

Council Will Impose Mercantile Tax Next Year; Plans Complete

Council has taken steps to impose a mercantile tax next year. Public notice has been served that the body proposes to exercise its authority, granted under the so-called "home rule" Act of Assembly.

Funeral Monday



PVT. W. S. MALOMKA The body of Private William S. Malomka who was killed in action March 13, 1944 in Italy, will arrive here Friday night and be removed to the home of a sister, Mrs. John Bellus, Second street and Park avenue, South Connel-

POSTPONE EAST PARK SHOW UNTIL MONDAY NIGHT

The free entertainment, under sponsorship of the Connelville Recreation Board of the Community Fund, scheduled for tonight at East Park, has been postponed.

Somerset County Treasurer Plans Tax Sale Aug. 16

SOMERSET, Aug. 5.—Treasurer Philip C. Dorsch has scheduled a sale of seated lands for tax delinquencies for 10 A. M. Monday, August 16, in the Somerset county courthouse.

District Exchange Picnic Postponed To Next Monday

An outing of district Exchange clubs has been postponed until Monday night.

The Weather

Table with weather forecast: Cloudy and cool with occasional rain today, probably ending early this afternoon; partly cloudy and slightly cooler tonight; Friday fair with moderate temperature is the noon weather forecast for Western Pennsylvania.

BUTCHER GIVES HIS CUSTOMERS AN ASPIRIN TO EASE PRICE-ACHE

KALAMAZOO, Mich., Aug. 5.—Merle Nichols, Kalamazoo butcher, is doing something to alleviate headaches caused by high meat prices.

SOVIETS RELEASE WESTERN BARGES

BERLIN, Aug. 5.—The Russians yielded apparent advantages to the west in Berlin and at the zonal border today in what seemed to be their first conciliatory gestures since they started tightening the screws on the western powers in Berlin.

Seven Babies At Local Hospital

Seven babies were born at Connelville State Hospital, according to the birth registry.

Community Fund Pledge Payments Asked by Humbert

With the annual Community Fund financial appeal just about two months away, a request came from the association today for persons who yet owe on their pledges to make payments as soon as possible.

Rod, Gun Club Will Meet Friday Night, East Park

President Harry T. Arnold today called a special meeting of the Connelville Rod & Gun Club to be held at East Park at 7 o'clock Friday evening.

TRAPPING DEMONSTRATION WILL FEATURE EAST PARK WILDLIFE SHOW NEXT WEEK

Trapping demonstrations will feature the wildlife exhibit of the Connelville Rod and Gun Club at East Park next Wednesday, Thursday and Friday, it was announced today.

Diet Will Immunize Persons From Polio, Physician Asserts

ASHEVILLE, N. C., Aug. 5.—A former Navy doctor today claimed "without reserve" the discovery that a controlled diet will immunize a person within 24 hours from infection by the dread infantile paralysis virus.

Post Mortem Shows Aged Man Beaten, Kicked In Fatal Quarrel

UNIONTOWN, Aug. 5.—In a post mortem examination yesterday of the body of George Carol (Carroll), beaten by his 40-year-old son, John Steven Carol at Tower Hill No. 1, a death spot behind the left ear was revealed.

Teachers In Upper Tyrone Are Assigned

Mrs. Helen Reagan announces the placement of teachers in the Upper Tyrone township schools, of which she is supervising principal, as follows:

Army Engineers Plan Fairbank Flood Projects

Special to The Courier. UNIONTOWN, Aug. 5.—As soon as Army engineers verify agreements with the county commissioners as to rights-of-way and adjustments of utilities, contracts for the deepening and straightening of Dunlap Creek and Saltlick Run in the Fairbank district will be awarded.

Goker Cheer Leaders, Majorettes to Meet Friday Afternoon

A meeting of cheer leaders and majorettes of Connelville High School Band will be held at 4 o'clock Friday afternoon in the Cameron band room, according to the Director Harry E. Mitchell.

