

When a little cold seems like a catastrophe . . .

. . . the best way to relieve her discomfort is probably with aspirin. But what aspirin?

## She needs an aspirin that's made to her size and taste

Its record of preference has never been excelled. From the day, 14 years ago, when St. Joseph Aspirin For Children was first introduced, it has offered several major advantages for the prescribing doctor, the harassed mother and the fretful patient.

Each tiny tablet is exactly 1¼ grains of the finest quality aspirin—an ideal unit of dosage for little patients.

Each tablet, too, has a smooth, creamy texture and orange flavor—allowing easy administration without heightening tension. Its ready acceptance minimizes the possibility either of ingestion of an inadequate dose through rejection or of overdosage through a mother's repeated attempts to "get her to take it."

Try St. Joseph Aspirin For Children, yourself. Put a tablet on your tongue. Let it dissolve. Note how

pleasant it tastes. Then do the same with any other children's aspirin tablet and you'll discover why so many mothers prefer giving St. Joseph Aspirin For Children—why children accept it readily . . . without fuss or furor.

The St. Joseph Aspirin For Children bottle is sealed with a special safety cap. It requires a special technique to remove, thus providing a safety factor favored by the medical profession and by health authorities.

Made to meet the strictest professional standards, St. Joseph Aspirin For Children can be prescribed with complete confidence.

*The coupon at the right is for your convenience should you desire professional samples.*

**PLOUGH, INC.**

New York • Memphis • Los Angeles • Miami



Plough, Inc.  
3022 Jackson Ave.  
Memphis, Tenn.

33

Please send me samples of St. Joseph Aspirin For Children, (In Canada, St. Joseph Bebetine For Children) addressed as follows:

\_\_\_\_\_ M.D.

## ST. JOSEPH ASPIRIN FOR CHILDREN

*Prevent... Correct*  
**"MILK CONSTIPATION"**



with



**POWDER**

**LIQUID**

- *in infants*

MALTSUPEX Liquid or Powder in formula or other liquid maintains natural, soft stools by providing a favorable medium for safely promoting a normal acidic colonic flora.

½ to 2 tablespoonfuls daily.

- *in children and adults*

A MALTSUPEX® "shake" is pleasant for promoting the ideal low pH flora for normal elimination. MALTSUPEX Powder may also be added to cereal.

1 or 2 tablespoonfuls once or twice daily. 8 and 16 oz. jars, at pharmacies.

MALTSUPEX is a nutritive food concentrate derived from the natural enzymatic digestion of barley.

**BORCHERDT COMPANY—DEPT. P**  
217 N. Wolcott Avenue • Chicago 12, Ill.

Please send trial package of MALTSUPEX® and descriptive literature to:

Dr. ....

Address .....

In Canada: Chemo Drug Co. Ltd., Toronto, Ontario

*In answering advertisements please mention PEDIATRICS*

i

This One



P2A2-8KD-NFZC

## GENERAL INFORMATION

**P**EDIATRICS 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.

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

### 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.

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, 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 32

September, 1963

Number 3

**Editor**

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

**Editorial Board**

**Alfred M. Bongiovanni**  
Philadelphia

**Randolph K. Byers**  
Boston

**Barton Childs**  
Baltimore

**David H. Clement**  
New Haven

**Bruce D. Graham**  
Vancouver,  
B.C., Canada

**Malcolm A. Holliday**  
Pittsburgh

**Norman Kretschmer**  
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**

**Clarence H. Webb**  
President  
Shreveport, La.

**E. H. Christopherson**  
Executive Director  
1801 Hinman Avenue  
Evanston, Illinois

## CONTENTS

**COMMENTARY**

- Research on Premature Infants—Some Perspectives—  
*S. Z. Levine* ..... 319

**ARTICLES**

- Autosomal Disorders—*Jerome Lejeune, M.D.* ..... 326

- A Simple Phenylalanine Method for Detecting Phenylketonuria in Large Populations of Newborn Infants—*Robert Guthrie, Ph.D., M.D., and Ada Susi* ..... 338

- Phenylketonuria, and Guthrie Inhibition Assay Screening Procedure—*D. S. Kleinman* ..... 344

- Citrullinuria—*W. C. McMurray, Ph.D., J. C. Rathbun, F.R.C.P.(C.), F. Mohyuddin, M.Sc., and S. J. Koegler, M.D., D.C.H.* ..... 347

- Gastrointestinal Malabsorption Associated with Cystinuria. Report of a Case in a Negro—*Lieutenant Commander William H. Fleming, MC USNR, Lieutenant Gordon B. Acery, MC USN, Lieutenant R. Irvin Morgan, MC USN, and Captain Thomas E. Cone, Jr., MC USN* ..... 358

- Changes in Red Cell Enzyme Activity in Relation to Red Cell Survival in Infancy—*Eugene Kaplan, M.D., and J. Tyson Tildon, B.S.* ..... 371

- Megaloblastic Anemia Associated with the Ingestion of Phenobarbital and Primidone. Report of a Case in a Six-year-old Child—*Sigmund Benham Kahn, M.D., Harold Lischner, M.D., Lester Baker, M.D., and William J. Williams, M.D.* ..... 376

(Continued on page iv)

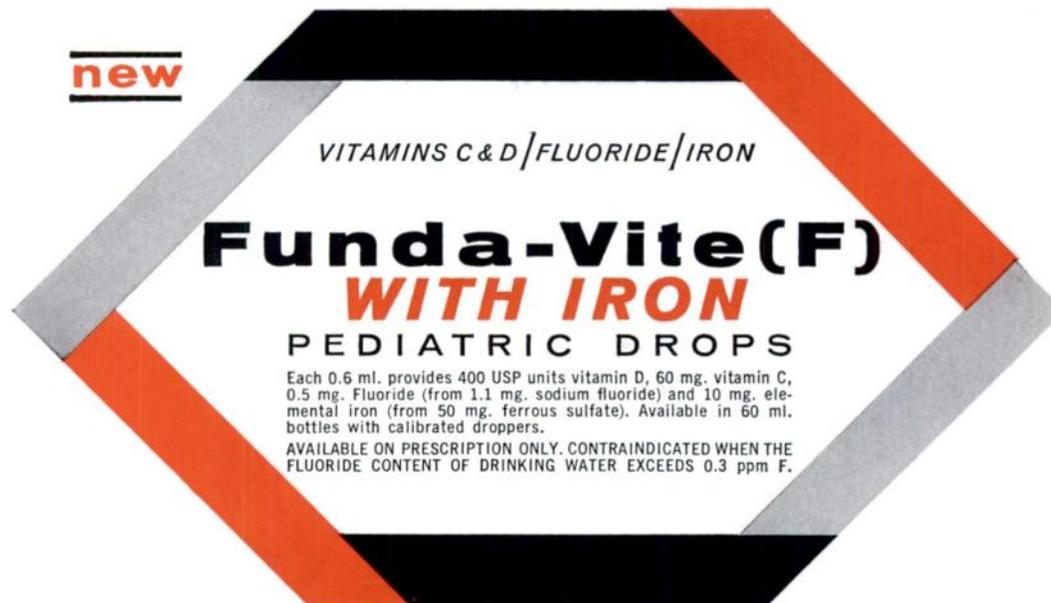
FORTHCOMING MEETINGS—AMERICAN ACADEMY  
OF PEDIATRICS

32nd Annual  
October 5-10, 1963  
Palmer House  
Chicago

Spring Session  
April 20-22, 1964  
Sheraton Hotel  
Philadelphia

**another "first"**  
**a vitamin-fluoride supplement with iron**

**In line with our Research and Development of products to meet current concepts of nutritional management, we are pleased to announce the availability of:**



**for proper nutritional support<sup>(1)</sup>...**  
**prophylaxis against dental caries<sup>(2-5)</sup>...**  
**and prevention of iron deficiency anemia<sup>(6-10)</sup>**

Some authorities advocate iron supplementation to diets of both full-term and prematurely born infants because of the difficulty in evaluating each variable involved in determining the iron available to the infant...others restrict the use of prophylactic iron to those infants with increased requirements or inadequate intakes of iron:

...deficient "stores" of iron at birth because of maternal deficiency, or by blood loss during the perinatal period.

... when the rate of growth will be faster than normal, i.e.—in small infants... weighing 3,000 Gm. (6.5 lbs.) or less at birth.

...in cases of excessive milk consumption representing a high caloric intake...with cereals and solid foods either not offered or refused.

**REFERENCES:** 1.) Council on Foods and Nutrition: J.A.M.A. 169:110 (January 3) 1959. 2.) Report of the Joint Committee of American Academy of Pediatrics and American Society of Dentistry for Children: Dental caries and a consideration of the role of diet in prevention, Pediatrics 23:400-407 (February) 1959. 3.) Accepted Dental Remedies, American Dental Association, Chicago, 27th Ed., 1962, pg. 139. 4.) Arnold F.A. Jr., McClure F.J. and White, C.L.: Sodium Fluoride Tablets for Children, Dental Progress 1:3-12 (October) 1960. 5.) Feltman, R. and Kosel, G.: Prenatal and Postnatal Ingestion of Fluorides—Fourteen Years of Investigation—Final Report, J. Dental Medicine 16:190-199 (October) 1961. 6.) Schulman I.: Iron Requirements in Infancy, J.A.M.A. 175:118-125 (January 14) 1961. 7.) Jackson, R.L.: Iron Deficiency Anemia in Infants—Guest Editorial, J.A.M.A. 160:976 (March 17) 1956. 8.) Woodruff, C.W.: Multiple Causes of Iron Deficiency In Infants, J.A.M.A. 167:715-720 (June 7) 1958. 9.) Woodruff, C.W.: Nutritional Assessment of Infants with Hypochromic Anemia, Am. J. Clin. Nut. 7:634-639 (Nov.—Dec.) 1959. 10.) Ross, J.D.: Current Concepts of Therapy—Treatment and Prevention of Iron-Deficiency Anemia of Infancy, New Eng. J. Med. 266:1372-1375 (June 28) 1962.

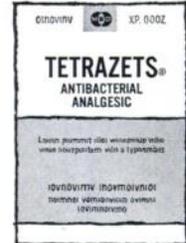


**SAMPLES AND LITERATURE, write Medical Department  
HOYT PHARMACEUTICAL CORP., NEWTON 58, MASS**

*In answering advertisements please mention PEDIATRICS*



# teacher's pet



Sore throat stopped the lesson until TETRAZETS relieved the sore throat. When minor sore throats and mouth irritations threaten to interrupt your patient's work or play, specify TETRAZETS for prompt relief of discomfort and broad-spectrum antibiotic action.

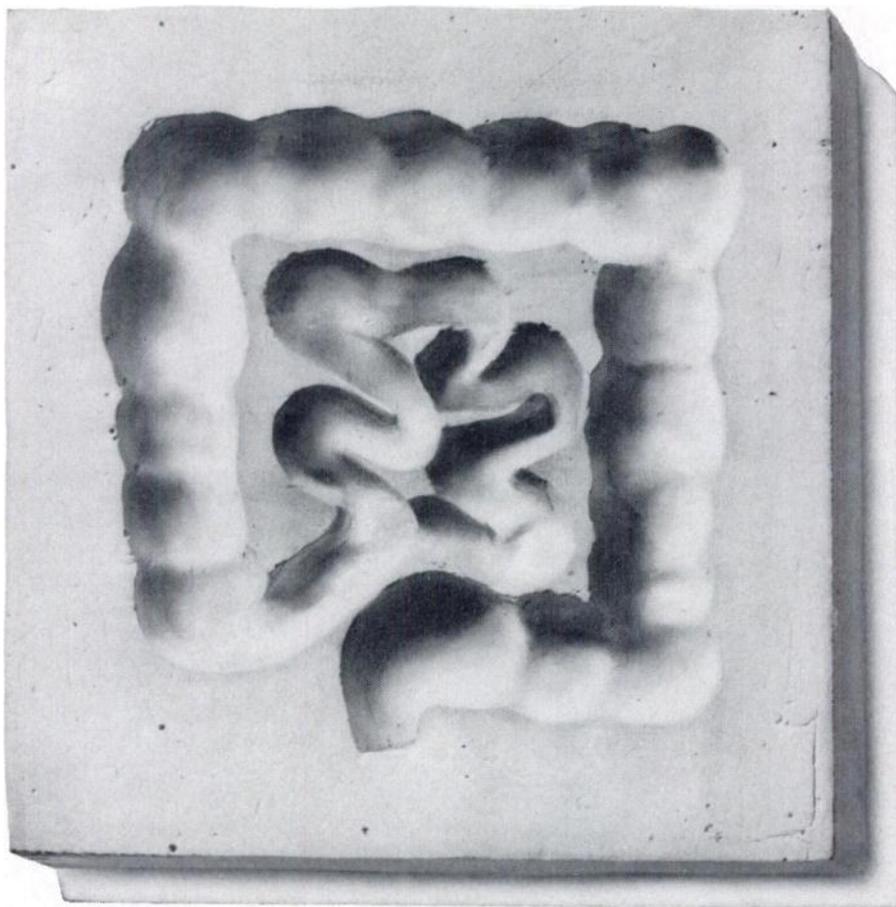
TETRAZETS are also useful after tonsillectomies and as adjunctive therapy in Vincent's infection, pharyngitis, and tonsillitis.

Supplied in vials of 12 troches, each troche containing zinc bacitracin 50 units, tyrothricin 1 mg., neomycin sulfate (equivalent to 3.5 mg. neomycin base) 5 mg., and benzocaine 5 mg.

 TETRAZETS is a trademark of Merck & Co., Inc.  
MERCK SHARP & DOHME • Division of Merck & Co., Inc., West Point, Pa.

# Tetrazets®

Antibacterial — Analgesic



## TO STOP BACTERIAL DIARRHEA

### **FUROXONE**<sup>®</sup> BRAND OF FURAZOLIDONE LIQUID/TABLETS

combats pathogens but does not eliminate the normal flora.

A double-blind study in 65 children "demonstrated both symptomatic and bacteriological effectiveness" of FUROXONE (furazolidone) in bacterial diarrhea—without eradication of the normal intestinal flora. "Overgrowth of nonsusceptible organisms resulting in colitis, proctitis and anal pruritus usually associated with bowel sterilization [has] not been observed."\*

Side effects are infrequent. Mild sensitization, in the form of vesicular or morbilliform rash, has occurred in a few patients but subsides on cessation of treatment. Certain Negroes or individuals of ethnic groups of Mediterranean or Near-Eastern origin may develop a primaquine type of mild, hemolytic anemia; this is reversible when the drug is discontinued. Nausea, emesis, headache or malaise occurs occasionally.

**FUROXONE (furazolidone) LIQUID** suspension contains furazolidone 50 mg. per 15 cc., with kaolin 20 Gm. per 100 cc. and pectin 1.5 Gm. per 100 cc.

**FUROXONE (furazolidone) TABLETS** each contain 100 mg. furazolidone.

\*Mintz, A. A.: *Antibiot. Med. Clin. Ther.* 7:481, 1960.

Complete product information in package insert. From your Eaton Representative, or on request to the Medical Director. For round-the-clock medical consultation on Eaton products, phone Norwich, N.Y., Area Code 607-334-9911.

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

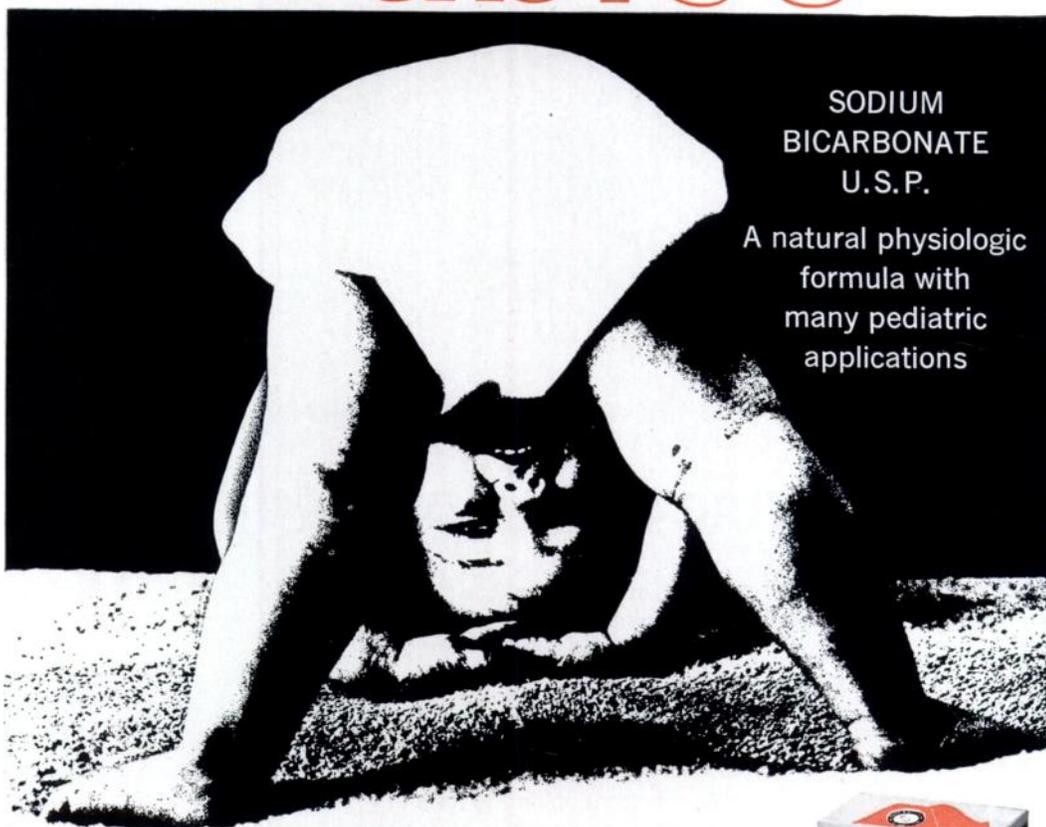


*In answering advertisements please mention PEDIATRICS*

Well established in  
the management of



# Babies



SODIUM  
BICARBONATE  
U.S.P.

A natural physiologic  
formula with  
many pediatric  
applications

Versatile is the word for gentle Sodium Bicarbonate. Readily available in most homes, it helps mothers in many ways to comfort babies. Added to the bath Sodium Bicarbonate helps control pruritus or included in the diaper soak and rinse it sweetens and improves cleaning action . . . helps rinse away detergent residue, administered as a cooling paste it soothes painful sunburn.

Arm & Hammer Baking Soda is pure Sodium Bicarbonate and meets all the standards of U.S.P. XVI. It may be prescribed with confidence wherever Bicarbonate of Soda is indicated.



© 1963 CHURCH & DWIGHT CO., INC., 70 Pine Street, New York 5, N.Y.

*In answering advertisements please mention PEDIATRICS*

# Choose From Two Convenient Dosage Sizes



**Erythrocin GRANULES**  
Erythromycin ethyl succinate, Abbott  
*For Oral Suspension*

When reconstituted, 60-ml. of cherry-flavored suspension are provided containing activity equivalent to 200 mg. of erythromycin base per 5-ml. teaspoonful.



**Erythrocin DROPS**  
Erythromycin ethyl succinate, Abbott  
*Granules for Oral Suspension*

When reconstituted, 30-ml. of cherry-flavored suspension are provided containing activity equivalent to 100 mg. of erythromycin base per 2.5-ml. dropperful.

## New Pediatric "CLOWN" Medicator

A 2.5-ml. calibrated dropper is included with the Drops to assure precise dosage measurement in the home. A cheerful clown design helps make taking medicine into a game for children. The medicator can easily be slipped into the side of the mouth to avoid waste and dripping when children are upset or unwilling to take medication.

**Dosages:** For children, the basic recommendation is 30 mg./Kg./day (14 mg./lb./day in divided amounts with a maximum of 50 mg./Kg./day (23 mg./lb./day). The following schedule is convenient for mild to moderate infections:

25-lb. (11.5 Kg.) child—100 mg. (2.5 ml.), approximately  $\frac{1}{2}$  teaspoonful or one dropperful, four times daily.

50-lb. (23 Kg.) child—200 mg. (5 ml.), approximately one teaspoonful, four times daily.

75-lb. (34.5 Kg.) or more—200 mg. (5 ml.), approximately one teaspoonful, five times daily  
Usual adult dose 1 to 2 Gm. in daily divided doses.

