INFANT MORTALITY:
ITS
PRIME CAUSE AND REMEDY.

"The Bane and Antidote lie both before me."—Addison.
RIDGE'S FOOD.

TO THE MEDICAL PROFESSION.

The popularity of a dietetic preparation greatly and very properly depends on the verdict of the family physician, under whose care the child or invalid is placed. In this belief, we respectfully address ourselves to physicians as yet unacquainted with our product, in the hope of ultimately securing their approval and recommendation.

The preparation known as Ridge's Food has been extensively used in England and the British Colonies for the last twenty-five years, and, since its introduction into the United States, has won the highest commendations from physicians, managers of public institutions, and all others who have made trial of its merits.

Ridge's Food is prepared from carefully selected winter wheat, which, by means of nicely adjusted mechanical power, is reduced to an almost uniform fineness. The product is then thoroughly cooked by a steam baking process, which gradually changes a large proportion of the starch into dextrine, excluding only the woody fibre. It is afterwards rendered a little sweet and slightly alkaline.

There is nothing in the material or process of manufacture which calls for especial remark; but we claim that in the selection of the former and in every stage of its conversion the most scrupulous and intelligent care is given to insure uniform excellence, and to
sustain the great and growing reputation of Ridge's Food. And, for the resultant product, we claim:

1st. That it retains the nitrogenous elements and the phosphates in which wheat is so rich; including the substance called by a French chemist "Cerealine," a metamorphic nitrogenous body which acts as a solvent on gluten when in presence of starch, dextrine, and glucose, exactly as pepsine acts on animal fibre.

2d. That those elements are presented in a form which is easy of digestion and yields abundant nourishment.

3d. That the Food is acceptable to the most irritable stomach when used (as in some cases it must be) without milk, and that it will alone support life.

4th. That it is the best daily food for infants and young children, especially those who are growing rapidly.

5th. That it makes the best gruel for a nursing woman. We may add that it is the cheapest food of the kind in the market, a point of some value.

Respectfully,

WOOLRICH & CO.

Office and Mills, Palmer, Mass.
That the last quarter of a century has developed a wonderful increase in medical knowledge and chemical science, no one can doubt, when it is considered that thirty or forty years ago large numbers of children were reared on little else than arrowroot; for at that time this was considered by members of the medical profession even as the principal as well as the popular artificial food for infants.

In reading the various medical and scientific journals of to-day,—after giving due weight to the many and exhaustive articles in which these matters are microscopically considered, and assertions are made that children cannot be reared while this or that element forms a part of the child's diet,—the close student is forced to wonder if science, as represented by these various writers, each of a different school, has not gone too far in saying what cannot be done, in view of the fact that there are men living to-day of average brain and vigor who were reared on such insufficient food as that quoted above; and whether there may not be some points which even these exponents of science have not revealed.

The writer of this pamphlet has devoted thirty years of his life to the study of medicine, diet, and hygiene; and, while at all times we have taken pains to show that the best food for a child is its own mother's milk, when the mother is in a state of health, there are many cases in which Nature's provision cannot be given untainted. We believe a fair trial will uphold us in the statement that there
is no food to-day so well suited to all conditions of children as Ridge's Food.

That it is a reliable food, its thirty years of use in England and America, with constantly increasing sales, and the testimony of thousands of mothers to-day, is a sufficient proof.

There are those who would endeavor, by various devices and statements, to point out defects in it; but we can assure the public that the close attention we have given to the needs of growing child-life in the thirty years past has resulted, both in the manner of preparation and in its composition, in placing within the reach of all, in Ridge's Food, something that will support life when all other foods fail.

We subjoin extracts from a physician's letters, unsolicited (and, because not written for publication, we do not append his name), received in 1882, which is a sample of hundreds which might be given from the public in support of our assertions:

March 11, 1882.

... I am now using "—— and ——— Foods" [two at present extensively advertised in the Medical Journals]. ... Having a very delicate, hand-fed infant, I have concluded to order two dozen of Ridge's Food.

March 31, 1882.

... My infant's bowels were running off very badly when I received the box by mail. I immediately placed her upon it according to your directions; and the diarrhoea ceased at once, giving her one healthy action in twenty-four hours. My wife was so delighted she said, "Dr. ———, you have at last found the right kind of food." During the whole time the box lasted [sent by mail to anticipate arrival of larger package ordered], her bowels gave us no trouble; but it is now out, and her bowels have begun to run off again, which gives us much trouble and great anxiety.

April 29, 1882.

... After considerable delay, I received the case, also the [second] can by mail. I have used upon my delicate infant some three or four different kinds of food, giving each according to directions, and ample time for an improvement in my infant's condition; but there was no improvement until I adopted Dr. Ridge's Food, which I am now using with satisfactory results, and shall use no other so long as it continues to supply so well the place of the food from the parent breast. With much esteem, I am

Yours respectfully, ——— ———, M.D.
TO THE PUBLIC.

