.

#### CURA ESTIVA DEI BAMBINI.

Il nutrimento adatto pei bambini è il latte della madre.

Allevate il vostro bambino voi stessa, se ciò è possibile.—La mortalità dei bambini è in queste proporzioni: che per ogni uno che ne muore, che è stato allattato a petto, ne muoino dieci che sono stati

allattati con la bottiglia.

Allattate il bambino regolarmente a ore fisse, e non ogni volta che piange. Bisogna allattare il bambino una volta ogni due o tre ore finchè egli ha l'età di quattro o cinque settimane: dopo di questa età lo si deve allattare non tanto spesso. Si deve dare il latte al bambino finchè egli raggiunge gli otto o nove mesi. Non si svezza il bambino durante la stagione calda.

Molti ragazzi muoiono ogni anno pel fatto che essi sono messi a tavola con la famiglia, e si dà loro del cibo non adatto ai loro piccoli stomachi. Finchè voi allattate il vostro bambino non gli date un boccone di cibo solido, nè gli date tè, caffe o birra. Aspettate finchè egli abbia messo i denti prima di dargli del cibo che ha bisogno di

esser masticato.

Se vi manca il latte del petto date al vostro bambino latte di vavva

con una bottiglia pulita.

I bambini che sono allevati col latte delle bottiglie debbono avere soltanto latte buono, e questo deve esser mantenuto sempre coperto e in ghiaccio. Se il latte non può esser mantenuto coperto come si

deve, lo si deve bollire appena ricevuto.

Per mantener dolce il latte pel vostro bambino si metta in una bottiglia o in un boccaccio di vetro a coperchio ben stretto, il latte di cui il bambino avrà bisogno per le prossime 24 ore. Tanto la bottiglia e il sughero, quanto il boccaccio e il coperchio debbono bollirsi prima che vi si versi dentro il latte. Si ponga sulla stufa una casseruola con acqua fresca. Vi si ponga dentro il recipiente col latte del bambino, col coperchio avvitato lento. Quando l'acqua bolle toglietene il recipiente col latte del bambino, apritelo, aggiungetevi poco meno di mezzo cucchiarino di bicarbonato di soda per ogni litro di latte, e quindi si ricopra il recipiente. Non permettete a nessuno di toccare il latte, altro che quando serve pel bambino.

Non nutrite troppo il bambino.—Lo stomaco di un neonato può contenerne da due a tre cucchiai da tavola, e non più di tanto. Durante la prima settimana, più o meno, della vita di un bambino che è allevato col latte di bottiglia, bisognerebbe dargliene anche meno di questo. A misura che il bambino cresce, la quantitità deve crescere gradatamente, così che alla fine del primo mese il bambino debba trovarsi a prendere circa quattro cucciiai da tavola per volta. Alcuni bambini possono averne bisogno di più, mentre altri non possono sostenerne tanto, ma vi è sempre più pericolo a darne troppo alla volta

che poso.

Pesate il bambino ogni settimana.—Un bambino di buona salute dovrebbe guadagnare durante questo periodo, una libbra per settimana. Se il vostro bambino non cresce tanto consultate il medico pel cibo che bisogna dargli, e fatevi guidare dal suo consiglio.

Se il bambino piange, ricordatevi che se è stato nutrito regolar-

mente non piange per fame.

E può aver sete.

O può avere una colica.

Badate che abbia le mani e piedi caldi. Che non stia troppo caldo, da sudare.

Che la sua biancheria sia morbida, pulita e asciutta.

Che non vi siano spilli che lo pungano.

Come si prepara il latte per nutrire il bambino.—Ad ogni tazza di latte si aggiungano due tazze di acqua, e del zucchero bianco (qualche volta il zucchero di latte è migliore) abbastanza da renderlo dolce come il latte di petto. Si versi quindi nella bottiglia e si riscaldi questo latte finchè esso sia tanto caldo quanto il latte di petto. Si metta quindi alla bottiglia il capezzolo di gomma.

Non si usi il cucchiaio nel nutrire un bambino al di sotto dei sei mesi.—Il succhiar è il mezzo naturale che un bambino adopera per nutrirsi. Perchè il nutrimento si mischi coi fluidi della bocca, e per l' adeguato sviluppo della bocca e dei denti vi è bisogno dell' atto suc-

chiativo delle labbra, della bocca e della lingua.