**Precautions:** Side effects are rare. However, if a patient should show signs of allergic sensitivity, appropriate countermeasures (e.g. epinephrine, steroids, antihistamines, etc.) should be administered and the drug withdrawn. 308289



*In answering advertisements please mention PEDIATRICS*

Eliminate both  
**pinworms and roundworms**  
with one product



***Without staining, nausea or laxatives***

**SYRUP** Piperazine Citrate Anhydrous\*, 550 mg. per 5 cc.—  
Bottles of 4 fl. oz., 1 pt., and 1 gal.

**TABLETS** Piperazine Citrate Anhydrous\*, 550 mg., scored—  
Bottles of 100 and 1,000.

**WAFERS** Piperazine Phosphate Anhydrous\*, 475 mg.—  
Boxes of 28.

(\*equivalent to 500 mg. piperazine hexahydrate)

**Caution:** While 'Antepar' (piperazine) usually produces no side effects when given in the recommended dosage, an occasional patient may experience urticaria, or, on taking excessively large doses, vomiting, blurred vision or general muscle weakness, which disappear when the drug is discontinued.

Complete literature available on request from Professional Services Dept. PML.



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

Announcing Two New  
Pediatric Dosage Forms of  
**Erythrocin<sup>®</sup>**

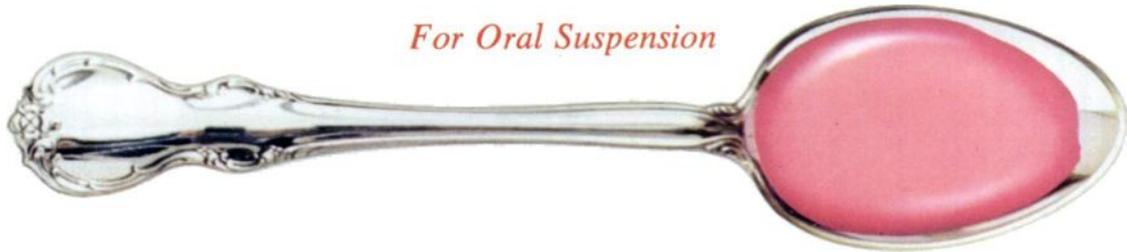
ERYTHROMYCIN, ABBOTT

—and a taste-test we'll be asking you to make

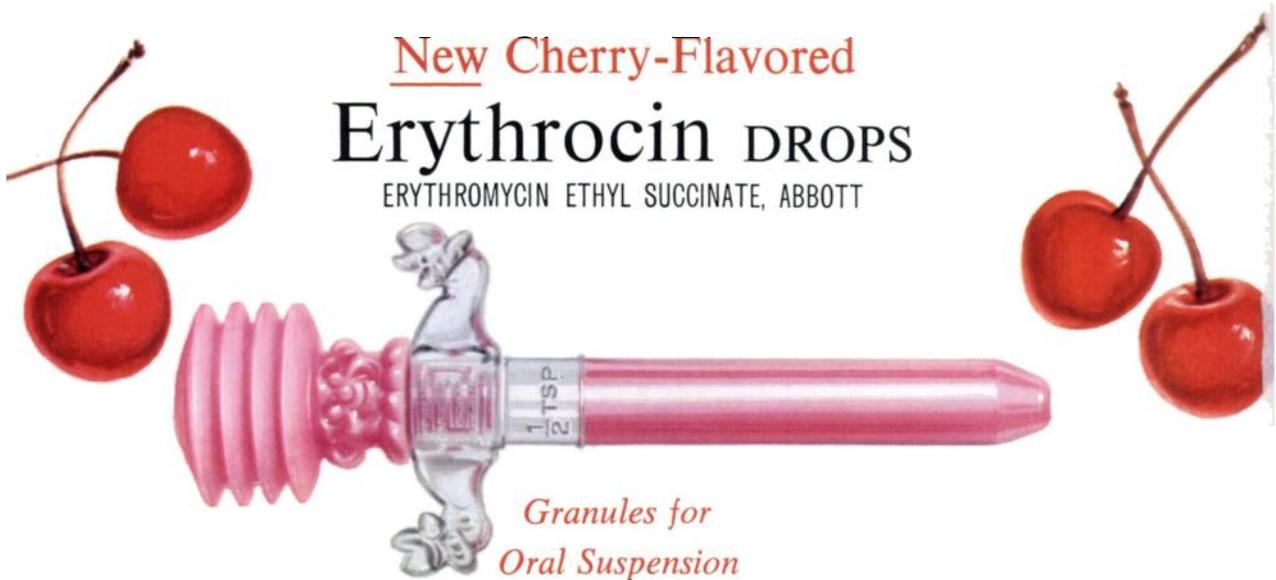


New Cherry-Flavored  
**Erythrocin GRANULES**  
ERYTHROMYCIN ETHYL SUCCINATE, ABBOTT

*For Oral Suspension*



New Cherry-Flavored  
**Erythrocin DROPS**  
ERYTHROMYCIN ETHYL SUCCINATE, ABBOTT



*Granules for  
Oral Suspension*

Soon, your Abbott man will be in to see you with tasting samples of these new suspensions. Because one taste is worth a page of description, all we'll say now is that you'll find a truly delightful cherry flavor—the characteristic bitterness of erythromycin has disappeared.

We'd like to emphasize, however, that this is *all* that's changed. The active ingredient—the superior antibacterial activity and exceptional safety—remain the same. 307077



## With Your Help These Children Can Have Caries-Resistant Teeth

# R "Enziflur" Lozenges

When you prescribe "Enziflur" Lozenges, you help these children have caries-resistant teeth. Medical and dental authorities agree that topical fluorides are of value for this purpose. "Enziflur" Lozenges provide these 5 distinct advantages as they supply both topical and systemic fluoride:

1. As the lozenge slowly dissolves in the mouth, topical sodium fluoride is supplied.

2. As the solute is swallowed, it becomes a systemic source of sodium fluoride.

3. Vitamins C and D are absorbed for their vital effect on dental structures.<sup>1-3</sup>

4. No mixing or measuring. "Enziflur" Lozenges are easily administered, according to directions.

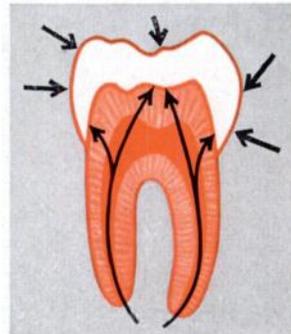
5. Both children and adults like the appealing orange flavor of "Enziflur" Lozenges.

#### HOW ADMINISTERED:

WHERE DRINKING WATER IS SUBSTANTIALLY DEVOID OF FLUORIDE: *Children over three years of age and adults*—1 lozenge daily (equivalent to 1.0 mg. fluoride ion daily). *Children under three years of age*—1 lozenge every other day (equivalent to 0.5 mg. fluoride ion daily).

WHERE DRINKING WATER CONTAINS SOME FLUORIDE: Detailed dosage chart available. Fluoride is contraindicated where communal water supplies are fluoridated at 0.7 ppm, or more.

**CAUTIONS:** No more than 264 mg. of sodium fluoride should be dispensed at one time. **KEEP OUT OF REACH OF CHILDREN.** "Enziflur" should be limited to those instances where the parent may be expected to follow directions carefully.



## "Enziflur"<sup>®</sup> LOZENGES

Each "Enziflur" Lozenge contains:

Sodium fluoride .....	2.21 mg.
Vitamin C .....	30.0 mg.
Vitamin D .....	400 U.S.P. Units

(Each lozenge yields 1.0 mg. of fluoride ion.)

**HOW SUPPLIED:** No. 805—"Enziflur" Lozenges, in bottles of 100.

Detailed dosage chart, prescription blanks, and literature are available on request.

1. Council on Foods and Nutrition: Vitamin preparations as dietary supplements and as therapeutic agents, *J.A.M.A.* 169:110 (Jan. 3) 1959. 2. May, C. D.: Editorial, *Pediatrics* 23:833 (May) 1959. 3. Sebrell, W.H., Jr.: *Vitamins in Medical Practice, Seminar Report* 3:2 (Fall) 1958.



AYERST LABORATORIES  
New York 17, N. Y. • Montreal, Canada

from ekiri in Japan

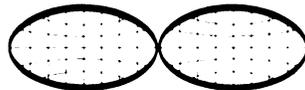


# to bronchitis in Ohio

there is a world of experience behind

## TERRAMYCIN<sup>®</sup>

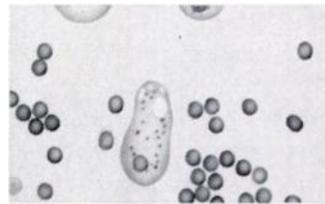
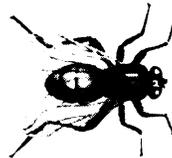
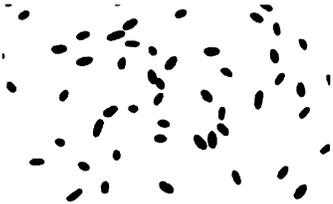
### OXYTETRACYCLINE



Whether treating ekiri, bronchitis, or a host of other infections, physicians throughout the world continue to rely on the special features of oxytetracycline (with its unique "oxy" grouping) for outstanding safety, effectiveness and excellent tolerability. Not a single case of phototoxic reaction, blood dyscrasia or neurologic disturbance directly attributable to oxytetracycline has been reported in more than 3,000 clinical papers in the past 13 years. *In your practice, the next infection you see will very likely be "Terra-responsive."*

**Ekiri** is a form of bacillary dysentery afflicting young children in Japan. Shigellae\* are the pathogens; *Musca domestica*,\* a known carrier. In Japan, both bacillary dysentery and ekiri have some common characteristics. However, the fulminating nature of ekiri is apparent early, symptoms principally involving the cardiovascular and nervous systems. Convulsions and sensory disturbances as well as coffee-ground vomiting, cyanosis, cold extremities, tachycardia and almost imperceptible pulse are typical findings. Using stool exudate, identification of the pathogen and of the swollen polymorphonuclear leukocytes with ring-like nuclei\* confirms the diagnosis. Mortality without antimicrobial therapy is 20 to 60 per cent, with most deaths occurring during the first three days of illness. The use of antibiotics, however, has resulted in a marked decrease in fatality rates. Epidemics may appear. Understandably, ekiri is often called "hayate," a squall or typhoon.

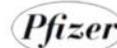
*\*illustrated*



#### IN BRIEF

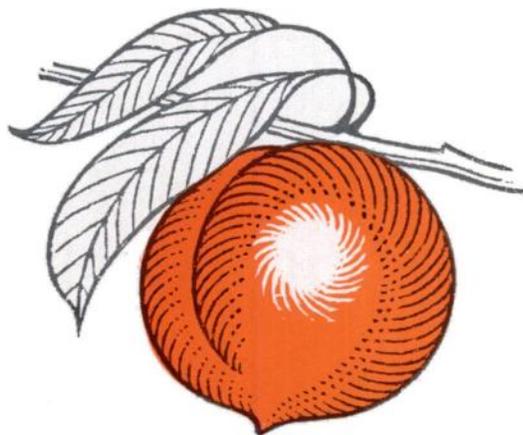
The dependability of Terramycin (oxytetracycline) in daily practice is based on its broad range of antimicrobial effectiveness, excellent toleration, and low toxicity. As with other broad-spectrum antibiotics, overgrowth of non-susceptible organisms may develop. If this occurs, discontinue the medication and institute appropriate specific therapy as indicated by susceptibility testing. Glossitis and allergic reactions are rare. Oxytetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans. However, use of oxytetracycline during tooth development (= last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (= yellow-grey-brownish). This effect occurs mostly during long-term use of the drug but it has also been observed in usual short treatment courses. Aluminum hydroxide gel given with antibiotics has been shown to decrease their absorption and is contraindicated. For complete information on dosage, administration, and precautions, consult package insert before using. *More detailed professional information available on request.*

PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. New York 17, New York



# その上美味しい

(tastes good, too)



## TERRAMYCIN® (CALCIUM OXYTETRACYCLINE) SYRUP AND PEDIATRIC DROPS

Not only does the unique oxytetracycline molecule provide special clinical benefits but the dosage forms themselves offer distinct "in use" advantages.

The delicious mixed-fruit flavor of Terramycin (calcium oxytetracycline) Syrup and Pediatric Drops is cheerfully accepted by children everywhere, making administration a pleasure instead of a project.

Already preconstituted and stable at room temperature, these two liquids offer a further convenience especially appreciated by parents. Both preparations can be kept handy anywhere... and need no refrigeration.



Add to this an excellent record of toleration; none of the physician's criteria for selecting an antibiotic need be sacrificed because of problems involving acceptability, toleration, administration or stability.

**Syrup:** Each teaspoonful (5 cc.) contains the equivalent of 125 mg. of oxytetracycline as calcium oxytetracycline; bottles of 2 oz. and 1 pint.

**Pediatric Drops:** Each cc. (20 drops) contains the equivalent of 100 mg. of oxytetracycline as calcium oxytetracycline; 10 cc. bottles with calibrated plastic dropper.

See previous page for additional information.

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

In answering advertisements please mention PEDIATRICS

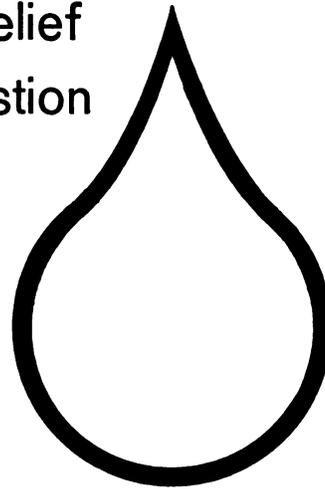
When coughing complicates  
colds in children . . .

## TUSS-ORNADE® LIQUID

Trademark

Each 5 cc. tsp. contains 5 mg. of caramiphen edisylate; 2 mg. of Teldrin® (brand of chlorpheniramine maleate); 15 mg. of phenylpropanolamine hydrochloride; 0.75 mg. of isopropamide, as the iodide; and alcohol, 7.5%.

provides comprehensive relief  
of cough and nasal congestion



1. Children like 'Tuss-Ornade' Liquid's orange-pineapple flavor.
2. 'Tuss-Ornade' eliminates the necessity for prescribing several different drugs separately.
3. Acting systemically, it reaches areas inaccessible to topical preparations.

---

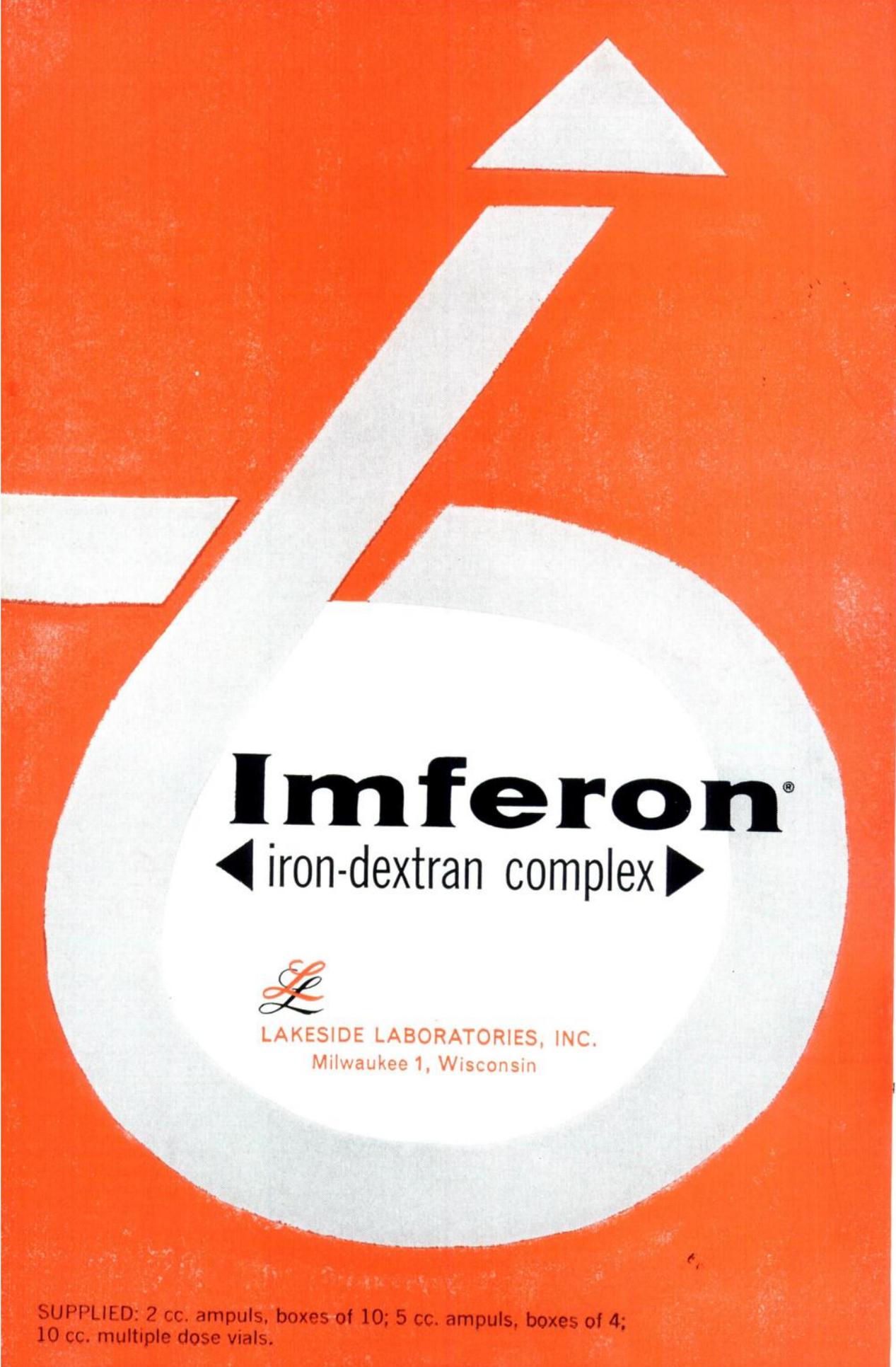
*Summary of side effects, cautions and contraindications:* Drowsiness; dryness of nose, throat, or mouth; "nervousness"; or insomnia may occur rarely, but are usually mild and transitory. Use with caution in the presence of hypertension, hyperthyroidism, or coronary artery disease.  
NOTE: Since the iodine in isopropamide iodide may

alter PBI test results and will suppress I<sup>131</sup> uptake, it is suggested that 'Tuss-Ornade' be discontinued one week prior to these tests. Do not use in patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloric duodenal obstruction, or bladder neck obstruction.

For complete prescribing information, see PDR or available literature.



Smith Kline & French Laboratories



**Imferon<sup>®</sup>**  
◀ iron-dextran complex ▶



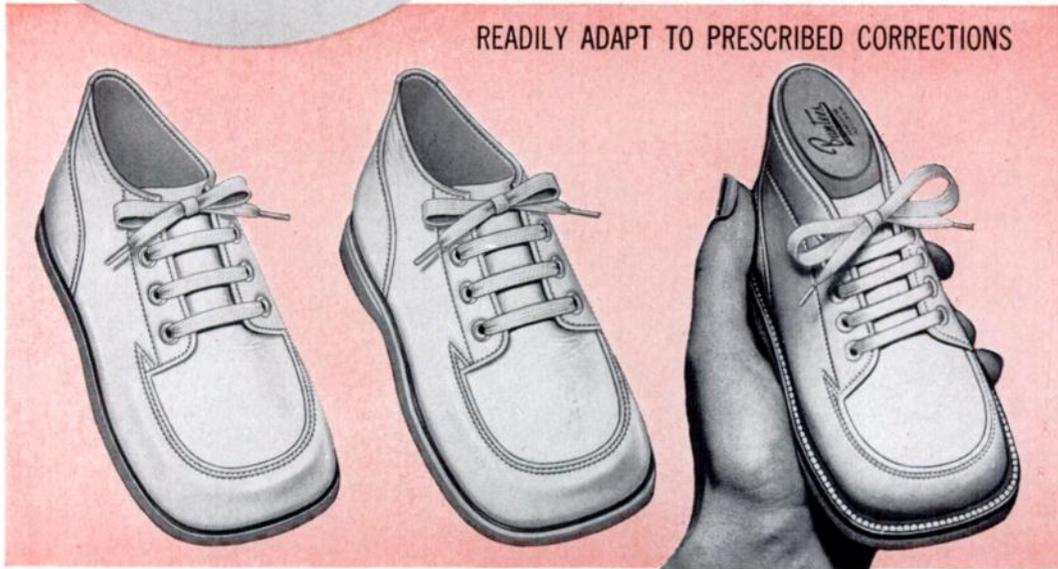
LAKESIDE LABORATORIES, INC.  
Milwaukee 1, Wisconsin

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4;  
10 cc. multiple dose vials.