It is a just reproach to our modern civilization that, with the wonderful progress it exhibits in so many things tending to promote material well-being, there should be so little popular understanding and appreciation of hygienic law. "The health of man," says Hartlaub, "is in incessant strife with ignorance; and this struggle commences with the first moment of his life." "It may be stated," remarks Dr. Ira Warren, "as a general truth that man has but just learned to live when he is ready to die."

One of the most prominent and lamentable results of this ignorance is seen in the enormous infant mortality which prevails both here and in Europe, of the extent of which few outside of the medical profession have any certain knowledge. And yet this knowledge is quite accessible, and the subject one which, as affecting every family, might well be considered of paramount importance. Turn where we will for such information, the grim figures of official reports tell the same sad story, with singular approximation toward uniformity; and they are such as, if not officially stated and sustained by cumulative experience, might well be deemed incredible. Take the following as examples:—

A few years ago, it was reported that, of 7,650 children born in the Dublin Lying-in Hospital, no
less than 2,944 (more than 38 per cent.) died within two weeks after birth. This mortality was largely attributed to bad ventilation; but other causes were, no doubt, active in bringing it about.

Let us now turn to the official report of the Board of Health of the city of Brooklyn, N.Y., for the years 1875-76. From this report, it appears that the number of births in 1875 were 6,946; in 1876, 6,306; while the deaths for infants under 1 year old for the same periods were, in 1875, 3,401, or 49 per cent.; 1876, 3,179, or 50 per cent.

When to these figures we add the number of deaths for those years of children from 2 to 5 years old, we have these appalling results:—

Total, 5 years old and under:—

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1875</td>
<td>6,387</td>
</tr>
<tr>
<td>1876</td>
<td>6,241</td>
</tr>
</tbody>
</table>

Allowing a margin for unreported births,—which in a city where registration is strictly enforced cannot be large,—we have a rate of mortality which cannot be contemplated without a shudder. Moreover, when we reflect that this destruction of child life is due to causes mostly preventable, it is clear that a heavy responsibility rests on the parents and guardians of children who do not seek to discover and remove them.

It is well understood by experienced physicians that improper food, impure air, uncleanliness, and other violations of sanitary laws within the family, are answerable for by far the largest number of fatal cases which occur in childhood. Improper
food is clearly indicated as a principal factor in the sum of grievous errors ignorantly committed. Either the mother's milk or that of the hired nurse, or the material or manner of administering nourishment by hand, is at fault and utterly at war with the object to be attained; and the little victim, starving, it may be, in the midst of plenty, becomes an easy prey to one or other of the malign influences against which our life is a perpetual struggle. A well-nourished child has some chances of living, even under conditions unfavorable to good health; but one that is fed upon innutritious or indigestible food is peculiarly liable to suffer from depressing causes,—such as a low external temperature, poisonous miasmata, and the like. The question of nutriment assumes therefore a prominent place in considering how to save so many innocent lives.

No reasonable being can doubt that the mother's milk, if she be a healthy woman of kindly disposition and cheerful temper, affords the very best sustenance for her child. But the conditions which render the mother's milk or that of a hired nurse preferable to any artificial food are in many cases unattainable. The tyranny of fashion in dress, occupation, and the social habits of our modern life tend to unfit woman for the maternal office by impairing the vegetative system and creating an excitable and irritable nervous condition.

The physician may be pardoned if, in view of the dire consequences of the follies of fashion, he
give expression to his feelings in the unstinted language of a modern writer: "The mammary glands have suffered additional outrages at the hands of the corset-maker, the dressmaker, and the manufacturer of bosom pads, so that what is left of our mothers is, in a majority of cases, only an apology for the ideal which nature designed." It is, indeed, a lamentable fact that, in all classes and conditions of modern life, the mother's milk is most frequently neither in quantity nor quality adequate to the nourishment of the child; and so "we see infants of wealthy as well as of poor parents with pale, waxy faces, flabby skins, pulpy muscles, distorted bones, and swollen glands, which tell their own story of innutrition to all who have eyes to see," and not only of innutrition, but of hereditary or constitutional cachexia, which are being implanted deeper day by day.