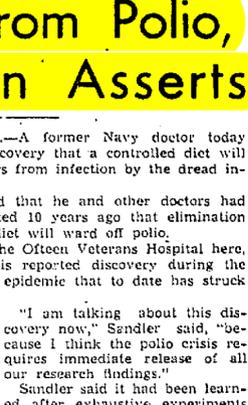
Mary Ellen Mallory Now Airline Hostess

Miss Mary Ellen Mallory, who recently graduated from St. Francis Hospital School of Nursing in Pittsburgh and passed her State Board examination, has been graduated from the McConnell School for airline hostesses at Minneapolis, Minn.

VA Dental Chief

WASHINGTON, Aug. 5.—Dr. B. R. East, professor of dentistry at Columbia University, has been named chief of the Veterans Administration dental service. He will take over his new duties September 7.

Spy Queen Talks



SELF-ADMITTED former Soviet espionage agent, Miss Elizabeth Bentley, testifies before a Senate investigating sub-committee in Washington.

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Mrs. Helen Reagan announces the placement of teachers in the Upper Tyrone township schools, of which she is supervising principal, as follows:

Commissioners May Dismantle Span Over Yough

UNIONTOWN, Aug. 5.—Plans are being discussed for the dismantling of the double-deck iron bridge over the Youghiogheny River at Broad Ford and the use of at least part of the steel on other bridges.

Painter Hurt In Fall From Ladder

William Geiger, 31, of 615 North York avenue, employed as a painter by Albert Enany of Connelville, is reported in a fair condition at Connelville State Hospital where he was admitted at 2:30 o'clock Wednesday afternoon after falling off a ladder while working in the South Side.

Farmer Ends Life

SOMERSET, Aug. 5.—Merle Vought, 49, Berlin, R. D., farmer, ended his own life Tuesday by firing a .22 calibre rifle bullet into his head. The coroner said he had been in poor health.

Coal Miner Hurt

Carl Butcher, 38, of Maxwell, was taken to Brownsville General Hospital with an injury to the right foot suffered while at work in the Maxwell mine Wednesday.

Will Cost \$2.50 For Trip Across Proposed Turnpike, Pittsburgh-Philadelphia

Completion of the extension is expected to boost traffic on the road. The toll for the enlarged road of \$2.50. For travel over shorter portions, the toll will be about a cent a mile.

Says Atomic Bomb Materials Given Russians in 1943



WASHINGTON, Aug. 5.—A House subcommittee chairman charged today that this country shipped atomic bomb materials to Russia in 1943 after Soviet agents put "tremendous pressure" on this Government.

Confluence Council Hits State for Span Repair Delay

CONFLUENCE, Aug. 5.—The State Highways Department was rapped by Confluence Council for failing to complete repairs to a bridge over the Youghiogheny River, one end of which is located in the borough.

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Sportsmen Asked To Stretch Wire For Holding Pens

A call for the assistance of sportsmen in completing holding pens for pheasants being raised in cooperation with the State Game Commission was issued today by Joe Moreland.

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## **POLIO DIET IS SUGGESTED**

**Low Sugar and Starch Use Seen  
Aid in Controlling Disease**

ASHEVILLE, N. C., Aug. 5 (AP) —Dr. Benjamin Sandler of Asheville believes that a major cause for susceptibility to polio is low blood sugar in the body. He says that a diet low in sugars and starches will control the disease.

A member of the staff at Oteen Veterans Hospital, he has based his findings on experiments with rabbits and monkeys. He is a specialist in nutrition research.

"Community cooperation and the general acceptance" of his proposed diet would control North Carolina's worst polio outbreak in about two weeks, he said today.

Through today the State Board of Health reported 1,199 cases and sixty-five deaths this year. Spokesmen for the board were not immediately available for comment on Dr. Sandler's proposal.

Dr. Sandler recommends that during the polio season that the diet of sugar, soft drinks and juices and pastries be eliminated. He also advises cutting down on breads, rice, corn cereals and grits. He favors consumption of more pork, beef, fish and dairy products-

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**Stomach Aches Now Coming Up**



Simon Murray (second from right) gets ready to give the starting signal to four youngsters entered in a hot dog eating contest at a children's picnic in Chicago Thursday. The kids are (from left): Richard Christie, 9; Michael Considine, 9; Jimmy Kilma, 5; and Richard Kubat, 11.—(Associated Press Photo.)

