# Vitamin D Milk ...and Your Child

S PAST CONTRIBUTORS TO PUBLIC HEALTH, WE TAKE PLEASURE IN PRESENTING THIS BOOKLET. WE TRUST THAT IT WILL GIVE TO YOU, IN READILY UNDERSTANDABLE FORM, VALUABLE INFORMATION REGARDING VITAMIN D AND THE NECESSITY OF SUPPLYING IT TO YOUR CHILDREN.

National Oil Products Co. HARRISON, N. J.

# Vitamin D Milk ... and Your Child

VITAMIN D MILK is a subject which has excited widespread interest on the part of public, municipal, state and governmental health authorities, as well as the medical and dental professions. The reason is that Vitamin D Milk seems to present the simplest, easiest way in which children from earliest infancy can secure an additional supply of that essentially important Vitamin — "VITAMIN D".

# As The Twig is Bent The Tree is Inclined

Vitamin D, you know, is the bone-building vitamin. Its place in the great scheme of things is to give the growing child the proper foundation on which nature can build through the years until the child becomes a strong, upstanding man or woman. If his foundation is weak, it is needless to say the child faces many physical handicaps.

There is a disease called "rickets," which is the scientific name for "softening of the bones." Unfortunately this disease is very prevalent and little recognized by mothers, because it is not accompanied by any pain, fever, coughing, etc. But a neglected case of rickets means knock knees, bow legs, spinal curvatures, narrow, distorted chests and other imperfections of the child's frame that he may carry throughout life. A commonly accepted cause of rickets in children is a lack of Vitamin D in the daily diet. And it is a fact that a child may have rickets and neither the mother nor the child himself be aware of it!

## The Mother's Responsibility

This lack of easily recognizable symptoms of rickets imposes a grave responsibility on mothers to see that their child is rightly started on the road to robust health with a husky frame, a straight strong back, and sturdy limbs. Physicians recognize the

menace of rickets — but doctors can control only a very small fraction of the population. Mothers, as a general rule, do not call a doctor unless their child is "sick" — yet their child may be developing rickets and not look or feel "sick". The best way for mothers to prevent the slightest degree of rickets is through proper dietary precautions.

Read what Dr. Alfred F. Hess of New York said before the Food and Nutrition Section of the American Public Health Association in October, 1932, in a symposium on Milks of Special Anti-Rachitic Value\*—

"... the best method of preventing rickets involves the use of some form of anti-rachitic milk ... milk has the distinction and advantage of being the food which contains calcium and phosphorus in the highest degree ... In view of these important advantages, I do not hesitate to recommend the general use of such milk for infants and children, especially in large communities."

#### The Cod Liver Oil Vitamin

All mothers know the importance of giving their child cod liver oil, especially in the winter time. Physicians have prescribed it for generations. Professor Theodore F. Zucker of Columbia University has described how to extract the Vitamin D of cod liver oil in an odorless, tasteless form. This can be incorporated in pure, pasteurized milk.† By this method an anti-rachitic factor is added to the splendid nourishing qualities of milk, making it the most nearly ideal food for infants and growing children.

Think what this means to busy mothers, and mothers who carefully watch the family budget. No more cod liver oil to remember — one less item of expense on the drug store bill — and no struggle or coaxing the child to take the repulsive, fishy dose of oil. Vitamin D Milk provides him with the Vitamin D of cod liver oil without the oil itself. Now mother can feel safe in the knowledge that her precious child is receiving a diet that will protect him against rickets and build his little body straight and strong.

The question very naturally arises: "Can all the others in the family drink Vitamin D Milk?" The answer is "yes". This milk will supply them with an important element lacking in their daily diet. Read what Dr. E. V. McCollum of Johns Hopkins University wrote in the Medical Searchlight and Science Bulletin, January 1932:

"The question is now being frequently asked of me whether adults should take a source of vitamin D as a safeguard to physiological wellbeing. The only logical answer in the light of the available evidence is that there is little room for doubt that an additional source of the vitamin, especially during the colder months of the year, affords a safeguard to health."

Dr. McCollum's article continues as follows, and is vastly interesting because more and more research work and investigation are being done on the subject of Vitamin D and teeth.

".... decay, we believe is the result in most instances, of a diet unsatisfactory in respect to its calcium, phosphorus, and Vitamin D content....

..... there is a decided tendency of the pregnant mother to sacrifice herself for the preservation of her progeny when her diet is inadequate, she is far more likely to suffer decalcification during lactation when the demand for mineral elements and vitamins is far greater than during pregnancy. I believe no one alert to existing knowledge would hesitate now to state unqualifiedly that the pregnant and nursing mothers of today are generally getting too little Vitamin D. If our studies and those of Mrs. Mellanby are sound as we believe they are, they will afford evidence that in temperate regions people of all ages should take some source of vitamin D.... a source of vitamin D should be given almost from birth."