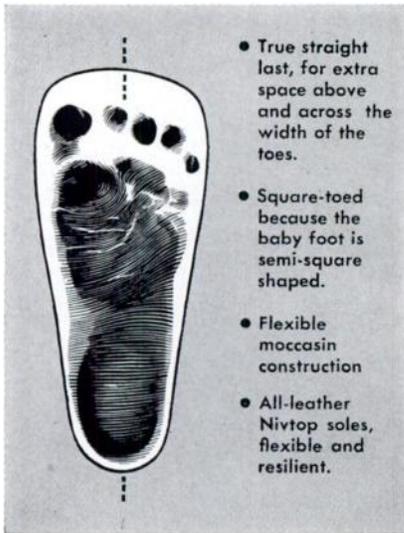
TRUE  
*Straight*  
 LAST

A truly straight last, neither left shoe nor right . . . a shoe with squared off forepart for equal toe room and displacement of area within the shoe.

READILY ADAPT TO PRESCRIBED CORRECTIONS



- Soft sole, no midsole
- Midsole and Spring heel
- Goodyear stitched all leather sole



Write for catalog of complete Bunties line on the Straight Last and conventional Natural Gait Last.

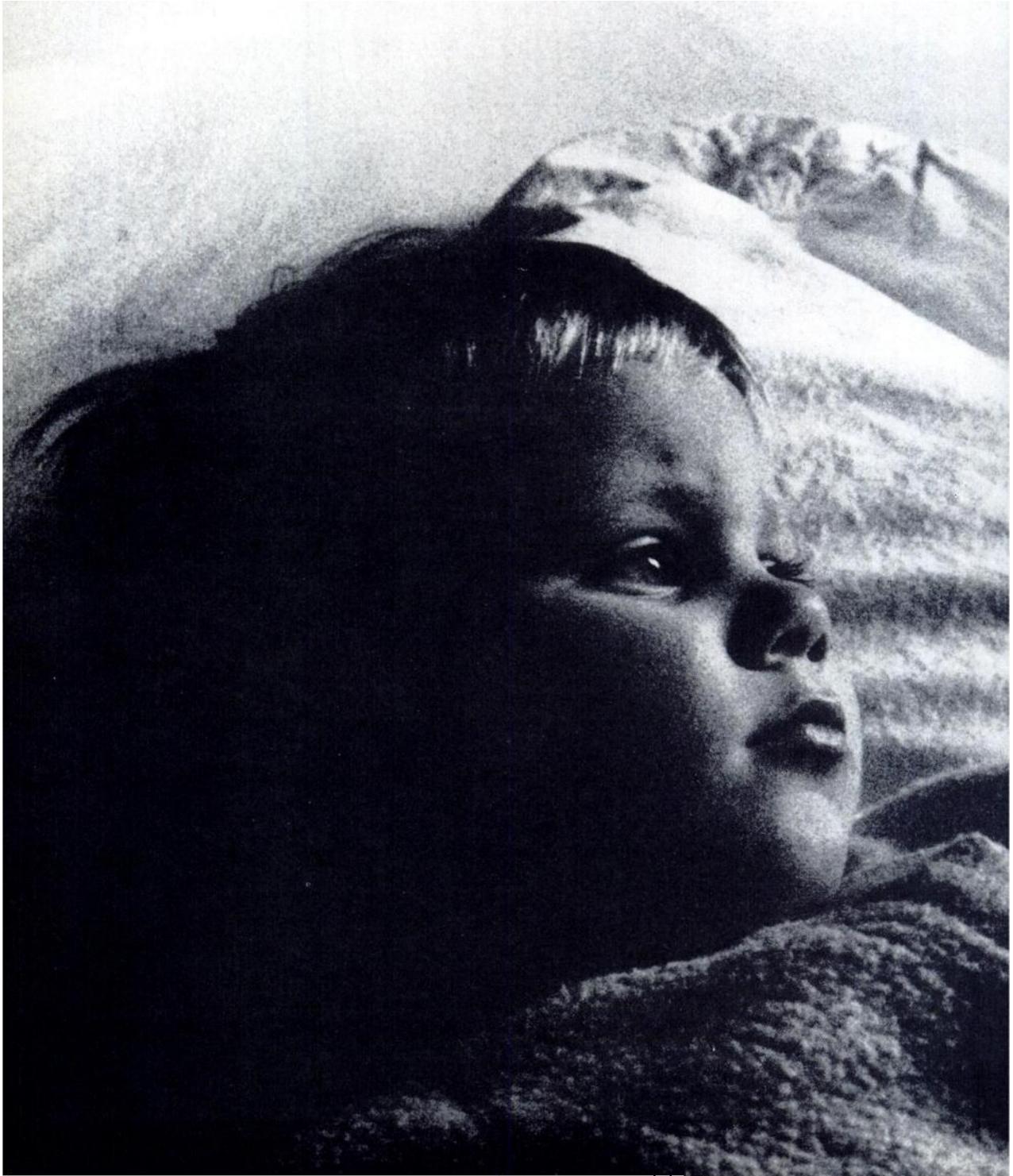


**Moccasins** . . . America's first baby shoe

R . J . POTVIN SHOE CO . , BROCKTON , MASS .

*In answering advertisements please mention PEDIATRICS*

**for greater  
assurance of response  
in mixed or stubborn  
infections**



# specify Ilosone<sup>®</sup> Sulfa Erythromycin Estolate with Triple Sulfas Suspension

Ilosone<sup>®</sup> (erythromycin estolate, Lilly) provides high, prolonged serum levels of antibacterial activity against the common gram-positive organisms. Its acid stability assures more complete absorption and obviates the need for an empty stomach.

The addition of triple sulfa further enhances and broadens the antibacterial spectrum to help provide a more decisive therapeutic response in mixed or refractory infections.

. . . and Ilosone Sulfa Suspension has ready patient acceptance. The bright-yellow color and fresh minty flavor are particularly appealing to children.

Ilosone Sulfa Suspension is available in 60-cc.-size packages.

The usual dosage for children is:

12 pounds . . . . .	1/2 teaspoonful	every six hours
25 to 50 pounds . . . . .	1 teaspoonful	
Over 50 pounds . . . . .	2 teaspoonfuls	

Each 5-cc. teaspoonful provides:

Ilosone . . . . .	125 mg. (base equivalent)
Sulfadiazine . . . . .	167 mg.
Sulfamerazine . . . . .	167 mg.
Sulfamethazine . . . . .	167 mg.

**Indications:** Ilosone Sulfa is indicated for infections in which the combination would be expected to be more effective than either agent alone. **Side-Effects:** Even though Ilosone is the most active oral form of erythromycin, the incidence of side-effects is very low. Infrequent cases of drug idiosyncrasy, manifested by a reversible form of intrahepatic cholestasis, have been reported. There have been no fatal or definite residual effects. Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract. Cutaneous manifestations of hypersensitivity have been noted in less than 0.5 percent of patients. In extremely rare instances, anaphylaxis has occurred with erythromycin therapy.

**Precautions:** When Ilosone Sulfa is used, the same precautions (including routine blood counts) should be observed as with other sulfonamide therapy.

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



300190

# Postgraduate Courses in Paediatrics

Edited by E. ROSSI, Universitäts-Klinik Bern

**Vol. 1 + 2: Diagnose und Therapie cerebraler Lähmungen im Kindesalter**

Vol. 1, Teil 1: IV + 72 p., 25 fig., 1961. US \$2.30

Vol. 2, Teil 2: IV + 81 p., 8 fig., 1961. US \$2.30

**Vol. 3 – 4: Notfalltherapie bei Kindern**

II + 132 p., 45 fig., 22 tab., 1962. US \$4.55

**Vol. 5 – 6: Orthopädische Fragen in der Pädiatrie**

II + 110 p., 76 fig., 1963. US \$4.55

**Vol. 7 – 8: Magen-Darm-Erkrankungen bei Kindern**

II + 150 p., 65 fig., 18 tab., 1963. US \$5.75

**Vol. 9: Kinderpsychiatrie in der Praxis**

II + 86 p., 1963. US \$2.90

**In Preparation**

**Vol. 10 – 11: Neue Probleme bei Infektionskrankheiten des Kindes**

Ca. 120 p., 1963. Ca. US \$5.75

**From the review of Vol. 3-4**

**Pediatrics (Excerpta Medica) March 1963:** Over the last couple of years there has been a relative increase in acute pathological conditions in children and an absolute increase in the number of accidents. Therefore, the issue of publications on the subject is obvious. After chapters on newborns (oesophageal atresia, cardiac anomalies and ileus, jaundice, which cannot very well be called an emergency, asphyxia) and dehydration (the only form of dehydration without potassium loss is that occurring in the adrenogenital syndrome without salt loss) with clear examples and schemas, acute condition within the abdomen and haemorrhages, a chapter is devoted to burns (indications for the evaluation of the burnt surface). In 10 yr. there was only a mortality of 3.5% in 285 cases hospitalized with burns. Further, the respiratory tract (foreign bodies, laryngeal stenosis, asthma without indication of therapy, choanal atresia), asphyxia, and finally, allergic reactions to insect bites and foodstuffs, are discussed. The production of the book is good. There is no alphabetical index. Poisoning is not dealt with.

Please write for index of volumes 1-11 of this series

S. Karger AG, Arnold-Böcklin-Strasse 25, Basel, Switzerland

Please send me: .....

Name .....

Address .....

Please place your order with:

**Albert J. PHIEBIG, P.O. 352, White Plains, N.Y.**

*In answering advertisements please mention PEDIATRICS*



For nasal congestion  
regardless of cause—for  
summer colds, allergy,  
running nose,  
stuffed nose

# Triaminic®

(Phenylpropanolamine HCl. Pyrilamine Maleate Pheniramine Maleate)

clears congestion, promotes  
sinus drainage, unclogs ears

## TOTAL COVERAGE FOR ALL AGE GROUPS

PRODUCT	AGE	FORMULA			
			Phenylpropanol- amine HCl.	Pyrilamine Maleate	Pheniramine Maleate
Rx Triaminic® Concentrate pediatric drop dosage	Infants	each ml.	20 mg.	10 mg.	10 mg.
Triaminic® Syrup	Children and Adults	each 5 ml.	12.5 mg.	6.25 mg.	6.25 mg.
Rx Triaminic® Juvelets timed-release (1/2-strength Triaminic)	Children and Adults	each tab.	25 mg.	12.5 mg.	12.5 mg.
Rx Triaminic® Tablets timed-release	Adults	each tab.	50 mg.	25 mg.	25 mg.

**PRECAUTIONS:** Drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets may occur occasionally. The patient should be advised not to drive a car or operate dangerous machinery if he feels drowsy. Use only with caution in patients with hypertension, heart disease, diabetes, or thyrotoxicosis.

**DORSEY LABORATORIES** • a division of *The Wander Company* • **LINCOLN, NEBRASKA**

*In answering advertisements please mention PEDIATRICS*

**this infant needs Desitin Ointment  
to treat diaper rash**



## **for treatment or prevention of**

In diaper dermatitis, Desitin Ointment interrupts the chain of progressive chemical and bacterial contamination and stops its deleterious effects on the infant skin. As the soothing action of Desitin Ointment relieves the burning, pain and itching, healing is promoted.<sup>1-4</sup> Clearing of inflammation and eruptions usually occurs rapidly.<sup>2-4</sup>

Desitin Ointment also safeguards the normal, intact infant skin against diaper dermatitis.<sup>2,4</sup> On application, Desitin Ointment forms a light protective coating that guards delicate infant skin from the untoward

effects of recurrent local contamination by excrement and the ammoniacal by-products of urine.

Contains high grade Norwegian cod liver oil (with unsaturated fatty acids and vitamins A and D), petrolatum, lanolin, zinc oxide, talcum. Tubes of 1, 2 and 4 oz.; 1 lb. jars.

Desitin Ointment is also indicated for diaper rash, intertrigo, chafing, non-specific dermatitis, superficial wounds, external ulcers, burns, sunburn, general skin care.

**this infant needs Desitin Ointment  
to prevent diaper rash**



## diaper rash . . . **DESITIN**<sup>®</sup> ointment

**for prevention and treatment of the more common dermatologic problems in infants and children:**

### **Desitin Family of Baby Care Products**

**Desitin Powder**—For diaper rash, prickly heat, chafing and minor skin irritations. The baby powder with cod liver oil, (containing vitamins A and D and unsaturated fatty acids) and antibacterial hexachlorophene, in a fine, dry, dusting base of zinc oxide, talcum, magnesium oxide; contains no boric acid. Cans of 3 and 7 oz.

**Desitin Baby Lotion**—For overall care of baby skin. A free-flowing, pleasantly scented emulsion containing lanolin, hexachlorophene, vitamins A and E in small amounts. 4 oz. bottles.

**Desitin Soap**—A general purpose soap for baby's tender skin. Rich in natural oils, including cod liver oil; contains over 2% hexachlorophene.

**References:** 1. Spoor, H. J.: New York State J. Med. 60:2863 (Sept. 15) 1960. 2. Heimer, C. B., Grayzel, H. G., and Kramer, B.: Arch. Ped. 68:382 (Aug.) 1951. 3. Grayzel, H. G., Heimer, C. B. and Grayzel, R. W.: New York State J. Med. 53:2233 (Oct. 1) 1953. 4. Behrman, H. T., Combes, F. C., Bobroff, A. and Leviticus, R.: Indus. Med. Surg. 18:512 (Dec.) 1949.



*Thos. Leeming & Co.* / Division, Chas. Pfizer & Co., Inc., New York 17, N.Y. **Pfizer**



**new, improved ketostix**  
dip-and-read test for ketones in urine, serum or plasma

**Now faster**—results in 15 seconds.

**Now easier to read**—uniform color diffusion  
... facilitates color interpretation.

**Now more versatile**—detects *both* acetone  
and acetoacetic acid in urine, serum or plasma.

**For physician**—ketonuria or ketonemia detection  
provides a valuable guide in management of  
diabetes, a rapid diagnostic clue in emer-  
gencies created by coma of unknown  
etiology, and is a useful adjunct in  
management of nondiabetic pa-  
tients with ketosis due to carbo-  
hydrate deficiency.

**For patient**—home-testing for  
ketonuria provides warning of  
inadequate control of diabetes,  
especially when high levels of  
urine sugar may result  
in ketoacidosis with  
ensuing coma.

**Available:** Bottles of  
50 and 100 KETOSTIX  
Reagent Strips.



**KETOSTIX—basic as the stethoscope**

**key to ketones**

*In answering advertisements please mention PEDIATRICS*

for the  
Steady  
Climb  
toward  
Iron  
Sufficiency



# CHĒL-IRON®

Brand of Ferrochollinate\*  
PEDIATRIC DROPS/LIQUID  
(25 mg. iron/cc.) (50 mg. iron/tsp.)

SPECIFIC FOR IRON DEFICIENCY IN THE YOUNG  
Because it's *chelated*, CHĒL-IRON provides an important difference in your treatment of iron deficiency anemias. Neither ionized nor precipitated after ingestion, CHĒL-IRON is highly acceptable to infants and children because of its superior toleration in comparison with ferrous sulfate or ferrous gluconate.<sup>1,2</sup> As a result, your iron regimen is *uninterrupted*, and full hematologic benefits are maintained. CHĒL-IRON PEDIATRIC DROPS and CHĒL-IRON LIQUID taste good, do not stain teeth and are easily miscible with milk and other foods.



KINNEY & COMPANY, INC.  
Columbus, Indiana

1. Franklin, M., et al.: J. A. M. A. 166:1685, 1958. 2. A. M. A. Council on Drugs: New and Nonofficial Drugs 1961, Philadelphia, Lippincott, 1961, p. 580.

\*U. S. PAT. 2,876,611

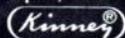
Consider EMETROL whenever an antiemetic is indicated, as in acute infectious gastroenteritis or intestinal "flu."<sup>1,2</sup> Its physiologic action quickly relaxes the gastrointestinal smooth muscle, thus checking nausea and discomfort.<sup>1</sup> EMETROL does not contain antihistamines, phenothiazines, or sedatives.<sup>1,3</sup> 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**<sup>®</sup>

PHOSPHORATED CARBOHYDRATE SOLUTION



## troubles on the run...in otitis externa

Sterile  
**Otic Neo-Cort-Dome<sup>®</sup> 1%**  
 (neomycin-hydrocortisone) pH 5.0

Broad antibiotic-fungicidal action... combats most commonly encountered ear pathogens. Added steroid benefits...relieve redness, swelling and itching. Therapeutic agents micro-dispersed in vehicle of physiologic pH...restore the normal acidity of the external auditory canal.

Contains: Micro-dispersed hydrocortisone alcohol 1%, neomycin sulfate 0.5% (equiv. to 3.5 mg./cc. neomycin base) and acetic acid 2% in an exclusive ACID MANTLE<sup>®</sup> vehicle.

Sterile **Otic Domeboro<sup>®</sup>** pH 5.0. Fortified, modernized Burow's Solution with 2% acetic acid. Mild, therapeutic cleansing and flushing. Anti-inflammatory, bactericidal, fungicidal and drying actions. Reduces swelling. Available: 2 fl. oz. plastic bottle with otic tip.

Sterile **Otic Lidaform-HC<sup>™</sup>** 1%, pH 5.0. Rapid relief of pain and itching. Provides anti-inflammatory, antipruritic, bactericidal and fungicidal actions, plus the acidity-restoring effect of the ACID MANTLE vehicle.

Contains: Micro-dispersed hydrocortisone alcohol 1%, iodochlorhydroxyquin 3%, Xylocaine<sup>®</sup> (lidocaine) and acetic acid 2% in an exclusive ACID MANTLE vehicle.

ECONOMICAL—Both Otic NEO-CORT-DOME and Otic LIDAFORM-HC come in 10 cc. bottles, provide 68 treatments of 4 drops each. Cost the same as 5 cc. bottles of other otic products.

Precaution: If infections do not respond promptly, or if sensitivity or irritation develops, discontinue use. Do not use in presence of chickenpox or tuberculosis of the skin.



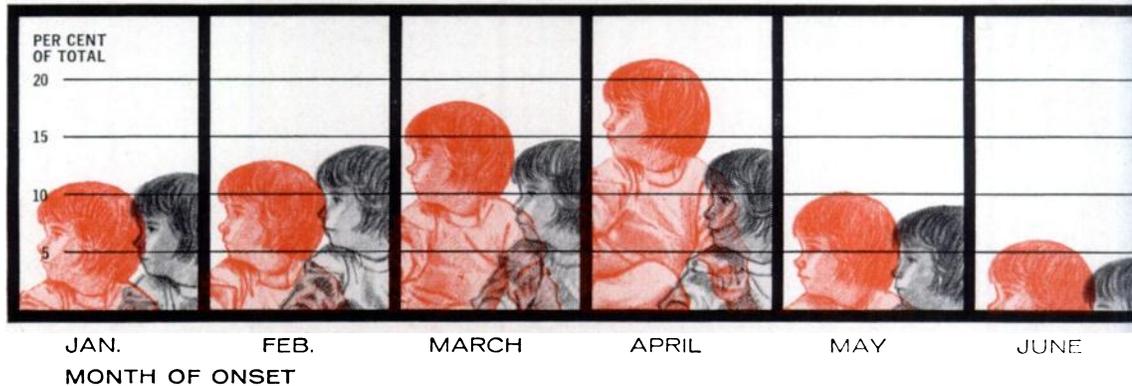
REG. TM  
 ASTRA PHARM. PROD., INC.  
 U. S. PAT. 2,441,498  
 081863-B

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

*In answering advertisements please mention PEDIATRICS*

# this season especially—

Seasonal incidence (1959) of streptococcal and nonstreptococcal pharyngitis (After Stillerman and Bernstein\*)



In view of the outbreak of influenza predicted for the winter 1962-1963, it would be reasonable to expect an increase in the normally high seasonal incidence of streptococcal infections (see graph).

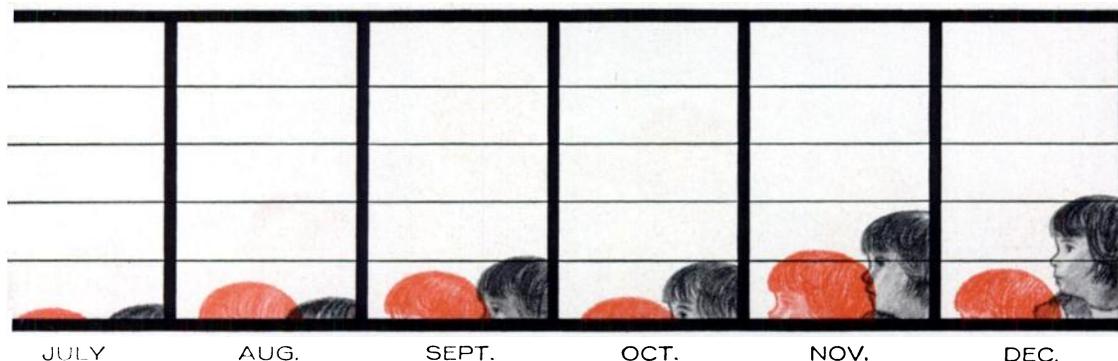
Whether streptococcal infections of the upper respiratory tract occur independently of influenza, or are secondary, the prompt and persistent antibacterial activity of Injection BICILLIN Long-Acting can eliminate the invader and reduce the possibility of serious consequences, such as rheumatic fever.