**Doctor Balks Polio With Blood Diet**

Asheville, N. C.—(AP)—A former navy doctor Thursday claimed "without reserve" the discovery that a controlled diet will immunize a person within 24 hours from infection by the dread infantile paralysis virus.

Dr. Benjamin P. Sandler said that he and other doctors had learned through experiments started 10 years ago that elimination of sugars and starches from the diet will ward off polio.

Sandler, now a physician at the Oteen Veterans hospital here, released the information about his reported discovery during the height of a record-breaking polio

epidemic that to date has struck 1,172 persons in North Carolina.

"I am talking about this discovery now," Sandler said, "because I think the polio crisis requires immediate release of all our research findings."

Sandler said it had been learned after exhaustive experiments that infantile paralysis victims frequently have a low blood sugar content, caused by eating sugars and starches.

"Cut out those foods and in one day's time the body builds up sufficient resistance to ward off the polio virus," he said. "I am willing to state this without reserve."

Sandler's "polio immunization" diet means avoiding all sweet foods. Soft drinks, fruits, ice cream, candy and such delicacies are forbidden, as are the starches like bread or rolls, pancakes and potatoes.

Sandler recommends three square meals a day, however, with emphasis placed on protein protec-

tive foods such as meats, fish, poultry, milk and milk products.

He agrees with most other polio researchers that plenty of rest is also required.

Sandler explained the oddity of a low sugar count being caused by eating too much sugar.

Eating sugar raises the blood sugar briefly, he said, but in the

long run it lowers the count greatly.

Sandler said that hot weather diet has plenty to do with the prevalence of polio during the summer months.

**BLOCK APPREHENDED.** Cedar Falls—P. F. Block, wanted here to face a charge of passing a number of worthless checks, has

been apprehended in Des Moines, where he is held on a similar charge, according to word reaching police here late Wednesday. Police Chief Earl Immer Thursday sent a requisition to the Des Moines department so that Cedar Falls may bring Block to trial here after the capital city gets through with him.

**NASHUA WOMAN ILL.**

Nashua, Ia.—(Special)—Mrs. Andrew Hansen, who has been in poor health for sometime, is confined to her bed at her home in Nashua, and able to take very little nourishment. Also on the sick

list at his home in Nashua is Philip Carpenter, who is having a siege of rheumatism.

**ELEVATOR EXPANDING.**

Holland, Ia.—(Special)—The Stout elevator, owned by K. W. Brandt, is to have a new feed

grinding and mixing building on the elevator lot. Its dimensions are 30 by 58 feet and the building, of frame construction, will have all modern machinery. The building will not be ready for use until early winter.

**Johnson**  
**FARMS DAIRY**

More than 50% of our customers—both wholesale and retail—have been with us continuously over a period of years.

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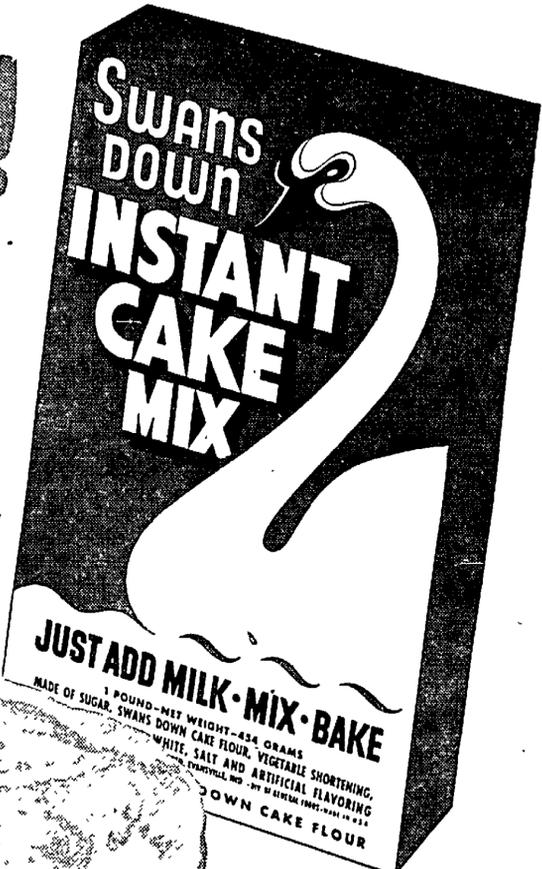
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<b>RINSO</b> NEW WITH SODIUM LIMIT 1 WITH COUPON LARGE PKGE. <b>27c</b>	<b>ALCOHOL</b> RUBBING LIMIT ONE WITH THIS COUPON PINT <b>6c</b>
<b>CLIP THIS COUPON</b>	<b>CLIP THIS COUPON</b>
<b>CLEANSING TISSUES</b> LIMIT ONE PKGE WITH COUPON <b>50c</b> or <b>16c</b>	<b>RED CROSS TOILET TISSUES</b> 1000 SHEET ROLL LIMIT 2 ROLLS WITH COUPON <b>2 for 17c</b>