Non si usi un cannello sulla bottiglia, si usi un capezzolo.

Non dimenticate di lavare la bottiglia e il capezzolo dopo che ve ne siete servita.—Spesso i bambini pigliano "mali alla bocca," "coliche flatulenti" e "sciolte estive" per difetto di cura della bottiglia da allattamento.

Si pulisca la bottiglia immediatamente dopo l'allattamento. Si pulisca ben bene il capezzolo, di fuori e di dentro. I capezzoli col tubo sono comodi per una madre pigra, ma significano la morte del

bambino.

Come si prepara l'acqua di orzo pel bambino.—Quando il bambino ha quattro o cinque settimane, invece di acqua semplice si deve usare acqua di orzo. Si mettano due cucchiai da tavola di orzo mondato, in quattro tazze di acqua fresca, e si faccia bollire per un ora o più finchè l'acqua si restringa a due tazze. Si passi quandi per un panno pulito, vi si aggiunga un pizzico di sale, e si addolcisca tanto da avere il sapore di latte di petto. Si aggiunga questo ad una tazza di latte di vacca, riscaldato come si è detto innanzi e s'incominci a nutrire il bambino con queste proporzioni. A poco a poco, gradatamente si usi più latte di vacca e meno acqua di orzo finchè, quando il bambino ha circa sei mesi si abbia la proporzione di due terzi di latte, ed un terzo di acqua di orzo. Questo sarà un nutrimento abbastanza buono per lui durante il periodo della dentizione e dello svezzamento. Passato questo periodo gli si potrà dare latte puro, riscaldato come si è deto innanzi; pane e latte; riso e latte; latte con patate infornate; brodetto di oatmeal ben'cotto, e latte (il latte sempre riscaldato, non bollito). Non vi è necessità di altri cibi salvo quelli di sopra menzionati.

Bagni.—Si mantenga il bambino pulito, ed egli sopporterà il caldo assai meglio. Egli dovrebbe avere almeno un bagno completo ogni giorno, e più d'uno durante i calori estremi. Non si dia mai il bagno

al bambino entro l'ora nella quale egli ha avuto il latte. Gli si da

prima il bagno e poi da succhiare.

Panni ed aria fresca.—Quando fa caldo si vesta il bambino quanto più leggermente è possible, si tenga il bambino all'aria aperta, ma non al sole ardente. La notte si tengano le retine e si evitino le mosche. Quando il tempo si raffredda tutto a un tratto bisogna aver cura di evitare che il bambino si raffreddi. Bisognerebbe in tal caso avvolgerne il corpo due o tre volte con una sottile e morbida fascia di flanella. Questa fascia dovrebb'essere abbastanza larga da coprir la pancia, e dovrebb'essere avvolta liscia e senza crespe o piegature, aggiustata con qualche punto di cotone morbido da rammendare e senza spilli.

Non fate dormire il bambino nello stesso letto, assieme ad altri.— Se non si ha una culla, la madre dovrebbe mettere accanto al suo letto un paio di sedie con popravi una morbida copertura, e farvi dormire il bambino. In una notte estiva starà a miglior agio che non stando presso il caldo corpo della madre, e sarà più difficile che dia fastidio agli altri o che ne riceva. Le spalliere delle sedie eviteranno che il bambino cada, e la medre è sempre a portata per prenderne cura,

ove mai fosse necessario.

Se il bambino vomicasse, avesse diarrea, o sembrasse malaticcio, non gli date più latte, non gli date che acqua tiepida nella bottiglia da allattare, e mandate a chiamare il dottore.

#### ADVICE TO THOSE ABOUT TO BECOME MOTHERS.

Before the birth of her baby, there are some things which may be done by the mother to make her more likely to be well herself and to

have a healthy child.

Food.—The food of the mother should be abundant, plain, without much spice and seasoning, and with not more than one cup of coffee or tea at a meal, and none between meals. If she wants more to drink, there is nothing better for her than milk. Meat should not be eaten oftener than once a day. The more water that is taken the better.

