

INFANT FOODS AND FEEDING PRACTICE

(A Rapid Reference Text of Practical Infant Feeding for Physicians and Nutritionists)

By

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INFANT FOODS AND FEEDING PRACTICE	

To all physicians and physicians-to-be who hold firmly to superior standards of personal integrity and intellectual honesty despite inevitable conflicts with political expediency, social opportunism and monetary competition in their professional pursuits — to these, the steadfast majority of the medical profession — this book is respectfully dedicated.

FOREWORD

THE CARE afforded an infant or a child should conform to the individual's specific needs. Proper nutrition is a most important aspect of infant care. The fundamentals of proper infant nutrition and the summary of the most desirable procedures available to achieve this are in themselves not complex, despite the large number of special foods developed for infant feeding. These have been marketed to permit individualization in infant care once his needs have been determined. Thus, the physician has available milk mixtures and other foods designed to meet almost every situation in the maintenance of health or in the treatment of disease.

In this book, the fundamentals of infant nutrition are reviewed first as the basis for the discussion of current concepts in infant feeding practices. The sequence of presentation and the development of each subject are excellent. Although the author devotes considerable attention to the problems often encountered in breast feeding, perhaps his most valuable contribution is to be found in his classification of infant foods, especially milk mixtures.

This concise, but complete discussion and classification, along with a thorough review of common problems encountered in infant care should make this book a valuable reference for the physician.

Philip L. White, Sc.D. Secretary Council on Foods and Nutrition American Medical Association Chicago

Frontispiece

A SIMPLE SAGA OF INFANT FEEDING

Soranus, he of ancient Rome, He had a simple trick To see if milk was fit for sale, He merely dropped it on his nail To see if it would stick; Yet 'spite of this the babies grew, As any school boy'll tell to you.

Good Metlinger in ages dark
Just called milk good or bad.
No acid milk to vex his soul;
He gave it good, he gave it whole,
A method very sad;
Yet babies grew to man's estate,
A fact quite curious to relate.

Time sped, and Science came along To help the human race; Percentages were brought to fame By dear old Rotch, (of honored name) We miss his kindly face; Percentages were fed to all— Yet babies grew, both broad and tall.

The calories now helped us know
The food that is required.
Before the baby now could feed
We figured out his daily need—
A factor much desired;
Again we see with great surprise
That babies grow in weight and size.

The vitamin helps clarify
Why infants fail to gain;
We feed the baby leafy food
Which for the guinea pig is good—
A reason very plain;
And still we watch the human race
Go madly at its usual pace.

We have the baby weighed today; The nursing time is set,
At last we find we are so wise
We can begin to standardize—
No baby now need fret;
In spite of this the baby grows,
But why it does God only knows!

Away with all such childish stuff! Bring chemists to the fore! The ion now is all the rage. We listen to the modern sage With all his latest lore; And if the baby fret or cry, We'll just see how the ions lie!

The pendulum swings back again—Great-grandmas have their say.
"Feed any hour or any time,"
To let them cry is now a crime—It's 'ad lib' feeding's day!
"Security"—The Clarion Call
From Ivory Towers, stern and tall!

A controversy shows its head—
Shall early solid foods win out?
Feed them meat and feed them bread—
It's a gastronomic race instead!
Nutrition's rules—"To Route!"
Yet fewer babies seem to die
And more and more they multiply.

Science to the front once more!
Solute loads are scanned;
The carbohydrate is at bay—
In babies' milk it is passé
And oft' may be completely banned!
Synthetic mixtures hold sway now,
And soon they'll say—"Who needs a cow?"

Amino acids are "the rage";
'N balance' is in fashion;
Which Fats are best—do all agree
With neonates' gastronomy?
What is a balanced ration?
Yet Man continues to succeed
In making Him the leading breed.

Breast Feeding! Ah—that ancient art Is losing out, it seems—
"The female breast is for display!"
"Utility be damned!"—they say,
(It may be just a dream).
While no one asks the babies' choice—Proprietary firms rejoice!

A hundred years will soon go by; Our places will be filled By others, who will theorize And talk as long and look as wise Until they too are stilled; And I predict no one will know What makes the baby gain and grow!

(See overleaf)

(The past history, present status and future extent of infant feeding are projected in the foregoing poem. It was written by the late Dr. John Ruhräh—philosopher, teacher, poet, pediatrist and able historian. In its gentle satire Dr. Ruhräh infers that the final conclusions to the art and science of infant feeding have not, as yet, been recorded—a propitious portent for this book, Infant Foods and Feeding Practice. The stanzas in italics were humbly added by the present author to bring to light the more recent episodes of this quaint thumbnail history. Apologies are offered to the memory of the original author for probable errors in metre and a presumptuous poetic license.)