<b>KLEENEX 300</b> 27c	<b>TAMPAX TAMPONS</b> No Bells No Pins <b>10 for 35c</b> 40 for \$1.19	<b>Ayds Vitamin Gandy</b> Reducing Plan 30 Day \$2.89 Supply
<b>60c DRENE</b> With Hair Conditioning Action <b>49c</b>	<b>PEPSODENT TOOTH PASTE</b> Large Tube <b>43c</b>	<b>SCHICK INJECTOR BLADES</b> <b>20 for 69c</b>
<b>PEPTO-BISMOL</b> Helps relieve upset stomach <b>4 Oz Size 57c</b>	<b>UNGUENTINE BURN OINTMENT</b> <b>57c</b>	<b>PEBECO TOOTH PASTE</b> 50c SIZE <b>43c</b>
<b>ZEMACOL</b> For Mosquito Bites, Sunburn, Windburn, Eczema <b>4 Oz Size 57c</b>	<b>BROMO SELTZER</b> For headache, upset stomach, jumpy nerves. <b>65c 57c</b>	<b>TEEL LIQUID DENTRIFICE</b> <b>39c</b>
<b>BAYER ASPIRIN</b> 5 Grain <b>100 for 59c</b>	<b>PILE TROUBLE?</b> For Quick Relief	<b>LYSOL</b> 14 Oz. <b>89c</b> 2 1/2 Oz. <b>25c</b>
<b>TONI HOME PERMANENT CREME COLD WAVE</b> The Home Permanent 9 Out Of 10 Women Buy With Plastic Curiers <b>\$2.00</b>	<b>TONI CREME SHAMPOO</b> Soft-Water Shampooing Even In Hardest Water <b>4 Oz. 95c Jar</b>	<b>MEDS REGULAR OR SUPER</b> <b>10 for 35c</b>
<b>PHILLIPS MILK OF Magnesia</b> 50c Size <b>39c</b>	<b>PHILLIPS MILK OF Magnesia</b> 50c Size <b>39c</b>	<b>BLUE-JAY CORN PLASTERS</b> <b>29c</b>

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**Swans Down**  
**Instant Cake Mix**



THE ONLY CAKE MIX MADE WITH FAMOUS SWANS DOWN CAKE FLOUR

**Miracle-perfect!** Real Swans Down cake from a mix! Yes, you'll get blue-ribbon white cake of true Swans Down quality—so light that you can't feel it on your fork, so flavor-true you can't believe you didn't mix it the hard way!

**Miracle-easy!** Just add milk, beat and bake! None of the usual cake-chores like creaming shortening, beating eggs, sifting, washing endless dishes!

**Miracle-quick!** 4 minutes from box to oven! Just put Swans Down Instant Cake Mix in a bowl, pour in the milk, beat. Zing—there's your batter, ready to bake into delicious, homemade cake!

**And no skimping!** Full 16 ounces in the box, enough for 2 high 8-inch layers!

Swans Down Instant Cake Mix bakes up into a lavish, luxurious looking prize winner!

More miracles! Besides glorious white cake, you can make all your other favorites with this wonderful new cake mix. Yellow cake, chocolate cake, spice cake, etc., cookies. Recipes right in the package. And every one a Swans Down triumph!

