



Official Publication

Doctors Library
St. Joseph Mercy Hospital
Ann Arbor, Mich.

Pediatrics

Volume 34

August, 1964

Number 2

COMMENTARY

Medical Responsibility and Drug Addiction *Leon Eisenberg* 155

ARTICLES

Low Birth Weight *P. Gruenwald* 157

"Normal" Skin Temperature and Survival of Prematures
..... *K. C. Buetow, S. W. Klein* 163

Body Temperature and Survival of Prematures
..... *R. L. Day, L. Caliguiri, C. Kamenski, F. Ehrlich* 171

Plasma Amino Acids after Birth *H. Ghadimi, P. Pecora* 182

Validity of Capillary pH and Pco₂ in Sick and Healthy Infants
..... *G. Gandy, L. Grann, N. Cunningham, K. Adamsons, Jr., L. S. James* 192

Protein Metabolism, Cell Formation, Immunity *D. Gitlin* 198

Dysgammaglobulinemia: Case Report with Affected Sibling
..... *B. D. Ackerman* 211

Intravenous Urea for Brain Swelling with Meningitis
..... *C. P. S. Williams, A. G. Swanson, J. T. Chapman* 220

Experimental Furniture Polish Pneumonia
..... *K. A. Huxtable, R. P. Bolande, M. Klaus* 228

Comparative Treatment of Experimental Burns of Esophagus
..... *J. A. Haller, Jr., K. Bachman* 236

Infantile Lobar Emphysema *L. L. Leape, L. A. Longino* 246

The Face Predicts the Brain *W. DeMyer, W. Zeman, C. G. Palmer* 256

Purpura Fulminans *J. D. Bouhasin* 264

Management of Ventricular Septal Defect *A. S. Nadas* 271

EXPERIENCE AND REASON—Briefly Recorded

Folic Acid Content of Milk *J. L. Naiman, F. A. Oski* 274

New Method of Intestinal Biopsy
..... *F. E. Pittman, C. Ores, C. R. Denning, H. I. Cohen* 276

Isolation of Rubella Virus from Mother and Fetus
..... *A. D. Heggie, W. C. Weir* 278

Bone Marrow in Hurler's Syndrome *H. A. Pearson, A. E. Lorincz* 280

REVIEW ARTICLE

Childhood and Adolescent Addictions (To be concluded)
..... *A. M. Freedman, E. A. Wilson* 283



ON MOST BABIES a sterile diaper isn't sterile very long. To help reduce skin rashes commonly due to infections from bacillus ammoniagenes and alcaligenes faecalis, Mexsana Medicated Powder's formula is worth knowing about. It even inhibits the growth of antibiotic resistant strains of staphylococcus aureus.

Four antiseptic ingredients of accepted value provide the bactericidal action needed to combat infection: hexachlorophene, Eucalyptus oil, camphor and zinc oxide.

These are evenly distributed throughout Mexsana's cornstarch base (72%) which forms a smooth, protective film over the skin's surface.

Highly absorbent, cornstarch absorbs moisture far more readily than talcum.* Thus it helps keep baby's tender skin dry and supple. Also, it is not alkaline. Has an exceptionally soothing, cooling effect on the skin.

Mexsana is also an aid in the relief of itching accompanying measles, scarlet fever, allergic dermatitis, heat rash and other minor skin irritations; in helping prevent friction for the patient who uses braces, and for excoriation in the incontinent.

The coupon at the right is for your convenience in obtaining professional samples of Mexsana Medicated Powder.

Plough, Inc.

NEW YORK • MEMPHIS
LOS ANGELES • MIAMI

*Soilman: J.A.M.A., Vol. 72, p. 835, 1919



33

PLOUGH, INC., MEMPHIS 1, TENNESSEE

Please send me samples of Mexsana Medicated Powder

Name _____, M.D.

Address _____

City _____ Zone _____ State _____

FOR CONSTIPATED BABIES AND CHILDREN



A food product of enzymatic digestion that encourages development of an aciduric intestinal flora

PROMOTES NORMALLY SOFT STOOLS GENTLE—SAFE—DEPENDABLE

A VALUABLE PRODUCT

"A valuable product in treating constipation throughout infancy and childhood is a malt soup extract available as a syrup or powder."

Reichert, J. L.: Constipation in Infants and Young Children. *Fed. Clin. N. A. 2: 527-538, 1955.*

For more than 50 years pediatric leaders have attested to the clinical value of Borchardt's MALTSUPEX (Malt Soup Extract) in treating constipation in infants and children. (References on request.) The addition of Maltsupex to the diet gently changes the character of the stool by simple, DIETARY means. It is SAFE for the tiniest baby! Just add it to the regular feeding (formula or whole milk). Results are usually observable within 24 hours, even in stubborn cases. Constipation is relieved in an easy natural manner without danger of habit formation, colic or other side effects.

One reason for the gentle stool-softening effect of Maltsupex is the high proportion of readily fermentable maltose which encourages the growth of aciduric bacteria in the lower intestinal tract, and retards growth of putrefactive organisms. The water-soluble extractives of choice malted barley and the added potassium carbonate also contribute to the gentle but prompt physiologic action. The hard calcium soap stool is modified to a soft potassium soap stool. Maltsupex promotes optimal bowel function by producing an ACIDURIC INTESTINAL FLORA similar to that of the breast-fed baby. Maltsupex is specially processed barley malt extract neutralized with potassium carbonate. Approximate composition of liquid Maltsupex—Maltose 57.6%, dextrins 11.7%, protein 6.4%, ash 2.5%, moisture 21.8%. 85 calories per ounce by weight.

Borchardt Company

217 N. Wolcott Ave.
Chicago 12, Ill.

AVAILABLE at pharmacies, liquid and powder, 8 oz. and 16 oz.

DOSE: Infants, 1 or 2 tablespoonfuls in day's feeding. Breast-fed babies, 1 or 2 teaspoonfuls in water before nursings. Dose may be increased or decreased according to the frequency and character of the stools. To prevent constipation when baby goes on whole milk, add 1 teaspoonful to every other bottle. Children, 2 tablespoonfuls in milk once or twice a day. Powder dissolves quickly, makes a "tasty malted." When using powder, use heaping measures.

Borchardt Company, 217 North Wolcott Avenue, Chicago 12, Illinois

Gentlemen: Please send me literature and starter samples of Maltsupex

Powder Liquid

I'm interested in constipation _____ M.D.

in babies

when babies change to whole milk

in growing children

Address _____

City _____ Zone _____ State _____

In answering advertisements please mention PEDIATRICS

i

This One



Y3E2-D3D-JKL1

GENERAL INFORMATION

PEDIATRICS publishes papers on original research or observations and special feature or review articles in the field of pediatrics as broadly defined. Papers on material pertinent to pediatrics will also be included from related fields such as nutrition, surgery, dentistry, public health, human genetics, animal studies, psychology, psychiatry, education, sociology and nursing.

PEDIATRICS is the official publication of the American Academy of Pediatrics, Inc., and serves as a medium for expression to the general medical profession as well as pediatricians. The Executive Board and Officers of the American Academy of Pediatrics, Inc. have delegated to the Editor and the Editorial Board the selection of the articles appearing in PEDIATRICS. Statements and opinions expressed in such articles are those of the authors and not necessarily those of the American Academy of Pediatrics, Inc., its Committees, PEDIATRICS, or the Editor or Editorial Board of PEDIATRICS.

COMMUNICATIONS

Concerning editorial matters, manuscripts, and books for review should be sent to PEDIATRICS, Dr. Clement A. Smith, Editor, 221 Longwood Avenue, Boston 15, Massachusetts.

Concerning business matters, subscriptions, offprints, reprints, and advertising should be sent to Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois. 62703.

Concerning the American Academy of Pediatrics should be sent to Dr. E. H. Christopherson Executive Director, 1801 Hinman Avenue, Evanston, Illinois. 60204.

INFORMATION FOR CONTRIBUTORS

Papers are accepted on the condition that they have not been published elsewhere in whole or in part and that they are contributed exclusively to this Journal, except by special consideration. Manuscripts should be prepared according to the instructions for "Preparation of Manuscripts" for PEDIATRICS as published on page v in the advertising section of the June and December issues.

Review of manuscripts by the Editorial Board and promptness of publication will be greatly facilitated if two *complete* copies of the manuscript, *including tables and figures*, are supplied.

The manuscript should be submitted by the head of the department or institution in which the work was done or accompanied by a letter of authorization for publication of the paper. Galley proofs and engraver's proofs are sent to authors. Permission to reproduce material from PEDIATRICS must be requested in writing.

OFFPRINT AND REPRINT ORDERS

When galley proofs are received, read the accompanying offprint and reprint order forms carefully. All instructions thereon are final.

PEDIATRICS will supply, upon request, at no charge, 50 offprints of each article without covers. All offprints are printed at the same time as PEDIATRICS—any in excess of the 50 free must be ordered immediately upon receipt of your galley proof on the form which will accompany proof. Offprints are side-stitched and distributed more promptly than reprints.

Offprint orders are limited to 250 (including 50 free) and must be ordered through the Senior Author. The type from each issue of PEDIATRICS is killed as soon as it is printed, except for reprint orders in hand. Offprints are not available thereafter.

All orders in excess of 250 offprints will be printed as a reprint job; saddle-stitched and self-covered, unless covers are ordered. Orders over 1,000 are subject to special quotations and any additional changes from standard pages are subject to additional charges. Any orders entered after PEDIATRICS has gone to press will be more costly.

PEDIATRICS is owned and controlled by the American Academy of Pediatrics, Inc. It is issued monthly by Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois, 62703.

Subscription price per year: U.S., Mexico, Canada, Cuba, Central and South America, \$12.00; other countries, \$14.00. Special price for medical students, hospital residents, and fellows in full time training \$6.00 per year but renewal at this rate beyond two years will require a letter from an appropriate authority stating the individual's eligibility. Current single issues, \$1.50.

Second-class postage paid at SPRINGFIELD, ILLINOIS, 62703, and at additional mailing office under the Act of March 3, 1879. Acceptance at a special rate of postage, as provided in Section 3440D, authorized November 18, 1952.

Pediatrics

OFFICIAL PUBLICATION OF THE AMERICAN ACADEMY OF PEDIATRICS, INC.

Volume 34

August, 1964

Number 2

Editor

Clement A. Smith
221 Longwood Avenue
Boston 15, Mass.

Editorial Board

Alfred M. Bongiovanni

Philadelphia

Sidney Carter

New York

Barton Childs

Baltimore

David H. Clement

New Haven

Bruce D. Graham

Columbus, Ohio

Malcolm A. Holliday

Oakland, Calif.

Norman Kretchmer

Stanford

Reginald S. Lourie

Washington, D.C.

Robert James McKay, Jr.

Burlington, Vt.

Alexander S. Nadas

Boston

Frederick C. Robbins

Cleveland

Irving Schulman

Chicago

Frederic N. Silverman

Cincinnati

William A. Silverman

New York

Orvar Swenson

Chicago

Myron E. Wegman

Ann Arbor, Mich.

Samuel M. Wishik

Pittsburgh

F. Howell Wright

Chicago

Ex Officio

Frank H. Douglass

President

Seattle, Wash.

E. H. Christopherson

Executive Director

1801 Hinman Avenue
Evanston, Illinois 60204

CONTENTS

COMMENTARY

- Medical Responsibility and Drug Addiction—*Leon Eisenberg* 155

ARTICLES

- Infants of Low Birth Weight Among 5,000 Deliveries—*Peter Gruenwald* 157

- Effect of Maintenance of "Normal" Skin Temperature on Survival of Infants of Low Birth Weight—*Kathleen C. Buetow and S. Wayne Klein* 163

- Body Temperature and Survival of Premature Infants—*Richard L. Day, Lawrence Caliguiri, Carolyn Kamenski, and Florence Ehrlich* 171

- Plasma Amino Acids After Birth—*H. Ghadimi and P. Pecora* 182

- The Validity of pH and Pco₂ Measurements in Capillary Samples in Sick and Healthy Newborn Infants—*Gillian Gandy, Lotte Grann, Nicholas Cunningham, Karlis Adamsons, Jr., and L. Stanley James* 192

- Protein Metabolism, Cell Formation and Immunity—Borden Award Address, October 1963—*David Gitlin* 198

- Dysgammaglobulinemia: Report of a Case with a Family History of a Congenital Gamma Globulin Disorder—*Bruce D. Ackerman* 211

- Brain Swelling with Acute Purulent Meningitis—Report of Treatment with Hypertonic Intravenous Urea—*Christopher P. S. Williams, August G. Swanson, and John T. Chapman* 220

(Continued on next page)

FORTHCOMING MEETINGS—AMERICAN ACADEMY OF PEDIATRICS

Thirty-third Annual Meeting, October 24 to 29, 1964
New York Hilton Hotel, New York City

***There is no reason why
infants and children
... living in communities
without fluoridated drinking water
... should be denied the dental
benefits of dietary fluoride***

In communities without fluoridated drinking water — the proper intake of sodium fluoride during infancy and childhood can be prescribed along with pediatric vitamin supplementation... Rx — FUNDA-VITE(F) ... with the utmost convenience and economy.

FUNDA-VITE(F) represents the first major change in pediatric supplementation for the normal healthy infant and child in over two decades, as it provides for: (1) a daily intake of 400 USP units vitamin D and 30 mg. vitamin C—as recommended by the A.M.A. Council on Foods and Nutrition and (2) an optimal amount of fluoride considered necessary to improve future dental health.



**proper nutritional support
plus prophylaxis against dental caries**

FUNDAMENTAL PEDIATRIC VITAMINS PLUS SODIUM FLUORIDE

during infancy and early childhood:

**Rx FUNDA-VITE®(F)
PEDIATRIC DROPS**

Each 0.6 ml. provides: vitamin D 400 U.S.P. units, vitamin C 30 mg. and fluorine (from 1.1 mg. sodium fluoride) 0.5 mg. USUAL DAILY ORAL DOSE: 0.6 ml. undiluted or mixed with fluids. AVAILABILITY: 30 ml. and 50 ml. bottles with calibrated droppers.

during childhood and adolescence:

**Rx FUNDA-VITE®(F)
LOZI-TABS**

Each pleasantly-flavored (sugar-free) lozenge-type tablet provides: vitamin D 400 U.S.P. units, vitamin C 30 mg. and fluorine (from 2.2 mg. sodium fluoride) 1 mg. USUAL DAILY ORAL DOSE — for children age 3 and over — one Lozi-Tab partially dissolved in mouth before swallowing. AVAILABILITY: Bottles of 100.

ON PRESCRIPTION ONLY
CONTRAINDICATED WHEN DRINKING WATER CONTAINS MORE THAN 0.3 ppm F

HOYT

SAMPLES AND LITERATURE, write Medical Department
HOYT PHARMACEUTICAL CORP. Needham, Massachusetts 02194

In answering advertisements please mention PEDIATRICS



Bananas... ideal for baby's first test of solid food

Bananas make an ideal first solid food for an infant.¹⁻³ They are easy to digest and virtually nonallergenic.¹⁻³ Indeed, eating this nutritious fruit is a good habit for infants to begin and for children to continue, because bananas can make a definite nutritional contribution.

This is particularly true during these growing, formative years since bananas help provide many of the vitamins and minerals essential in tissue-building and bone growth...an observation confirmed years ago by Macy and associates⁴ when they noted that bananas exert a stimulating influence on the rate of growth in young children.

In addition, bananas are rich in easily assimilated carbohydrates, an accessible and quickly converted source of energy for active young bodies. Though one average, medium-sized banana contains only 88 calories, bananas are a filling and satisfying food that may discourage excessive caloric intake. And from the child's point of view, bananas are a delightful treat...one he'll eat without urging.

Yes, Doctor, bananas are an excellent food to include in the diets of all your young patients—from infancy on. And when you do, be sure you recommend the best...Chiquita® Brand Bananas.



BANANA FACTS

A single medium-sized banana (average weight 100 gm.) contains:

Calories	.....88
Protein	.....1.2 gm.
Carbohydrate	.....23 gm.
Fat	.....0.2 gm.
Vitamin A	.....430 I.U.
Thiamine	.....0.04 mg.
Riboflavin	.....0.05 mg.
Niacin	.....1.0 mg. equiv.
Ascorbic Acid	......10 mg.
Calcium	......8 mg.
Phosphorus	......28 mg.
Iron	......0.6 mg.
Potassium	.....367 mg. av.

1. Crews, J. E.: South. M.J. 50:343, 1957.
2. Sackett, W. W., Jr.: South. M.J. 50:340, 1957.
3. Craig, J. D.: J. Pediat. 13:239, 1938.
4. Macy, I. G. et al.: J. Nutrition 19:461, 1940.

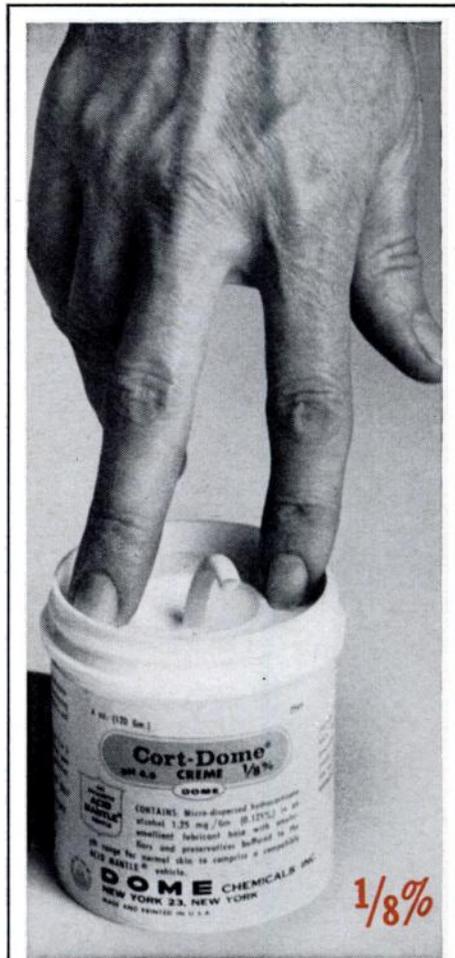
United Fruit Company



In answering advertisements please mention PEDIATRICS



Cort-Dome 1/4% (hydrocortisone cream) where slightly drying creams are preferred as in contact dermatoses. Provides micro-dispersed steroid plus an ACID MANTLE vehicle to achieve greater therapeutic response at lower concentration—successfully and economically maintains improvement—after initial control of acute inflammatory state.



Cort-Dome 1/8% (hydrocortisone cream) for diaper rash. Subdues inflammation and pruritus rapidly. Its emollient, evaporable ACID MANTLE base and micro-dispersed steroid help ensure faster resolution of inflamed, macerated, and encrusted areas. Costs no more than many nontherapeutic creams, yet is a proven prescription medication.

new—DISPENSAJAR™ increases patient acceptance for

Cort-Dome®

Crème (pH 4.6)

Micro-dispersed hydrocortisone alcohol in ACID MANTLE®

New unique DISPENSAJAR™ delivers the desired amount of medication quickly, conveniently, esthetically.