Bowels.—It is very important to have a movement of the bowels every day. Strong medicines must not, however, be used to open the bowels; costiveness can be avoided by sufficient exercise and suitable food, as brown bread, stewed vegetables, fruit, and abundance of

Work.—The woman may do her usual work, but should not work hard enough to get very tired. Work in store and mills is not good, and it should be stopped as soon as possible, at least four weeks before the expected birth of the baby. She should go out of doors every day, but must not run for cars, or jump, or overexert herself in any way.

Once in four weeks, at the time when the woman would have been unwell if she were not to have a baby, she should be even more careful than usual about overexertion, because at these times there is more

danger of miscarriage.

Clothing.—All clothing should be loose. As soon as she begins to show her condition, the mother should leave off her corsets, and have nothing about the waist that is at all tight. A loose corset waist should be worn to which side garters should be attached instead of wearing circular ones about the legs.

Baths.—It is important to keep the skin in a healthy condition, and this is best done by frequent bathing. Sea bathing is not good,

however, because it is too violent.

Nipples.—Nothing should be put on the nipples until the last month. Then they should be washed every day with clean soap and water and boracic acid solution put on them. Get some boracic acid from the drug store and put a heaping tablespoonful in a pint bottle and fill with warm water, or better, put in warm water two-thirds and alcohol one-third. If they are small or turned in they should once every day be gently pulled out, so as to make them ready for the baby to nurse.

Food for baby.—No food is as good for a baby as its mother's milk. This is why so many more bottle-fed babies are sick and die than breast-fed babies. For this reason the mother ought to try to nurse her baby as long as she has any milk at all. One or two feedings a day from the breast are a great deal better than none at all. Keep the body well nourished before the birth of the baby in order to secure a good supply of milk. Regular nursing and corn-meal gruel, a pint or more a day, are the best things to make more milk.

Providence, 1910.

#### TO EXPECTANT MOTHERS.

Too frequently the expectant mother receives no advice from a physician or anyone else competent, presuming the condition to be a perfectly normal one that needs no assistance. This is far from true. So many little conditions arise that intelligent care and instruction would prevent not only great discomfort but lower the mortality rate in these conditions.

The first and commonest symptom is nausea. This is purely reflex and while no specific drug will cure the condition, by proper advice in the way of diet and the addition of some simple stomachics or some drug furnishing temporary rest to the organs will accomplish

wonders.

Next is the obstinate constipation. Any milk laxative, such as the compound licorice powder or phenolax wafers not only adds to the comfort of the mother but assists in the development of a healthy

child.

The most serious of all are the kidney complications. These are usually brought on by cold drafts; exposure, such as sitting on damp ground or being chilled by long rides or drenched with rain. The presence of albumin denotes the possibility of convulsions, and urine analysis should, from the fourth to the ninth month, be made at least every two weeks. \* \*

Next in importance is the care of the nipples. By persistent use of alcohol or glycerol of tannin, the skin can be hardened and prevent

painful fissures that too frequently follow.

The duration of the normal pregnancy is 280 days. Near the termination of that time, the mother should have ready a quiet room apart from the rest of the house and other children, if possible, because rest is above all things most desirable in the new mother. She should have ready rubber sheet to protect the bedding; binders, three or more, made of old toweling, to perfectly support the relaxed abdomen and not only derive perfect comfort but also to preserve a more comely appearance in after years; clean basins and pads, that can be made from the ordinary cotton covered with newspapers and sterilized afterwards by dry heat in the oven. Also, plenty of clean cloths and sterile oil.

For the baby she should have at least four dozen napkins; four soft binders to bind its little abdomen and protect the cord. Shirts supported by straps from the shoulders, skirts always made with the body and not with a band that must be bound tightly around the ribs to hold in place; soft pillows, soft covers, and knit wrapping blanket. These, together with sacks, wrappers, bibs, and caps, complete the

new wardrobe.

The baby's basket should be one specifically for its own use. This should contain large and small safety pins, talcum powder, a soft hairbrush, castile soap, blunt scissors for the nails, old linen for clean-

ing the mouth, soft towels for the bath, cold cream or cocoa butter, and a bath blanket.