## Vitamin D Milk Tested in Detroit Hospital

When Vitamin D Milk made from the Zucker-Columbia Vitamin D concentrate was ready to market, Dr. D. J. Barnes of Detroit conducted an investigation in the Children's Hospital of Michigan, with 15 infants having active rickets. Read his report after 41 days feeding with Vitamin D milk:

".... in conclusion, fifteen infant patients with active rickets received the Zucker concentrate in the amount of 150 Steenbock units per day of Vitamin D with milk. The milk was well taken and well tolerated by all the patients and healing progressed satisfactorily in all instances. From this evidence it is safe to say the Zucker concentrate will ordinarily cure rickets when given in this dosage with milk."

<sup>\*</sup> Published in the American Journal of Public Health. 1932, Vol. 22, page 1215.

<sup>†</sup> American Journal of Public Health, January 1933: Vol. 23, page 10.

# Questions and Answers

1. Question: What is the source of Vitamin D in your Vitamin D Milk?

Answer: A Vitamin D concentrate extracted from cod liver oil by the Zucker-Columbia process.

2. Question: How much Vitamin D is in one quart of this Vitamin D milk?

Answer: The equivalent of three teaspoonfuls of standard cod liver oil within the meaning of the standard as defined by the Council on Pharmacy and Chemistry of the American Medical Association. (J.A.M.A., August 31, 1929)

3. Question: Is there any cod liver oil in this milk?

Answer: No. Only the Vitamin D concentrate taken from cod liver oil.

4. Question: Does the amount of Vitamin D vary — can it be depended upon?

Answer: Our license requires that 150 Vitamin D units (Steenbock) be incorporated in each quart of Vitamin D Milk. Samples of this milk are obtained, unknown to us, at intervals in the open market. These samples are forwarded to a laboratory designated by the proper authorities where the milk is assayed according to the method accepted by the American Medical Association to assure the public and all concerned that the product is exactly as labeled.

5. Question: Can your Vitamin D Milk be used in cooking?

Answer: Yes. Boiling or baking does not destroy the Vitamin D. This makes a convenient way for a child or adult to get the required amount needed daily through means other than drinking.

Question: Is Vitamin D Milk fattening?
 Answer: If one is under weight it will help restore one to normal, but there is no extra fat in the milk.

7. Question: Should the expectant mother drink Vitamin D Milk?

Answer: Yes. During this period Vitamin D Milk supplies the necessary elements to protect the mother's teeth and bones. Its use also helps insure good teeth and bones for her child.

8. Question: What is rickets?

Answer: "Rickets is a very common nutritional disease, caused by lack of Vitamin D and of sunlight. It occurs during the period of most rapid growth in infancy and early childhood. It affects the whole body, but most strikingly the bones, which may become greatly deformed, and the muscles, which become weak and flabby . . .

The child with rickets may be restless, irritable, and pale. He may be of normal weight; or, if he has had the disease for some time, he may be poorly nourished and his growth stunted. Convulsions may occur on account of an associated condition called tetany. A child with severe rickets may be slow in learning to walk, his teeth may be delayed, and his permanent teeth may be injured by the disease." (Publication No. 30, U. S. Dept. of Labor, Children's Bureau, 1931, p. 115)

9. Question: How can I guard my child against rickets?

Answer: By seeing that he has plenty of sunlight and an

added source of Vitamin D in his daily diet. The simplest and least expensive source of added Vitamin D now is natural Vitamin D Milk. By giving your child this milk in his formula, or by having him drink plenty of it each day, you will largely eliminate any danger of a deficiency of Vitamin D. Ask your physician.