The choice of a wet nurse is a very delicate and serious affair, involving questions of constitution, hereditary or acquired tendencies, temper and disposition, personal habits, trustworthiness, and freedom from external causes of anger and despondency. She must know how to control her temper, for the milk of an angry woman is dangerous to a child. Albinus states that a woman having given the breast to a child after a violent fit of anger, the latter was immediately attacked with haemorrhage of the nose, eyes, and mouth, which speedily ended in death. Lastly, the date of the nurse's confinement is an important consideration in estimating the value of her milk.
Dealing with the subject of maternal incompetence, Prof. Beebe, of Chicago, says: "We must make good this deficiency in the child's diet, either by supplementing it with or entirely substituting for it some kind of artificial food. I would never," he continues, "commit a child of my own or of others to a wet nurse, unless under very exceptional circumstances; for I believe most emphatically that children can be fed by artificial means better than the average of women can nurse them.... Fortunately, such a preparation is manufactured and sold everywhere now, and at quite reasonable prices.... It is sold under the name of Ridge's Food, and is manufactured in Massachusetts by Messrs. Woolrich & Co. If now we use a moderately thick gruel made of this Food, with water to dilute the cow's milk before using it, we have come as near to artificial mother's milk as we can; and the best of it is *that it proves in practice all that it promises in theory*. I have been using this preparation for five years or more, and have the most unbounded faith in it as a diet for infants up to—say eighteen months old.... If a man has a medicine or instrument or a food which is perfectly satisfactory and reliable for a particular purpose, he will never abandon it for anything else; and I can say this for the preparation of food before mentioned, that it has *never failed* me, or failed to agree when given strictly according to my directions, nor have I
any desire to experiment with other preparations. With scrupulous care in the feeding of children, there need be very little trouble from bowel complaints; and it is to this that I ascribe the fact that I have never yet lost a child with any form of diarrhoea or cholera infantum, although I believe I have enjoyed a pretty fair practice for eight years past."

Since Liebig made known his formula for making infants' food, a number of claimants for popular favor have appeared with other preparations, of more or less merit, vauntingly based on a profound study of chemical laws and the absolute control of these over the animal economy. The public have been invited to give judgment in favor of theoretic perfection against long-tried excellence. But the public possesses a large measure of common-sense, and is moreover sufficiently enlightened to know that chemistry alone is unequal to pronounce on the nutritious possibilities of any artificial food. The public is aware that two substances may have exactly the same chemical constitution and yet have different properties, owing to the different arrangement of their atoms. This distinction is of the first practical importance. A difference of organic form, it is well known, is often the sole reason why one substance may be nourishing and the other not so. Gelatine was at one time supposed to have peculiar nourishing properties: it is now held to be of no use in renewing muscle or blood particles, though experience testifies to its utility in some other but obscure way; yet gelatine differs very little in its
chemical constitution from other organic compounds of acknowledged value. So a preparation of artificial food may satisfy the theories of the chemist, and yet respond very indifferently to the wants of the body; while another, which contains in combination an element pronounced indigestible, may be found wholly acceptable by the weakest stomach.

The microscopic criticism of rivalry has been thus applied to the composition of Ridge’s Food, with a view to show its unfitness for the use of very young children. According to these critics, our preparation contains elements insoluble by the stomach of an infant, and which must therefore prove irritating and injurious. Unfortunately for this criticism, the test of experience is quite at issue with it. Messrs. Gale & Blocki, one of the most eminent druggist firms in Chicago (and whose sales of Ridge’s Food are very large), say: “Its soothing and satisfying properties are so marked as often to cause customers to inquire if it does not contain some opiate”; and Dr. Mead, Licentiate of the London College of Physicians, finds the Food “a very valuable preparation, especially in cases where the digestive powers are unusually feeble,” and, quoting the case of an infant “dying from exhaustion and excessive vomiting,” he adds: “As a last resort, some of Ridge’s Food was given, mixed with water, which was retained. The child rapidly improved; and now, after the lapse of some months (during which time it has entirely lived on the Food), it is quite well and strong.” In like manner, Dr. Boardman, of Portsmouth, N.H., speaks of Ridge’s Food as
“the best substitute for the natural milk, easily assimilated, free from acidity, and in my practice has done more for the preservation of the infant than anything else I have tried in a thirty years' experience.” Chemically impossible! our critics will exclaim; the anticipation of which comment reminds us, as the lamented Lincoln used to say, of a little story. A stern, uncompromising adherent of a priori dogmatism was once vociferously opposing the plainest evidence in a matter under discussion. As he paused to take breath, a cool-headed by-stander observed, “But, sir, sir, the facts are all against you!” “So much the worse for the facts,” fiercely rejoined the unconquered dogmatist.

A great controversy which took place in London, spoken of humorously as the “Battle of the Diets,” and which was eventually carried before a committee of the House of Commons, resulted in placing Ridge's Food at the head of all other dietetic preparations, in respect to its guaranteed purity, palatability, bone, flesh, and fat-forming properties. Since the introduction of this Food more than twenty-five years ago, its great and increasing popularity among all classes would furnish sufficient independent testimonials from the profession and the public to fill a goodly volume. But enough has been said to warrant at least a trial by those who as yet have no practical knowledge of the preparation. We feel well assured that every fair test of experience will add to the increasing number of our customers and advocates.

Respectfully, WOOLRICH & CO.
Office and Mills, Palmer, Mass.