## a single injection

- provides penicillinemias lethal to susceptible streptococci, pneumococci and certain staphylococci
- produces protective penicillin levels that persist for days and even weeks
- helps prevent reinfection; eliminates the streptococcus "carrier" state.

\*Stillerman, M., and Bernstein, S.H.: Am. J. Diseases Children **101**:96 (April) 1961.

# eliminate the "strep" invader —prevent reinfection



KEY: %TOTAL STREP CASES



%TOTAL NONSTREP CASES

## Injection **Bicillin**<sup>®</sup> Long-Acting Benzathine Penicillin G in Aqueous Suspension, Wyeth



### product précis

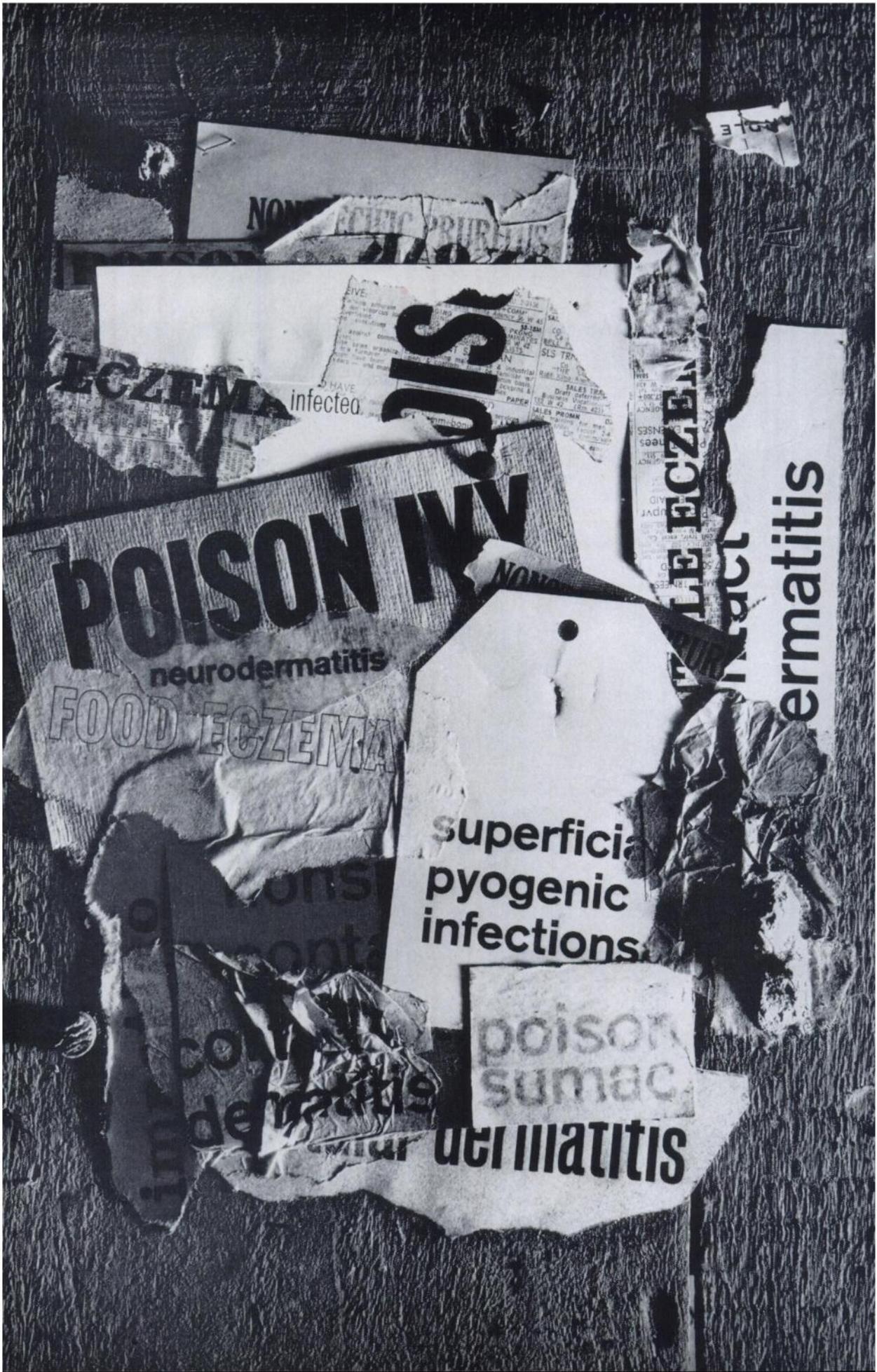
**Indications:** Infections due to susceptible pathogens including streptococci, staphylococci, pneumococci, gonococci and T. pallidum.

**Side Effects and Precautions:** Penicillin may occasionally produce reactions in some patients. The following have been noted: allergic skin eruptions, gastrointestinal distress, loose stools, peripheral neuritis, vitamin deficiency, drug fever, anaphylaxis and the emergence of non-susceptible pathogens, particularly monilia.

**BICILLIN** should be administered by deep intramuscular route only.

**Supplied:** 300,000 units per cc.—vials of 10 cc. 600,000 units per cc.—1-cc. TUBEX<sup>®</sup> Sterile Cartridge-Needle Unit, packages of 1 and 10; 1-cc. TUBEX Sterile Cartridge-Needle Unit in a single-dose disposable syringe; 2-cc. single-dose disposable syringe; 2-cc. TUBEX Sterile Cartridge-Needle Units, packages of 10; 4-cc. single-dose disposable syringe.

Wyeth Laboratories Philadelphia 1, Pa.



NON

ECZEMA

infected

POISON

POISON IVY  
neurodermatitis

FOOD ECZEMA

superficial  
pyogenic  
infections

poison  
sumac

dermatitis

CONTACT ECZEMA

dermatitis

There are many dermatoses  
but there is only one

# Terra-Cortril®

TERRAMYCIN® (OXYTETRACYCLINE HCl)  
PLUS HYDROCORTISONE

## For a dual attack on common inflammatory dermatoses:

Only TERRA-CORTRIL provides the proved broad-spectrum effectiveness, excellent toleration and minimal allergenicity of Terramycin® (oxytetracycline HCl) in combination with hydrocortisone. □ Hydrocortisone is equally well accepted for effective and well-tolerated anti-inflammatory and antiallergic action at the tissue level. □ When topical therapy with hydrocortisone is of value, the presence of oxytetracycline HCl in TERRA-CORTRIL serves to prevent or eradicate susceptible secondary bacterial complications. □ Thus, TERRA-CORTRIL effectively combats many common topical pathogens, while providing prompt symptomatic relief of inflammation, erythema and pruritus.

**TWO CONVENIENT DOSAGE FORMS: TERRA-CORTRIL Topical Spray** ideal for large, hairy or relatively inaccessible areas, weeping or exudative dermatoses; and surprisingly economical.

**TERRA-CORTRIL Topical Ointment** for prolonged contact of medication, with emollient action; ideal for small areas; easy to carry, apply.

### IN BRIEF

Each 85 Gm. can of Terra-Cortril Spray contains 300 mg. Terramycin (oxytetracycline HCl) and 100 mg. hydrocortisone. It is regulated to dispense approximately 2.5 mg. of oxytetracycline HCl and 0.833 mg. of hydrocortisone during each second of spray. Terra-Cortril Ointment contains 30 mg. oxytetracycline HCl and 10 mg. hydrocortisone in each gram of petrolatum base. *Indications:* Terra-Cortril is useful in the treatment of skin conditions in which topical anti-inflammatory or antibacterial effects are desired. *Precautions:* Terra-Cortril therapy should not be discontinued too soon after the initial response has been obtained. When Terra-Cortril Spray is used about the face, the eyes should be protected and closed, and inhalation of the spray should be avoided. Allergic reactions may

occur, but are rare. Terra-Cortril should be discontinued if allergic or sensitization reactions occur. *Contraindications:* Tuberculous lesions of the skin, herpes simplex, vaccinia and varicella. *Note:* The use of oxytetracycline and other antibiotics may result in an overgrowth of resistant organisms, particularly *Monilia* and staphylococci. Constant observation of the patient for this possibility is essential. If new infections due to nonsusceptible bacteria or fungi appear during therapy, appropriate measures should be taken. *Supplied:* Terra-Cortril Topical Spray is supplied in seamless, pressurized cans, 85 Gm. each. Terra-Cortril Topical Ointment is supplied in 1.2 oz. and 1.6 oz. tubes.

*More detailed professional information available on request.*

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

Since 1849

# oral steroid requirement cut in half in 98.1% of dermatologic patients<sup>1</sup>

Reduction in steroid requirement in 214 dermatologic patients converted from oral steroid (dexamethasone) to DRONACTIN<sup>1</sup>

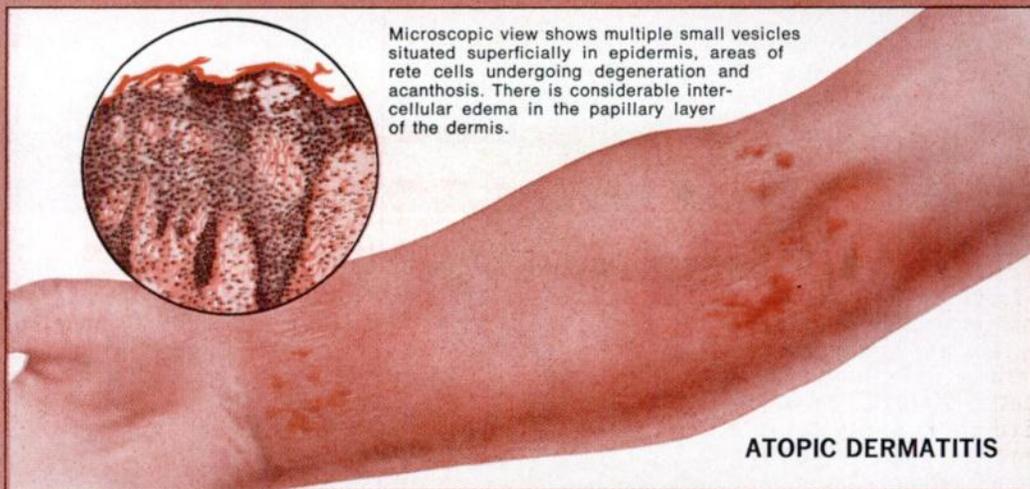


"Dexamethasone enhances the antiallergic, antipruritic properties of cyproheptadine, which, in turn, exerts a steroid-sparing effect."<sup>1</sup>

# DRONACTIN<sup>®</sup> TABLETS

Antipruritic—Corticoid      Each tablet contains 0.25 mg. of dexamethasone and 4 mg. of cyproheptadine hydrochloride.

- highly effective in inflammatory skin disorders
- with less oral steroid
- hence fewer side effects



**Brief Summary:**

*Indications:* Steroid-responsive dermatoses. *Side Effects, Precautions, and Contraindications:* *Dexamethasone:* Patients require continual supervision. Do not use in ocular herpes simplex, chickenpox, or tuberculosis. Exercise extreme caution in diabetes mellitus, hypertension, peptic ulcer, osteoporosis, intestinal anastomosis, diverticulitis, thrombophlebitis, psychosis, pregnancy. Relative adrenocortical insufficiency, aggravation of infection or ulcer, moon face, convulsions, and other common steroid side effects may occur. *Cyproheptadine:* Do not use in patients with glaucoma or predisposed to urinary retention. Drowsiness appears frequently — may disappear after 3 to

4 days' continuous therapy. Occasional dry mouth, dizziness, jitteriness, nausea, skin rash. Before prescribing or administering, read product circular with package or available on request.

**SUPPLIED:** Tablets, bottles of 100. Each tablet contains 0.25 mg. of dexamethasone and 4 mg. of cyproheptadine hydrochloride.

1. Welsh, A. L., and Ede, M.: Studies of cyproheptadine combined with dexamethasone, *J. New Drugs* 2:223, July-Aug., 1962.

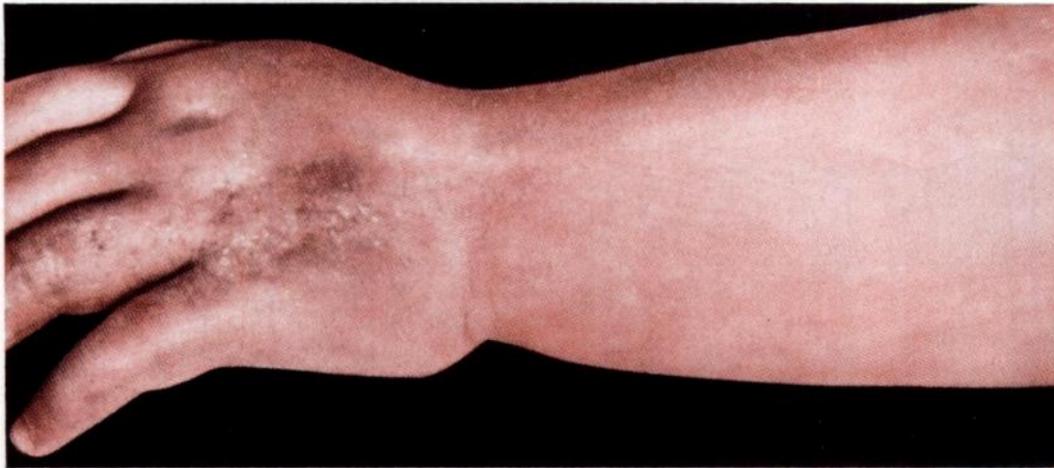


**MERCK SHARP & DOHME**  
DIVISION OF MERCK & CO., Inc., WEST POINT, PA.  
DRONACTIN is a trademark of Merck & Co., Inc.



Severely infected burn in 16-month-old child  
(Staph. aureus, coagulase positive)—before treatment.

Complete healing 27 days later, after treatment with gauze impregnated  
with FURACIN Soluble Dressing.



### tough pathogens yield to

Tough pathogens such as staphylococci show little or no resistance to FURACIN after 15 years of wide clinical use. Gentle, nontoxic, the water-miscible FURACIN Soluble Dressing speeds healing through prompt control of infection, insures free drainage without maceration.

The frequency of sensitization to FURACIN is low. It is easily minimized by limiting

**FURACIN<sup>®</sup>**  
**NITROFURAZONE**  
**SOLUBLE**  
**DRESSING**

**and tender tissues**  
**quickly heal**

application to the lesion itself, and by discontinuing therapy as soon as infection is eradicated—usually within 5 days.

For treatment or prevention of surface bacterial infection. Tubes of 28 Gm. and 56 Gm., jars of 141 Gm. and 454 Gm., containing FURACIN 0.2% dissolved in a water-soluble, ointment-like base of polyethylene glycols.

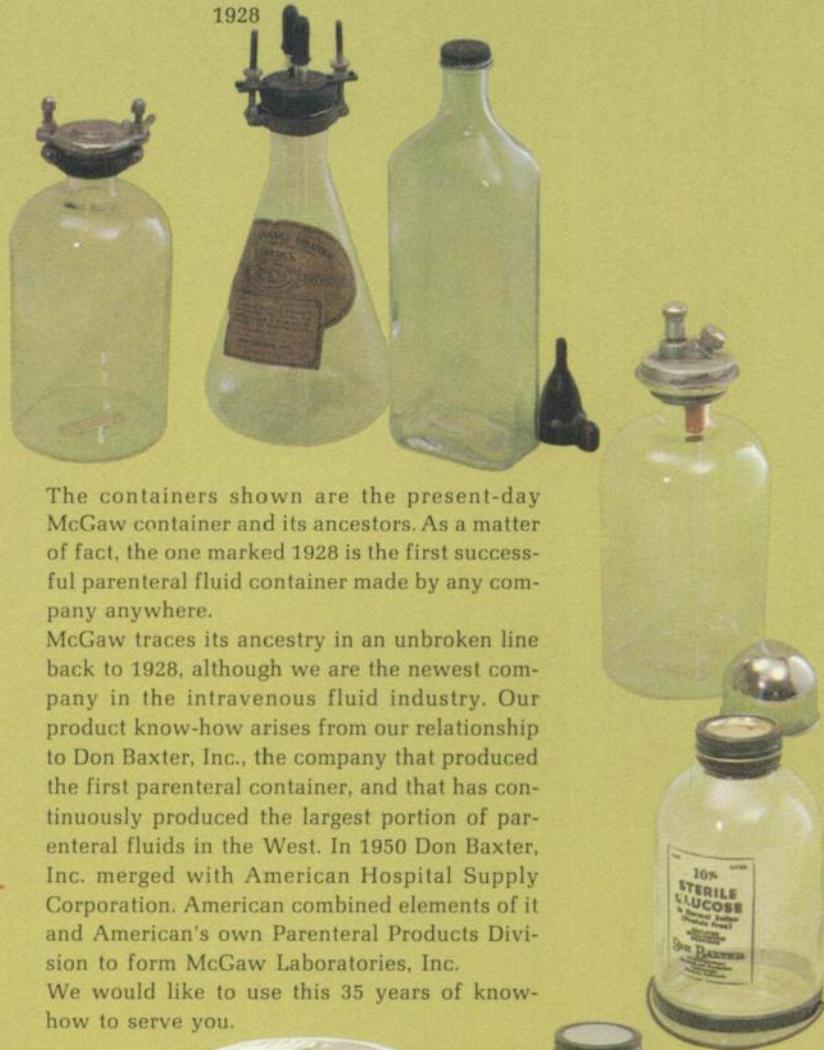
For round-the-clock medical consultation on any Eaton product, call the medical consultant on duty, person to person, Norwich, New York, Area Code 607, 334-9911.

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



*In answering advertisements please mention PEDIATRICS*

1928



## FAMILY PORTRAIT



**McGaw Laboratories, Inc.**

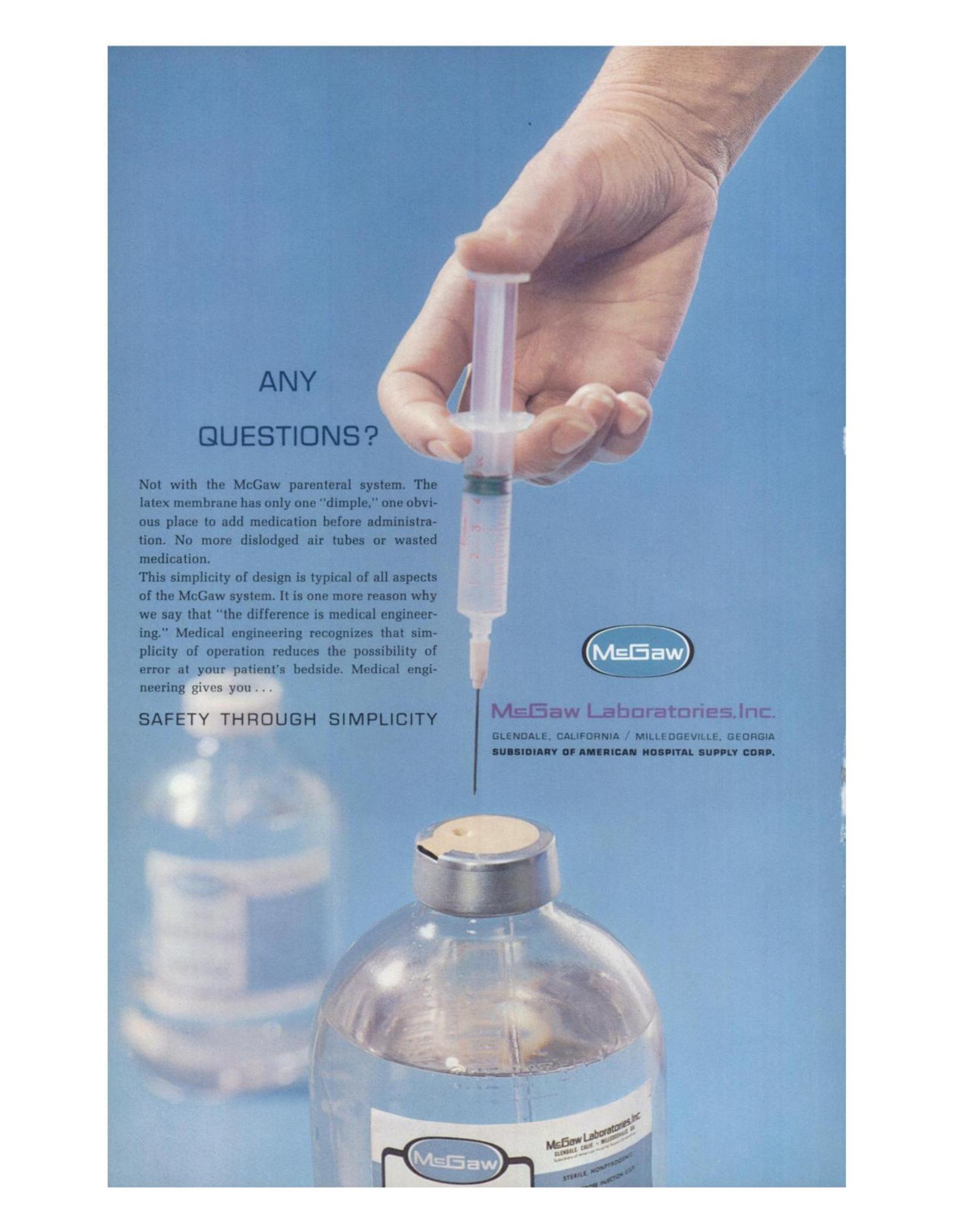
GLENDALE, CALIFORNIA / MILLEDGEVILLE, GEORGIA  
SUBSIDIARY OF AMERICAN HOSPITAL SUPPLY CORP.