**Special Bargain!**

Send 75c and top from your box of Swans Down Instant Cake Mix to Swans Down, Dept. D., Battle Creek, Michigan. Get 2 heavy aluminum 8-inch layer cake pans, ideal size for use with Swans Down Instant Cake Mix.

Offer may be withdrawn without notice if supplies are not available. Good only in U.S.A. This offer void in any state, municipality, or other locality where prohibited, taxed, or otherwise restricted. This offer expires Jan. 1, 1949.

**Hurry! Get a package at your Grocer's today!**

**BUY GIANT SIZES and SAVE!**

AMERICA'S FAVORITES  
**COLGATE-PALMOLIVE TOILETRIES**

<b>COLGATE DENTAL CREAM</b> 41c Giant Size	<b>BALMOLIVE GIANT SIZE</b> LATHER SHAVE CREAM <b>45c</b>	<b>COLGATE GIANT SIZE</b> LATHER SHAVE CREAM <b>45c</b>
<b>VETO DEODORANT</b> 59c Economy Size	<b>VASELINE GIANT SIZE</b> HAIR TONIC <b>73c</b>	<b>COLGATE GIANT SIZE</b> TOOTH POWDER <b>37c</b>
<b>HALO SHAMPOO</b> 79c Giant Size	<b>PALMOLIVE GIANT SIZE</b> BRUSHLESS SHAVE CREAM TUBE <b>41c</b>	<b>COLGATE GIANT SIZE</b> BRUSHLESS SHAVE CREAM TUBE <b>41c</b>

**IMRA HAIR REMOVER** \$1\*

**75c Size LISTERINE**  
For Infectious Dandruff  
**14 Ounce 69c**

**SHASTA THE NEW BEAUTY CREAM SHAMPOO**  
IN A JAR  
Leaves Your Hair Shining, Manageable, Lovely to Touch  
**LARGE SIZE 79c 49c**

**Coollest Thing on Two Feet**  
Nothing like frosty-white medicated Ice-Mint to put tired burning feet in cool blissful comfort. Just rub on—relief in jiffy. Helps soften callouses, too.  
**ICE-MINT 55c AND 98c**

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aches and somnolence probably are the result of the chronic hypercapnia.<sup>5</sup>

Therapy has not been effective and prognosis is poor. Heart failure and respiratory infection develop frequently, and mechanical support of ventilation is often necessary. Pharmacologic or electrical stimulation of respiration may offer hope for the future.

*Charles J. Paine, M.D.\* and  
Marion D. Hargrove, Jr., M.D.\*\*  
Shreveport*

foods, he ate potatoes, green corn, and peas, which he raised. He wrote, "I sometimes caught a mess of fish for my dinner, and once went so far as to slaughter a woodchuck which ravaged my bean field. . . . It was fit that I should live on rice, mainly, who love so well the philosophy of India. . . . The reader will perceive that I am treating the subject rather from an economic than a dietetic point of view."

Thus, Thoreau lived on a quantitatively adequate diet from the caloric standpoint, but on a qualitatively poor diet because of the very small amount of protein-rich foods. For two years, he ate enough to appease hunger and rarely catered to appetite. "Yet men have come to such a pass that they frequently starve not for want of necessaries, but for want of luxuries," he wrote. The essential and more expensive protein-rich foods such as, meat, poultry, fish, pork, eggs, cheese, milk and butter, presumably were the luxuries referred to.

My purpose in this communication is to suggest that Thoreau's diet during the two years at Walden consisted mainly of foods with high carbohydrate content, chiefly starch, and was woefully lacking in high quality protein. Based on clinical research in the treatment of tuberculosis with a low carbohydrate high protein diet,<sup>1,2</sup> I concluded that the most important factor in susceptibility to tuberculosis was poor nutrition, and specifically a diet deficient in high quality protein. Individuals who eat to excess to the point of obesity may develop tuberculosis because of deficient protein intake. Among my patients there were several who were obese and who had far advanced cavitory disease.