Eliminates waste and handling of greasy containers, helps assure the necessary, frequent use for most effective therapy.

Contains: Micro-dispersed hydrocortisone alcohol 1/8% or 1/4% in an emollient lubricant base with emulsifiers and preservatives buffered to the pH range for normal skin to comprise a compatible ACID MANTLE vehicle.

Precautions: Do not use in the presence of tuberculosis or fungal lesions, vaccinia, vari-

cella, or acute herpes simplex. Not for ophthalmic use.

Available: CORT-DOME 1/8% or 1/4% (hydrocortisone cream) in DISPENSAJAR,® 4 oz. (120 Gm.) + 1 oz. tubes.

*PATENT APPLIED FOR 06663

DOME CHEMICALS INC., N. Y. 23, N. Y. WORLD LEADER IN DERMATOLOGICALS



In answering advertisements please mention PEDIATRICS

AMERICAN ACADEMY OF PEDIATRICS

**1801 Hinman Avenue
Evanston, Illinois 60204**

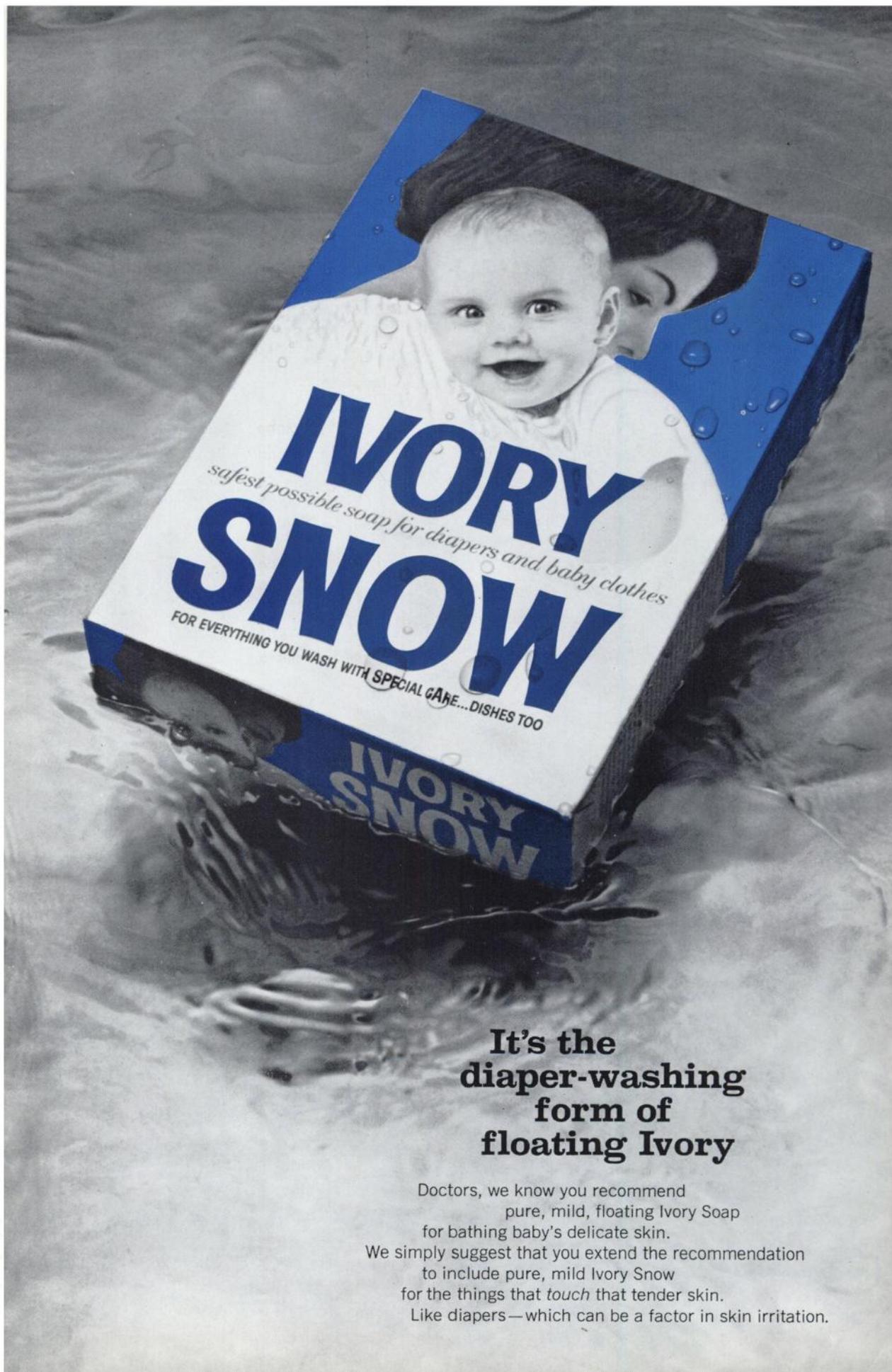
SCHEDULE OF MEETINGS

ANNUAL MEETINGS

1964—Thirty-Third New York Hilton, New York City	October 24 to 29 Seminars—October 24 & 25
1965—Thirty-Fourth Palmer House, Chicago	October 23 to 28 Seminars—October 23 & 24
1966—Thirty-Fifth Palmer House, Chicago	October 22 to 27 Seminars—October 22 & 23
1967—Thirty-Sixth The Washington Hilton, Washington, D.C.	October 21 to 26 Seminars—October 21 & 22
1968—Thirty-Seventh Palmer House, Chicago	October 26 to 31 Seminars—October 26 & 27

SPRING SESSION

1965—Americana Bal Harbour, Florida	April 26 to 29
1966—The Queen Elizabeth Montreal, Canada	April 25 to 27
1967—Hilton Hotel San Francisco, California	April 3 to 5
1968—Jung Hotel New Orleans, La.	April 29 to May 1
1969—Hotel America Boston, Mass. (Boston Children's Hospital—Centennial)	April 20 to 23 April 18 to 20



**IVORY
SNOW**

safest possible soap for diapers and baby clothes

FOR EVERYTHING YOU WASH WITH **SPECIAL CARE**... DISHES TOO

**It's the
diaper-washing
form of
floating Ivory**

Doctors, we know you recommend
pure, mild, floating Ivory Soap
for bathing baby's delicate skin.
We simply suggest that you extend the recommendation
to include pure, mild Ivory Snow
for the things that *touch* that tender skin.
Like diapers—which can be a factor in skin irritation.



Shh...

introducing a quiet break through

New Asbron. Really does a remarkable job of quickly and quietly breaking through the bronchial constriction of children with bronchitis and bronchial asthma.

Asbron has two powerful bronchodilators and an effective expectorant in a good tasting hydro-alcoholic vehicle.

One bronchodilator* acts longer than ephedrine and with virtually no excitation. No sedatives are needed. What about gastric irritation? *Shh*—you'll rarely hear parents complain with Asbron.

ASBRONTM elixir

asthma bronchitis

Each tablespoonful (15 ml.) of elixir contains theophylline sodium glycinate, 300 mg.; glyceryl guaiacolate, 100 mg.; *phenylpropanolamine hydrochloride, 25 mg.; alcohol, 15%. Usual dosage, 2 or 3 times daily: Children—1 to 3 yrs., ½ to 1 tsp.; 3 to 6 yrs., 1 to 1½ tsp.; 6 to 12 yrs., 2 or 3 tsp.

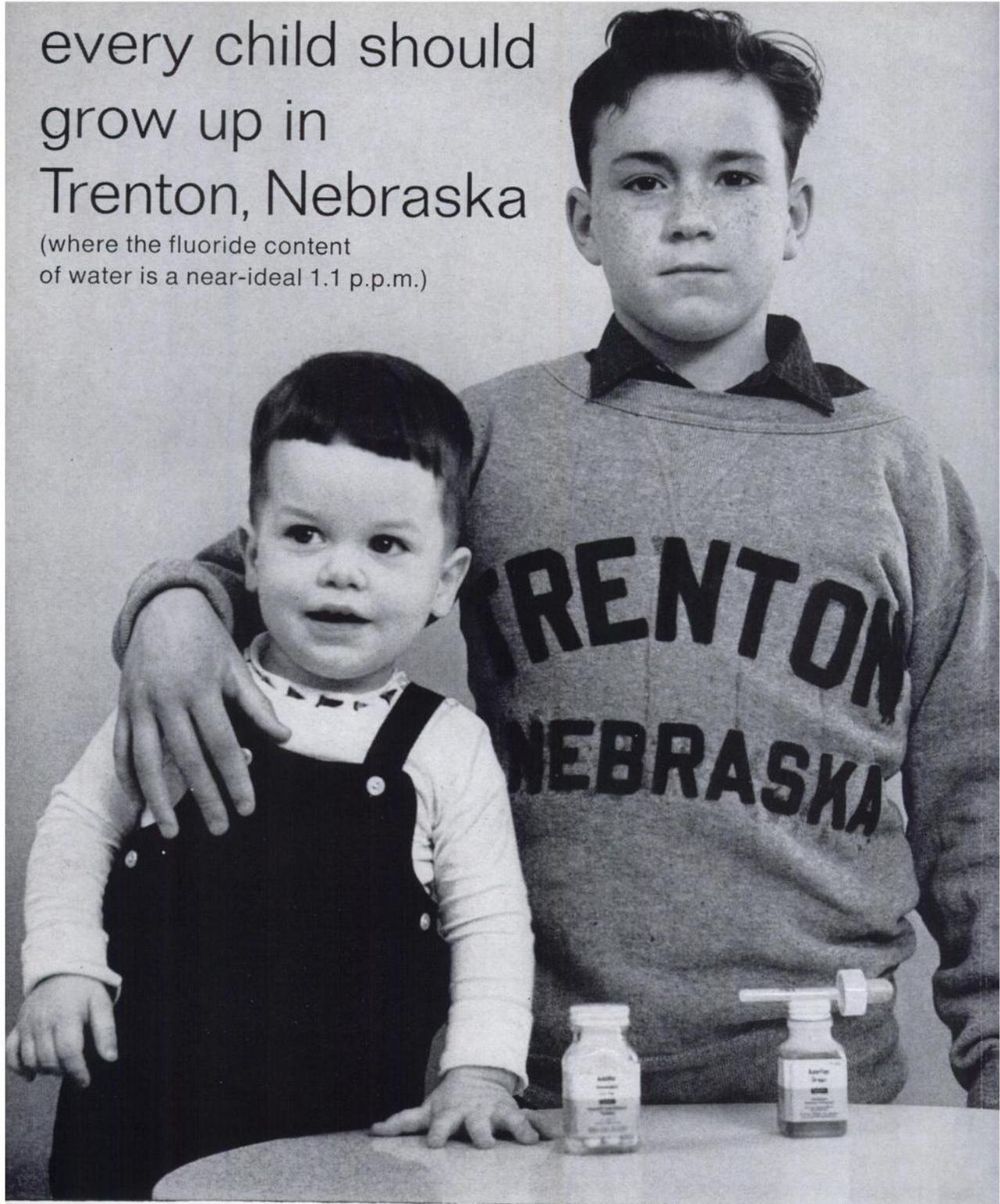
Precautions and Side Effects: Do not administer more frequently than every 4 hours or within 12 hours after administration of, or concurrently with, other xanthine derivatives. Asbron contains a sympathomimetic amine; use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis. Ordinary large doses may cause hypertension, headache, tachycardia, nausea, vomiting, etc. Administration after meals may further reduce the infrequent possibility of gastric distress or CNS stimulation.

New from Dorsey, originators of the Triaminic® line.

DORSEY LABORATORIES • a division of The Wander Company • Lincoln, Nebraska

every child should
grow up in
Trenton, Nebraska

(where the fluoride content
of water is a near-ideal 1.1 p.p.m.)



Even better, you can "bring" Trenton to children everywhere by prescribing Upjohn fluoride/vitamin supplements. To protect dental integrity and nutritional development, there are Adeflor or Zymaflor drop-dosage formulations for the very young (infancy to age 3) and tablets of Adeflor Chewable for older children (ages 3 to 12).

**to age 3:
Adeflor® Drops**

Each 0.6 cc. contains:
 Fluoride (from sodium fluoride) 0.5 mg.
 Vitamin A 0.6 mg.
 Vitamin D 10 mcg.
 Ascorbic Acid (C) 50 mg.
 Pyridoxine Hydrochloride (B₆).. 1 mg.

Dosage: Infants and children up to 3 years of age — 0.6 cc. daily.
 Supplied: In 15, 30, and 50 cc. dropper bottles with each dropper calibrated for 0.6 cc. dosage.

**or new full-formula
Zymaflor® Drops**

Each 0.6 cc. contains:
 Vitamin A 0.6 mg.
 Vitamin D 10 mcg.
 Thiamine Hydrochloride 1 mg.
 Riboflavin
 (from 5' phosphate sodium).. 1 mg.
 Ascorbic Acid 50 mg.
 Nicotinamide 10 mg.
 Pyridoxine Hydrochloride 1 mg.
 d-Pantothenyl Alcohol 3 mg.
 Fluoride (from sodium fluoride) 0.5 mg.

Usual child dosage: 0.6 cc. daily.
 Supplied: In 15, 30, and 50 cc. plastic bottles with a plastic, calibrated (0.6 cc.) dropper.

**to age 12:
Adeflor Chewable**

Each tablet contains:	0.5 mg.	1.0 mg.
Fluoride (from sodium fluoride) ..	0.5 mg.	1.0 mg.
Vitamin A	1.2 mg.	1.2 mg.
Vitamin D	10 mcg.	10 mcg.
Ascorbic Acid (from sodium ascorbate) ..	75 mg.	75 mg.
Thiamine Mononitrate	2 mg.	2 mg.
Riboflavin	2 mg.	2 mg.
Nicotinamide	18 mg.	18 mg.
Pyridoxine Hydrochloride ...	1 mg.	1 mg.
Calcium Pantothenate	5 mg.	5 mg.
Cyanocobalamin ...	2 mcg.	2 mcg.

Dosage: Children 3 years or older — one tablet daily.

Supplied: In bottles of 50 and 500 chewable tablets.

NOTE: Adeflor Chewable 0.5 mg. formerly prescribed as Adeflor Plus.

Precautions when using fluoride supplements: Adeflor Drops or Zymaflor Drops are contraindicated when the intake of fluoride from drinking water exceeds 0.3 mg. per day. One quart of water containing one p.p.m. of fluoride provides 1 mg. of fluoride. Adeflor Chewable 1 mg. is contraindicated where the fluoride content of drinking water exceeds 0.3 p.p.m. Adeflor Chewable 0.5 mg. is contraindicated when the intake of fluoride from drinking water exceeds 0.5 mg. per day.

Cautions: Do not exceed recommended dose; excessive fluoride intake may result in dental fluorosis.

Side effects: Occasional fluoride skin reactions: eczema, atopic dermatitis, and urticaria. Overdoses from 25 to 50 mg. reported to cause gastrointestinal distress, nausea, vomiting and diarrhea.

Adeflor[®] costs no more than the vitamins alone

like the first hands the newborn feels

Diaparene[®]



gives gentle protection to infant skin

... skin so sensitive that it must be guarded constantly against infant skin problems. Diaparene Anti-bacterial Products provide this protection... a firm 24-hour-a-day defense against the ever-present, urea-splitting, ammonia-forming bacteria which cause diaper rash and related skin conditions.

Clinical evidence confirms the efficacy of Diaparene. Using a regimen of Diaparene Products, Lipschutz and Agerty¹ found that 96% of 200 babies were kept free of diaper rash and seborrhea. They conclude: "This study has demonstrated that a prophylactic regimen for diaper rash and related skin conditions, carefully followed, can prevent many of the irritating and potentially hazardous skin manifestations commonly encountered in private practice of pediatricians and in the institutional care of infants."

Start the newborn right...with these Diaparene Baby Products

Diaparene Antiseptic Diaper Rinse... Granules and Tablets...eliminates the cause of diaper rash by impregnating the diaper with methylbenzethonium chloride, an antiseptic that destroys urea-splitting organisms. Such rinsing "...prevents the formation of ammonia up to 15 hours after soiling, and prevents urinary odors."² Inhibits monilial growth...reduces mildew in diapers. For use in hospitals, home laundries or commercial diaper services.

Diaparene Anti-bacterial Ointment...a strikingly effective treatment when diaper rash is present, this water-miscible ointment soothes the raw area...its anti-bacterial methylbenzethonium chloride destroys bacteria, protects against further irritation, allows the rash to heal. Diaparene Ointment spreads easily, is non-staining, and greaseless.

Diaparene Anti-bacterial Peri-Anal® Creme...is outstanding in the prevention and treatment of dermatitis in the perianal area. Peri-Anal Creme forms a water-repellent shield against the irritation caused by loose stools and urine, and inhibits growth of monilia organisms with its methylbenzethonium chloride component.

Diaparene Anti-bacterial Baby Powder... is more than an ordinary baby powder. Medicated with methylbenzethonium chloride for added antibacterial protection, Diaparene has a refined cornstarch base which absorbs more moisture than talc, and contains no irritating boric acid or zinc stearate.

Diaparene Anti-bacterial Baby Lotion... to cleanse the diaper area...soothe and soften infant's sensitive skin...gives added antibacterial protection because of its methylbenzethonium chloride component.

Diaparene Cradol®...a specific for seborrhea capitis, or "cradle cap," Cradol is an emulsion that softens and loosens the crusts and scales, penetrates them easily because of the wetting properties of methylbenzethonium chloride. This anti-bacterial also fights local infection.

Diaparene Tod'l®...is an antibacterial, sudsing, emollient skin cleanser for bathing the infant and cleaning the diaper area

at changes. Tod'l leaves an antibacterial film on the skin to protect against harmful organisms, contains hexachlorophene 0.5%.

References: 1. Lipschutz, A., and Agerty, H.: Arch. Pediat. 79:257 (July) 1962. 2. J.A.M.A. 181:461 (Aug. 4) 1962.

**Better diaper services
are Diaparene franchised.**



Diaparene® Baby Products...sentinels for infant skin care



Send for samples and literature to Dept. 24
Diaparene Products Division, BREON LABORATORIES INC., New York 18, N. Y.
Subsidiary of Sterling Drug Inc.

Biomydrin is safe — no special pediatric dosage is necessary. Because of the unique penetrating action of thonzonium bromide, Biomydrin decongests almost instantly with *only 0.25% phenylephrine*. Two topical antibiotics protect against secondary infections. Two drops (or a fine spray) of Biomydrin can help the stuffy-nosed child play through the day or sleep through the night — with minimal systemic side effects and no rebound congestion. *Dosage:* Children over 3 — 1 or 2 sprays or 1 or 2 drops in each nostril, 4 or 5 times a day. Adults — 3 sprays or drops in each nostril, 4 or 5 times a day. *Supplied:* In a convenient 15 ml. plastic atomizer, or in a 15 ml. bottle with dropper. *Side Effects:* Overdosage may cause local irritation, rebound phenomenon or CNS stimulation. Full information available on request.