The containers shown are the present-day McGaw container and its ancestors. As a matter of fact, the one marked 1928 is the first successful parenteral fluid container made by any company anywhere.

McGaw traces its ancestry in an unbroken line back to 1928, although we are the newest company in the intravenous fluid industry. Our product know-how arises from our relationship to Don Baxter, Inc., the company that produced the first parenteral container, and that has continuously produced the largest portion of parenteral fluids in the West. In 1950 Don Baxter, Inc. merged with American Hospital Supply Corporation. American combined elements of it and American's own Parenteral Products Division to form McGaw Laboratories, Inc.

We would like to use this 35 years of know-how to serve you.





ANY  
QUESTIONS?

Not with the McGaw parenteral system. The latex membrane has only one "dimple," one obvious place to add medication before administration. No more dislodged air tubes or wasted medication.

This simplicity of design is typical of all aspects of the McGaw system. It is one more reason why we say that "the difference is medical engineering." Medical engineering recognizes that simplicity of operation reduces the possibility of error at your patient's bedside. Medical engineering gives you . . .

**SAFETY THROUGH SIMPLICITY**



**McGaw Laboratories, Inc.**

GLENDALE, CALIFORNIA / MILLEDGEVILLE, GEORGIA  
SUBSIDIARY OF AMERICAN HOSPITAL SUPPLY CORP.



Schering



Proven Fact: still unsurpassed by newer antihistamines  
Published Sources: 2 double-blind, placebo-controlled studies<sup>1,2</sup>

# CHLOR-TRIMETON<sup>®</sup> Maleate

chlorpheniramine maleate, Schering

Practical Result: prescribed more often than any other antihistamine in allergic rhinitis and for relief of their responsive allergic states

(1) Wahner, H.W., and Peters, G.A.: An Evaluation of Some Newer Antihistamine Drugs against Pollinosis, Proc. Staff Meet. Mayo Clin. 35:161, 1960. (2) Schwandt, A.L.; Wahner, H.W., and Peters, G.A.: Further Study of Effectiveness of New Antihistaminic Drugs in Ragweed Pollinosis, ibid. 36:261, 1961.

Clinical Considerations: As with all antihistaminic agents, occasional drowsiness or dizziness may be encountered. Patients should be cautioned to avoid situations requiring maximum alertness. For more complete details, consult Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Union, New Jersey.

Packaging: Tablets, 4 mg., scored, bottles of 100 and 1000; REPETABS<sup>®</sup> (R) (brand of repeat-action tablets) 8 and 12 mg., bottles of 100 and 1000; Syrup, 2 mg./4 cc., bottles of 16 fluid ounces and 1 gallon.

S-149R2

Pediatrics

Volume 30

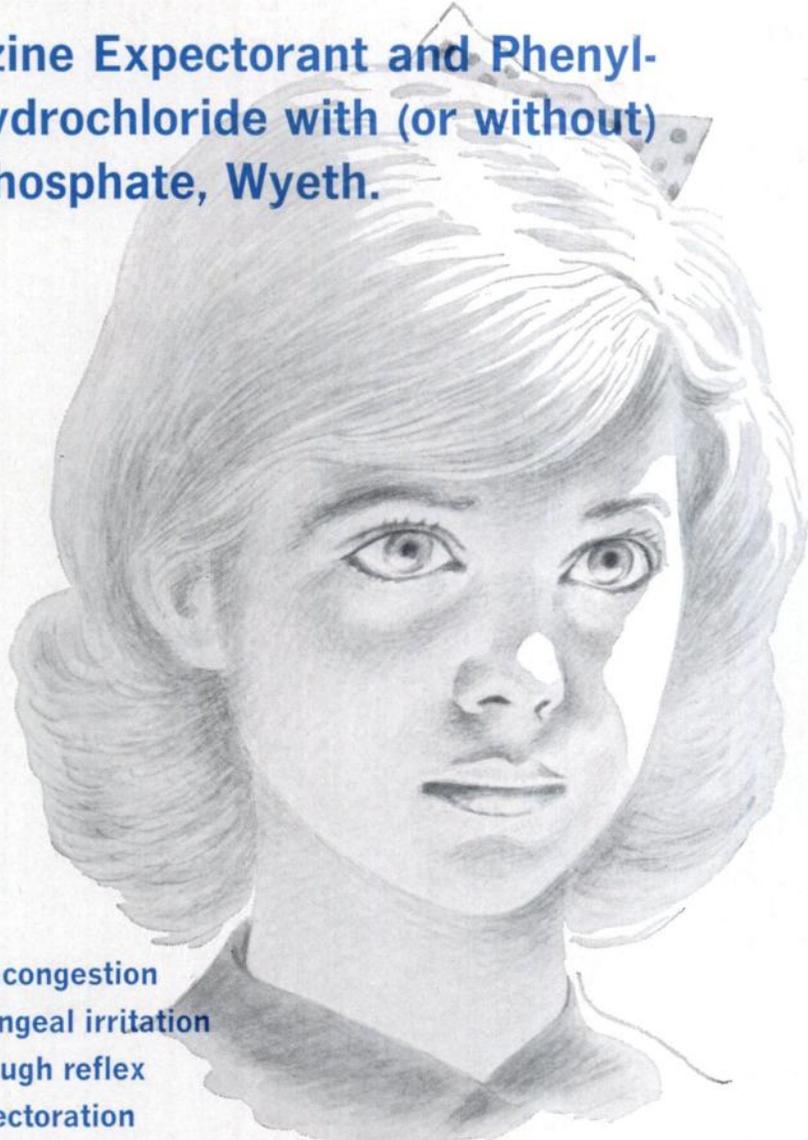
COMMENTA  
Respiratory Dist  
ARTICLES



*quiet the cough... calm the patient  
... and clear the airway*

## **Phenergan<sup>®</sup> VC** EXPECTORANTS

Promethazine Expectorant and Phenylephrine Hydrochloride with (or without) Codeine Phosphate, Wyeth.



- relieves nasal congestion
- soothes pharyngeal irritation
- suppresses cough reflex
- promotes expectoration
- relieves bronchospasm and allergy-caused congestion
- permits uninterrupted sleep

*non-narcotic antitussive:  
quiets the cough...calms the patient*

## **Pediatric Phenergan<sup>®</sup> EXPECTORANT** **Promethazine Expectorant with Dextromethorphan, Wyeth.**

all the benefits of PHENERGAN  
Expectorants plus the antitussive effects  
of non-narcotic dextromethorphan

### product details

**Indications:** For relief of cough and associated U.R.I. symptoms of the common cold or allergic manifestations, including congestion (PHENERGAN VC Expectorants), rhinitis and throat irritations.

**Caution:** Most antihistamines are capable of producing drowsiness in susceptible individuals. If drowsiness is present on arising, patient should not drive automobiles or operate dangerous machinery, and no additional daytime doses should be given such patients. Dosage forms containing phenylephrine should be administered with caution to patients with hypertension, cardiac or peripheral vascular disease, hyperthyroidism or diabetes. **Warning:** Preparations containing codeine may be habit forming.

**Composition:** The basic formula. Each 5 cc. teaspoonful contains: promethazine hydrochloride, 5 mg.; fluid-extract ip-eac, 0.17 min.; potassium guaiacolsulfonate, 44 mg.; chloroform, 0.25 min.; citric acid, 40 mg.; sodium citrate, 197 mg. in a pleasantly flavored syrup base; ethanol, 7%. PHENERGAN VC Expectorant contains phenylephrine hydrochloride, 5 mg. per 5 cc., in addition to the basic formula. PHENERGAN VC Expectorant with Codeine contains codeine phosphate, 10 mg. per 5 cc., and phenylephrine hydrochloride, 5 mg. per 5 cc., in addition to the basic formula. Pediatric PHENERGAN Expectorant contains dextromethorphan hydrobromide, 7.5 mg. per 5 cc., in addition to the basic formula.

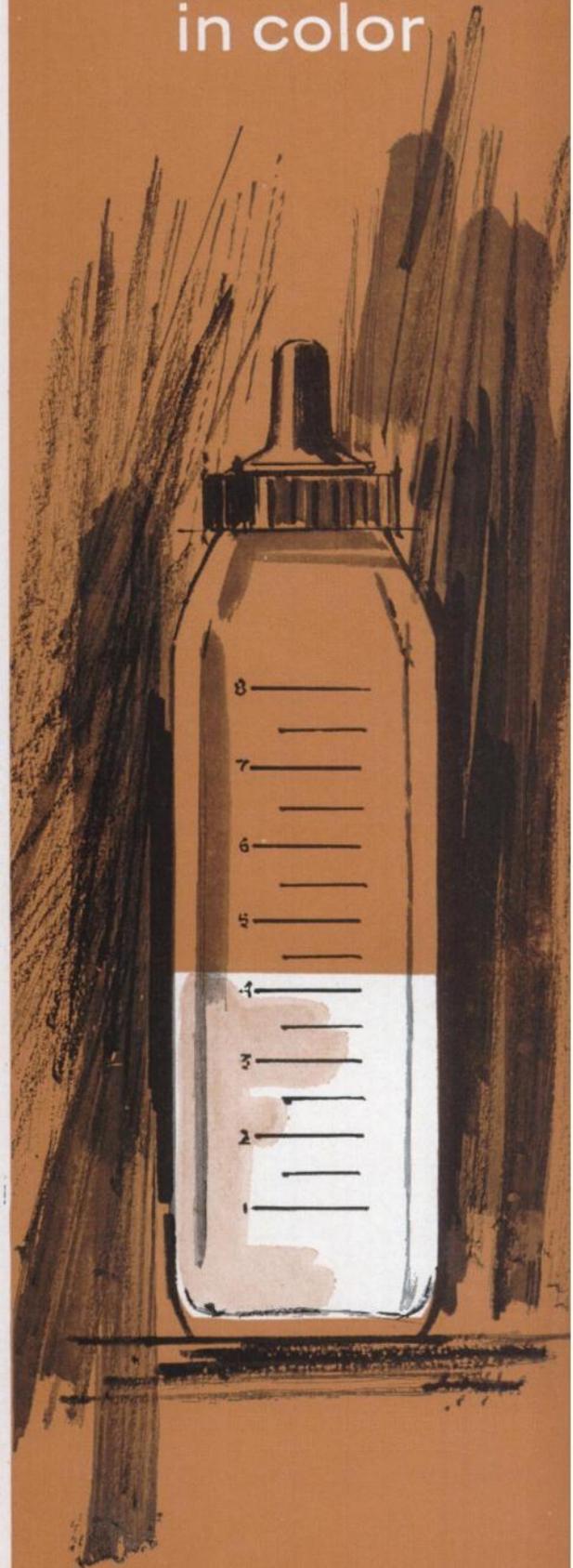
Wyeth Laboratories, Philadelphia 1, Pa.



in smoothness



in color



in taste

## There is a difference in soya formulas...

Sobee has the creamy color and smooth consistency mothers expect in an infant formula. Its pleasant, bland taste also insures ready acceptance. "Formula acceptance by infants was excellent... none refused the formula after the initial 24-hour offering period."<sup>1</sup>

In this same study, "The growth rates were normal or above normal in comparison with other infants of the same age" [using the Wetzel grid technique].<sup>1</sup>

*for infants allergic  
to cow's milk<sup>1,2,3</sup>*

# Sobee<sup>®</sup>

*Milk-free soya formula*  
*the modern milk substitute*

1. Kane, S.: *Am. Pract. & Digest Treat.* 8:65 (Jan.) 1957.
2. Bruce, J. W.: *Ped. Clin. North America* 8:143 (Feb.) 1961.
3. Collins-Williams, C.: *Canad. M.A.J.* 75:934 (Dec. 1) 1956.



Mead Johnson  
Laboratories

*Symbol of service in medicine*

classic  
description  
of asthma

ἄναπνέουσι ὀρθοὶ, ὅπως  
They breathe standing, as

ἄπαντα σπᾶσαι τὸν  
if desiring to draw in all the air

ἐλκόμενον ἕρπα ποθέοντες,  
which they can possibly inhale,

ὑπ' ἀπορίας δὲ τοῦ ἕρπος  
and in their want of air, they also

καὶ διόρθουσι τὸ στόμα, ὡς  
open the mouth as if thus to

τῷδε μέζονι κρεόμενοι.  
enjoy the more of it...

ἀναγωγὴ μικρῆ, λεπτή,  
expectoration small, thin, cold,

ψυχρῆ, ἰκέλη ὀκοῶν τι καὶ  
resembling the efflorescence of

ἀφροῦ ἐπ' ἀνθίσμα... κῆν  
foam... and if these symptoms

ὑπερταθῆ τάδε, ἀπεπνιξέ  
increase, they sometimes

κοτε ἐπιληπτικῶ τρώπῳ.  
produce suffocation...

Aretaeus the Cappadocian,  
Greek physician, 2nd century, A. D.

classic  
asthma  
therapy

**MARAX**®  
tablets,  
syrup

(ephedrine, theophylline, hydroxyzine HCl)

an excellent bronchodilator...  
ephedrine sulfate to reduce congestion and  
open bronchiolar lumens  
theophylline for bronchospasmolysis

...with resultant expectorant action

the tranquilizing effect of  
ATARAX® (hydroxyzine HCl)

and the bonus of antihistaminic activity

The added antihistaminic property of  
Atarax (hydroxyzine HCl) helps control  
the allergic element in asthma.



New York 17, N. Y.  
Division, Chas. Pfizer & Co., Inc.  
Science for the World's Well-Being®

**Precautions and side effects:**

Because of the ephedrine, Marax  
is contraindicated in cardio-  
vascular disease, hypertension,  
and hyperthyroidism.

**Formula:** Each Marax Tablet  
contains: Atarax® (hydroxyzine  
hydrochloride) 10 mg.;  
Ephedrine Sulfate 25 mg.;  
Theophylline 130 mg. Each  
teaspoon (5 cc.) of Marax Syrup  
contains: Atarax® (hydroxyzine  
hydrochloride) 2.5 mg.;  
Ephedrine Sulfate 6.25 mg.;  
Theophylline 32.50 mg.;  
Alcohol (Ethyl Alcohol) 5% v/v.

In answering advertisements please mention PEDIATRICS

---

Complete Multivitamin with Fluoride Added in Softab® Tablet Form

# MULVIDREN-F

## Each Tablet Contains

<i>Fluoride</i>	1 mg.	<i>Thiamine Mononitrate</i>	2 mg.
(from 2.2 mg. sodium fluoride)		<i>Riboflavin</i>	2 mg.
<i>Oleovitamin A</i>	4,000 USP Units	<i>Pyridoxine Hydrochloride</i>	1.2 mg.
<i>Calciferol</i>	400 USP Units	<i>Cobalamin Concentrate</i>	3 mcg.
<i>Ascorbic Acid</i>	24 mg.	<i>Nicotinamide</i>	10 mg.
<i>Sodium Ascorbate</i>	57 mg.	<i>Calcium Pantothenate</i>	3 mg.

---

**Indications:** MULVIDREN-F is indicated from birth through the first 10 years of life as an aid in promoting the development of caries-resistant teeth, prevention of dental caries and to provide vitamin and mineral nutritional supplementation.

**Advantages:** MULVIDREN-F in Softab form is a pleasant and convenient method of administering fluoride for both topical and systemic effects. Dietary fluoride should be made available continuously during the first 10 years of life in order to obtain significant benefit. Many well-controlled studies show a definite decrease in the incidence of dental caries in children receiving an optimal supply of fluoride. In addition to its fluoride content, MULVIDREN-F also provides supplemental amounts of nutritionally important vitamins, including pyridoxine hydrochloride and ascorbic acid.

**Dosage:** Children three years of age and older—one tablet daily. Infants and children under three years of age—one half tablet daily. For infant use, tablets should be crushed and mixed with food or

formula. To adjust the dosage properly, it is necessary to know the fluoride content of drinking water. The use of this product should be restricted to geographical areas in which the concentration of fluoride in the drinking water is less than 1.0 p.p.m., and the combined daily intake from water and other sources does not provide more than 0.5 mg. per day.

**Precautions:** Dental fluorosis (mottling) may result from exceeding the recommended dose. In hypersensitive individuals, fluorides occasionally cause skin rashes such as atopic dermatitis, eczema, or urticaria. Epigastric distress, headache and weakness have also been reported. These hypersensitive reactions usually disappear promptly after discontinuation of the fluoride. In rare cases, a delay in the eruption of teeth has been reported.

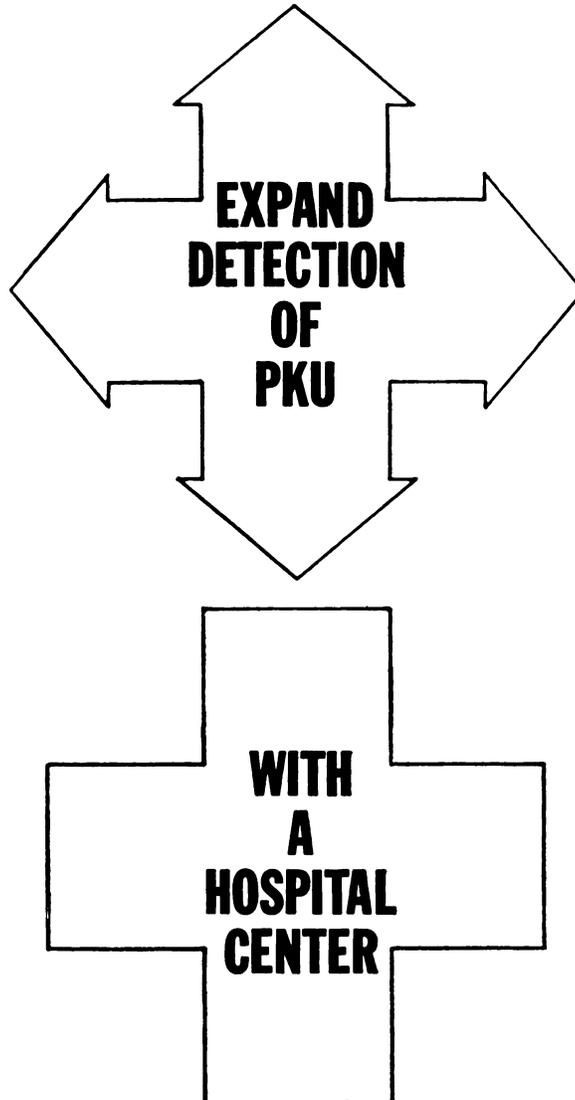
**Supplied:** MULVIDREN-F is available in bottles of 100 orange-flavored Softab tablets embossed "Stuart" at all pharmacies. Prescription required.

Quality Pharmaceuticals at Low Patient Cost

**Stuart**

The Stuart Company PASADENA, CALIFORNIA

Division of ATLAS CHEMICAL INDUSTRIES, INC.



Severe mental retardation by **PKU** (phenylketonuria) can be prevented—but only if **PKU** is detected early and corrective diet therapy instituted promptly. **Finding every newborn infant with PKU will require that every hospital, large and small, develop a PKU Detection Program.**

The initiative and leadership of the pediatrician are vital to this testing program. Pediatricians, parents, and the hospital must work together to prevent the real tragedy—that of a newborn infant who is not tested and whose **PKU** goes undetected.