Faber,<sup>3</sup> in an analysis of factors responsible for the increase in tuberculous mortality in Denmark, Sweden, and England during World War I, concluded that the reduced consumption of meat and fish was the most important nutritional factor. He found that "the total calories consumed was not diminished because there was sufficient bread and flour."

Thus, it is possible that Thoreau developed a tuberculous lesion of minimal extent during the two years on his Walden diet. The lesion probably became inactive after he left Walden and returned to Concord to live with his family where his diet improved. The lesion could have remained inactive or quiescent until he caught a severe cold in December, 1860. The cold persisted and developed into chronic bronchitis with cough which lasted all through 1861. His condition gradually worsened and he died of "consumption" on May 6, 1862.

*Benjamin P. Sandler, M.D.  
Asheville, North Carolina* ■

\*Chief Resident in Medicine, Louisiana State University Medical Center School of Medicine.

\*\*Professor and Head, Department of Medicine.

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## Thoreau, Pulmonary Tuberculosis and Dietary Deficiency

*To the Editor:*

I wonder if Henry David Thoreau was responsible for his death from pulmonary tuberculosis in his prime at the age of 45? He lived the simple life, did not drink or smoke, and spent much time in outdoor activities. As far as we know, he had no contact with a tuberculous individual. During the two years of Spartan life at Walden pond, from July 4, 1845 to September 6, 1847, he tried to be self-sufficient in all aspects of living and wanted to prove that one could maintain health on a cheap, plain diet. His expenses for food for eight months was \$8.74, for such staples as rice, molasses, rye meal, Indian meal, salt pork, flour, sugar, lard, apples, dried apple, sweet potatoes, one pumpkin, one watermelon, and salt. In addition to these

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## The Mechanism of Bronchial Breathing

Though "bronchial breathing" is a well known physical sign and generations of medical students have been taught its recognition, no clear explanation as to the production of its characteristic features appears in medical texts.

Consideration of events taking place during the respiratory cycle provides an understanding of "bronchial" breath sounds. "Bronchial breathing" and its close associates "tracheal" and "tubular" breathing represent the normal sounds of air flowing back and forth through the bronchial tree. The sounds of bronchial breathing are heard almost unchanged since they are transmitted to the stethoscope by the nonaerated tissue of collapsed or consolidated lung. Because of the tubular structure of the bronchial tree, breath sounds originally contain a number of single frequencies giving them a somewhat musical quality.<sup>1</sup> Also, as might be expected, inspiration and expiration produce sounds of almost equal intensity, both reaching maxima at

periods of peak flow. It is these features which characterize "bronchial breathing."

So-called normal breath sounds, *ie* those heard over aerated lung, have necessarily a very different quality. Firstly, air passing through progressively smaller bronchi and bronchioles results in the production of sounds containing an increasing number of different frequencies, while the interposed alveoli provide a vast quantity of tiny sound absorption units,<sup>2</sup> so that sounds arriving at the chest wall have lost much of their musical character and volume. Of equal importance is that the auscultated sound has passed through the lung at varying degrees of aeration, the amount of which depends on the particular instant of time in the respiratory cycle. During maximal flow at the start of inspiration the lung is at its smallest volume and the minimum of aerated lung separates the bronchial tree from the chest wall. Inspiration is therefore comparatively loud. This is not so during expiration since peak flow takes place with the lung volume at its greatest, so that the maximal quantity of aerated lung lies between the bronchi and the chest wall. Expiratory sound is consequently much quieter than inspiratory.

It is therefore "bronchial breathing" which most faithfully represents sounds created in the bronchial tree. So-called normal or vesicular breath sounds are altered by the varying properties of the tissues through which they pass.