WARNER - CHILCOTT Warner-Chilcott, Morris Plains, N.J. Makers of Coly-Mycin Gelusil Mandelamine Peritrate Tedral



the trouble
with
small noses

no trouble
with
Biomydrin®
nasal spray / drops





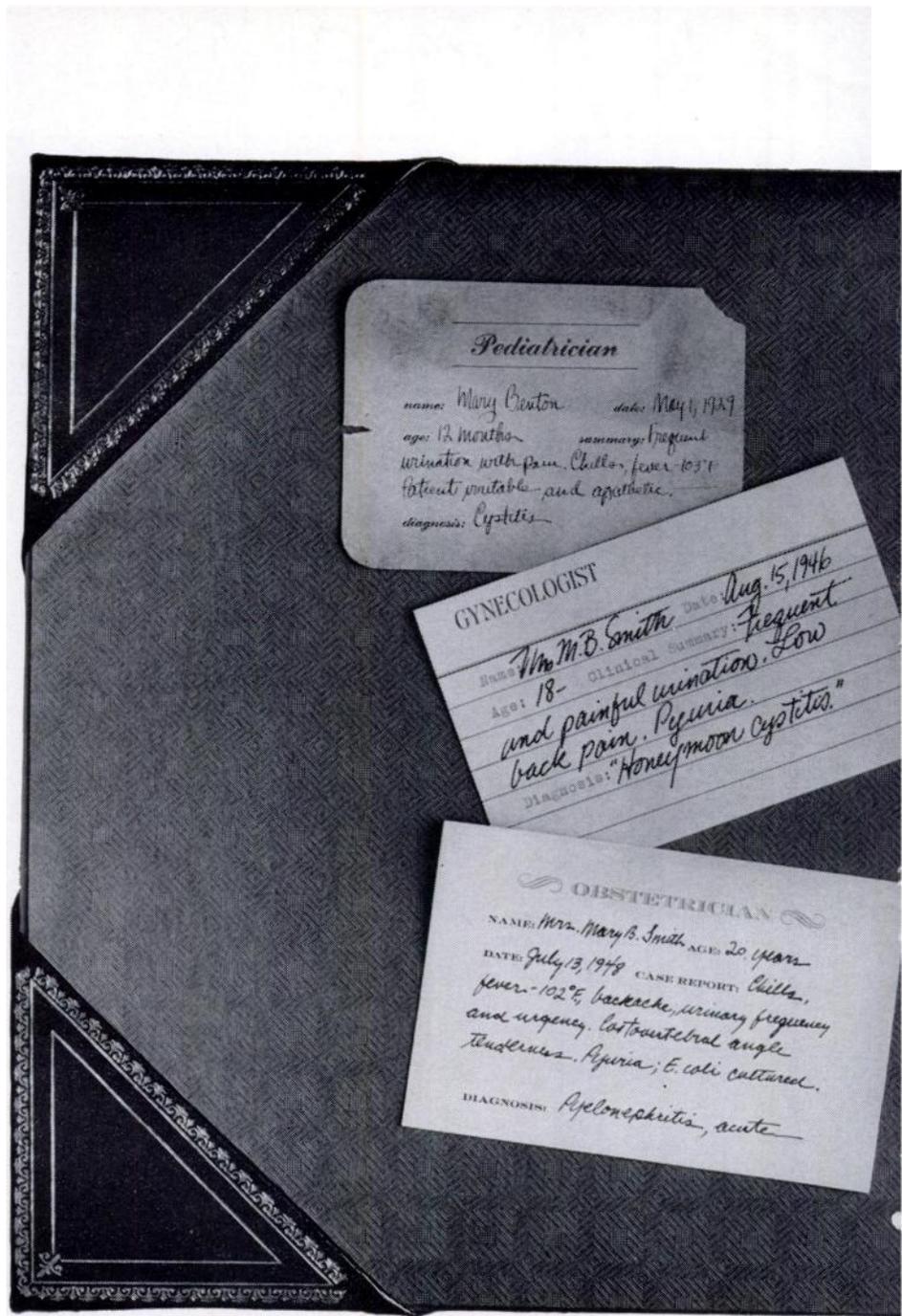
HOW TO BE SURE
your young patients get the aspirin
dosage you want them to have

The answer is Orange Flavored Bayer Aspirin for Children
The dosage is $1\frac{1}{4}$ grains per tablet. Mothers place such confidence in the Bayer name. And the new orange flavor is so fresh and smooth that children take it readily. (The grip-tight cap on the bottle helps keep them from taking it on their own.)

For professional samples, just write The Bayer Company, Dept. 114, 1450 Broadway, New York 18, N. Y.



In answering advertisements please mention PEDIATRICS



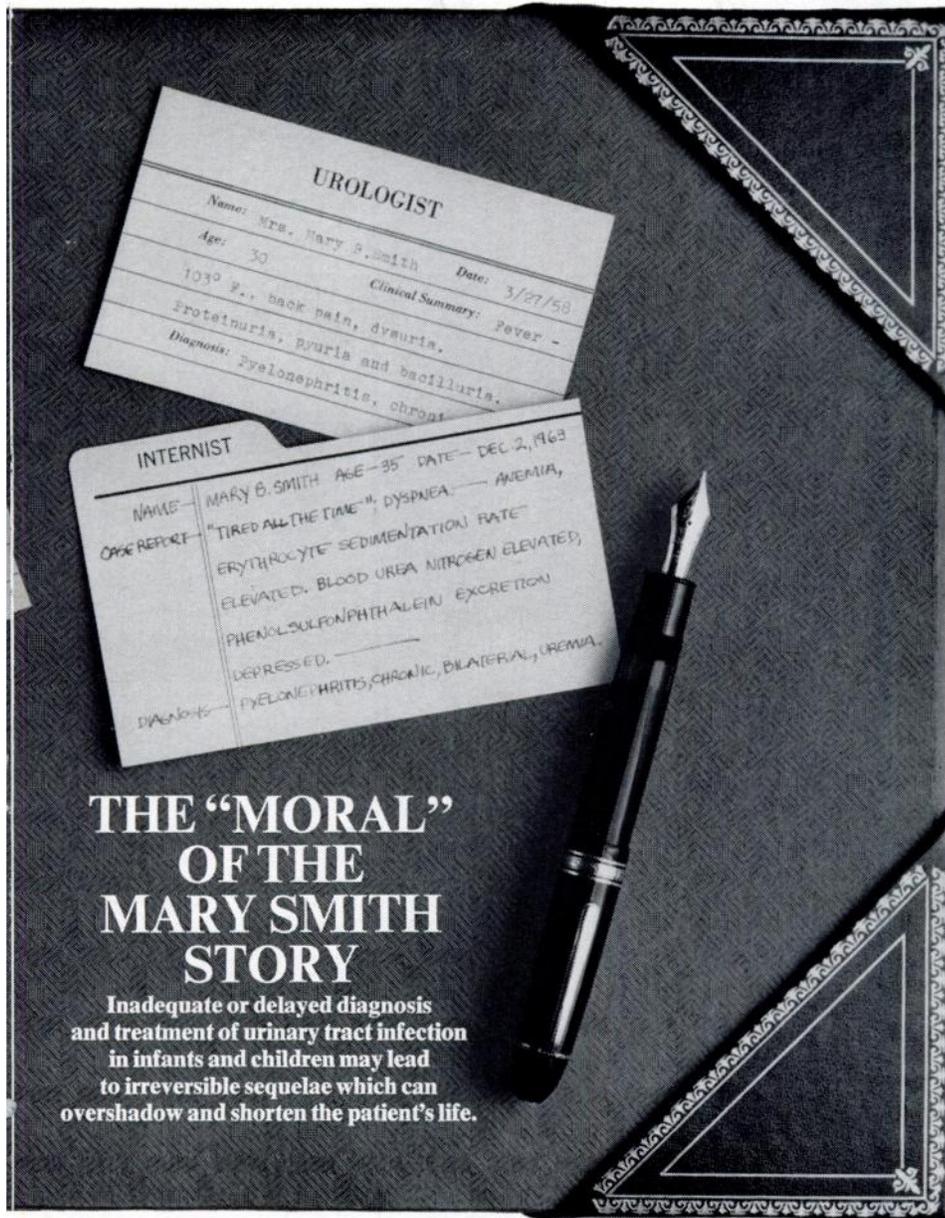
(This is not an actual case history; it is intended only for illustrative purposes.)

in urinary tract infections to cure when you can...control the chronic when for prompt/thorough/dependable/economical/

Untoward Reactions and Contraindications: Anuria and oliguria are contraindications to therapy. Infants under one month of age should not receive the drug. Peripheral neuropathy has been reported; most of these patients

were uremic, anemic, diabetic or had other debilitating conditions. Hemolytic anemia has occurred in a few individuals; this appears to be a primaquine-type reaction and is reversible when the drug is withdrawn.

Should nausea or emesis occur, a smaller dose is indicated. Allergic skin reactions develop occasionally; other hypersensitivity conditions, such as fall in blood pressure, asthmatic symptoms, muscular aches, jaundice and



THE "MORAL" OF THE MARY SMITH STORY

Inadequate or delayed diagnosis and treatment of urinary tract infection in infants and children may lead to irreversible sequelae which can overshadow and shorten the patient's life.

of childhood, and after—
you can't... **FURADANTIN[®] NITROFURANTOIN**
well-tolerated/ bactericidal action throughout the urinary system

fever, are rare. Headache or malaise occurs occasionally.

FURADANTIN Tablets, 50 mg. and 100 mg. nitrofurantoin, FURADANTIN Oral Suspension, 25 mg. nitrofurantoin per 5 cc. tsp., alcohol 10%.

Complete information in package insert or on request to the Medical Director.

For round-the-clock medical consultation on any Eaton product, call the medical consultant on duty, person

to person, Norwich, New York, Area Code 607, 334-9911.

EATON LABORATORIES
Division of The Norwich Pharmacal Company 
NORWICH, NEW YORK



The Gerber Baby Formula, MODILAC,[™]

looks like milk  and tastes like milk 

because it's flash-sterilized in 6 seconds

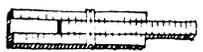
 to retain the natural color and flavor

of milk. This true-milk flavor makes the

eventual transition to  fresh whole milk

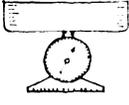
 especially easy.

The protein, fat (corn oil) and carbohydrate

in MODILAC  are proportioned 

to the infant's physiological and nutritional

needs.  Nutritional efficiency has

been clinically demonstrated.¹ 



1. Mosovich et al: Effects of Milk Composition on Baby Composition, Am. J. Dis. 100: 791-792, 1960.

Babies are our business . . . our only business!®

Gerber® Products Company, Fremont, Michigan

STUDY #1

Sobee

226%



Soya FORMULA A

(Did not take part in this phase of study)

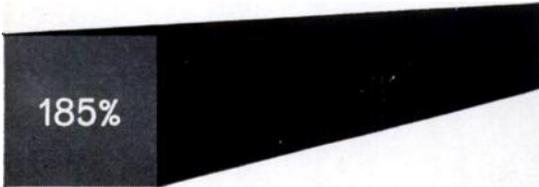
Soya FORMULA B

184%



Soya FORMULA C

185%



evidence confirms

**STUDY #2 —IN ANIMALS
WEIGHT GAIN IN GRAMS**

2.3 Gm.

1.95 Gm.

1.8 Gm.

1.25 Gm.*

(Ratio of weight gain per Gm. of protein ingested
over a 4-week period.)¹

*Mean of 2 batches 0.89 and 1.59 Gm.

there is
a difference
in soya
formulas

In an unusual combination of human and animal studies, the nutritional qualities of Sobee were demonstrated and confirmed. *In Study #1*, 114 premature infants were fed Sobee and two other soya formulas for a period of 25 weeks. Sobee-fed infants registered an average gain of 226% over birth weight—with a minimal incidence of diarrhea.¹

In Study #2, these superior weight gains were duplicated in animals when equal amounts of protein from each soya formula were ingested. The animals on Sobee gained an average of 2.3 grams for each gram of Sobee protein ingested.¹

1. Omans, W. B.; Leuterer, W., and Gyorgy, P.: *J. Pediat.* 62:98 (Jan.) 1963.

2. Kane, S.: *Am. Pract. & Digest Treat.* 8:65 (Jan.) 1957.

3. Bruce, J. W.: *Pediat. Clin. North America* 8:143 (Feb.) 1961.

4. Collins-Williams, C.: *Canad. M.A.J.* 75:934 (Dec. 1) 1956.

*for infants allergic
to cow's milk.*^{2,3,4}

Sobee

Milk-free soya formula



**Mead Johnson
Laboratories**

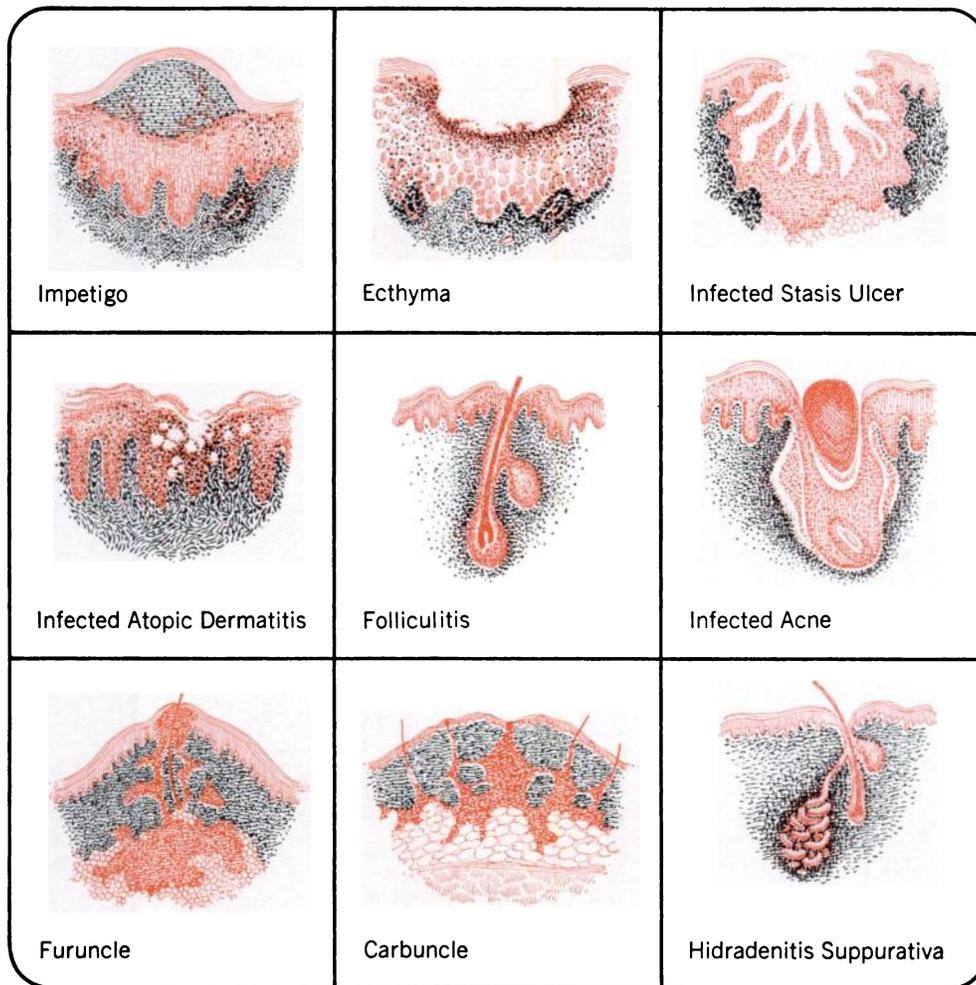
Symbol of service in medicine

Don't Forget

9 times out of 10¹

these and other common skin infections
are caused by staph and strep*

Representative Pyodermas in which Terra-Cortril may be of therapeutic value†



*Staphylococcus aureus (coagulase positive) and beta hemolytic streptococci

†Terra-Cortril is indicated as primary therapy in superficial skin infections. Its employment in deeper or walled-off infections should be adjunctive to systemic and/or surgical treatment.

Don't Forget

Terramycin® (oxytetracycline) is highly effective against both staphylococci and streptococci in clinical experience²

The marked clinical effectiveness of Terramycin (oxytetracycline) against pathogens responsible for so many bacterial skin infections has made Terra-Cortril a "treatment of choice in secondarily infected dermatoses . . ."³

"Skin sensitization occurs rarely if at all"² with Terramycin (oxytetracycline)

The absence of untoward reactions in 11,191 patients treated with topical Terramycin (oxytetracycline) as reported by Barefoot^{4,5} illustrates the "very low sensitizing index."⁴ On the other hand, potential sensitization by neomycin and iodochlorhydroxyquin has been cautioned.⁶

Terra-Cortril provides the accepted standard topical corticosteroid

Contains hydrocortisone 1% for suppression of inflammation and pruritus—without systemic side effects. Controlled and double blind studies⁷ confirm the value of Terra-Cortril "in the treatment of selected inflammatory dermatoses, especially when they are complicated by secondary bacterial infection."⁷

Terra-Cortril®

TOPICAL OINTMENT

oxytetracycline as the hydrochloride 30 mg. and hydrocortisone 10 mg. per Gm.

Side Effects: Allergic reactions to oxytetracycline are rare—as is hypersensitivity to topical hydrocortisone. If either occurs, therapy should be discontinued.

Precautions: The use of oxytetracycline may result in an overgrowth of resistant organisms, particularly *Monilia* and staphylococci.

When ointment is used, the affected area should be cleansed thoroughly and ointment applied gently in small amounts. When spray is used about the face, the eyes should be closed and protected and inhalation should be avoided. Care should be taken not to discontinue therapy too soon after the initial response has been obtained.

When the infection is deep seated or spreading, addi-

References: (1) Pillsbury, D.M.; Shelley, W.B., and Kligman, A.M.: *A Manual of Cutaneous Medicine*, Philadelphia, W.B. Saunders Company, 1961, p. 134. (2) *New and Nonofficial Drugs, Evaluated* by A.M.A. Council on Drugs, Philadelphia, J.B. Lippincott Company, 1963, pp. 168-169. (3) Leeder, E.E.: *Med. Times* 83:1259 (Dec.) 1955. (4) Barefoot, S.W.: *Arch. Dermat.* 79:455 (April) 1959. (5) Barefoot, S.W.: *Arch. Dermat.* 86:154 (Aug.) 1962. (6) Burkhardt, W., and Epstein, S.: *Atlas of Dermatology and Venereology*, Baltimore, The Williams and Wilkins Company, 1959, p. 135. (7) Laymon, C.W. and Young, H.R.: *Minn. Med.* 46:871 (Sept.) 1963.