The cost per infant for home testing of urine is measured in pennies, yet by detecting one **PKU** infant, your hospital can avoid both the preventable loss to society of a useful member, and a public expense of \$100,000\* or more.

**FREE PAMPHLET—“Programs For Detection Of PKU”** — a procedural guide for instituting a program in your hospital. To obtain your copy, write to: **PKU**, Ames Company, Inc., 819 McNaughton Avenue, Elkhart, Indiana.

# phenistix<sup>®</sup>

*dip-and-read test for urine phenylketones*

**Available:** Special Institutional Carton of 100 foil-wrapped **Three-Test Units** (home testing instructions and report form are attached to each Three-Test Unit). With each purchase, an ample supply of parents' literature sets will be included free of charge, on request. Literature plus a Three-Test Unit makes a complete Home Testing Kit.

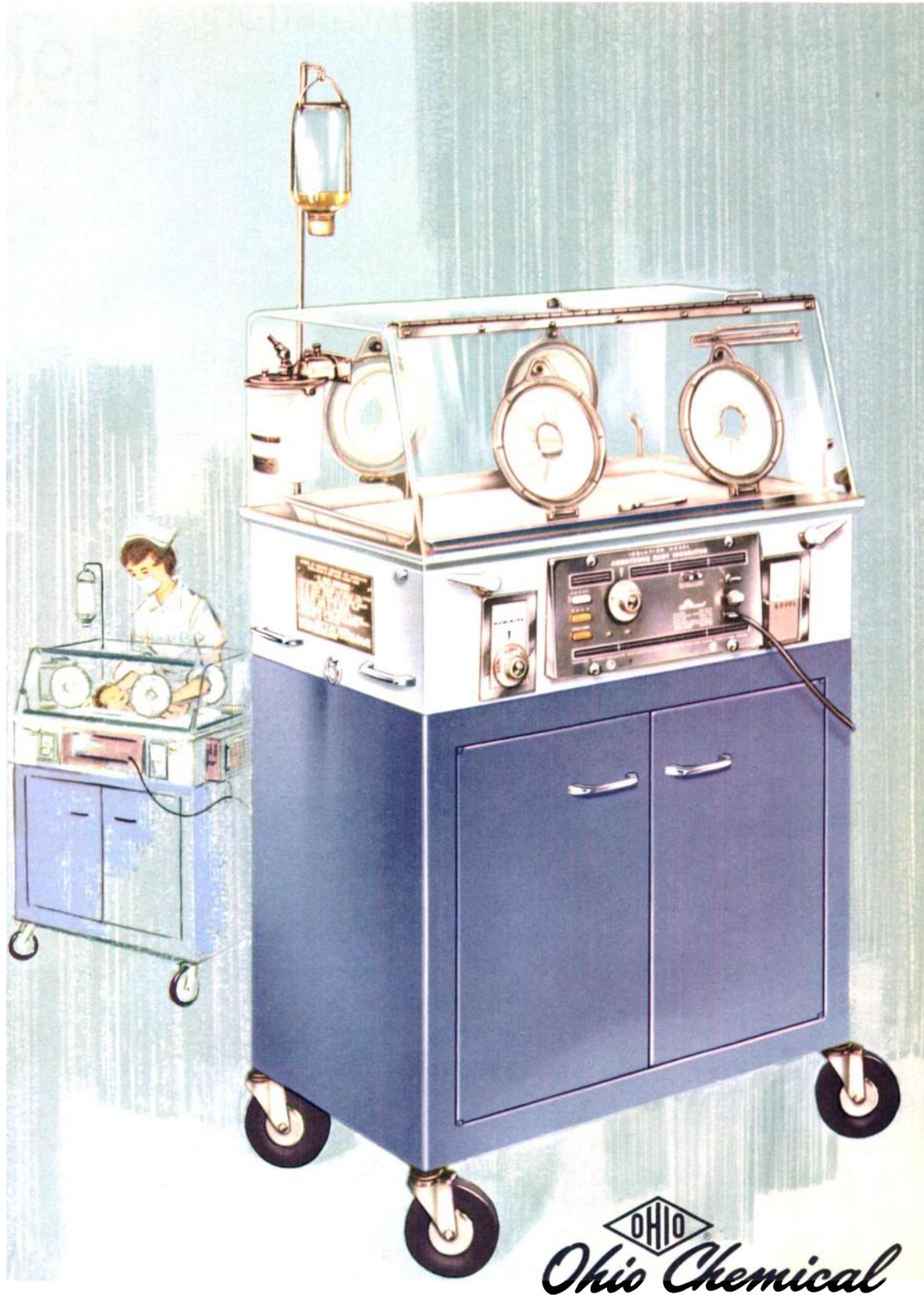
\*Cost of lifelong institutional care as estimated by Centerwall, W. R.; Chinnock, R. F., and Pusavat, A.: *Am. J. Pub. Health* 50:1667, 1960. See also editorials—*Canad. M.A.J.* 83:1118 (Nov. 19) 1960 and *J.A.M.A.* 178:838 (Nov. 25) 1961.



*In answering advertisements please mention PEDIATRICS*

Q. "Which isolation-type incubator offers totally unique design concepts for improved isolation technique?"

A. "The new Ohio-Armstrong isolation Model 190!"



# new Ohio-Armstrong isolation-type incubator

MODEL

# 190

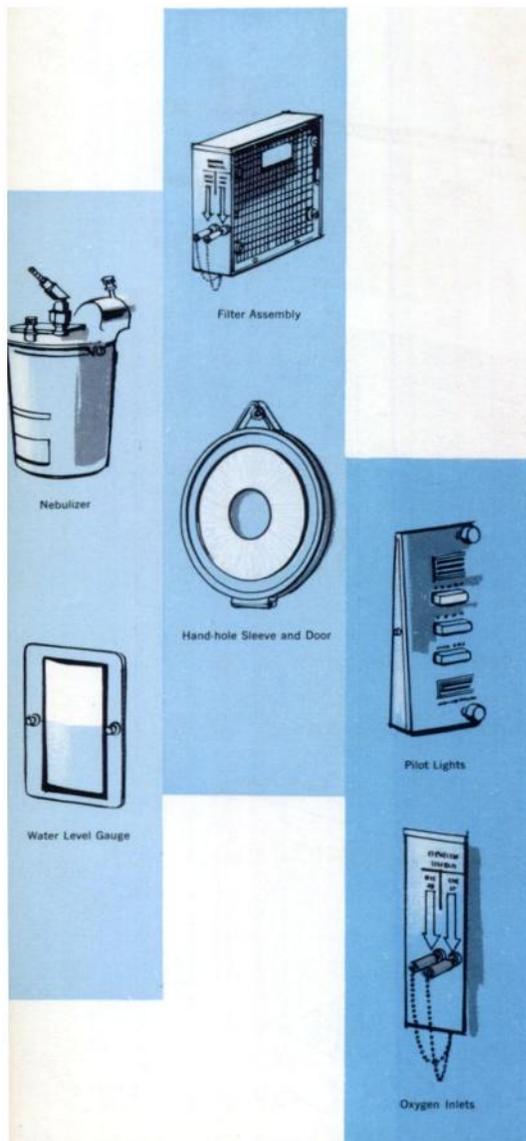
The new Model 190 incubator provides for the latest advances in isolation technique. This outstanding incubator development incorporates not only significant engineering advances but also design features that originated as recommendations and suggestions by leading pediatricians as well as obstetrical and nursery supervisors. Result: the Model 190 sets new standards for aseptic incubator environment.

#### Here's why —

1. **Cleanability** — New ease of cleaning is one of the most important design considerations in the Model 190. It has been specifically engineered to provide quick disassembly — **without tools** — of major components for thorough sterilizing. Nearly all parts, such as the complete water fill assembly, nebulizer, etc., can be autoclaved for unquestioned asepsis.
2. **Isolation** — The infant is protected against external contaminants. Incoming air is thoroughly filtered by extra-large submicronic filters with a filtration effective range down to 0.5 microns. Such meticulous filtration prevents penetration of streptococci and staphylococci. A system of hand-hole doors and sleeves prevents the possibility of contamination by hands or dirty linens.
3. **Safety** — Temperature is accurately regulated by extremely sensitive thermostatic controls. Additional protection is provided by a special cut-out thermostat which prevents overheating and actuates a warning light and buzzer. Two filtered oxygen inlets, one for concentrations up to 40% and the second for 100% undiluted flows, are distinctively marked and especially capped to eliminate the possibility of confusing the two oxygen inlets.

Some of the standard design features available at no additional cost include: pull-out tray, adjustable I.V. stand, fog-clear thermometer panel, special isolation-type nebulizer, and others.

Ask your authorized Ohio Chemical dealer for Catalog No. 8120, or write Ohio Chemical (a division of Air Reduction Company, Inc.), Madison 10, Wisconsin; Ohio Chemical Canada Limited, Montreal 3, Que.; Airco International, New York 17, New York.



**OHIO**  
*Ohio Chemical*

ECZEMAS / DERMATOSES / SENSITIVE SKIN

NOTHING CLEANSSES MORE GENTLY THAN

# LOWILA<sup>®</sup> CAKE

...aids healing



Over 20 years ago, a new concept was born for the cleansing of dermatitic and sensitive skin . . . Lowila Cake. Today, Lowila still remains unchallenged in its role as a superior, nonirritating cleanser.

Gentle Lowila's basic formula has never been changed . . . it couldn't be improved. But, many changes have been made in its texture, "feel" and lathering qualities.

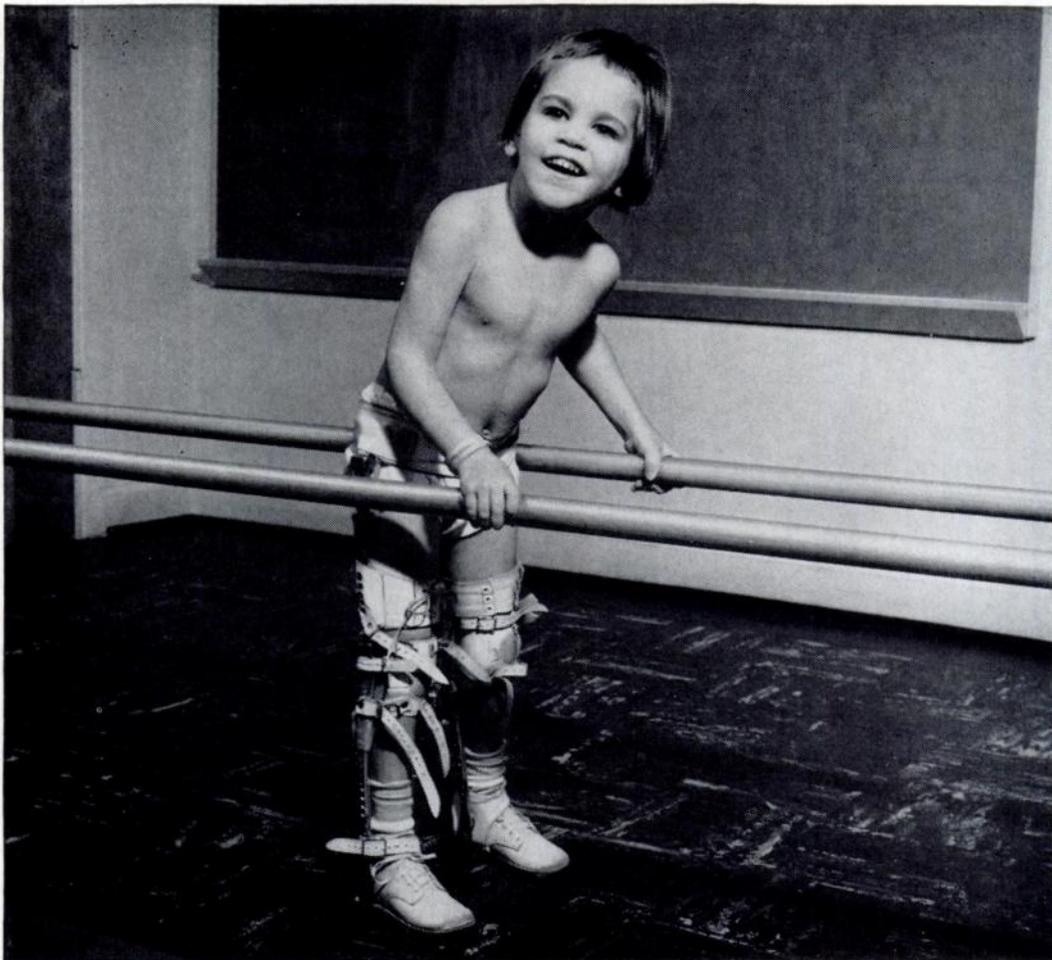
Lowila Cake now provides a rich, creamy lather comparable to that of fine toilet soaps. Contains no irritating alkalis, fatty acids and perfumes. See pp. 968-969, PDR. Write for samples. Also available in Canada.

**WESTWOOD PHARMACEUTICALS**

**BUFFALO 13, NEW YORK**

**When soap irritates or retards healing, change to the gentle cleanser LOWILA**

*In answering advertisements please mention PEDIATRICS*



**Soma<sup>®</sup> can help your cerebral palsy patients  
carisoprodol hold up their heads and smile**

*Muscle-relaxing, pain-relieving  
carisoprodol speeds up habilitation  
...encourages children to want  
to help themselves*

Treatment with 'Soma' (carisoprodol) encourages children to want to help themselves. They are happier, more willing to walk, dress, and feed themselves.

Physical therapy is also more beneficial. Patients wear corrective braces with less discomfort. And they drool less.

Carisoprodol seldom produces side effects. Occasional drowsiness may occur, but usually at higher dosage. Individual reactions may occur rarely.

*Dosage:* Children over 5, one 250 mg. capsule 2 or 3 times a day.

Literature and samples on request. Also available: 15-minute documentary color film by Dr. C. A. Spears.

1. Phelps, P. M., Arch. of Ped., 76:243-250, June, 1959.
2. Spears, C. A., Annals of N.Y. Acad. of Sc., Mar. 30, 1960, Vol. 86.

**Soma<sup>®</sup>**  
**carisoprodol**

 Wallace Laboratories, Cranbury, New Jersey

*In answering advertisements please mention PEDIATRICS*

*Asthma is loneliness... isolation...  
hidden fears... evidenced outwardly  
by the obvious signs and symptoms...  
and inwardly by the hidden tear.*

Photography: John Nese

**Tedral**<sup>®</sup>

*Pediatric Suspension*

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

**WARNER-CHILCOTT**



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

# Quadrinal is an even better bronchodilator/ expectorant than Verequad

## BOTH

Paradoxical as it may seem, each of these medications is better than the other, depending on the circumstances in which they are prescribed. They have many superior qualities in common — and one significant difference.

Both Quadrinal and Verequad have proved exceptionally effective in the management of asthma, bronchitis and other chronic respiratory diseases. Both relieve bronchospasm, loosen tenacious mucus, rapidly clear the airway, help maintain unobstructed respiration. Both offer economy and a wide range of usefulness, for children as well as adults, in persistent "common dry cough" as well as in major conditions such as pulmonary emphysema. The only question is: when Quadrinal and when Verequad? Quadrinal, as its name suggests, provides four-way relief: two complementary bronchodilators, an antispasmodic, and a highly

effective expectorant, potassium iodide. *Because of its comprehensive action, Quadrinal is indicated for almost all patients who suffer from chronic respiratory diseases.*

Verequad, a variation of the Quadrinal formula, also provides four-way relief, but substitutes glyceryl guaiacolate as the expectorant. *While Verequad is also efficacious for the broad range of patients, its formulation makes it especially useful during pregnancy, or when there is sensitivity to iodides.* Quadrinal and Verequad Suspensions have another valuable difference. Each has a pleasant flavor all its own — making it easier to please the patient and to alternate the medications if you desire. NOTE: A recent double blind study underscores once again the importance of the added expectorant component in Quadrinal and Verequad. "... There continues to be much clinical evidence

# Verequad is an even better bronchodilator/ expectorant than Quadrinal

## TRUE!

that mucolytic agents are necessary in the treatment of bronchial asthma. The most effective appear to be potassium iodide and glyceryl guaiacolate."<sup>1</sup> Further evidence that whichever you prescribe — Quadrinal or Verequad — they both do the job.

The QUADRINAL formula:

	Each tablet:	Suspension (5 cc.):
Potassium iodide.....	5 grs.....	2½ grs.
Ephedrine hydrochloride.....	¾ gr.....	¾ gr.
Phenobarbital.....	¾ gr.....	¾ gr.
Theophylline-calcium salicylate.....	2 grs.....	1 gr.

*How supplied:* Quadrinal Suspension (fruit flavored) — pint bottles. Quadrinal tablets (white, bisected) — bottles of 100, 500, 1000.

*Precaution:* Caution is recommended in patients sensitive to iodides, in cardiovascular disease, in hyperthyroidism and during pregnancy. (Although an extremely rare occurrence, iodide-induced goiter with hypothyroidism in the newborn has been

reported.) In some patients, prolonged use of iodides can lead to hypothyroidism.

The VEREQUAD formula:

	Each tablet:	root beer flavored Suspension (5 cc.):
Glyceryl guaiacolate.....	100 mg.....	50 mg.
Ephedrine hydrochloride.....	24 mg.....	12 mg.
Phenobarbital.....	8 mg.....	4 mg.
Theophylline-calcium salicylate.....	130 mg.....	65 mg.

*How supplied:* Verequad Suspension (root beer flavored) — bottles of 4 oz. Verequad tablets (salmon colored, uncoated) — bottles of 24.

*Precaution:* Care is indicated in the presence of cardiovascular disease, hyperthyroidism, and diabetes. *Please see PDR for more complete information and for dosage schedules.*

1. Shure, N. and St. John, M. A.: Comparison of Asthmalytic Compounds. *J. Allergy*. 33:479 (Nov.-Dec.) 1962.

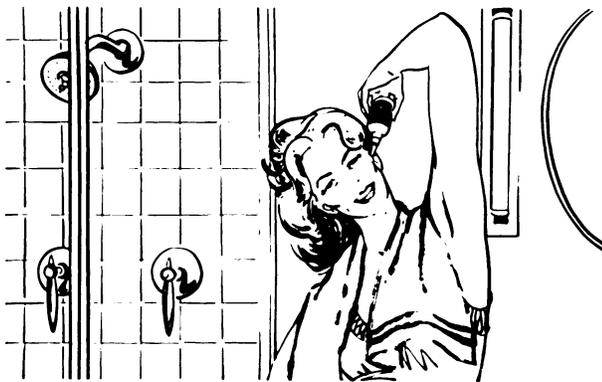


KNOLL PHARMACEUTICAL COMPANY • ORANGE, NEW JERSEY

FOR THE FIRST TIME . . .  
**CHEMOMECHANICAL** REMOVAL OF  
**EXCESS EAR WAX**



Save valuable  
office time



Safe, convenient  
ear wax removal  
at home

**SAFE**—with virtually no risk of sensitization  
**EASY TO USE**—with a minimum of  
instrumentation  
**AT HOME**—by the patient, or parent, to save  
you office time

**DEBROX**<sup>®</sup>  
. . . FOR EAR WAX

DEBROX is a solution of 6.5% carbamide (urea) peroxide in a special anhydrous glycerol vehicle. In the ear, DEBROX forms urea and evolves oxygen, exerting a chemomechanical cleansing and churning effect which disorganizes ear wax. The hygroscopic glycerol vehicle controls and sustains the action of carbamide peroxide. The softened, fragmented wax can then be easily removed with simple irrigation.

In 26 major published studies on carbamide peroxide glycerol solutions, not a single case of irritation, allergy or toxic reaction was reported, even after extended use. (References available on request.)

**Dosage:** Five drops are instilled into affected ear twice daily for three or four days and then flushed with a soft rubber syringe.