PREFACE

In this compact manual of infant feeding, a sincere effort is directed toward the application of the practical principles of chemistry and physiology pertaining to the art and science of infant nutrition. It is designed for the physician, to whose lot falls the responsibility of directing the feeding of most well infants. It has been observed that most practitioners, internes and even residents are of the opinion that they never have been adequately prepared for this phase of their care of infants when it is known that 60 to 80 per cent of the baby-care portion of any practice consists in the routine feeding of well infants. It is hoped that this text of essential facts may help to allay that deficiency of the medical curricula.

No apology is offered for the elemental tone which pervades some portions of the text. In addition to the presentation of the essentials of infant feeding facts in compact form for the experienced physician, this book is also a primer and digest, written for the neophyte in his introduction to the subject. The temptation to become didactic is ever present in the preparation of data on infant feeding. Studied effort is made to avoid the dogmatism and arbitrary directives which would violate the vital premise on which successful and individual infant feeding is based.

Throughout the text there is an air of repetitiveness which is unavoidable. Because this is mainly a reference book, few persons will attempt to read the sections consecutively. Thus certain facts which seem important bases of infant feeding are repeated in the light of the section or chapter under discussion. This is one of the licenses which an author assumes in order to emphasize favorite topics or to drive home that which he deems valuable in the field.

Without attempting to escape the responsibility which authorship of the printed word often implies, the reader is reminded that the clinical opinions expressed and often repeated in minor controversial areas is still the opinion of but one clinician and

must be accepted with this well in mind. In spite of being forcibly articulate or persistently argumentative, there is still room for further interpretation and opinion.

No presumption is made by the author of being an expert in the field of nutrition—the almost two hundred references herein quoted would effectively document this fact. The allusions through the text of the applied data of practical information have been gleaned for over 30 years in directing of infant feeding in private pediatric practice, in the hospital outpatient department, in Infant Welfare Stations, and at the cribside of the sick infant in a children's hospital. It is repeated that the opinions stated in the text do not necessarily concur with those of members of institutions with which the author is associated

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The enthusiasm with which the first text—Essentials of Infant Feeding for Physicians was received by its readers and reviewers seemed to justify the inference made by Dr. Jeans in the Foreword that it would "supply specific needs." Because almost all of the stock of the first book is exhausted, the question of preparing another edition arose. Since 1952 there have been at least four new texts published covering the subject of infant nutrition, and there have been new editions of standard text books on pediatrics all with revised sections on the infant dietary. It was concluded by the author and publisher in this book to emphasize and amplify those sections of the first text which proved so acceptable and helpful. Also for this reason the title of the book was changed to reiterate the essential sections which seemed important and popular in the first venture.

The chapter on the bottle-fed infant milk foods has been completely re-written, and the classification of all of the products has been revised so as to make it more understandable and useful. All of that which presently seemed superfluous in the first text has been deleted, and each chapter has been reviewed and changed for better orientation and usefullness, with the condensing of some chapters and the elimination of others. The controversy as to solid food additives of the first year has been completely revised with the hope of a better understanding as to the

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varied opinions and conflicting recommendations of a group of nutrition authorities versus those of clinicians. The subject of breast feeding and human milk has been appraised as to modern concepts, and the sections on formula computation and vitamin additives have been improved and extended. A chapter on practical everyday problems of office practice in infant feeding has been added to assist those whose clinical experience in infant feeding might be enhanced. These, then, are the changes and additions which have been made to the first book, rather than a corrected version to the first printing, or specifically a new edition.

The author is especially indebted to his colleagues in the institutions with which he is associated; to the many practicing physicians in other sections of the country for aid in relating their experiences; to the infant food manufacturers for their generous cooperation involving much correspondence; to Dr. John L. Reichert, the author's office associate of many years for his considerate interest; to Miss Charlotte Drew, Mr. William Hamilton and associates, and Dr. W. O. Robertson for supplying many of the references in the literature; to Professor Ann Schwab of Trinity University, for suggestions as to grammatic construction and rhetoric composition in certain areas; to Dr. E. H. Parfitt and the organization with which he is associated, for helping to make possible some of the special projects which contributed valuable additions to the feeding data here presented; and finally, to Mr. Robert Schinneer, Mr. Warren Green and Mr. Pavne E. L. Thomas of the Charles C Thomas organization, for their specific and combined assistance, cooperation, patience and courtesy in our contacts during this mutual venture.

H.F.M.

Chicago, Illinois

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