J. L. Mercer, M.B.

St. Bartholomew's Hospital, London, England

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# ***Dr. Benjamin P. Sandler, Nutritionist, 77, Is Dead***

**Dr. Benjamin P. Sandler, who specialized in preventive nutrition, died Friday in Asheville, N.C., after a long illness. He was 77 years old and a resident of Asheville.**

**Dr. Sandler gained attention in the 1940's when he began to publish his controversial theories linking refined sugars and starches to the development of diseases, specifically tuberculosis, polio and heart disease. He believed that a diet low in sugars and starches and high in proteins would decrease the body's susceptibility to disease. Dr. Sandler wrote two books developing his theories, "Diet Prevents Polio," and "How to Prevent Heart Attacks." He also wrote numerous articles on nutrition, some of which appeared in the diet and health magazine, Prevention.**

**Dr. Sandler's articles recommending a low carbohydrate diet to treat tuberculosis were published in 1942 while he was serving in the Navy Medical Corps. He left Navy with the rank of commander in 1947, and served as a captain in the Navy Reserve until 1963.**

**In 1948, he joined the staff of the Oteen Veterans Hospital in Oteen, N.C., near Asheville, and he remained on the hospital staff until he retired in 1972.**

**He is survived by his sister, Ethel Sandler.**

**The New York Times**

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## DIET IS MAJOR FACTOR IN POLIO PREVENTION, DR. SANDLER BELIEVES

*(From The Asheville Citizen, August 5, 1948.)*

A theory concerning a major cause for human infection with polio has been advanced by Dr. Benjamin P. Sandler, of Asheville, N. C.

Dr. Sandler, a recognized authority in nutrition research, was the first doctor to transmit polio to the rabbit, believed to be immune, a test he completed in 1938.

His theory is two-fold — he believes he has found a major cause for polio in humans, and he believes that preventive measures are simple, easy, and quickly applicable.

Dr. Sandler believes that the major cause is the low blood sugar in the human body, caused, paradoxically as it may sound, by eating too much sweets and starchy food.

The preventive measures? Cut out foods containing sugars and starches.

In 24 hours, according to Dr. Sandler, the body can build up sufficient resistance to the polio virus to prevent disease. The diet would have to continue, of course.

"The crisis is here and hours have become precious," he said. "I have been impelled to bring this directly to the newspapers because of my profound conviction that, through community cooperation and general acceptance of a diet low in sugars and starches, this epidemic can be got under control in about two weeks time.

"I am willing to state without reserve that such a diet, strictly observed, can build up in 24 hours time a resistance in the human body sufficiently strong to combat the disease successfully. The answer lies simply in maintaining a normal blood sugar."

Here is Dr. Sandler's program:

- (1) Eliminate from the diet sugar and foods containing sugar, such as: soft drinks; fruit juices (except tomato juice); ice cream; cakes, pastries, pies; candies; canned and preserved fruits. (Saccharin may be substituted for sugar.)
- (2) Cut down the consumption of starchy foods, such as: bread, rolls, pancakes; potatoes; rice; corn; cereals and grits.
- (3) Substitute for such starch foods and starchy vegetables, the following: tomatoes, string beans, cucumbers, greens, lettuce, turnips, carrots, red beets, cabbage, onions and soybeans.
- (4) Do not eat fresh fruits or melons more than once a day, and then only in small quantities.
- (5) Eat more protective protein foods, such as: eggs, pork and beef products; fish (fresh or canned); poultry; milk, cream and cheese.

Eat three substantial meals a day, advises Dr. Sandler. And avoid exertion and fatigue because they are known to be associated with low blood sugar content. Avoid swimming in cold water. Rest as much as possible.

Dr. Sandler suggests that the recommended diet be followed until the polio danger season officially is declared over by local health authorities.

"One of the puzzling characteristics of polio," Dr. Sandler said yesterday, "has been its prevalence in warm weather. Many people

cut down on protective protein foods— such as meat, fish and poultry — because of a mistaken idea that a ‘light’ diet is better for them in warm weather. And they increase consumption of cooling foods and beverages — most of them heavily sweetened. It is this increase in consumption of sugar that produces a lowering of blood sugar and thereby a lowering of the body’s resistance to the polio virus and other diseases."

Here is the basis for the Sandler theories:

A normal blood sugar content of 100 milligrams in each 100 cubic centimeters of blood is necessary to maintain resistance to bodily infection. Any appreciable lowering of this blood sugar content (say, to from 75 to 55 mg.) can lower the barriers and permit bodily invasion by the virus of polio.

Dr. Sandler offers as the scientific basis for these statements research done with rabbits and monkeys. This research he began at Willard Parker hospital in New York during the metropolitan area’s record polio outbreak of 1931.