The feeding of the baby then is of the most importance. Unfortunately, there are two classes of mothers: the one who, either from a life of idleness or lack of exercise, secretes insufficient milk for the baby's food, and the other, who from overwork, lack of proper diet, and lack of sleep confronts the same condition. No milk, no matter how carefully prepared, is as good for the baby as mother's milk. However, when this is impossible, the next best substitute is cow's milk. The milk of a mother is alkaline. The milk of a cow is acid. The milk of the cow contains much more casein, so of necessity must be modified some. In the city every mother who must raise her child on a bottle should use nothing but certified milk. A little inquiry on her part will tell you just what to use. In country districts or small towns it is possible for intelligent parents to see to it that the milk for their baby comes from cows that are free from tuberculosis or any other disease, that the hair is clipped away from the cow's udders, that the milking is done in narrow-mouthed buckets covered with clean cloth, so that there is no possibility of excretions from the cow or dirt from the stable contaminating the milk. It is an unfortunate fact that the mortality rate in infants is higher in the country nearer the center of production of raw cow's milk than it is in cities, and this is due only to carelessness.

If a bottle must be used, keep it scrupulously clean, with a large nipple fitting directly over the bottle. Under no condition should the old rubber tube be used. At the completion of each feeding the bottle and nipple should be boiled and then kept waiting for use in an ordinary solution of bicarbonate of soda, which keeps it sweet and clean.

The capacity of a newborn babe's stomach is, during the first week,  $1\frac{1}{2}$  fluid ounces; during the second week,  $2\frac{1}{2}$  ounces; from the third and fourth week about 3 ounces; at the third month, 5 ounces; at the ninth month, 12 ounces. A study of this table will easily convince you that most babies are overfed. The newborn babe should, during the first three days of its existence, have no other food save that which comes from the mother's breast. The use of cloth filled with sugar or a diluted solution of brandy is absolutely criminal.

Next to dirt, the greatest murderer of newborn babies is the house fly. One speck on the baby's nipple may be sufficient to start an attack of intestinal trouble that would result fatally. The pernicious habit of too many mothers is the throwing of soiled napkins in some corner of the kitchen or back porch, thereby furnishing food for flies, and in turn to be transferred to the milk, the baby's nipple, or even direct to the baby's face, thereby setting up an infection that will assist materially in increasing infant mortality.

All babies should early become accustomed to an abundance of fresh air. Night air will not hurt babies any more than adults, unless it is last night's air shut up in some close room. Accustom them to sleeping with all the windows open, or better yet, to taking their daily naps on the porch, protected only from drafts. See that no single day passes that the infant does not have at least two hours outdoors, breathing in all the ozone that the Creator intended it should have

A proper cart or large basket or crib for sleeping is incomparably better than the old cradle, as the digestion is more perfect in children, as in adults, when they are not constantly throwing their center of

gravity outside their bodies.

Whenever possible a graduate nurse should be in charge of the mother and babe. Where it is not possible, a person of wide experience, who has had it thoroughly impressed upon her mind that cleanliness is next if not equal to godliness, is the only one to be safely trusted.

A normal child should weigh at birth  $7\frac{3}{4}$  pounds; at the end of the second week,  $9\frac{1}{2}$  pounds; at the end of the third week, 11 pounds; at the end of the fourth week,  $12\frac{1}{2}$  pounds; and at the end of one year, 21 pounds. These are perfectly normal averages, but variations can not but occur.

It is important that the mother, following the birth of her child, shall have ample opportunity for rest. She should stay in bed at least two weeks. The habit of entertaining friends the following day or for several days after can not be too strongly condemned. She should have ample opportunity to sleep, for this will bring back color to her cheeks more quickly than malt or any other medicines masquerading under the name of tonics.

The diet for the first few days until milk appears in the breast, which is usually 48 hours after, should be liquid entirely. After this a liberal diet of easily assimilated foods usually solves the prob-

lem of the milk supply.

There is no other condition in life where absolute cleanliness is so essential as it is in this condition for the welfare of mother as well as the babe.

A quiet life during the period that the mother is nursing the babe will not only add to her comfort and happiness but to that of her babe as well.

Late suppers, dances, improper diet, and overwork all tend to decrease the quantity and quality of her milk, as well as to affect the digestion and disposition of the child. A prolonged rest will avoid many of the displacements with the accompanying discomforts or even surgical operations that too frequently follow childbirth.