**Supplied:** DEBROX Drops in economical 15 cc plastic squeeze bottle



**INTERNATIONAL PHARMACEUTICAL CORPORATION**  
415 GREEN STREET • NORRISTOWN, PENNSYLVANIA

*In answering advertisements please mention PEDIATRICS*



The famous *Firstie* is a soft and flexible shoe... to be used as soon as baby starts standing. Its significant features include:

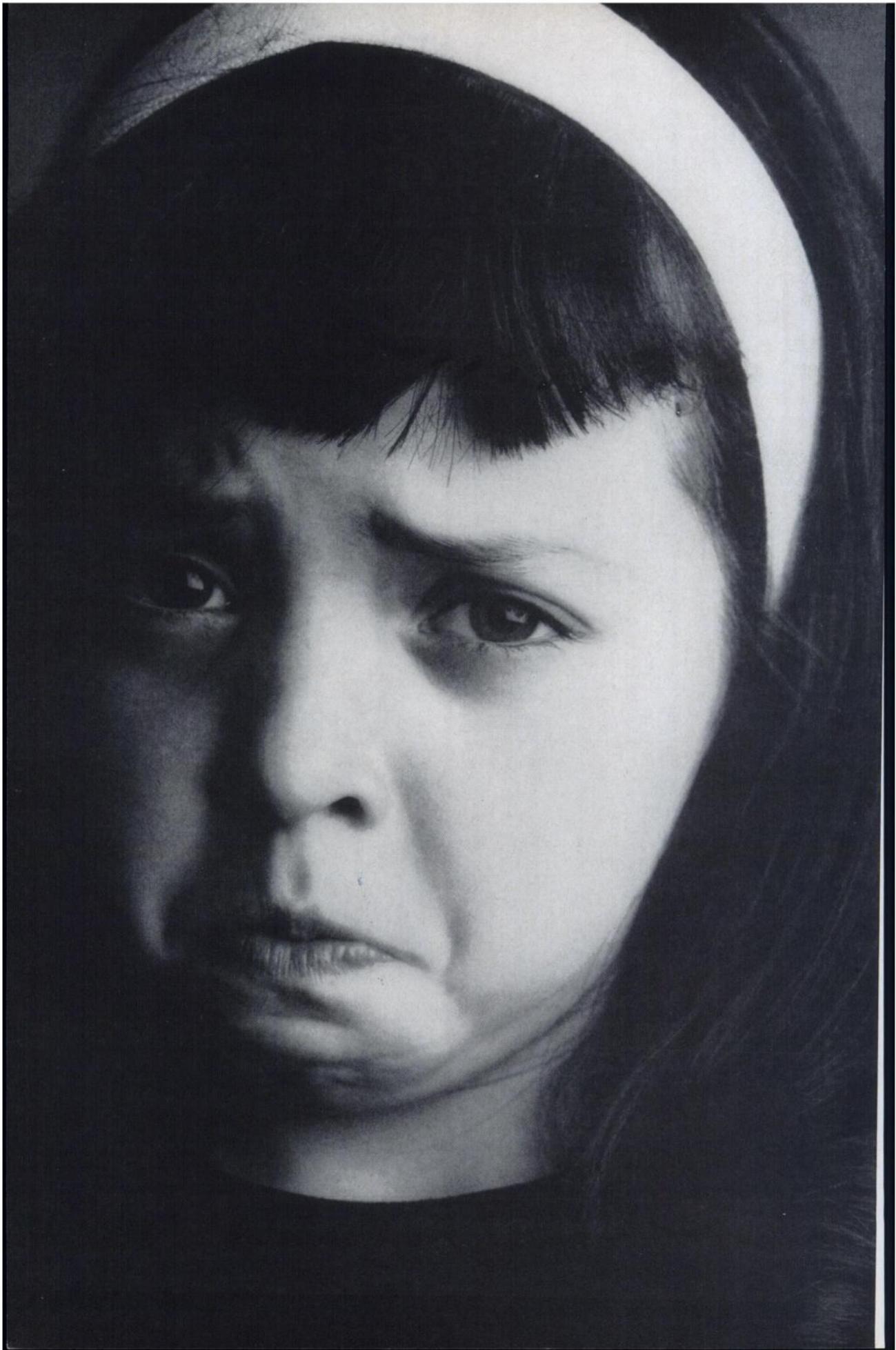
**a sole of  
desired  
flexibility...  
designed to  
let the foot  
govern the  
action... not the  
shoe the foot.**



**THE  
STRIDE RITE  
SHOE**

DIVISION OF GREEN SHOE MFG. COMPANY  
BOSTON, MASSACHUSETTS

*In answering advertisements please mention PEDIATRICS*



**cajole!  
entreat!  
demand!  
threaten!  
plead!  
promise!  
wheedle!  
implore!  
beseech!  
beg!**

**...or give her** **good-tasting  
Tetrex<sup>®</sup> Syrup**  
(tetracycline syrup)

And in addition to its good taste, Tetrex Syrup (tetracycline syrup) happens to be unsurpassed in effectiveness among broad-spectrum antibiotics for kids. In safety, too—no hepatotoxicity, phototoxicity or dangerous hematologic changes. No difficulty with excessive serum binding either. Prescribe well-tolerated Tetrex Syrup (tetracycline syrup). Mothers with little patience—not to mention the little patients themselves—will be grateful.

**Bristol Therapeutic Summary.** For complete information consult Official Package Circular. **Effectiveness.** Clinical experience has established this drug as being effective in treating infections due to a broad range of organisms which are sensitive to the antibiotic. **Side Effects.** The overgrowth of nonsusceptible organisms may occur during therapy. **Precautions.** Use of tetracycline during the period of tooth formation may result in tooth staining. **Usual dose. Adults:** 1 Gm. per day; 2 teaspoonfuls every 6 hours or 4 teaspoonfuls every 12 hours. **Children:** according to weight and the severity of the infection; 10-20 Kg.—½-1 teaspoonful every 6 hours, 1-2 teaspoonfuls every 12 hours; 20-40 Kg.—1-2 teaspoonfuls every 6 hours, 2-4 teaspoonfuls every 12 hours.

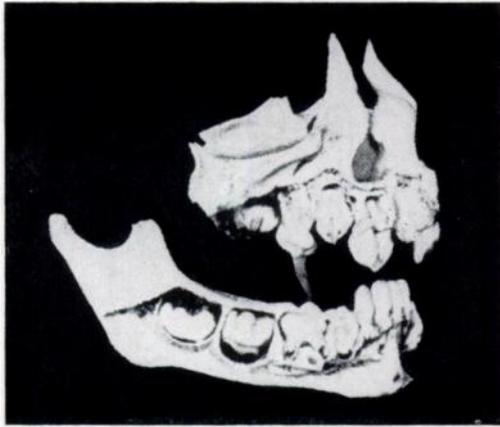


# The chronology of dental development

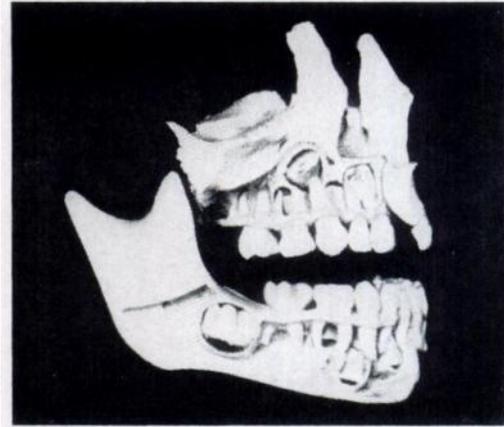
---

## Eruption of primary and permanent teeth

---



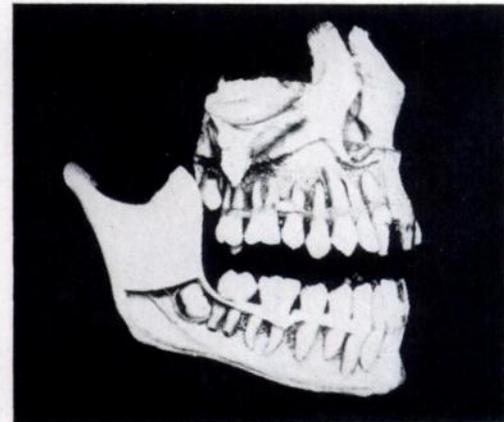
1st year. Primary incisors clinically erupted and enamel completed in all primary teeth. (In the permanent dentition, calcification of the 1st molar is already under way, and hard tissue formation has started in the incisors and cuspids.)



4th year. Primary dentition completely erupted. Note permanent teeth in their crypts. (In the permanent dentition, the enamel of the incisors is in final stages of completion.)



11th year. Mixed dentition. Permanent incisors and 1st molars (plus primary molars) clinically erupted. Second permanent molars about to appear, to be followed by the bicuspids. Enamel of all permanent teeth, except 3rd molars, completed.



About 15th year. Crown of 3rd molar lies within its crypt.

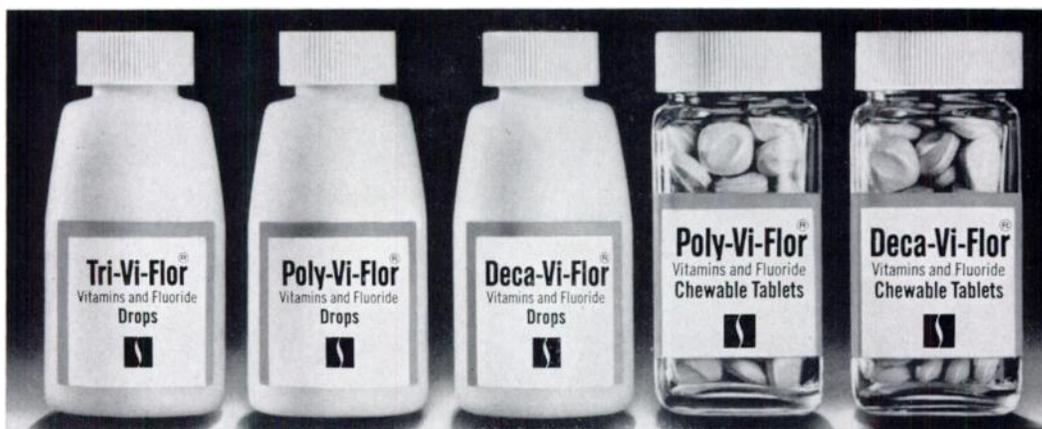
Adapted from Schour, I., ed.: Noyes' Oral Histology and Embryology, ed. 8, Philadelphia, Lea & Febiger, 1960, pp. 311-313.

To achieve maximum benefit, daily ingestion of fluoride should begin at birth<sup>1</sup> and should continue during the calcification of the permanent teeth, or until the patient is at least 10 years of age.<sup>2</sup>

# Vitamins with Fluoride

available on prescription only

The Mead Johnson Laboratories' system  
of vitamin-fluoride products



for the infant from birth  
—Each 0.6 cc. provides:  
Fluoride (from sodium  
fluoride), 0.5 mg.;  
Vitamin A, 3000 units;  
Vitamin D, 400 units;  
Vitamin C, 60 mg. Drop-  
per bottles of 30 and  
50 cc.

for the infant from birth  
—Each 0.6 cc. provides:  
Fluoride (from sodium  
fluoride), 0.5 mg.;  
Vitamin A, 3000 units;  
Vitamin D, 400 units;  
Vitamin C, 60 mg.;  
Thiamine, 1 mg.; Ribo-  
flavin, 1.2 mg.; Niacin-  
amide, 8 mg. Dropper  
bottles of 30 and 50 cc.

for the infant from birth  
—Each 0.6 cc. provides:  
Fluoride (from sodium  
fluoride), 0.5 mg.;  
Vitamin A, 3000 units;  
Vitamin D, 400 units;  
Vitamin C, 60 mg.; Thia-  
mine, 1 mg.; Riboflavin,  
1.2 mg.; Niacinamide,  
8 mg.; Pyridoxine, 1 mg.;  
Cyanocobalamin, 1 mcg.;  
Panthenol, 3 mg.; Biotin,  
30 mcg. Dropper bottles  
of 30 and 50 cc.

for children of 3 years  
and older — Each Chew-  
able Tablet provides:  
Fluoride (from sodium  
fluoride), 1.0 mg.\*;  
Vitamin A, 4000 units;  
Vitamin D, 400 units;  
Vitamin C, 75 mg.; Thia-  
mine, 1.2 mg.; Ribo-  
flavin, 1.5 mg.; Niacina-  
mide, 15 mg. Bottles of  
50 and 1000 tablets.

for children of 3 years  
and older — Each Chew-  
able Tablet provides:  
Fluoride (from sodium  
fluoride), 1.0 mg.\*;  
Vitamin A, 4000 units;  
Vitamin D, 400 units;  
Vitamin C, 75 mg.; Thia-  
mine, 1.2 mg.; Ribo-  
flavin, 1.5 mg.; Niacina-  
mide, 15 mg.; Pyridoxine,  
1.2 mg.; Cyanocobala-  
min, 3 mcg.; Calcium  
pantothenate, 5 mg.;  
Biotin, 40 mcg. Bottles  
of 50 and 1000 tablets.

Today the doctor can provide the benefits of dietary fluoride for the prevention of dental caries to all infants and children.

Safe, appropriate and effective<sup>3,4</sup> amounts of fluoride based upon authoritative<sup>2</sup> recommendations have been added to familiar vitamin supplements for daily administration from birth through the calcification of both primary and permanent teeth.

**DOSAGE:** *Tri-Vi-Flor*, *Poly-Vi-Flor* and *Deca-Vi-Flor Drops*: 0.6 cc. daily for infants and children under 3 where drinking water content does not exceed 0.7 ppm. of fluoride.

*Poly-Vi-Flor* and *Deca-Vi-Flor Chewable Tablets*: 1 tablet daily for children 3 years old and older where drinking water content does not exceed 0.7 ppm. of fluoride.

Suggested dosage should not be exceeded since eventual mottling of developing teeth

may result. Before prescribing, it should be ascertained that the water consumed is of known low fluoride content. Should not be given to infants and children using other fluoride-containing drugs, or to patients with frank fluorosis.

1. Report of the Joint Committee of the American Academy of Pediatrics and the American Society of Dentistry for Children: *Pediat.* 23:400 (Feb.) 1959. 2. Council on Dental Therapeutics: *J. A. Dent. A.* 56:589 (Apr.) 1958. 3. Accepted Dental Remedies, ed. 27, Chicago, American Dental Association, 1962, pp. 137-139, 148. 4. Bacon, E. S., in Holt, L. E. Jr.; McIntosh, R., and Barnett, H. L.: *Pediatrics*, ed. 13, New York, Appleton-Century-Crofts, Inc., 1962, p. 350.

\*Recommended daily dose for children 3 years and older where drinking water is substantially devoid of fluoride.<sup>1</sup>



Mead Johnson  
Laboratories

*Symbol of service in medicine*

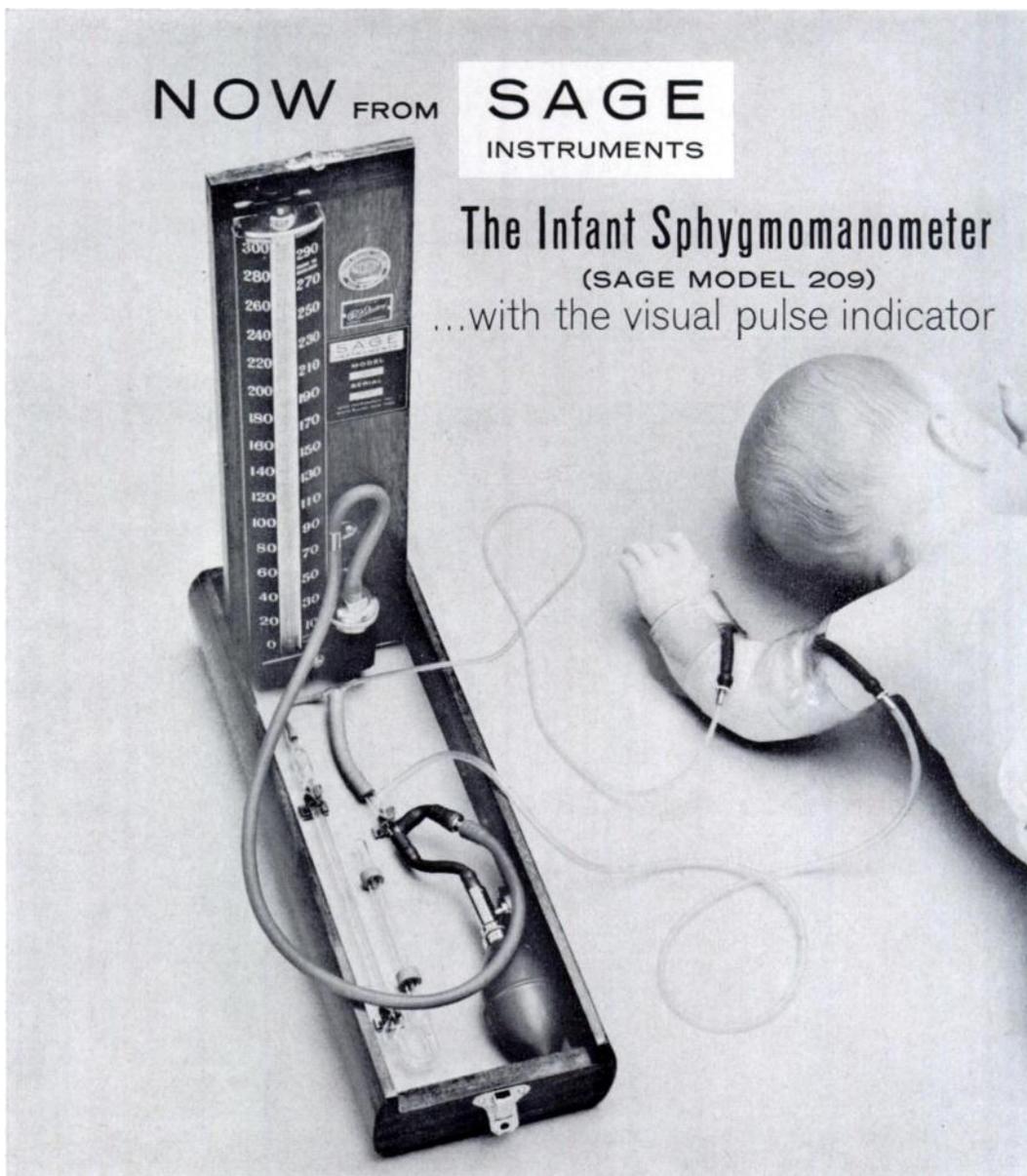
NOW FROM

**SAGE**  
INSTRUMENTS

## The Infant Sphygmomanometer

(SAGE MODEL 209)

...with the visual pulse indicator



The Infant Sphygmomanometer permits taking reliable, reproducible readings of blood pressure of premature infants, newborns, and young children.\* It uses a sensitive plethysmographic pulse pick-up which overcomes the difficulties with auscultation, palpation, and flush methods.

As occluding pressure is slowly released, onset of the pulse is seen visually in a bouncing bubble in a glass capillary tube, at which time systolic pressure is

read in the mercury column. Special 2.5cm wide cuffs for infants are made of easily cleaned polyvinyl chloride. Write for catalog sheet and reprint of the *Lancet* article which describes the instrument and technique in detail.

Price: **\$95.00**

**Reference**

\*Ashworth, A. M., Neligan, G. A., Rogers, J. E., (1959) *Lancet*, i, 801

**SAGE INSTRUMENTS, INC.**

2 SPRING STREET, WHITE PLAINS, N. Y.  
914 WHITE PLAINS 9-4121

*In answering advertisements please mention PEDIATRICS*

# Midicel<sup>®</sup> (Sulfamethoxyypyridazine)

one-dose-a-day sulfa therapy

PARKE-DAVIS

MIDICEL (sulfamethoxyypyridazine) achieves continuous effective blood levels for 24 hours. As a result, it provides convenience and economy, eliminates "middle-of-the-night" doses, and reduces possibility of interrupted rest for young patients. The drug is rapidly absorbed and slowly excreted... affords effective antibacterial action in a variety of systemic infections due to sulfonamide-sensitive organisms. Low dosage and high solubility minimize the possibility of crystalluria. INDICATIONS: Gram-negative and gram-positive infections, such as urinary tract, respiratory and soft-tissue infections, and bacillary dysenteries. PRECAUTIONS AND CONTRAINDICATIONS: Daily doses higher than 0.5 Gm. should not be continued longer than three to five days without checking for blood levels above therapeutic range. Maintain adequate fluid intake during therapy and for 48 to 72 hours afterward. In common with all sulfonamides, this agent is contraindicated in the premature and newborn infant under one month of age. The effect on the fetus through administration during pregnancy has not been investigated. Contraindicated in patients with a history of sulfa sensitivity. Not recommended for meningococcal in-

fections. Periodic blood counts are advised. Patients with impaired renal function should be followed closely since excessive blood and tissue accumulations may occur. SIDE EFFECTS: Anorexia, lassitude, rash, drug fever, and headache may occur and are indications for discontinuing the drug. Although most reactions to sulfamethoxyypyridazine have been mild and reversible, severe and fatal reactions may occur and have been reported. They include pancytopenia, aplastic anemia, thrombocytopenic purpura, leukopenia and hemolytic anemia. Also reported have been hypersensitivity myocarditis, focal hepatitis, and albuminuria. Skin reactions have ranged from urticaria to fatal exfoliative dermatitis. Fixed drug eruption, photosensitivity and erythema multiforme exudativum have been noted. A lupus erythematosus-like syndrome has also been reported. SUPPLIED: Quarter-scored tablets of 0.5 Gm. each, bottles of 24, 100, and 1,000; also as butterscotch-flavored Suspension, each cc. containing 50 mg. sulfa-methoxyypyridazine as the N<sup>1</sup>-acetyl derivative, bottles of 4 oz.