SPRAY

oxytetracycline as the hydrochloride 300 mg., hydrocortisone 100 mg., and polymyxin B sulfate 100,000 units (equivalent to 10 mg. Polymyxin B Standard) per 85 Gm. spray can.

tional systemic administration of Terramycin (oxytetracycline) should be instituted.

Contraindications: Acute herpes simplex, vaccinia, varicella, and most other viral diseases of the skin; tuberculosis of the skin; superficial fungal diseases; acute purulent infections may be masked or enhanced by the presence of the steroid.

Formulas: Spray—300 mg. oxytetracycline as the hydrochloride, 100 mg. hydrocortisone and 100,000 units polymyxin B sulfate (equivalent to 10 mg. Polymyxin B Standard) per 85 Gm.

Ointment—10 mg. hydrocortisone and 30 mg. oxytetracycline as the hydrochloride per Gm. in a petrolatum base. *More detailed professional information available on request.*

Science for the world's well-being®  Since 1849

PFIZER LABORATORIES Division,
Chas. Pfizer & Co., Inc. New York, N. Y. 10017



NEW VITERRA® TASTITABS®
taste so good it's a crime □ five flavor multivitamins



New York, N.Y. 10017, Division, Chas. Pfizer & Co., Inc., Science for the World's Well-Being®



NEW VITERRA® TASTITABS®

taste so good
it's a crime



a comprehensive multivitamin formula. Designed as a dietary supplement to aid in the maintenance of better health and well-being in all age groups. Tastitabs may be chewed or dissolved in the mouth.

Vitamin A 5000 U.S.P. Units
 Vitamin D 500 U.S.P. Units
 Thiamine (B₁) 1 mg.
 Riboflavin (B₂) 1.5 mg.
 Pyridoxine (B₆) 1 mg.
 Cobalamin concentrate, N.F.,
 as Stablets® (B₁₂) 2 mcg.
 Ascorbic acid 50 mg.
 Niacinamide 10 mg.
 Calcium pantothenate 2 mg.

Dosage:

One tablet daily, or as indicated.



New York, N.Y. 10017
 Division, Chas. Pfizer & Co., Inc.
 Science for the World's Well-Being®

**This is the
next-best
ready-to-feed
method**



No man-made formula can equal the physiological and psychological advantages of breast-feeding. But the new, Ready-to-Feed BREMIL (available to Hospitals only) does offer convenience and satisfactory development of the infant because it approximates closely the analysis of human milk in protein, fat, and carbohydrate pattern.

NEW Ready-to-Feed BREMIL requires no refrigeration. No tools to misplace or sterilize. No clumsy racks to delay your hospital feeding schedules. Safety Seal assures sterility at time of assembly by assuring that the bottle has not been resealed or tampered with.

NEW Ready-to-Feed BREMIL is supplied to hospital nurseries at cost. It is available at 20 cal./oz., in 4 fl. oz. and 8 fl. oz.; and at 13 cal./oz., in 4 fl. oz. All packed 24 bottles per case. Disposable sterile nipple assemblies supplied 48 bags per box, each bag containing one nipple assembly.

NOTE: Mull-Soy Hypoallergenic Formula, Sterile Distilled Water, and 5% Glucose Solution are also supplied in the Borden Ready-to-Feed Method.

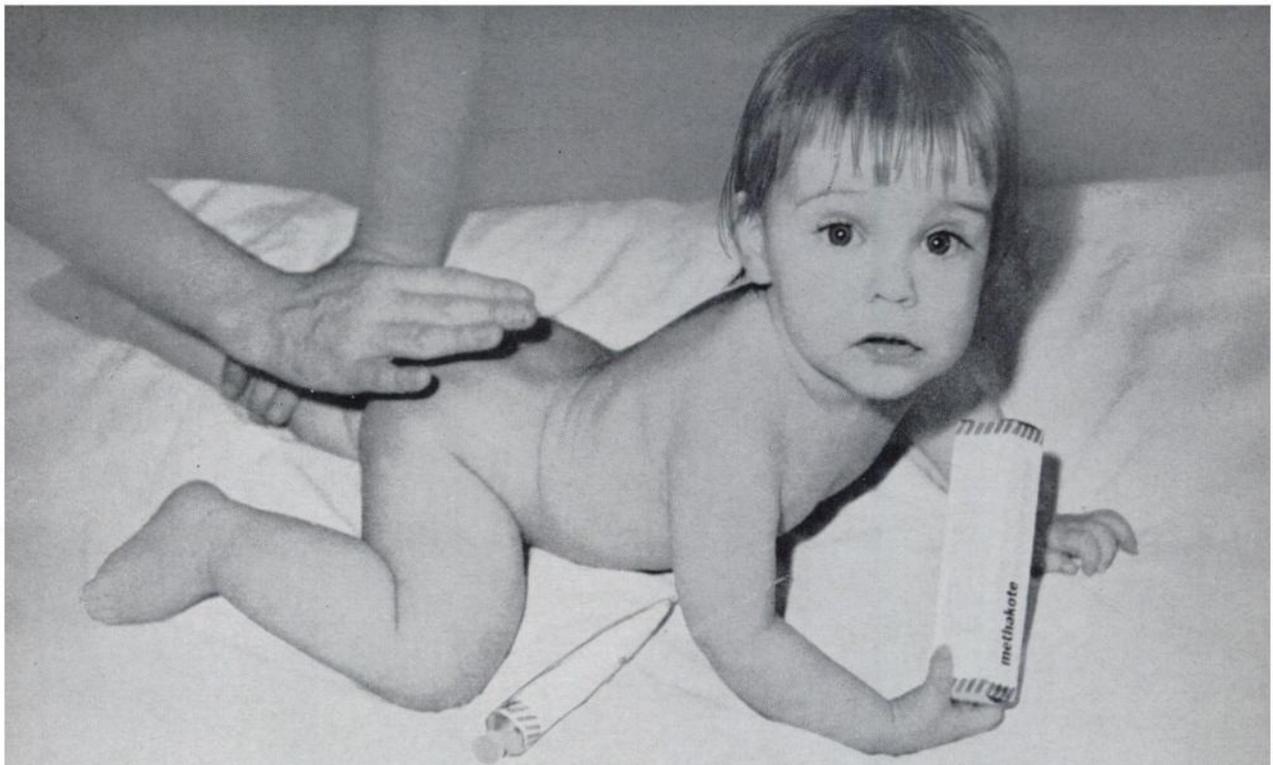
BREMIL®

READY-TO-FEED INFANT FORMULA
AVAILABLE TO HOSPITALS ONLY



Pharmaceutical Division 350 Madison Ave., New York, N.Y.
10017

(Makers of Mull-Soy® and Methakote®)



Gentle
but effective
protection
for
infant
skin...

Christian, Susca, and others¹⁻⁴ have found that diaper rash—regardless of severity—and other infant skin disorders yield promptly to the antiseptic/regenerative agents in Methakote. You can duplicate these results in your practice with Methakote and provide gentle but effective protection for infant skin because Methakote contains:

- Protein hydrolysate, fortified with methionine and cysteine (reported to have a stimulating effect on growth of epithelial tissue¹⁻⁴) to provide a favorable, comfortable atmosphere for rapid growth of new tissue.

- Benzethonium chloride, a potent but nonirritating germicide for effective elimination of *Bacillus ammoniagenes*—a causative agent of diaper rash. This germicide also exerts an inhibiting action on the growth of *Staph. aureus* which is often responsible for secondary pyogenic infection.

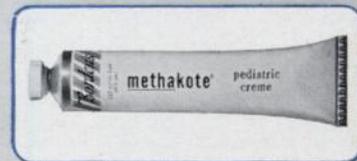
- Dermabase®, an emollient, water-washable cream base for soothing relief and lubrication of dry, inflamed skin.

Methakote belongs in your practice for gentle but effective skin protection. Ask your Borden Representative for samples or write direct!

Composition: Unique amino acid/antiseptic formula contains a protein hydrolysate, 1.5% (*l*-leucine, *l*-isoleucine, *l*-methionine, *l*-phenylalanine, *l*-tyrosine), fortified with methionine and cysteine, 0.6%, plus benzethonium chloride, 0.2%, in an emollient, water-washable vehicle.

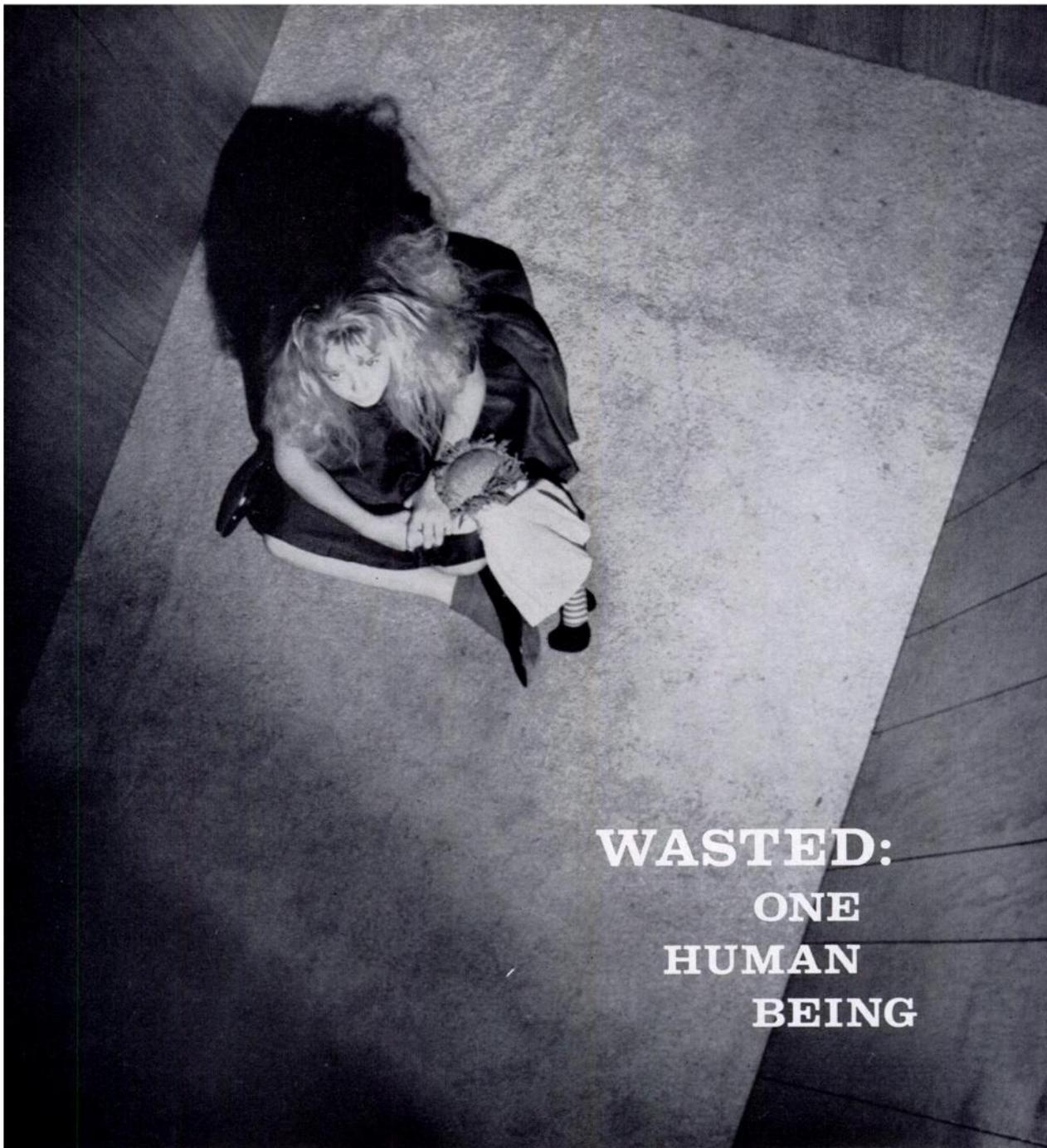
Supplied: 1½-oz. tubes and 3-oz. economy-size tubes at all drugstores.

Evidence: 1. Christian, J.R., and Gonzalez, F.: *Clin. Med.* 8:225 (Feb.) 1961. 2. Susca, L.A., and Geuting, B.G.: *New York J. Med.* 60:2858 (Sept. 15) 1960. 3. Brunsting, L.A., and Simonsen, D.G.: *J.A.M.A.* 101:1937 (Dec. 16) 1933. 4. Riley, J.F.: *Brit. M. J.* 2:516 (Oct. 19) 1940.



Borden's Pharmaceutical Division
350 Madison Avenue, New York, 17, N.Y.
(Makers of Bremil® and Mull-Soy®)

methakote®
Pediatric
Creme



**WASTED:
ONE
HUMAN
BEING**

Phenylketonuria diagnosed too late. The result: a mentally retarded child. A tragic waste of human potential that every pediatrician can now easily avoid.

The Guthrie Test, proved in an extensive nationwide evaluation program, can screen babies for phenylketonuria before they leave the hospital. Treatment can be instituted before the condition causes permanent damage.

The test is sensitive, practical and reliable. During the past year, the Biochemical Procedures staff has attained such a high degree of proficiency in performing the procedure, that it can now be offered at minimal cost.

**BIOCHEMICAL
PROCEDURES, INC.**

12020 Chandler Blvd., No. Hollywood, Calif., U.S.A.



It requires a moment of your time and just 3 drops of blood from the baby's heel on a Phenylketonuria Specimen Form. The Fee: \$1.50 per test.

Write for Phenylketonuria Specimen Forms and detailed Guthrie Test Bulletins.



He has just chewed his first phenylephrine hydrochloride and chlorpheniramine maleate

In other words, he has just had his first Novahistine Melet. As you can see, it tastes good. It does good, too. For the youngster with a cold, Novahistine Melet produces a prompt decongestant effect, reduces discomfort, and helps return respiratory functions to normal.

Many children rebel against medication. Some won't take liquids. Many can't swallow tablets. But they still catch colds. When they do, a Novahistine Melet is a very logical way to give an oral decongestant. It has a pleasant flavor, dissolves readily in the mouth, and is not gritty.

The combination of phenylephrine and chlorpheniramine relieves congestion by shrinking mucous

membranes and reducing edema. Novahistine Melet helps prevent secondary infection because it tends to restore normal ciliary activity and it does not suppress secretion of the protective mucus.

Phenylephrine should be used cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Chlorpheniramine may cause drowsiness—so, when you prescribe Melets for adults (and, of course, you may), caution those who operate machinery or motor vehicles.

Sample available to physicians on request.

Each Melet contains phenylephrine hydrochloride 10 mg. and chlorpheniramine maleate 2 mg.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis, Indiana



Novahistine[®]
Melet^(TM)

In answering advertisements please mention PEDIATRICS

xxxiii

antipruritic
anti-inflammatory
anesthetic

far more
than just
another
steroid cream
for topical
relief of
itching and
inflammation

spreads comfort fast

combines three distinct pathways for more complete relief:

1. Stops pain and itch through topical anesthetic effect
2. Counteracts allergic reaction
3. Suppresses inflammatory processes

Indications: 'Mantadil' Cream is indicated for relief of a variety of itching, painful dermatoses including: allergic eczema, anogenital pruritus, atopic dermatitis, contact dermatitis (including poison ivy, oak and sumac), insect bites, intertrigo, lichenoid dermatitis, localized neurodermatitis, nuchal eczema, nummular eczema, seborrheic dermatitis, and sunburn.

Contraindications: As with other topical hydrocorti-

tisone preparations, 'Mantadil' Cream should not be used in: bacterial infections of the skin unless antibacterial therapy is concomitant, tuberculosis of the skin, viral infections including dendritic keratitis of the eye and herpes simplex of the adjacent skin.

Application: Apply 2 to 5 times daily. Complete literature available on request from Professional Services Dept. PML.

'MANTADIL'[®] brand CREAM

Each 15 Gm. tube contains:

Chlorcyclizine Hydrochloride 2%, Hydrocortisone Acetate 0.5%



BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N. Y.

In answering advertisements please mention PEDIATRICS



to ease emotional
storm and stress
in children

Elixir
Benadryl[®]
(diphenhydramine
hydrochloride)

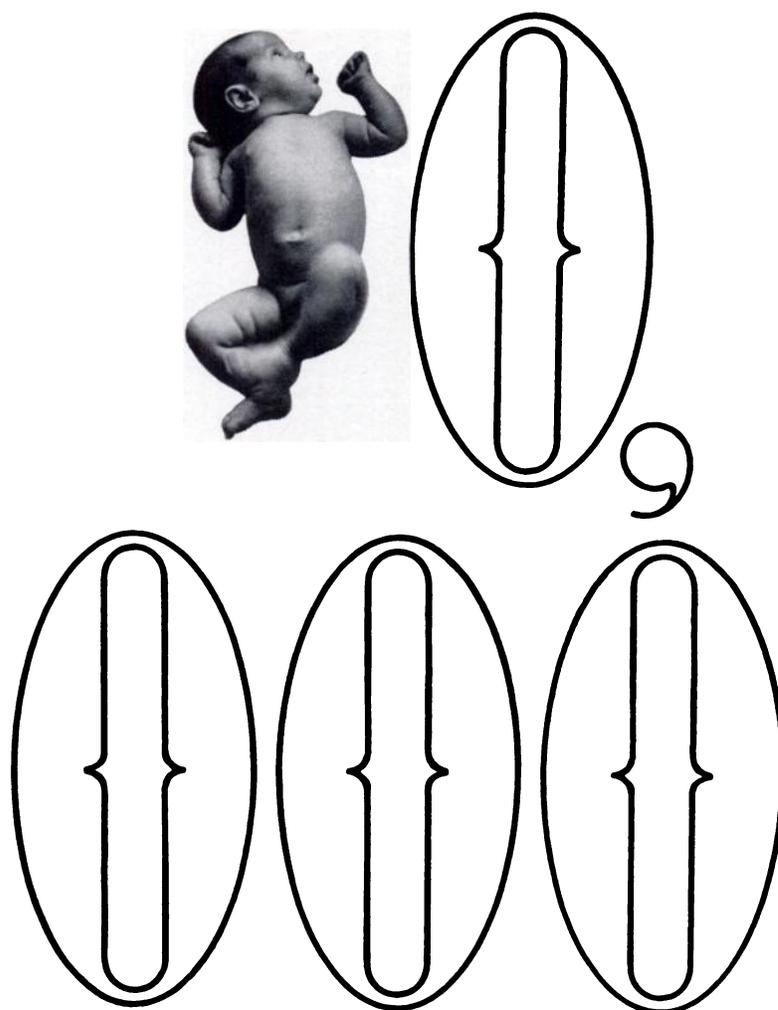
PARKE-DAVIS

• Highly effective in the therapy of primary behavior disorders of the emotionally disturbed child,¹⁻⁴ especially when considerable anxiety is manifest^{2,3} • valuable in reducing impulsivity and hyperactivity⁴ • beneficial in the treatment of night terrors and other sleep disturbances² • useful adjunctively in the management of schizophrenic children.¹ **Dosage:** An initial dose of 1 mg. per pound of body weight per 24 hours is suggested. For maintenance therapy, this dose should be adjusted upward or downward to suit the individual therapeutic response. **Precautions:** Should be used cautiously with hypnotics or other sedatives, or if atropine-like effects are undesirable; also if patient engages in activities requiring alertness or rapid, accurate response. **Available** as a pleasantly spice-flavored elixir containing 10 mg. diphenhydramine hydrochloride per 4 cc. with 14% alcohol; in 16-oz. bottles. **References:** (1) Fish, B.: *Compr. Psychiat.* **1**:212, 1960. (2) Effron, A. S., & Freedman, A. M.: *J. Pediat.* **42**:261, 1953. (3) Freedman, A. M., et al.: *J. Nerv. & Ment. Dis.* **122**:479, 1955. (4) Bender, L., & Nichtern, S.: *New York J. Med.* **56**:2791, 1956.