# Dairies Licensed to Produce Vitamin D Milk

BROCK-HALL DAIRY CO.	New Haven, Conn.
FREEMAN'S DAIRY	
SPARKS DAIRY, INC	Buffalo, N. Y.
CROWLEY'S MILK CO	Newburgh, N. Y.
ROCKFORD DAIRIES, INC	Rockford, Ill.
DEAN MILK CO.	
WAHL DAIRY, INC.	Tonawanda, N. Y.
U. S. DAIRY PRODUCTS CO.	
RICHMOND DAIRY CO	Richmond, Va.
Pedigree Dairies, Inc.	Atlanta Ga.
WOODLAWN FARM DAIRY CO	Scranton, Pa.
SCOTT-POWELL DAIRIES, INC.	Philadelphia, Pa.
TILTON CITY DAIRIES, INC.	Asbury Park, N. I.
BIRTCHERD DAIRIES, INC.	Nortolk, Va.
CRANE MILK COMPANY	
Janssen Dairy Corp	Paterson, N. J.
Avondale Farms Creamery	Knowville Tenn
Southland Dairy Prod. Co., Inc.	Jacksonville Fla
W. J. Kennedy Dairy Co	Detroit, Mich.
SOUTHWEST DAIRY PRODUCTS CO.	
SOUTHWEST DAIR! TRODUCTS CO.	
	Dallas Texas
Dairyland Products	Dallas, Texas San Antonio, Texas
Dairyland Products	San Antonio, Texas
Dairyland Products	San Antonio, Texas Fort Worth, Texas
Dairyland Products	San Antonio, Texas Fort Worth, Texas Shreveport, La. Lake Charles, La.
Dairyland Products	San Antonio, Texas Fort Worth, Texas Shreveport, La. Lake Charles, La. San Angelo, Texas
Dairyland Products	San Antonio, Texas Fort Worth, Texas Shreveport, La. Lake Charles, La. San Angelo, Texas Wichita Falls, Texas
Dairyland Products	San Antonio, Texas Fort Worth, Texas Shreveport, La. Lake Charles, La. San Angelo, Texas Wichita Falls, Texas Dallas, Texas
Dairyland Products	San Antonio, Texas Fort Worth, Texas Shreveport, La. Lake Charles, La. San Angelo, Texas Wichita Falls, Texas Dallas, Texas Big Springs, Texas
Dairyland Products	San Antonio, Texas Fort Worth, Texas Shreveport, La. Lake Charles, La. San Angelo, Texas Wichita Falls, Texas Dallas, Texas
Dairyland Products	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, Texas Big Springs, TexasToledo, OhioSt. Paul, Minn.
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY	San Antonio, Texas Fort Worth, Texas Shreveport, La. Lake Charles, La. San Angelo, Texas Wichita Falls, Texas Dallas, Texas Big Springs, Texas Toledo, Ohio
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, Texas Big Springs, TexasToledo, OhioSt. Paul, Minn. Houston, Texas
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY.  SANITARY FARM DAIRIES, INC.  FRANKLIN CO-OP. CREAMERY ASSN	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, TexasDallas, TexasToledo, OhioSt. Paul, MinnHouston, TexasMinneapolis, Minn.
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY.  SANITARY FARM DAIRIES, INC.	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, TexasDallas, TexasToledo, OhioSt. Paul, MinnHouston, TexasMinneapolis, Minn.
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY.  SANITARY FARM DAIRIES, INC.  FRANKLIN CO-OP. CREAMERY ASSN	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, Texas Big Springs, TexasToledo, OhioSt. Paul, MinnHouston, TexasMinneapolis, MinnRochester, Minn.
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY.  SANITARY FARM DAIRIES, INC.  FRANKLIN CO-OP. CREAMERY ASSN	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, Texas Big Springs, TexasToledo, OhioSt. Paul, Minn. Houston, TexasMinneapolis, MinnRochester, MinnRed Wing, Minn. Austin, Minn. Faribault, Minn.
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY.  SANITARY FARM DAIRIES, INC  FRANKLIN CO-OP. CREAMERY ASSN  MARIGOLD DAIRIES, INC	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, TexasDallas, TexasToledo, OhioSt. Paul, MinnHouston, TexasMinneapolis, MinnRochester, MinnRochester, MinnRustin, MinnAustin, MinnCarinal
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY.  SANITARY FARM DAIRIES, INC.  FRANKLIN CO-OP. CREAMERY ASSN	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, TexasDallas, TexasToledo, OhioSt. Paul, MinnHouston, TexasMinneapolis, MinnRochester, MinnRochester, MinnRustin, MinnAustin, MinnCarinal
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY.  SANITARY FARM DAIRIES, INC  FRANKLIN CO-OP. CREAMERY ASSN  MARIGOLD DAIRIES, INC	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, Texas Big Springs, TexasToledo, OhioSt. Paul, Minn. Houston, TexasMinneapolis, MinnRochester, MinnRed Wing, Minn. Austin, MinnYatin, MinnVatin, MinnOwatonna, MinnWilmington, N. C.
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY.  SANITARY FARM DAIRIES, INC.  FRANKLIN CO-OP. CREAMERY ASSN.  MARIGOLD DAIRIES, INC.  WHITE ICE CREAM CO.  WENDT'S DAIRY.	San Antonio, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, TexasDallas, TexasDallas, TexasToledo, OhioSt. Paul, MinnHouston, TexasMinneapolis, MinnRochester, MinnRed Wing, MinnAustin, MinnVautin, MinnVautin, MinnWilmington, N. CNiagara Falls, N. Y.
DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS.  DAIRYLAND PRODUCTS (Snowhite Cream. Co.).  DAIRYLAND PRODUCTS (Producers Cream. Co.).  HIGHLAND JERSEY FARM DAIRY.  PAGE DAIRY COMPANY.  SANITARY FARM DAIRIES, INC.  FRANKLIN CO-OP. CREAMERY ASSN.  MARIGOLD DAIRIES, INC.	San Antonio, TexasFort Worth, TexasFort Worth, TexasShreveport, LaLake Charles, LaSan Angelo, Texas Wichita Falls, TexasDallas, TexasDallas, TexasToledo, OhioSt. Paul, MinnHouston, TexasMinneapolis, MinnRochester, MinnRed Wing, MinnRed Wing, MinnAustin, MinnFaribault, MinnWilmington, N. CNiagara Falls, N. YOmaha, Nebr.