**PARKE-DAVIS**

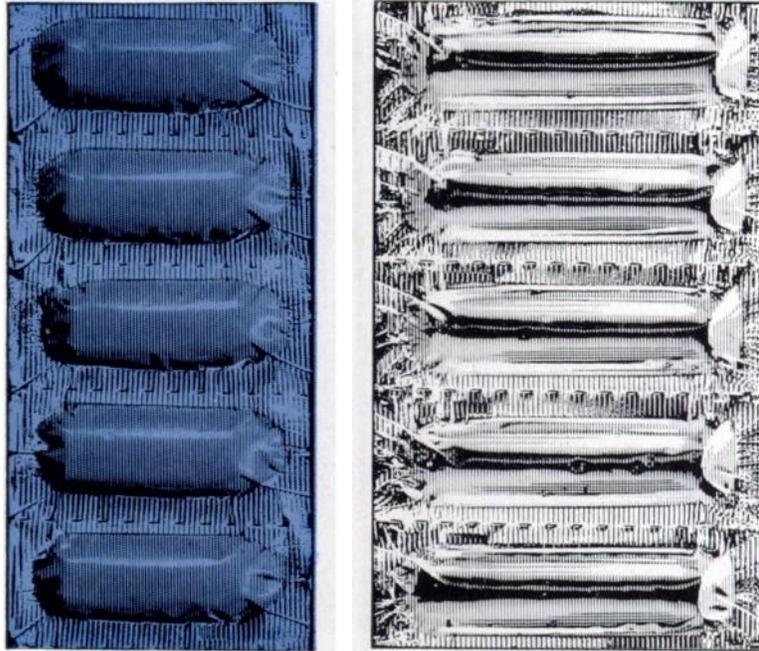
28143 PARKE-DAVIS & COMPANY, Inc., Kenilworth, N.J. 07033

when her favorite program  
comes on tomorrow morning...

today's medication  
will still be working



# for children with asthma color-coded and weight-proportioned



Blue Foil	<b>AMINET®</b>	Silver Foil
QUARTER STRENGTH	RECTAL SUPPOSITORIES	HALF STRENGTH
25 mg.	<b>PENTOBARBITAL SODIUM</b> <small>WARNING: may be habit forming.</small>	50 mg.
125 mg.	<b>AMINOPHYLLINE</b>	250 mg.
15 mg.	<b>BENZOCAINE</b>	30 mg.
1.41 Gm.	<b>BASE</b> <small>(cetyl alcohol—60%; oleyl alcohol—40%)</small>	2.11 Gm.

You can select the dosage strength according to weight range.  
You can identify the right strength by the color of the foil wrap.  
You can achieve effective absorption with rectal administration. The nonreactive base of AMINET is unique. In contrast to other bases, it melts both rapidly and uniformly.

*Rectal Administration:* For children 80 lbs. and over—Half Strength AMINET. For children 40 lbs. and over—Quarter Strength AMINET. Repeat at 8-hour intervals, if necessary.

*Caution:* Advise parents to follow carefully all directions and precautions. Indotrinate them not to give AMINET more often than every 8 hours. Advise parents against use of all but prescribed medications. Avoid concomitant use of ephedrine and aminophylline. Stop AMINET on any sign of stupor, mental agitation, or convulsions. *Warning*—Prolonged barbiturate use may be habit forming. *Boxes of 12:* available through your regular supplier.



In answering advertisements please mention PEDIATRICS

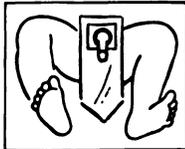
**NEW... CONVENIENT**



# **INFANT SPECIMEN COLLECTOR\* FOR HOME USE**

Here is a most convenient and effective appliance for collecting specimens of infant urine, right in the home, by parents.

Designed for both sexes, the Davol Specimen Collector can be worn inside the diaper. It is made of soft polyethylene – comfortable for the baby, non-irritating, non-toxic, and leakproof. Unit capacity approximately 5 oz.



When a specimen has been collected, the polyethylene bag becomes a self-sealing waterproof container. You can recommend the Davol Infant Specimen Collector with the reassurance that it has been approved by leading hospitals. Moderately priced and available through local retail drug stores.



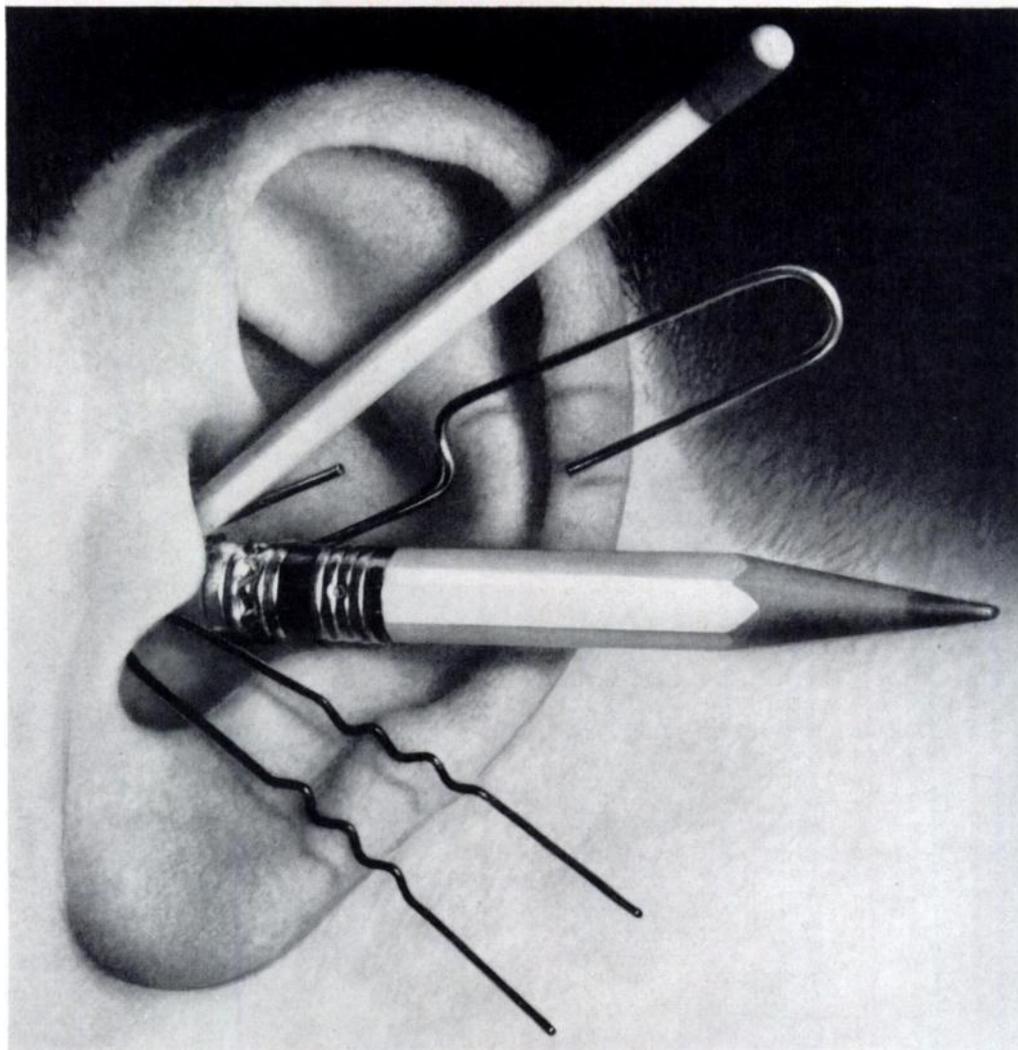
\*HILL, E. J., M.D., F.A.C.S., New Method For Collecting Urine Samples In Infants: Plastic and Reconstructive Surgery, Vol. 22, No. 6, December, 1958



**RUBBER COMPANY**  
PROVIDENCE 2, RHODE ISLAND

*In answering advertisements please mention PEDIATRICS*

**PROTECT YOUR PATIENTS FROM THIS**



**PRESCRIBE** **kerid** **DROPS**  
earwax remover

**SAFE • PAINLESS • EFFECTIVE**

Administration: Fill the ear canal with Kerid Drops. Plug with cotton for 30 to 60 minutes. Gently flush with warm water, using soft rubber syringe. In stubborn cases, repeat or allow Kerid Drops to remain overnight.

Supplied: 8 cc. bottles with a dropper. Also combination kits containing 8 cc. dropper bottle and soft rubber ear syringe.

Composition: Urea and Glycerol in Propylene Glycol.

**BLAIR LABORATORIES INC., YONKERS, NEW YORK**

*In answering advertisements please mention PEDIATRICS*

**Croup: 2:00 a.m.**

**Injection DECADRON® Phosphate and steam 2:30 a.m.**



**later in the morning: crisis ended**  
patient much improved

With Injection DECADRON Phosphate dexamethasone 21-phosphate and moisture you may expect a rapid change in the course of this pediatric emergency. Relief of alarming symptoms may follow one dose of Injection DECADRON Phosphate... within two or three hours definite signs of clinical improvement may be noted. The prompt use of both moisture and Injection DECADRON Phosphate, along with usual therapeutic measures, usually makes hospitalization unnecessary. Further acute attacks of croup may often be prevented by continued use of Injection DECADRON Phosphate for two or three additional days. Injection DECADRON Phosphate can be given rapidly and in adequate pharmacologic doses with the assurance that if therapy does not exceed three days there is no prolonged pituitary and adrenal suppression.

**Supplied:** In vials of 1 and 5 cc. and disposable syringes of 2 cc. Each cc. of the 1- and 5-cc. vials contains 4 mg. dexamethasone 21-phosphate (as disodium salt); 8 mg. creatinine; 10 mg. sodium citrate; 3.2 mg. sodium bisulfite; 5 mg. phenol; sodium hydroxide to adjust pH; and water for injection q.s. ad 1 cc. The formula for the disposable syringe differs in that each cc. also contains 1.5 mg. methylparaben and 0.2 mg. propylparaben, but not the phenol. **Brief Summary: Indications:** Acute adrenocortical insufficiency and other acute conditions responsive to intensive adrenocortical hormone therapy. **Side Effects, Precautions, and Contraindications:** Do not use in ocular herpes simplex, chickenpox, or tuberculosis. When used as recommended, steroid side effects are seldom a problem; however, general steroid precautions should be considered. Exercise caution in diabetes mellitus, hypertension, peptic ulcer, osteoporosis, intestinal anastomosis, diverticulitis, thrombophlebitis, psychosis, pregnancy. **Before prescribing or administering, read product circular with package or available on request.** MERCK SHARP & DOHME • Division of Merck & Co., Inc., West Point, Pa. (6)

Injection Phosphate  
**Decadron**   
dexamethasone 21-phosphate  
the stable aqueous solution for  
rapid corticosteroid support

## **cystitis in childhood: “a two-fold threat”<sup>1</sup>**

Because of the shortness and immaturity of their ureterovesical valve mechanism, children are particularly vulnerable to reflux.

“Cystitis in children is a two-fold threat: 1) It produces the vesical edema required to convert a marginally competent intravesical ureter into an incompetent one. 2) It produces the infected urine necessary to make the reflux dangerous to the kidneys. Unfortunately the tendency to reflux is greatest at the worst possible time, i.e. when the bladder urine is infected.”<sup>1</sup>

Reflux “can be demonstrated in about 50 per cent of all children with recurring urinary tract infections.”<sup>1</sup>



Voiding cystourethrogram showing reflux in a 3-month-old girl with cystitis due to *E. coli* but no apparent anatomic abnormality. Excretory urograms were normal. (From Hutch.<sup>1</sup>)

# “Every patient with acute cystitis potentially has ureteral reflux and, thus, pyelonephritis.”<sup>2</sup>

To avert the threat to the kidneys, therapy should “combat pyelonephritis and not simple cystitis.”<sup>2</sup> FURADANTIN (nitrofurantoin) quickly permeates renal tissue and protects vital function with broad-range bactericidal action • Resistance rarely develops • No superinfection has been reported • Crystalluria is not a problem • There is no cross resistance or cross sensitization with other drugs • And Furadantin (nitrofurantoin) is well tolerated—tolerance is enhanced by the simple expedient of taking it with meals, and with food or milk on retiring.

**Note to the prescribing physician.** Precautions, contraindications and untoward reactions: Caution is recommended in the presence of diminished renal function which may reduce excretion of the drug and require smaller doses; oliguria and anuria are contraindications. Peripheral neuropathy has been reported; most of these patients were uremic, anemic, diabetic or had other debilitating conditions. In such cases the drug should be used only when indicated by in vitro sensitivity tests and dosages carefully controlled. Discontinue drug if numbness or tingling occurs. Hemolytic anemia has occurred in primaquine-sensitive individuals; the condition is reversible when the drug is withdrawn. In repeated or prolonged therapy, frequent chemical and cellular blood evaluations as well as determination of the minimum effective dose are strongly advised. Infants under one month of age should not receive the drug.

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 low grade fever, are rare. Headache or malaise occur occasionally.

Supplied: **Furadantin** (nitrofurantoin) **Oral Suspension** contains 25 mg. Furadantin (nitrofurantoin) per 5 cc. teaspoonful suspended in a water-miscible, palatable gel composed of glycerol 42%, alcohol 10%, magnesium aluminum silicate, propionic acid, methylparaben, flavoring and water. **Furadantin** (nitrofurantoin) **Tablets**, 50 and 100 mg.

1. Hutch, J. A.: J. Urol. **88**:354, 1962. 2. Lich, R., Jr.; Howerton, L. W., and Davis, L. A.: Southern Med. J. **55**:633, 1962. Complete product information in package insert, from your Eaton Representative, or on request to the Medical Director. For round-the-clock medical consultation on any Eaton product call, person to person, the medical consultant on duty, Norwich, New York, Area Code 607-334-9911.

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



to control infection  
throughout the urinary system  
**FURADANTIN**<sup>®</sup>  
BRAND OF  
nitrofurantoin  
new—for children—  
cherry-flavored oral suspension.



**more than 72% will be formula-fed but all can**

Now every normal infant can enjoy the benefits of *physiologic* nutrition right from the start: if breast feeding is not feasible, you can take advantage of the modern replacement, FORMULA S-26.

FORMULA S-26 helps preclude formula-related problems because it provides:

1. A mineral content that meets all known nutritional requirements, yet *which is held to a level commensurate with the concentrating capacity of the infant's renal system.*  
As a result, FORMULA S-26 permits a homeostatic water reserve for stress situations such as fever, diarrhea, protracted hot weather.
2. Physiologic protein in the same quantity and ratio as mother's milk—60 percent lactalbumin, 40 percent casein.
3. All other nutrients recognized as essential to optimum growth and development of the infant.



## receive physiologic nutrition

Supplied: Liquid—cans of 13 fluid ounces; Powder—1 pound can. For a 20-calorie-per-ounce feeding, one ounce of liquid or one measure of powder (spoon in can) to one ounce of water.

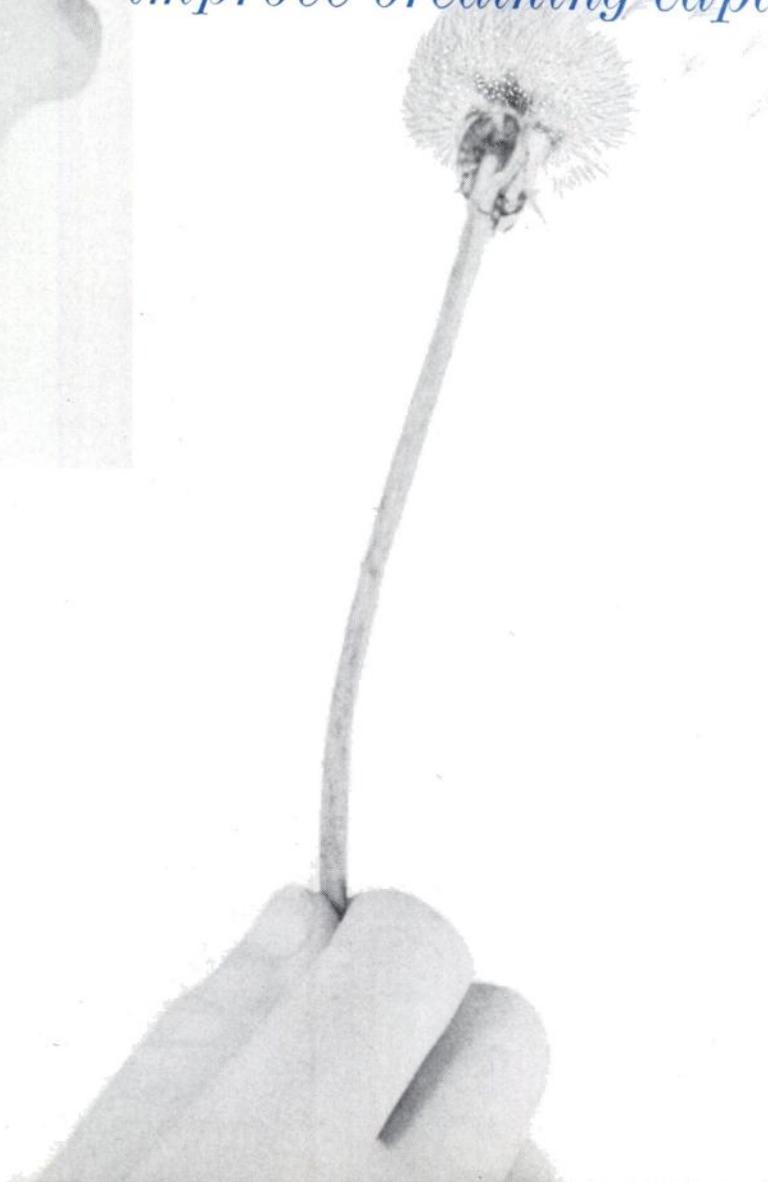
Wyeth Laboratories Philadelphia 1, Pa.



Prepared formula for infants, Wyeth  
physiologic nutrition—at no extra cost



*improve breathing capacity*



*in bronchospastic conditions*

# QUIBRON<sup>®</sup> ELIXIR

Each tablespoonful elixir provides theophylline 150 mg. and glyceryl guaiacolate 90 mg.

## RESOLVES BOTH BRONCHOSPASM AND TENACIOUS MUCUS

*In children with bronchial asthma "...particularly helpful when given early in the attack."*<sup>1</sup> It was believed that prompt administration could even *abort* an attack.<sup>1</sup> In a study which included children with chronic asthma, it was observed that "Relief from wheezing was rapid... in most patients in 10 to 15 minutes."<sup>2</sup>

*Prompt absorption from low-volume Quibron elixir or liquid-filled capsules results in rapid onset of dual therapeutic action. Tolerance excellent; gastric reactions minimal.*<sup>1,2,3</sup>

INDICATIONS: Bronchial asthma, asthmatic bronchitis, chronic bronchitis, and pulmonary emphysema. DOSAGE AND ADMINISTRATION: *Children under 6*: ½ teaspoon elixir (25 mg. theophylline) per 10 pounds body weight, 2-3 times daily. *Children 6-12*: 1 tablespoon elixir, 2-3 times daily. (Children weighing over 100 lbs. may require adult doses.) *Older children*: 1-2 tablespoons elixir or 1-2 capsules, 2-3 times daily. On first day of treatment and in severe attacks, usual doses may be increased by one half. CAUTION: Do not administer more frequently than every 6 hours or give within 12 hours after rectal administration of theophylline or aminophylline. Do not use other xanthine derivatives concurrently. SIDE EFFECTS: Theophylline may cause gastric irritation, with abdominal discomfort, nausea and vomiting, or central nervous system stimulation. Such effects have been minimal with these capsules and elixir. SUPPLIED: Elixir, bottles of 8 fl. oz.; capsules, bottles of 100. REFERENCES: (1) Levin, S. J., and Weisnagel, J.: *Ann. Allergy* 20:315-319 (May) 1962. (2) Puls, R. J., and Grater, W. C.: *Current Therap. Res.* 3:457-460 (Nov.) 1961. (3) Schiller, I. W., *et al.*: *Dis. Chest* 42:384-387 (Oct.) 1962.

© 1963 MEAD JOHNSON & COMPANY, EVANSVILLE 21, INDIANA

13363



Mead Johnson  
Laboratories

*Symbol of service in medicine*



**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.