41564R

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit, Michigan 48232



Is this baby one in 10 thousand?*

The only way to be absolutely certain that this baby is not the one in 10,000 with PKU is to **test and retest** at proper time intervals—since variations in phenylalanine intake and other factors may limit the detectability of PKU during the first few days of life.

Blood can be tested easily and accurately on the fourth or fifth day of life (or earlier if hospital discharge is earlier) with **PHENIPLATE™** bioassay test for phenylalanine in the blood. Follow-up testing for phenylpyruvic acid in the urine can be performed at home by the mother at 2, 4, and 6 weeks of age with **PHENISTIX®** Reagent Strips (available in a convenient home-testing kit).

Instituting this simple, economical testing program as a routine procedure in the hospital and at home can prevent a wasted life—and can save your community more than \$100,000 in lifetime custodial care if only one baby with PKU is discovered and treated in time. For a free copy of a procedural outline, "Programs for the Detection of PKU" write to Ames Company, Inc., Elkhart, Indiana.

*Guthrie, R., and Susi, A.: Pediatrics 32:338, 1963.

804R64



AMES

In answering advertisements please mention PEDIATRICS



**Mulvidren[®]-F is not a lollipop.
It's a children's multivitamin tablet with fluoride.
But, like a lollipop, it requires no water.
It requires no chewing.
And children really like the way it tastes.**

Mulvidren[®]-F Each Tablet contains: Fluoride (from 2.2 mg. sodium fluoride), 1 mg.; Oleovitamin A, 4,000 USP Units; Calciferol (Vitamin D), 400 USP Units; Vitamin C (from ascorbic acid 25 mg. and sodium ascorbate 57 mg.), 75 mg.; Thiamine Mononitrate, 2 mg.; Riboflavin, 2 mg.; Pyridoxine Hydrochloride, 1.2 mg.; Vitamin B₁₂ (from cobalamin concentrate), 3 mcg.; Nicotinamide, 10 mg.; Calcium Pantothenate, 3 mg. Prescription required.

Caution: MULVIDREN[®]-F should not be used where the drinking water contains more than 1.0 p.p.m. of fluoride or the combined daily intake from water exceeds 0.5 mg. per day. Do not exceed the recommended dosage as dental fluorosis may result from continued ingestion of excessive amounts of fluoride. Hypersensitive individuals occasionally experience skin eruptions, gastric distress, headache or weakness.

DOSAGE: Children three years of age and older one tablet daily. Those under three years of age, one-half tablet daily.

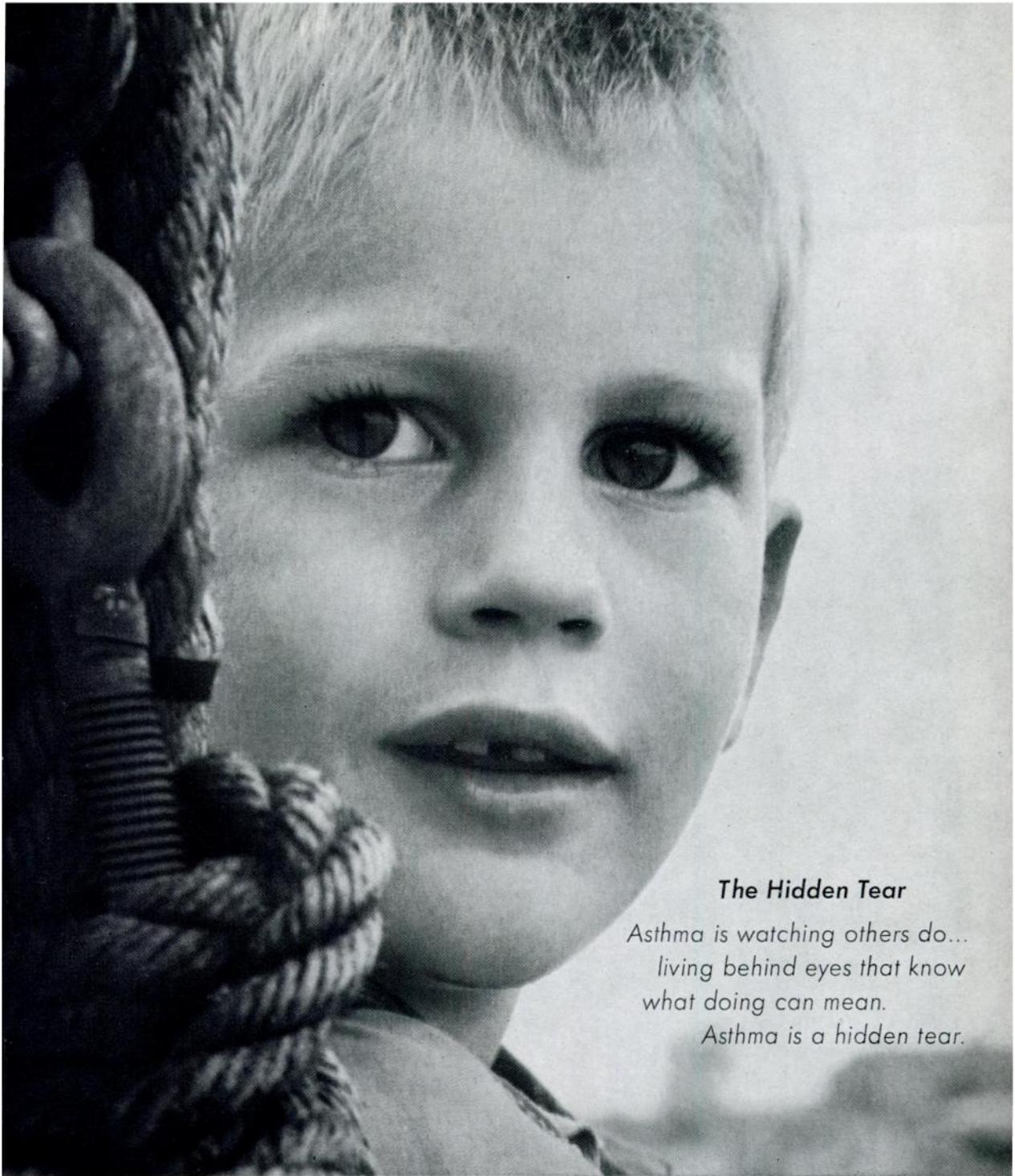


Quality Pharmaceuticals at Low Patient Cost

THE STUART COMPANY Pasadena, California
Division of **ATLAS CHEMICAL INDUSTRIES, INC.**

Mulvidren[®] Junior has the same composition, without fluoride, and does not require prescription.

In answering advertisements please mention PEDIATRICS



The Hidden Tear

*Asthma is watching others do...
living behind eyes that know
what doing can mean.
Asthma is a hidden tear.*

Tedral[®] Pediatric Suspension

improves vital capacity and the ability to exhale
and helps the asthmatic child lead a more normal life

WARNER-CHILCOTT  Morris Plains, N.J.

in confirmed infections
of all body systems...

over 90%

even when
infections are difficult to treat...
pathogens prove resistant
to other agents...
previous therapy fails...

From its introduction to today, Signemycin has repeatedly exhibited an extremely high rate of response in a host of confirmed infections of all body systems. From an exhaustive and continuing analysis of the world literature on Signemycin involving over 5,000 cases to date, the fact has been established that over 90% of patients respond. Moreover, this high rate of response is remarkably consistent year after year, in study after study, providing clinical proof that the effectiveness of Signemycin has not been diminished by continued use.

No renal, hepatic, neurologic or hemopoietic complications reported, although millions have received therapy. Side effects are infrequent, generally mild and transient, and usually confined to minor intestinal symptoms. Tolerability has been excellent in both young and old.

Only a trial in your own practice could be more convincing than the worldwide record of Signemycin.



respond!*

Side Effects: Glossitis and allergic reactions, as well as severe anaphylactoid reactions, have been reported as rare side effects. Should significant reaction or idiosyncrasy occur, discontinue medication and institute countermeasures. Use of tetracycline during the last trimester of pregnancy, neonatal period and early childhood may cause discoloration of developing teeth.

Precautions: Overgrowth of nonsusceptible organisms may occur. In such cases, discontinue medication and institute appropriate specific therapy as indicated by susceptibility testing. Aluminum hydroxide gel given with antibiotics has been shown to decrease their absorption and is contraindicated. The coloring agents used in Signemycin Syrup and Pediatric Drops may produce red discoloration of stools.

Triacetyloleandomycin, a constituent of Signemycin, administered to adults in daily oral doses of 1.0 Gm. (3 Gm. Signemycin) for periods of more than ten days may produce hepatic dysfunction and jaundice. In the rare patient who requires this high dosage level of Signemycin initially, liver function should be carefully followed and dosage should be reduced, as promptly as possible,

to the usual recommended range of 1.0 to 2.0 Gm. per day. Therefore, Signemycin is recommended primarily for the treatment of acute or severe infections, with treatment restricted to a ten-day period. If clinical judgment dictates continuation of therapy beyond ten days, serial monitoring of the liver profile should be carried out, including BSP, transaminase, and cephalin flocculation tests. The observed changes in liver function are reversible following discontinuation of triacetyloleandomycin.

Formulas: *Capsules:* 250 mg. Signemycin (167 mg. tetracycline HCl and 83 mg. oleandomycin as triacetyloleandomycin); *Capsules:* 125 mg. Signemycin (83 mg. tetracycline HCl and 42 mg. oleandomycin as triacetyloleandomycin); *Syrup:* 125 mg. Signemycin (tetracycline equivalent to 83 mg. tetracycline HCl and 42 mg. oleandomycin as triacetyloleandomycin) per 5 cc.; *Pediatric Drops:* 100 mg. Signemycin (tetracycline equivalent to 67 mg. tetracycline HCl and 33 mg. oleandomycin as triacetyloleandomycin) per cc.

More detailed professional information available on request.

Signemycin®

tetracycline HCl, 167 mg.; oleandomycin as triacetyloleandomycin, 83 mg.

Science for the world's well-being®  PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. New York 17, New York
Since 1849

*Based on a recent survey of published clinical studies on Signemycin® involving more than 5,000 patients treated with oral dosage forms. Complete reference list is available from the Medical Department of Pfizer Laboratories on request.

10 big reasons why you will prefer



vi-syneral vitamin drops fortified

1. provides vitamin B₁₂.
2. 100% natural vitamin A complex.
3. 100% natural vitamin D complex.
4. vitamin E to reduce susceptibility of red blood cells to hemolysis.
5. vitamins A, D, and E made aqueous* for far faster and more complete absorption and utilization.
6. vitamin B₆.
7. lipotropic agents.
8. other essential B complex factors and vitamin C.
9. delicious fruity flavor.
10. no burps . . . no fish oil taste or odor . . . allergens removed.

*Protected by U.S. Pat. No. 2,417,299 owned and controlled by U. S. Vitamin & Pharmaceutical Corporation

SAMPLES of new VI-SYNERAL VITAMIN DROPS FORTIFIED on request

u. s. vitamin & pharmaceutical corporation

Arlington-Funk Laboratories, division • 800 Second Ave., New York 17, N.Y.

In answering advertisements please mention PEDIATRICS

in ACNE

**therapeutic washes are the
most widely used topicals**

& FOSTEX[®]

**is the therapeutic wash
used most by physicians***

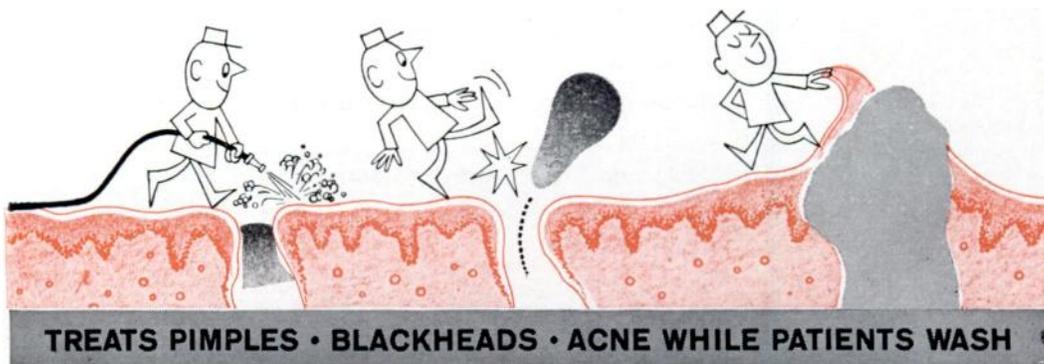
Acne clears faster with Fostex . . . patients like it because it's so easy to use. Fostex degreases, dries and peels, and degerms acne skin. It helps remove blackheads, unblock pores, prevent pustules and scar-producing cysts, and rids the skin of bacteria. Instead of using soap, patients simply wash acne skin with Fostex Cake or Cream 2 to 3 times daily.

Fostex contains SEBULYTIC[®] brand of unique penetrating, surface-active combination of soapless cleansers and wetting agents, sulfur 2%, salicylic acid 2%, and hexachlorophene 1%. Supplied—Fostex Cake, bar form. Fostex Cream, 4½ oz. jars. Fostex Cream is also used as a therapeutic shampoo in dandruff and oily scalp which often accompany acne. See pp. 996-997 PDR. Also available in Canada. *From a Dermatologist study as reported in Clin. Med. 70:1473-1476 (Aug.) 1963.

Write for free Fostex Treatment-Starter Packs

WESTWOOD PHARMACEUTICALS

BUFFALO, NEW YORK



In answering advertisements please mention PEDIATRICS

HOW TO ACQUIRE

THE HARD WAY

Naturally occurring measles is distressing, with possible serious complications and sequelae.

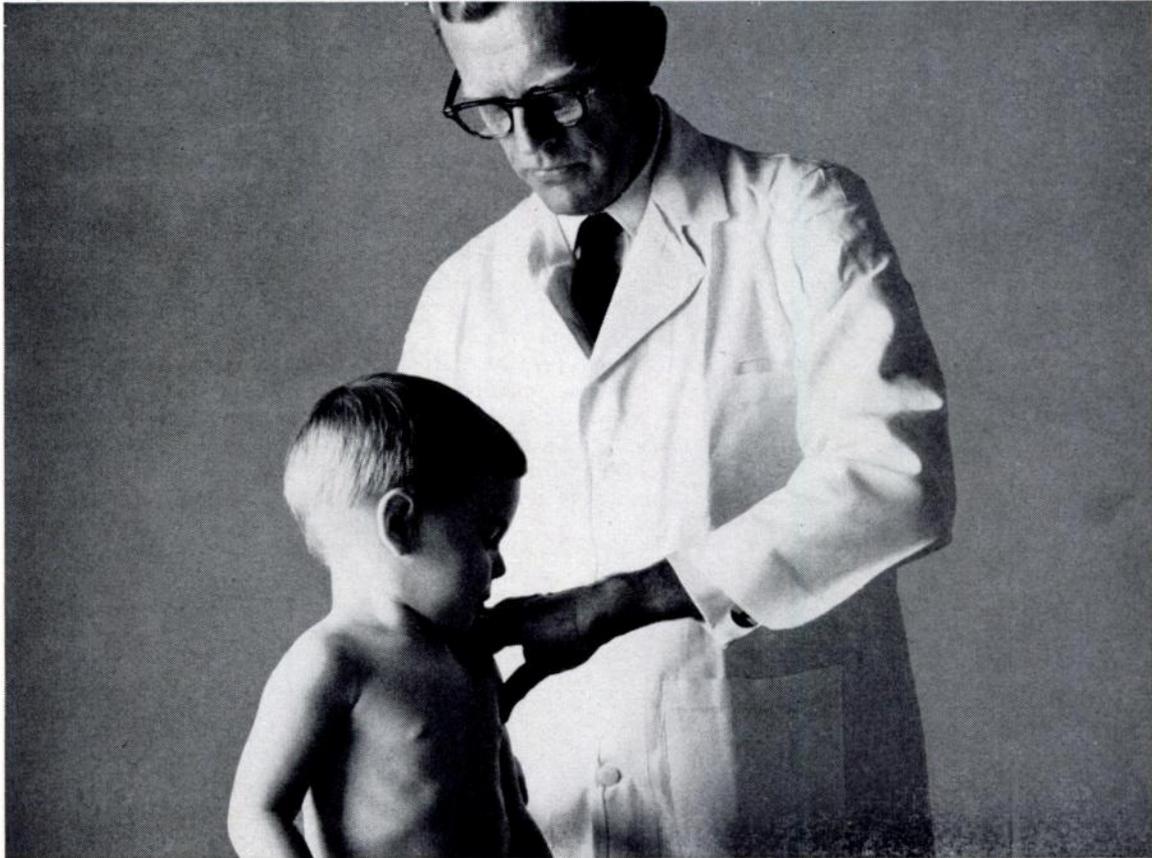


EXPERIENCE:
More than 5,000,000
children have received
RUBEOVAX

IMMUNITY TO MEASLES:

THE EASY WAY

A single dose of RUBEOVAX
for active immunization.



LYOVAC®

RUBEOVAX®

MEASLES VIRUS VACCINE, LIVE, ATTENUATED

0.5-cc. vial of lyophilized vaccine. (In an accompanying package, a 0.7-cc. ampul of Sterile Diluent for Reconstitution of LYOVAC RUBEOVAX and a sterile disposable syringe with needle are supplied.)

- With a single dose of vaccine, the duration of immunity is expected to be lifelong.
- CNS involvement has not been observed—postinoculation electroencephalograms show no abnormality attributable to the vaccination procedure.
- Spread from vaccinees to susceptible contacts has not been reported.
- Systemic reactions caused by the vaccine are reduced by concurrent administration of GAMMAGEE® [Immune Serum Globulin (Human)]. Fever is usually not accompanied by significant toxic reaction. A mild, transient rash occurs in approximately 16 percent of children.

RUBEOVAX

INDICATIONS: Immunization of children against measles (rubeola).
CONTRAINDICATIONS: Do not use in pregnancy, in persons with leukemia or untreated active tuberculosis, or in brain-damaged children under 1 year of age.