Authorities had noted that rabbits normally are resistant to polio virus. Dr. Sandler, observing that studies showed that in rabbits the blood sugar never dropped below 100 mg., began pondering the far-differing case of the rhesus monkey, a notoriously easy prey to poliomyelitis. In monkeys, blood sugar content frequently was observed to fall to abnormally low levels, around 50 mg.

Furthermore, observations on humans who had recovered from polio revealed low blood sugar — hypoglycemia is the technical term — to be frequently present.

From these — rabbits, monkeys and humans — Dr. Sandler first deduced that low blood sugar could be an important factor in susceptibility to the polio virus.

The job was to check this deduction through experiments in which the blood sugar content of rabbits would be lowered and their susceptibility to polio again tested.

In the laboratories of the Morrisania hospital in New York 10 years ago, Dr. Sandler began a series of experiments in which insulin was injected in rabbits to lower the blood sugar for periods of four to six hours. Once the blood sugar content had been thus dropped, the doctor attempted again to transmit the polio virus to the normally highly resistant animals. The rabbits then fell easy victims.

The animals showed evidence of polio infection within eight to 10 hours after intracerebral inoculation with the virus, indicating rapid spread of the disease during the period of hypoglycemia. (Dr. Sandler reported on these studies in the American Journal of Pathology in January, 1941). Some rabbits died within 14 hours after infection. Characteristic nerve-cell destruction with paralysis was in evidence.

Chronic hypoglycemia (low blood sugar) is a common disorder in childhood and adolescence, Dr. Sandler points out, and is readily influenced by diet as well as exertion. This, he believes, serves to explain the high incidence of polio in younger age groups, as well as the frequently reported occurrence of the disease following strenuous physical exertion.

Dr. Sandler received his degree in medicine at New York university in 1931. He interned at Morrisania city hospital in New York city and later was on the staff there as well as Polyclinic and Montefiore hospitals in New York city. From July, 1941, until February, 1947, he was in the U. S. naval medical corps, attaining the rank of commander.

He has done considerable research in polio and the relationship between diet and disease. He has published six papers on the latter subject, as well as papers on other medical subjects. His research includes a period assisting the research staff at Willard Parker hospital in New York city during the epidemic there in 1931, and independent research later, when he "gave" polio to a rhesus monkey, transmitted it to a rabbit, and then to another monkey.

Summarizing the evidence for my contention that low blood sugar is a factor of susceptibility to polio, and that a diet aimed to prevent low blood sugar can prevent polio, I submit the following:

1. Low blood sugar is not present in the rabbit, a non-susceptible animal.
2. Low blood sugar is present in monkeys, a susceptible animal.
3. Inducing low blood sugar in rabbits with insulin renders the animals susceptible.
4. Physical exertion, swimming in cold water, predispose to polio because they may be associated with low blood sugar.
5. The diet campaign aimed to prevent low blood sugar and thereby prevent polio had a significant effect on the number of cases during the 1948 epidemic both locally in the city of Asheville, the state of North Carolina, and in the nearby southeastern states as shown by the earlier peak dates in those states. The diet campaign also had a significant effect on the number of cases throughout the country as shown by the change in the trend of the 1948 epidemic when compared with the trend in 1946.
6. The unique change in the graph comparing 1946 with 1948 is exceptional, in that the change occurred immediately after the release of the diet instructions, and because such a change had never before occurred in the history of polio in this country.
7. Although the 1949 polio epidemic for the country as a whole was more severe than the 1948 epidemic, the city of Asheville and the state of North Carolina experienced the greatest reduction in the number of cases in 1949 in spite of the fact that North Carolina had the second highest case rate in the country in 1948. The state of North Carolina had a case rate of 66.3 in 1948 and a case rate of only 6.3 in 1949. South Dakota had a case rate 153.9 in 1948, the highest in the nation, but showed a reduction in 1949 to only 63.0.
8. Polio epidemics have occurred throughout the world in past years only in those countries with high per capita sugar consumption. Epidemics are unknown in countries with low sugar consumption. The greater the sugar consumption the more severe the epidemic.