PRECAUTIONS: Use with caution in adults, in children with history of febrile convulsions, or in persons under treatment with steroids. Defer use in presence of febrile respiratory illness, other active infection, or poliomyelitis epidemic.

Co-administration of immune serum globulin (human) standardized for measles antibody content is recommended to minimize incidence and severity of fever and rash.

SIDE EFFECTS: Severe reaction to egg protein possible.

GAMMAGEE

INDICATIONS: Modification of systemic reactions induced by vaccination with live, attenuated measles (rubeola) vaccine; prevention or modification of natural measles.

CONTRAINDICATIONS: Hypersensitivity.

PRECAUTIONS: Intravenous injection should be avoided.

SIDE EFFECTS: Local tenderness and stiffness may occur after injection. Hypersensitivity and anaphylaxis are possible.

Before prescribing or administering, read product circular with package or available on request.



MERCK SHARP & DOHME
Division of Merck & Co., Inc., West Point, Pa.

where today's theory is tomorrow's therapy

BELIEVABILITY . . .

is our biggest problem

Until you see for yourself what an IL Model 143 Flame Photometer really can do this might sound like just another wild claim, but it is true . . . the IL Model 143 does take all the confusion and fuss out of Flame Photometry . . . brings a brand new concept of computer automation and reliability to an otherwise unwieldy process plagued with chances for unnecessary errors.

The new IL Flame Photometer uses only one dilution (200:1) to give direct digital readout throughout the entire range of concentration seen in biological samples (0-290 mEq/L Na⁺ and 0-290 mEq/L K⁺). It is that simple. Just turn it on. Calibrate in seconds with one standard solution. Your first reading will be correct and you can prove it again and again (standard coefficient of variation $\pm 0.3\%$). There is no time wasted either with many reiterative steps, serial dilutions or annoying computations.

Get the latest facts on how fast, reliable and accurate Flame Photometry has become. Contact your nearest IL Field Representative for a demonstration without obligation or write for your free copy of the IL user list plus instrument data No. 143.



In answering advertisements please mention PEDIATRICS



new added protection

ABDEC® DROPS WITH FLUORIDE

Each 0.6 cc. represents:

Vitamin A Palmitate	5000 units (1.5 mg.)
Calciferol	400 units (10 mcg.)
Thiamine Hydrochloride	1 mg.
Riboflavin Phosphate Sodium*	1.65 mg.
Pyridoxine Hydrochloride	1 mg.
Sodium d-Pantothenate*	5.5 mg.
Nicotinamide	10 mg.
Ascorbic Acid	50 mg.
Sodium Fluoride*	1.1 mg.

*Equivalent to 1.2 mg. Riboflavin, 5 mg. Pantothenic Acid, and 0.5 mg. Fluoride.

An aqueous, nonalcoholic, hypoallergenic solution having an apple flavor.

INDICATIONS: Vitamin-fluoride supplementation for infants and children under 3 years of age. **DOSAGE:** 0.6 cc. daily. **CAUTION:** Do not exceed recommended dosage. Not to be used in areas where drinking water contains fluoride in excess of 0.7 p.p.m. Excessive ingestion of fluoride may cause fluorosis. Eczema, atopic dermatitis, and urticaria have been associated with the ingestion of fluoride. **SUPPLIED** in 30-cc. plastic bottle with graduated dropper.

ABDEC DROPS WITH FLUORIDE is available only on prescription.

PARKE-DAVIS

34464 PARKE, DAVIS & COMPANY, Detroit, Michigan 48222

classic
description
of asthma
800 B.C.

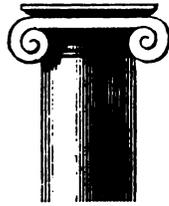
उदायसंरजो जीर्णं

some asthma is born of flatulence of the

कायनिरोधज तमसा

of dust in the nostrils... and becomes

classic
asthma
therapy
1964 A.D.



Marax[®]

(ephedrine, theophylline, hydroxyzine HCl)

for bronchodilation, ephedrine sulfate;
for bronchospasmolysis, theophylline
...with resultant expectorant action

for tranquilization plus the bonus of antiallergic activity
ATARAX[®] (hydroxyzine HCl)

Provides bronchial dilation and "psychic" relief in asthma and respiratory diseases such as bronchitis, and bronchial dilation in bronchopneumonia

substantial to complete relief in 89% of cases. Out of 850 patients with asthma, Marax gave substantial to complete relief to 755 (89%).¹⁻³ It was found effective for prophylaxis as well as for relief of the acute attack.^{1,2}

controls symptoms by night as well as by day. Patients who receive Marax sleep more comfortably⁴⁻⁵ and are frequently freed of nocturnal paroxysms when given a tablet at bedtime.¹ The hydroxyzine HCl component, through relief of tension, helps promote normal physiological sleep.⁶

convenient, well tolerated by your youngest to your oldest patients. In clinical reports on patients ranging from very young children to septuagenarians, side effects have not been considered significant in the majority of patients.¹⁻³ Marax Syrup, convenient for the aged and children over 2 years, is compatible with many medications commonly used for respiratory diseases. Tiny, easy to swallow tablets are suitable for adults and children over 5.

ह्नि न

stomach or

वर्धते



aggravated during the hours of darkness

from the Sanskrit, by Charaka, Hindu physician, circa 3rd to 9th century B. C.

formula

Atarax (hydroxyzine HCl)
Ephedrine sulfate
Theophylline
Alcohol (ethyl alcohol)

each tablet

10 mg.
25 mg.
130 mg.
—

each 5 cc. tsp. syrup

2.5 mg.
6.25 mg.
32.50 mg.
5% v/v

Precautions and side effects: Large doses of ephedrine may cause nervousness, excitation, tremulousness, insomnia, palpitation, tachycardia, precordial pain, arrhythmias, vertigo, nose and throat dryness, headache, sweating and warmth. It should be used with caution in elderly males or those with known prostatic hypertrophy. Given three or more times daily, tolerance may develop after several weeks. Theophylline should be given after meals to minimize gastric irritation, upper abdominal discomfort, nausea and vomiting. Diuresis and cardiac stimulation may also occur. Involuntary motor activity occasionally occurs with extremely high doses of hydroxyzine HCl. Because of the mild potentiating action of hydroxyzine HCl, dosage of CNS depressants when used concomitantly should be reduced.

Contraindications: Because of the ephedrine, Marax is contraindicated in cardiovascular disease, hyperthyroidism, and hypertension.

References: 1. Kohn, C. M.: Ann. Allergy 20:252 (April) 1962. 2. Eisenberg, B. C.: Clin. Med. 7:275 (Feb.) 1960. 3. Fox, J. L.: E.E.N.T. Digest 24:13 (Feb.) 1962. 4. Shaftel, H. E.: Clin. Med. 7:1841 (Sept.) 1960. 5. Charlton, J. D.: North Carolina M.J. 23:17 (Jan.) 1962. 6. Farah, L.: Internat. Rec. Med. 169:379 (June) 1956.

In any condition where tissue depletion of the water-soluble vitamins is found,
Rx RoeriBeC* therapeutic B complex with 500 mg. of vitamin C *TRADEMARK



J. B. Roerig and Company
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being®
New York, N.Y. 10017



Another stuffy nose cleared with Alcon-efrin 12!

Mild and comfortable Alcon-efrin 12 is safe for infants of all ages. Yet it clears the airways thoroughly and quickly—lets the baby breathe and drink his bottle in comfort.

A formula especially for babies: Alcon-efrin 12 provides 0.16% phenylephrine hydrochloride in a menstruum adjusted to the pH and tonicity of nasal secretions. Hence it virtually never smarts or stings. For your tiniest patients' big nose problems, remember Alcon-efrin 12 . . . the nose drops with the baby's point of view.

Available in 1 oz. dropper bottles. For older children and adults: Alcon-efrin 25 (phenylephrine hydrochloride 0.25%), in 1 oz. dropper bottles or 30 cc spray dispensers.

Alcon-efrin 12 NOSE DROPS FOR BABIES



*For samples and additional information
write to Dept. M, Alcon Laboratories, Inc., Ft. Worth, Texas*

from pian in Ubangi
to tonsillitis in Maine



there is a world of experience behind
the "OXY" broad spectrum
TERRAMYCIN[®]
OXYTETRACYCLINE
a unique molecule offering exceptional benefits

Whether treating pian or a host of other infections, physicians throughout the world continue to rely on the special features of oxytetracycline (with its unique "oxy" grouping) because of its outstanding record of effectiveness, safety and tolerability. Oxytetracycline is distinguished by true broad-spectrum activity/rapid systemic uptake/high tissue penetration and concentration/high relative distribution volume/low degree of serum binding/high urinary excretion in active form. Moreover, not a single case of phototoxic reaction, blood dyscrasia or neurologic disturbance directly attributable to oxytetracycline has been reported in more than 3,000 published papers in the last 14 years. *In your practice, the next infection you see will very likely be responsive to Terramycin (oxytetracycline).*

Pian is a disease that is contagious in the tropics but apparently never infectious in other areas. Caused by *Treponema pertenue*,* it is often acquired during childhood and is widespread among native tribes such as the Babinga, a race of forest pigmies in Ubangi. The organism enters the body through cuts or abrasions of the skin, usually by direct contact, but flies, especially species of *Hippelates*,* can also transmit the disease. Within three to four weeks a granulomatous lesion (the "mother pian"*) develops at the site of inoculation. Six to twelve weeks later a generalized eruption occurs. After several years, tissue-destructive tertiary lesions of the skin and bones may be seen. Disfiguring and disabling, these lesions are both a social and economic handicap to many adult patients. Diagnosis rests on appearance of lesions, history of contact, and identification of the spirochete on dark-field examination or by Giemsa-stained smear. A positive reaction to serologic tests for syphilis is also obtained, although pian is not a venereal disease. *illustrated



SIDE EFFECTS: Glossitis and allergic reactions have been reported as rare side effects. Use of oxytetracycline during the last trimester of pregnancy, neonatal period and early childhood may cause discoloration of developing teeth.

PRECAUTIONS: Overgrowth of nonsusceptible organisms may occur. In such cases, discontinue medication and institute appropriate specific therapy as indicated by susceptibility testing. Aluminum hy-

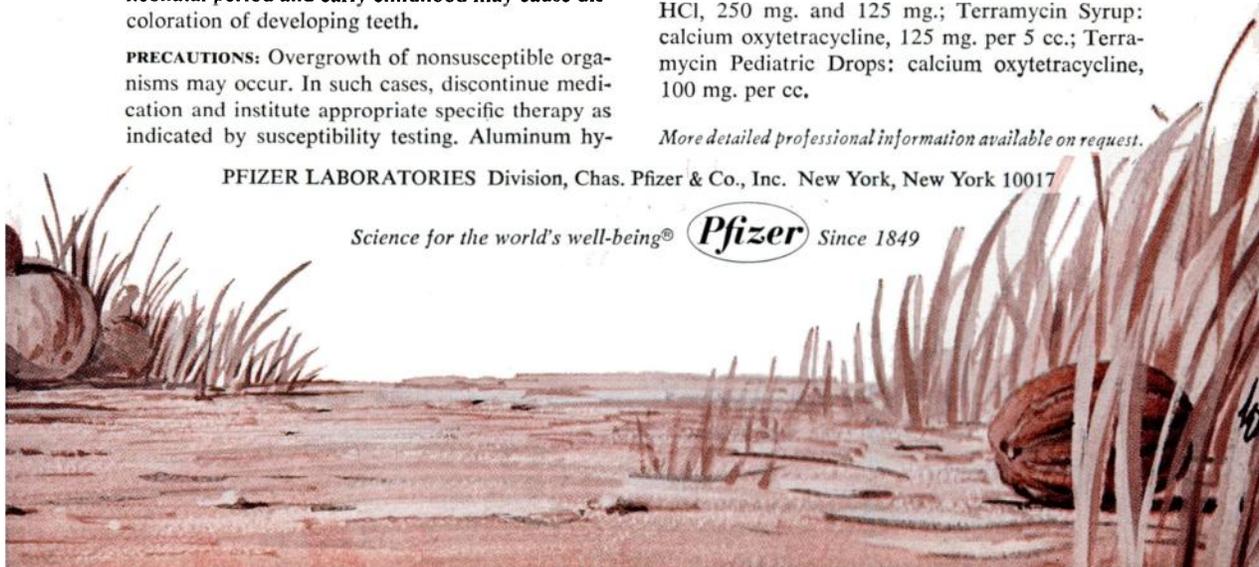
droxide gel given with antibiotics has been shown to decrease their absorption and is contraindicated.

FORMULAS: Terramycin Capsules: oxytetracycline HCl, 250 mg. and 125 mg.; Terramycin Syrup: calcium oxytetracycline, 125 mg. per 5 cc.; Terramycin Pediatric Drops: calcium oxytetracycline, 100 mg. per cc.

More detailed professional information available on request.

PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. New York, New York 10017

Science for the world's well-being[®] **Pfizer** Since 1849



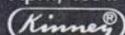
Consider EMETROL whenever an antiemetic is indicated, as in acute infectious gastroenteritis or intestinal "flu."^{1,2} Its physiologic action quickly relaxes the gastrointestinal smooth muscle, thus checking nausea and discomfort.¹ EMETROL does not contain antihistamines, phenothiazines, or sedatives.^{1,3} Not a single side effect has been reported in over 11 years of use.

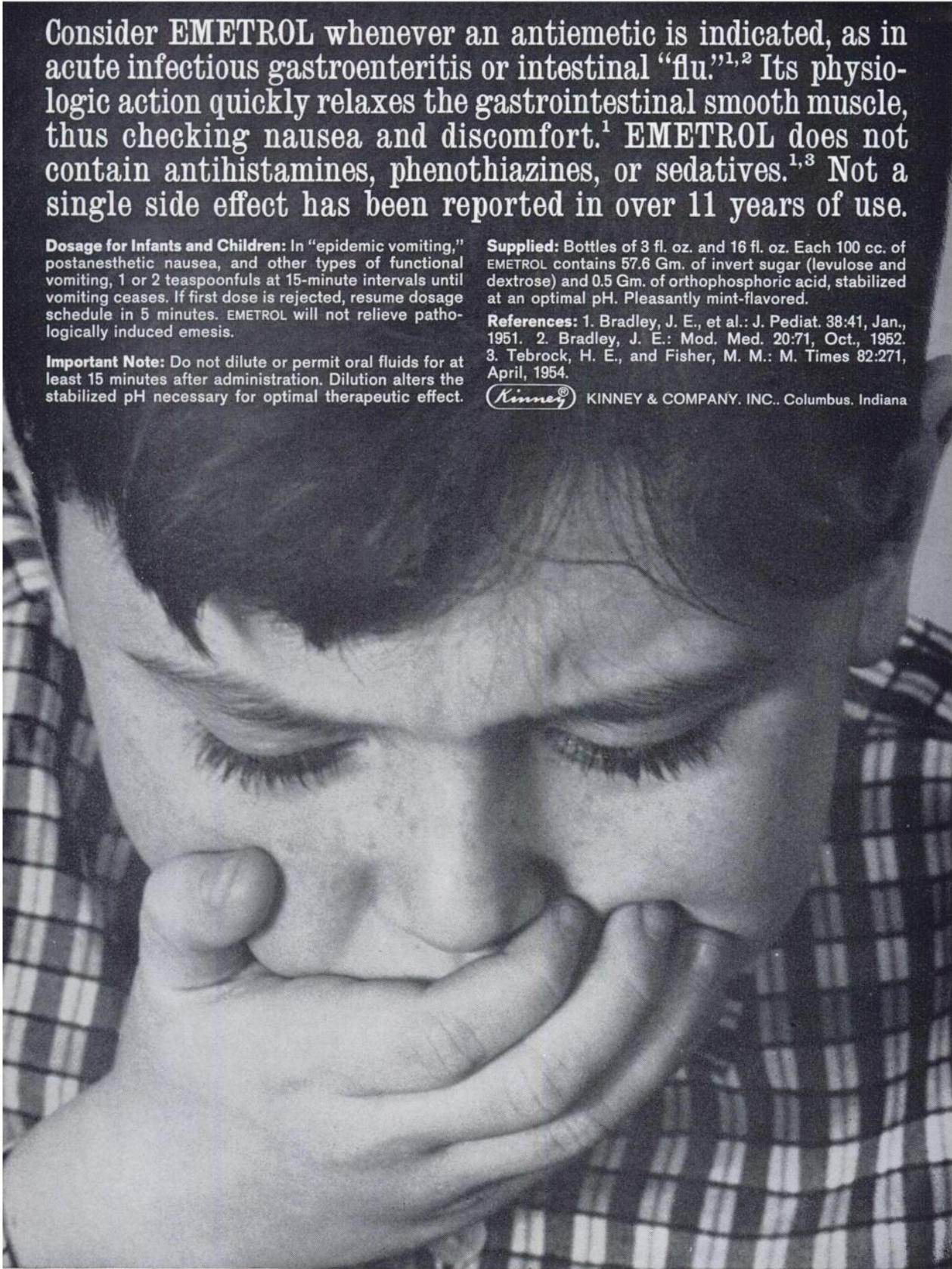
Dosage for Infants and Children: In "epidemic vomiting," postanesthetic nausea, and other types of functional vomiting, 1 or 2 teaspoonfuls at 15-minute intervals until vomiting ceases. If first dose is rejected, resume dosage schedule in 5 minutes. EMETROL will not relieve pathologically induced emesis.

Important Note: Do not dilute or permit oral fluids for at least 15 minutes after administration. Dilution alters the stabilized pH necessary for optimal therapeutic effect.

Supplied: Bottles of 3 fl. oz. and 16 fl. oz. Each 100 cc. of EMETROL contains 57.6 Gm. of invert sugar (levulose and dextrose) and 0.5 Gm. of orthophosphoric acid, stabilized at an optimal pH. Pleasantly mint-flavored.

References: 1. Bradley, J. E., et al.: J. Pediat. 38:41, Jan., 1951. 2. Bradley, J. E.: Mod. Med. 20:71, Oct., 1952. 3. Tebrock, H. E., and Fisher, M. M.: M. Times 82:271, April, 1954.

 KINNEY & COMPANY, INC., Columbus, Indiana



quickly "settles" the problem of functional nausea and vomiting

EMETROL[®]

PHOSPHORATED CARBOHYDRATE SOLUTION

A S T H M A

In children with asthma
"Symptomatic relief was greater and
side effects fewer..."*

with
ISUPREL® COMPOUND ELIXIR

Brand of
isoproterenol

Each tablespoon (15 ml.) contains:
Luminal® (brand of phenobarbital) — 6 mg. / Warning: may be habit forming /
Isuprel (brand of isoproterenol) hydrochloride — 2.5 mg. / Ephedrine sulfate — 12 mg. /
Theophylline — 45 mg. / Potassium iodide — 150 mg. / Alcohol 19%.

Isuprel Compound Elixir achieved a "...good therapeutic result at drug levels far below those usually used,"* when compared with a standard antiasthmatic preparation.† In a controlled clinical study, it provided *more* relief for asthmatic children with *fewer* side effects.* Isuprel Compound Elixir is a *balanced* bronchodilator-expectorant. It acts day and night to help keep bronchi dilated and decongested... to ease breathing. It helps thin sputum and relieve cough.

Three proven bronchodilators are included in the Elixir formula—Isuprel, ephedrine and theophylline. Potassium iodide promotes expectoration and eases dry cough. Luminal provides mild sedation and helps negate possible side effects of the adrenergic medication. Because Isuprel Compound Elixir achieves bronchodilation with smaller amounts of Isuprel, ephedrine and theophylline, the chance of unwanted side effects is greatly lessened. No child using Isuprel Compound Elixir "...showed any signs of gastric irritation"—nor evidence of cardiac stimulation.* And children like its pleasant vanilla flavor!



Dosage: *Children* 1-3 years, one or two teaspoons, t.i.d.; 3-6 years, two or three teaspoons, t.i.d.; 6-12 years, one or two tablespoons, t.i.d. as required. *Adults*—two tablespoons, t.i.d. or q.i.d. as required. *Isuprel Compound Elixir* is supplied in bottles of 16 fl. oz.

Side effects and precautions: Although the Elixir is generally well tolerated, symptoms of adrenergic overstimulation such as tachycardia or nervousness may occur, in which case the preparation should be temporarily discontinued and administered later at a lower dosage. Minor iodide side effects include coryza, acneiform skin eruptions, erythema of the face and chest, and painful swelling of the salivary glands.

These side effects quickly subside on discontinuance of the medication. Theophylline may cause gastric intolerance (nausea and vomiting).

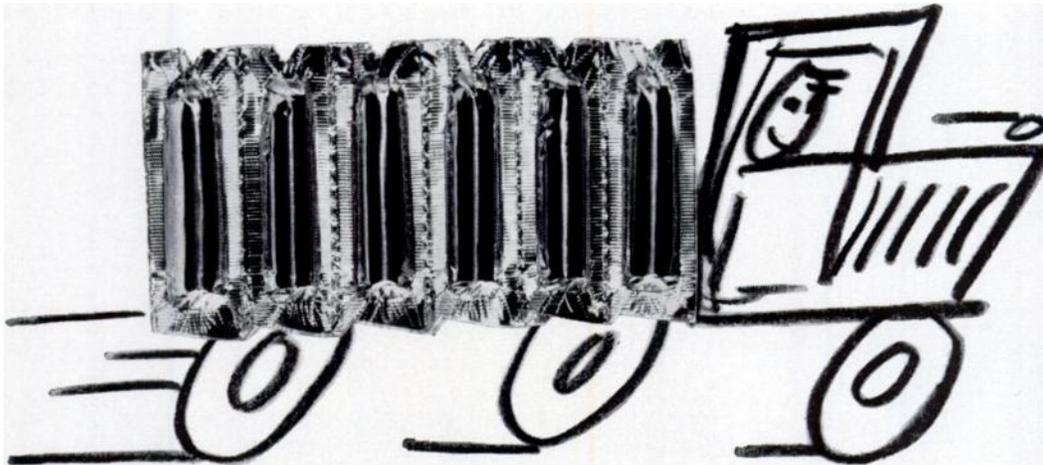
The dosage must be carefully adjusted in patients with hyperthyroidism, acute coronary disease, cardiac asthma, hypertension and limited cardiac reserve and in patients sensitive to sympathomimetic amines, since overdosage may result in tachycardia, palpitation, nausea, headache or other epinephrine-like side effects. Caution is also recommended in the presence of prostatic hypertrophy and glaucoma. The Elixir should not be given to patients with known sensitivity to iodides which can cause fever, malaise and generalized skin eruptions. Large doses of iodides should not be used during pregnancy since they may cause development of a goiter in the fetus.

*Dubrow, Emanuel: *Arch. Pediat.* 79:173, May, 1962.

†Standard antiasthmatic preparation (phenobarbital, ephedrine and theophylline) administered in a lower dosage for equalization of active ingredients.

Winthrop Laboratories, New York, N. Y.

Winthrop



FOR “RAPID DELIVERY” FROM ASTHMATIC DISTRESS

The unique, nonreactive base of an AMINET Rectal Suppository will melt rapidly and uniformly to allow fast absorption of prescribed dosage. You can choose dosage—identifiable by foil color—according to the child's weight range. For children 80 lbs. and over, **Half Strength AMINET**; for children 40 lbs. and over, **Quarter Strength AMINET**. Administered rectally (at 8-hour intervals, if necessary.)

Caution: Tell parents to follow directions and precautions carefully — and especially not to give AMINET more than once every 8 hours.

Quarter strength: Pentobarbital Sodium 25 mg. (Warning: may be habit forming), Aminophylline 125 mg., Benzocaine 15 mg., Base (cetyl alcohol—60%; oleyl alcohol—40%) 1.41 Gm. *Packaged in blue foil.* **Half strength:** Pentobarbital Sodium 50 mg. (Warning: may be habit forming), Aminophylline 250 mg., Benzocaine 30 mg., Base (cetyl alcohol—60%; oleyl alcohol—40%) 2.11 Gm. *Packaged in silver foil.* Ames Company, Inc., Elkhart, Indiana.

Concurrent use of ephedrine and aminophylline should be avoided and parents told to use only drugs prescribed. Stop AMINET at any sign of stupor, mental agitation, or convulsions. **Warning:** Prolonged barbiturate use may be habit forming. (See package insert for detailed data.)

AMINET®



Available: AMINET Rectal Suppositories, boxes of 12.

your pick of protection for pediatric patients

PALAFLOR® Tablets—In each chewable tablet: vitamin A acetate—4000 units (1.2 mg.); calciferol—400 units (10 mcg.); ascorbic acid*—50 mg.; d-alpha-tocopheryl acetate—10 I.U.; thiamine mononitrate—3 mg.; riboflavin—3 mg.; pyridoxine hydrochloride—1 mg.; cyanocobalamin—5 mcg.; nicotinamide—20 mg.; calcium pantothenate**—5.4 mg.; dibasic calcium phosphate† (anhydrous)—78 mg.; potassium iodide†—0.065 mg.; potassium sulfate†—5.5 mg.; ferric phosphate†—13.5 mg.; magnesium oxide†—1.65 mg.; sodium fluoride†—2.2 mg. *Supplied partly as sodium ascorbate. **Equivalent to 5 mg. pantothenic acid. †Provides 23 mg. calcium, 17 mg. phosphorus, 0.05 mg. iodine, 2.5 mg. potassium, 5 mg. iron, 1 mg. magnesium, and 1 mg. fluoride. **INDICATIONS:** Vitamin-mineral nutritional supplementation for children 3 years of age or older. **DOSAGE:** One tablet daily. **CAUTION:** Do not exceed recommended dosage. Not to be used in areas where

drinking water contains fluoride in excess of 0.7 p.p.m. Excessive ingestion of fluoride may cause fluorosis. Eczema, atopic dermatitis and urticaria have been associated with the ingestion of fluoride. **SUPPLIED:** Bottles of 50.

PALADAC® WITH MINERALS Chewable Tablets—In each tablet: vitamin A—4000 units (1.2 mg.); vitamin D (calciferol)—400 units (10 mcg.); vitamin C—50 mg.; vitamin E (d-alpha-tocopheryl acetate)—10 I.U.; vitamin B₁ (thiamine) mononitrate—3 mg.; vitamin B₂ (riboflavin)—3 mg.; vitamin B₆ (pyridoxine hydrochloride)—1 mg.; vitamin B₁₂ crystalline (cyanocobalamin)—5 mcg.; nicotinamide—20 mg.; pantothenic acid (as the calcium salt)—5 mg.; calcium*—23 mg.; phosphorus*—17 mg.; iodine*—0.05 mg.; potassium*—2.5 mg.; iron*—5 mg.; magnesium*—1 mg.

PARKE-DAVIS

*Supplied in the form of salts.

PARKE-DAVIS COMPANY, KENILWORTH, N.J. 07033

38664



greater convenience in severe allergic flare-up

- superior low-dosage corticosteroid for flare-up allergies and skin disorders
- striking control in severe intractable asthma of childhood
- easy to administer –
 - special calibrated spoon facilitates accurate fractional doses
- pleasant to taste – easy to swallow
- economical –
 - costs less (per equivalent dose) than other leading corticosteroids

Clinical considerations: Although betamethasone differs significantly from other corticosteroids in potency and electrolyte effects, it is potentially capable of causing any of the reported **side effects** of other such compounds. As with other corticosteroids, recurrence or complications of peptic ulcer may occur during therapy with this drug. Active, questionably healed, or suspected tuberculosis and acute ocular herpes simplex are absolute **contraindications**. During pregnancy, corticosteroids should be given only for severe diseases. Use in the controlled diabetic patient should be closely observed. In individuals exposed to, or in the active phase of exanthematous disease, it may be desirable to discontinue all corticosteroid therapy. Sodium and water retention or excessive potassium loss is rarely a problem, though diuresis may occur in some instances when patients are transferred from other steroids to betamethasone. For more complete details, consult Schering literature available from your Schering Representative or Medical Services Department, Union, New Jersey.

S-415

Newest member of the Schering allergy relief group

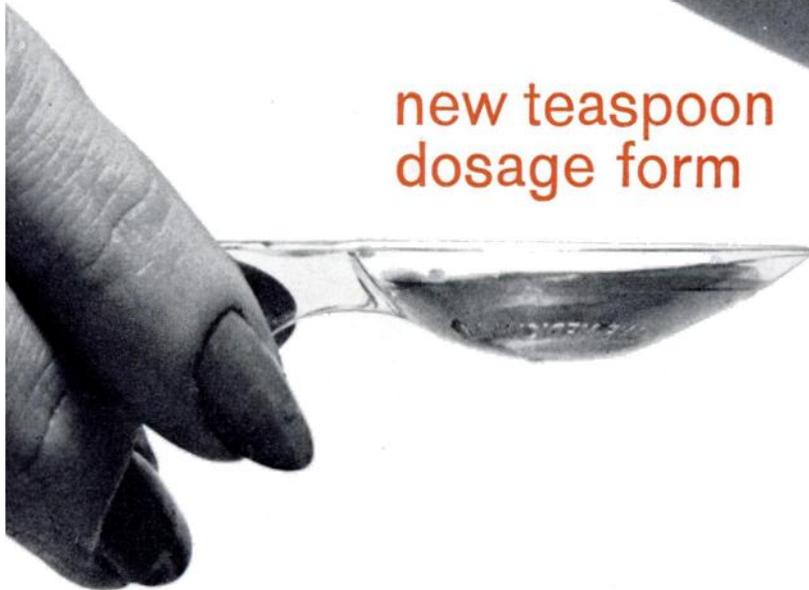




CELESTONE[®] Syrup
brand of betamethasone, 0.6 mg. per 5 cc.



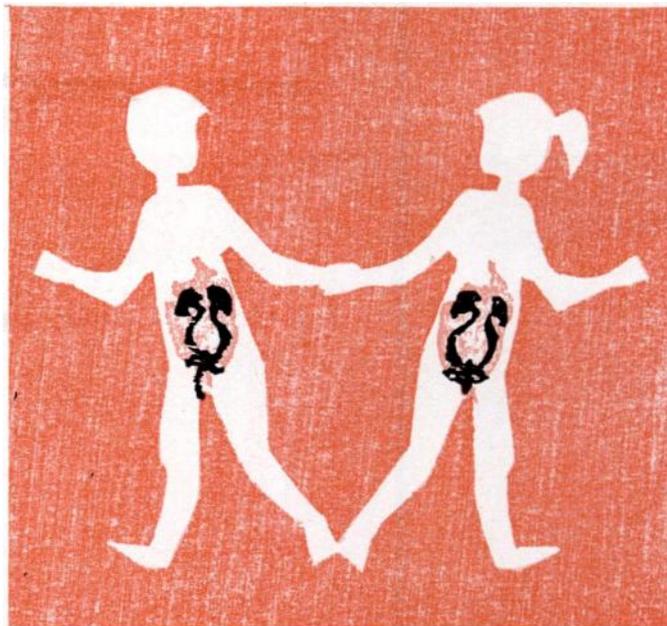
new teaspoon
dosage form



Discover
the "silent"
urinary
infection...



**...during
the routine
child-health
visit**



Correlates 84-91 per cent with colony counting technique in detecting significant bacteriuria —yet takes less than 1 minute to prepare, gives results within 4 hours.

This simple office test screens for urinary tract infection in childhood—quickly, accurately, economically. The Uroscreen reagent is reduced by bacterial metabolites to form a red precipitate—even when infections are asymptomatic. To do the test, simply—

1. Add 2 ml. of urine to the Uroscreen vial (midstream specimen from males; "clean-catch" specimen from females).
2. Shake well; incubate for 4 hours at 37° C. (use the Uroscreen office incubator,* given at no additional cost with your initial purchase of 100 Uroscreen disposable test vials).
3. Look for the red precipitate that indicates significant bacteriuria (100,000 or more organisms per ml.).

"The value of quantitative bacterial counting has been confirmed by a large number of workers; but...it has been found too time-consuming for many routine laboratories."¹With new Uroscreen there is, for the first time, a simple and rapid office test of proved reliability—economical enough for routine screening as part of every physical (your cost per test is in the 50¢ range).

1. Simmons, N. A., and Williams, J. D.: *Lancet* 1:1377 (June 30), 1962.

UROSCREEN™

(triphenyltetrazolium chloride)

*Limited time offer. Order Uroscreen and reserve your office incubator from your Pfizer representative. For complete information write to:



KNICKERBOCKER BIOLOGICS

Pfizer Laboratories Division, Chas. Pfizer & Co., Inc.
New York, New York 10036



Science for the
world's well-being

when hostility reflects



the intensity of your patient's tension...

Rx **ATARAX**[®]
(hydroxyzine HCl) tablets
syrup
parenteral

for any age, for any stage of anxiety

Powerful enough to calm the severely disturbed child

Hostility, destructiveness, or any expression of deep anxiety soon gives way to quiet cooperation when disturbed children receive Atarax (hydroxyzine HCl). Once their underlying tensions are dissolved they become amenable to psychotherapy and learn to adopt more constructive modes of behavior. Hydroxyzine HCl is particularly valuable for anxious school children since it calms without dulling their intellects.

Safety record permits use in young patients

Hydroxyzine HCl has long been preferred by pediatricians because of its efficacy and outstanding record of safety—and by their patients because of the exceptional palatability of the Syrup form.

No matter how anxiety manifests itself, or how severe it is, you can count on hydroxyzine HCl for rapid, effective relief. The wide variety of dosage forms makes administration flexible by any standards of convenience, patient preference, or emergency requirements. You can adjust the dosage to whatever level best controls your patient's degree of anxiety within the recommended range. The daily oral dosage for children 6 years and under is 50 mg. in divided doses. Over 6 years, 50-100 mg. in divided doses.

FOR EVERY DEGREE OF ANXIETY—IN PATIENTS UNDER 6 TO OVER 60

Side effects and precautions: Therapeutic doses of Atarax (hydroxyzine HCl) seldom impair mental alertness. If drowsiness occurs, it is usually transitory and may disappear after a few days of therapy or with reduced dosage. Mouth dryness may occur at high doses. In some hospitalized patients on high doses, involuntary motor activity, not unlike that seen with high doses of other psychotropic drugs, has been reported although continued therapy with 1 Gm. daily has been used in some cases without

producing this effect. When some patients receive anti-coagulants and hydroxyzine HCl concurrently, the anti-coagulant requirement may be decreased; patients receiving both should be followed closely and appropriate laboratory studies performed regularly. When hydroxyzine HCl is used with CNS depressants, its mild potentiating action should be taken into consideration. Soft tissue reaction, as seen with other injectables, has rarely been reported with parenteral hydroxyzine HCl.



New York, N. Y. 10017 • Division, Chas. Pfizer & Co., Inc. • Science for the World's Well-Being®

- **APHASIA HANDBOOK: For Adults and Children** by **Aleen Agranowitz, Lakewood Speech Clinic, and Milfred Riddle McKeown, Veterans Administration Hosp. Both of Long Beach, Calif.** Jan. '64, 336 pp., 116 il., \$12.75
- **A PRIMER OF SKIN DISEASES FOR PHYSICIANS AND STUDENTS** by **Townsend W. Baer, Univ. of Pittsburgh, Pittsburgh, Pa.** Oct. '63, 120 pp., \$5.75
- **A PRACTICAL MANUAL FOR THE TREATMENT OF BURNS** by **Eli Rush Crews, Robert B. Green Memorial (County) Hosp., San Antonio, Texas.** Feb. '64, 136 pp., 7 il. (5 plates in full color), \$6.75
- **A GUIDE TO LEARNING FLUID THERAPY** by **Daniel C. Darrow, Babies Hospital Research Center, Wilmington, N. C.** Jan. '64, 296 pp., 22 il., 40 tables, \$9.75
- **REFLEX TESTING METHODS FOR EVALUATING C.N.S. DEVELOPMENT** by **Mary R. Fiorentino, Newington Hospital for Crippled Children, Newington, Conn.** Aug. '63, 72 pp., 78 il. (Amer. Lec. Orthopaedic Surgery), \$5.50
- **TREATMENT OF STRABISMUS** by **Eugene R. Folk, Univ. of Illinois, Chicago, Ill.** Aug. '64, about 120 pp.

~~~~~ **NEW** ~~~~~

## ACNE: And Related Disorders of Complexion and Scalp

By **Arthur Bobroff, Univ. of Washington, Seattle, Wash.**

Based on the author's personal experience in treating more than five thousand acne sufferers . . . a long-needed text covering the nature, origin, causes, prevention, treatment, epidemiology, and control of facial disfigurement from acne. Doctor Bobroff shares with the reader knowledge that will enable him to clear up most acne within a few weeks . . . at reasonable cost . . . with simple treatment that he can readily master and apply. Prevention of scarring is emphasized. Where existing scarring must be dealt with, the reader is offered sound, workable advice. Meticulous attention is given to possible complications, anomalies, and atypical situations that may confront the clinician.

August 1964      about 264 pp.      about 17 il.      about \$5.75

- **CHILD PSYCHIATRY (3rd Ed., 3rd Ptg.)** by **Leo Kanner, The Johns Hopkins Univ., Baltimore, Md.** Sept. '62, 800 pp., \$10.50
- **A HISTORY OF THE CARE AND STUDY OF THE MENTALLY RETARDED** by **Leo Kanner.** Jan. '64, 160 pp., 2 il., \$6.50
- **LIVING WITH EPILEPTIC SEIZURES** by **Samuel Livingston, The Johns Hopkins Univ., Baltimore, Md.** Assisted by **Irving M. Puce.** March '63, 368 pp., 11 il. (1 color plate), \$6.50
- **THE CHEMISTRY AND THERAPY OF DISORDERS OF VOLUNTARY MUSCLES** by **E. G. Murphy.** With a chapter by **G. R. Williams.** Both of *Univ. of Toronto, Toronto, Canada.* May '64, 140 pp., 16 il. (Amer. Lec. Living Chemistry edited by I. Newton Kugelmass), \$6.50
- **MICROTECHNICS OF CLINICAL CHEMISTRY (2nd Ed., 2nd Ptg.)** by **Samuel Natelson, The Roosevelt Hosp., New York City.** Sept. '63, 592 pp., 318 il., \$14.75
- **GROWTH FAILURE IN MATERNAL DEPRIVATION** by **Robert Gray Patton, Children's Hospital of San Francisco, San Francisco, Calif., and Lytt I. Gardner, State Univ. of New York, Syracuse, N. Y.** March '63, 112 pp., 18 il., \$5.75
- **HYPNOSIS IN MODERN MEDICINE (3rd Ed.)** by **Jerome M. Schneck, State Univ. of New York, New York City.** June '63, 472 pp., \$12.75
- **EAR, NOSE AND THROAT FOR THE GENERAL PRACTITIONER** by **Albert P. Seltzer, Univ. of Pennsylvania, Philadelphia, Pa.** April '64, 244 pp., \$7.75

---

**CHARLES C THOMAS • PUBLISHER**      301-327 East Lawrence Avenue      **SPRINGFIELD • ILLINOIS**



for bladder instillation  
 in urethrotrigonitis and postoperatively

# FURACIN<sup>®</sup> SOLUTION

## NITROFURAZONE

■ dependable antibacterial action against a wide range of gram-positive and gram-negative pathogens ■ prompt and profound relief of symptoms, such as dysuria, frequency and urgency, in the great majority of cases ■ no mucosal irritation observed following instillations in recommended dilutions

For urethral irrigation or bladder instillation it is recommended that FURACIN (nitrofurazone) Solution be diluted 1 in 10 or 1 in 6, using aseptic technic. Sterile distilled water is preferred to saline. Use within 1 week to avoid precipitation and mycotic contamination. In urethrotrigonitis, instill 50 to 60 cc. (2 fl. oz.) of diluted Solution into bladder after urination. Retain for at least 30 minutes. Repeat 2 or 3 times weekly.

The incidence of irritation or sensitization to FURACIN (nitrofurazone) Solution in urologic and surgical practice is probably less than 2%. Discontinue if signs or symptoms of irritation develop.

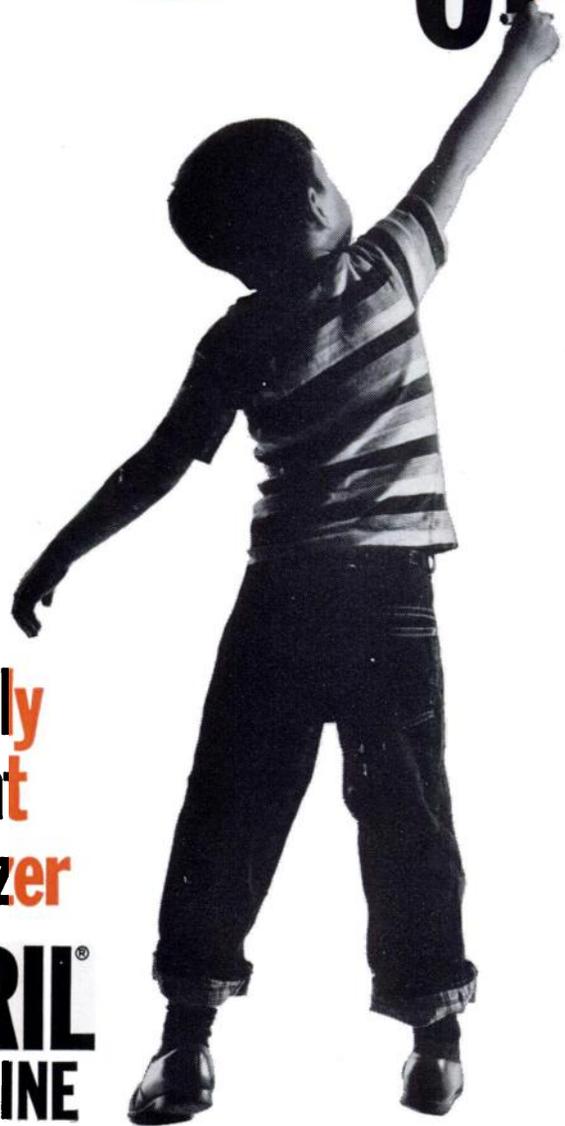
SUPPLIED: Bottles of 60 cc. and 473 cc., containing FURACIN (nitrofurazone) 0.2%.

EATON LABORATORIES, Division of The Norwich Pharmacal Company, NORWICH, N. Y.



*In answering advertisements please mention PEDIATRICS*

relieve  
disruptive  
of



a usefully  
different  
tranquilizer  
**VISTARIL**<sup>®</sup>  
HYDROXYZINE

# the anxieties childhood

The problem child, the child with "school phobia," tics, hyperactivity, restlessness, the candidate for T & A—all can benefit from the useful differences of Vistaril (hydroxyzine).

## calms without inhibiting school or play activities

When suggested dosage schedules are followed, Vistaril (hydroxyzine) allays symptoms of agitation and tension but seldom interferes with performance.

## alleviates gastrointestinal symptoms

For children with functional disturbances characterized by nausea and vomiting, Vistaril (hydroxyzine) offers more than simple tranquilization. It has exhibited antiemetic properties and will not increase gastric acidity.

## provides the safety features essential in treating children

In its six years of use, there have been no reports of toxic effect on the liver or blood-forming organs, and involuntary motor activity has not been reported with average recommended dosages. Vistaril (hydroxyzine) has been used for long periods without producing tolerance or addiction.

## supplied in delicious suspension form

Young children readily accept citrus-

flavored Vistaril (hydroxyzine pamoate) Suspension. For the acutely agitated child, Vistaril (hydroxyzine HCl) is available as a parenteral solution.

**SIDE EFFECTS:** Drowsiness, usually transitory and correctable by dosage reduction, may occur. Dryness of mouth may be seen with higher doses. Involuntary motor activity has been reported in some hospitalized patients on high dosage.

**PRECAUTIONS:** Vistaril (hydroxyzine) may potentiate the action of central nervous system depressants, anticoagulants, narcotics such as meperidine, and barbiturates. In conjunctive use, dosage for these drugs should be decreased. Patients receiving anticoagulants should be followed closely, and appropriate laboratory studies performed regularly. The usual precautions for intramuscular injection should be followed with the parenteral form. Intravenous injection should not exceed a rate of 1 cc. per minute or 100 mg. per dose. As with other injectables, soft-tissue reactions have been rarely reported, and are usually associated with faulty technique.

**FORMULAS:** Vistaril (hydroxyzine pamoate) Capsules: 25 mg., 50 mg., 100 mg.; Vistaril (hydroxyzine pamoate) Oral Suspension: 25 mg. per 5 cc.; Vistaril (hydroxyzine HCl) Parenteral Solution: 25 mg. and 50 mg. per cc.

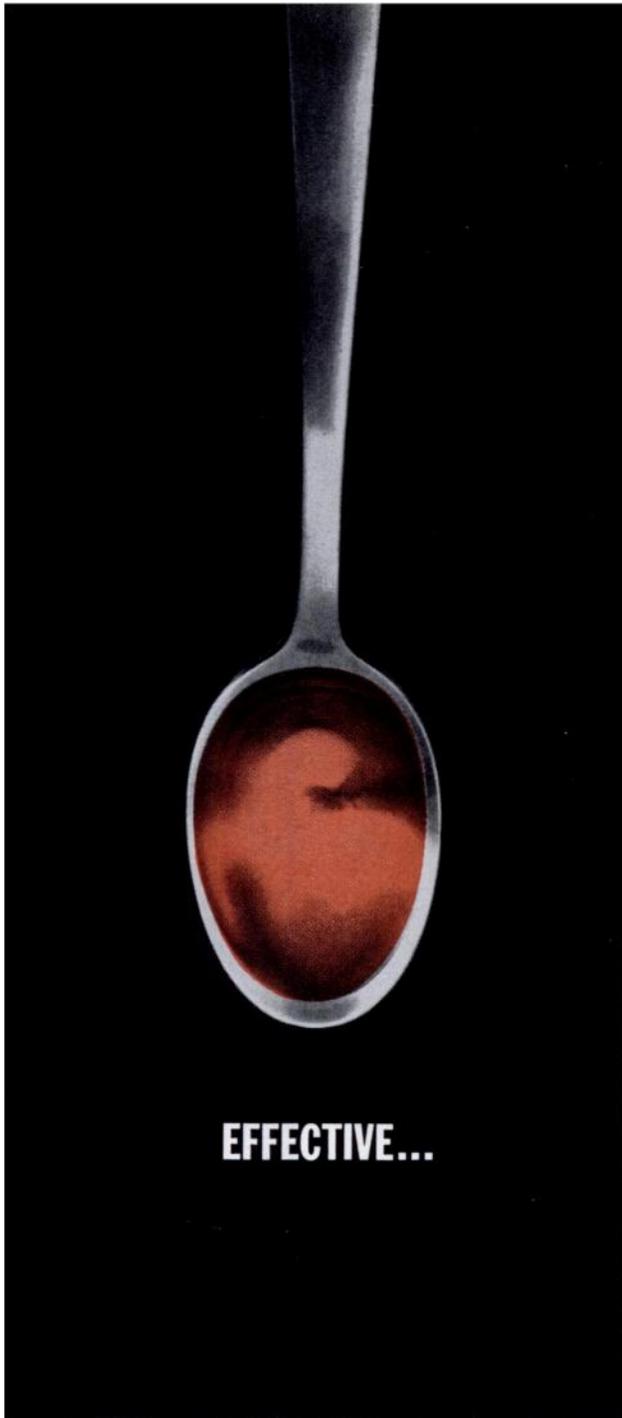
*More detailed professional information available on request.*

Science for the world's well-being®

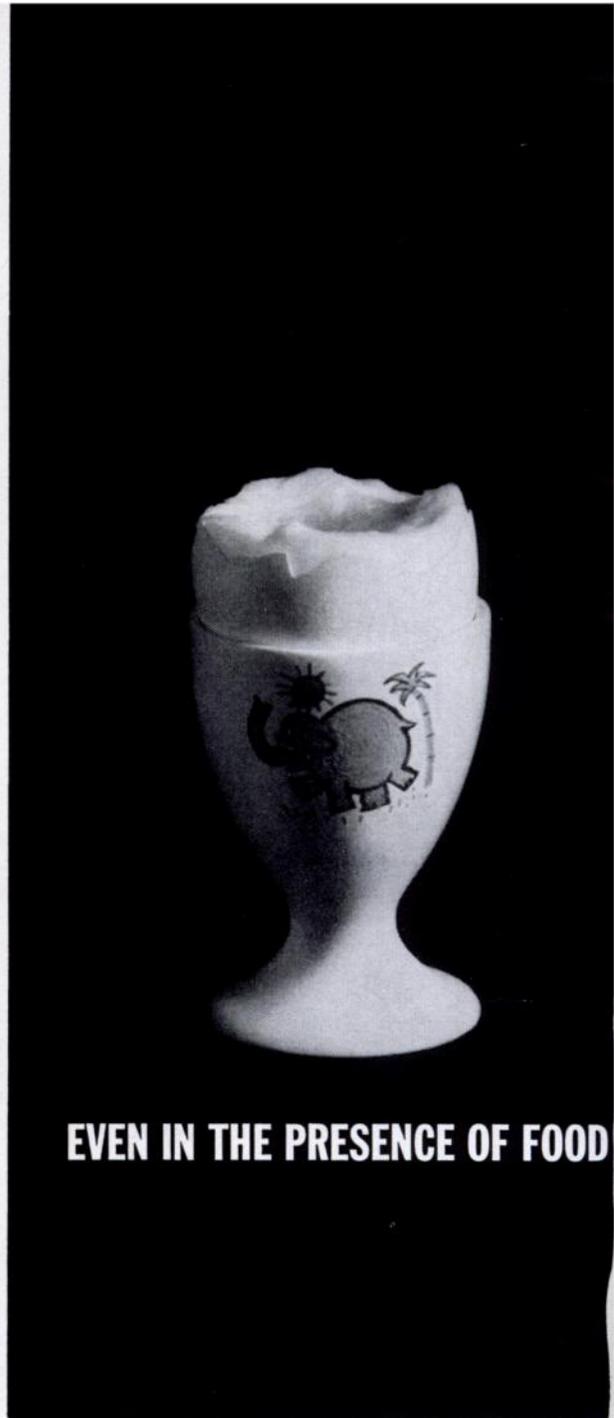
**Pfizer**

Since 1849

PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. New York, New York 10017



**EFFECTIVE...**



**EVEN IN THE PRESENCE OF FOOD**

McCarthy and Finland<sup>1</sup> demonstrated that V-Cillin K is well absorbed *even in the presence of food*. No nonabsorbers have ever been found. Thus, whether taken before or after meals . . .

**V-CILLIN K<sup>®</sup>, PEDIATRIC, PROVIDES CONSISTENTLY DEPENDABLE CLINICAL RESULTS**  
 POTASSIUM PHENOXYMETHYL PENICILLIN

**Indications:** V-Cillin K, Pediatric, is an antibiotic useful in the treatment of streptococcus, pneumococcus, and gonococcus infections and infections caused by sensitive strains of staphylococci.

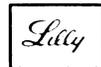
**Precautions:** Although sensitivity reactions are much less common after oral than after parenteral administration, V-Cillin K, Pediatric, should not be administered to patients with a history of allergy to penicillin. As with any anti-

biotic, observation for overgrowth of nonsusceptible organisms during treatment is important.

**Dosage:** The usual dosage range is 125 mg. three times daily to 250 mg. six times daily.

**Supplied** in packages of 40, 80, and 150 cc.

Additional information available upon request. Eli Lilly and Company, Indianapolis 6, Indiana.



1. McCarthy, C. G., and Finland, M.: Absorption and Excretion of Four Penicillins, *New England J. Med.*, 263:315, 1960.

# Pediatrics

VOLUME 34

AUGUST 1964

NUMBER 2

## COMMENTARY

### MEDICAL RESPONSIBILITY AND DRUG ADDICTION

THE dismaying extent of addiction among young people, the complexity of its causation, and the grossly unsatisfactory results from current methods of management are all sharply posed in the accompanying review by Freedman and Wilson. This thoughtful condensation of the available literature may disappoint those looking for neat and simple formulations as to cause or cure. Easy slogans and hoary nostrums abound; they lack only facts to support them.

The correlations between low socioeconomic status, membership in ethnic groups shut out from full participation in American society, and the prevalence of addictive practices point to social class factors as important determinants of the behavior patterns that eventuate in addiction; yet addiction is not universal among the disadvantaged and is being discovered to an increasing extent among privileged youth. Clearly, more than poverty and prejudice is involved. This is further indicated by the lack of a uniform personality pattern among addicts. Quite to the contrary, they run the gamut from relatively integrated individuals who maintain the habit with neither family nor friends aware of it—through sociopaths whose addiction is only one aspect of a criminal way of life—to ambulatory schizophrenics who avoid an acute and fulminating psychotic break by way of drugs. They include the graduate student who rationalizes his use of drugs

as “seeking for a cosmic experience to broaden the horizons of perception,” the candidate for delinquent gang membership who pays in the coin of drug use for admission to a peer group, and the hypochondriac who gets hooked in his search for relief from discomfort. Addiction is a symptom, not a disease, a final common path for a multiplicity of personal and social derailments in the search for a satisfying way of life. It should then not surprise us that no single explanation is sufficient to encompass all the facts.

The relation between narcotic addiction and criminal behavior is similarly complex. Because *this* society has outlawed the obtaining of narcotics—but not of alcohol and tobacco, both of which are associated with considerable morbidity and mortality—the drug addict becomes *ipso facto* a criminal by possessing narcotics. When, to maintain his habit, he commits other crimes, he enters an underworld that is in part of social manufacture. To paraphrase Judge Bazelon, if the addict nominates himself for a life of crime we elect him.

There is no intent here to argue that addiction is desirable or ought to be encouraged. There is, however, a gross disproportion between the severity of the social sanctions for addiction and the actual pathophysiologic cost to the addict himself. There is, moreover, some reason to suspect that the present punitive and non-medical approaches to management are themselves

## NEW PUBLICATIONS RECEIVED

- STANDARDS AND RECOMMENDATIONS FOR HOSPITAL CARE OF NEWBORN INFANTS, Committee on Fetus and Newborn. Evanston, Illinois: American Academy of Pediatrics, Revised, 1964, 89 pp., \$1.50.
- THE EARLY DIAGNOSIS OF CONGENITAL ABNORMALITIES, R. W. Smithells. Philadelphia: F. A. Davis, 1964, 213 pp., \$4.75.
- THE CHEMISTRY AND THERAPY OF DISORDERS OF VOLUNTARY MUSCLES, E. G. Murphy. Springfield, Illinois: Charles C Thomas, 1964, 123 pp., \$6.50.
- EMOTIONAL PROBLEMS OF ADOLESCENTS, Revised Edition, J. Roswell Gallagher and Herbert I. Harris. New York: Oxford University Press, 1964, 210 pp., \$5.00.
- MODERN TREATMENT, Vol. 1, No. 1: Treatment of Renal Disease, edited by E. Lovell Becker; Treatment of Thyroid Disease, Edward A. Carr, Jr. New York: Hoeber, 1964, 228 pp., \$16.00 per year.
- RECENT ADVANCES IN PEDIATRIC SURGERY, A. W. Wilkinson. Boston: Little, Brown, 1964, 306 pp., \$11.50.
- AUDIOLOGICAL EVALUATION OF THE PEDIATRIC PATIENT, Maurice H. Miller and Ira A. Polisar. Springfield, Illinois: Charles C Thomas, 1964, 111 pp., \$5.75.
- ANNUAL REVIEW OF MEDICINE, VOL. 15, 1964, edited by Arthur C. DeGraff. Palo Alto, California: Annual Reviews, Inc., 1964, 476 pp., \$8.50 postpaid (U.S.A.). \$9.00 postpaid (elsewhere).
- PERCEPTUAL AND VISUO-MOTOR DISORDERS IN CEREBRAL PALSY, Little Club Clinics Developmental Medicine No. 11, M. L. J. Abercrombie. London: The Spastics Society, Medical Education and Information Unit. 136 pp., 25s or \$3.50.
- THE NEUROLOGICAL EXAMINATION OF THE FULL TERM NEWBORN INFANT, H. Prechtel, D. Beintema, Little Club Clinics in Developmental Medicine No. 12. London: The Spastics Society, Medical Education and Information Unit. 72 pp., 15s or \$2.00.