

NUTRITION

# New Disease Discovered by Government Health Service

## Lack of One of New Vitamins, Riboflavin, Causes Ugly Moist Sores and Cracks at Corners of Mouth

**D**ISCOVERY of a new, disfiguring disease which people get from a diet lacking in one of the new vitamins, riboflavin, was announced by Drs. W. H. Sebrell and R. E. Butler, of the U. S. National Institute of Health, Washington, at the meeting of the American Institute of Nutrition.

Ugly moist sores and cracks at the corners of the lips appear in patients suffering from this ailment. Later the skin around the nose and on the ears gets red and slightly greasy and peels. This disfiguring condition, which has been confused with pellagra in the past, is quite prevalent, Dr. Sebrell believes. He first discovered it in the South, but has already had reports of a dozen cases seen in Bellevue Hospital in New York City. A similar condition has been reported from Malaya and India.

The ailment is due to lack of riboflavin, a chemical which has only recently been discovered as an essential of the diet and which belongs in the class of the vitamins. Giving this chemical to the patients cures the condition. Nicotinic acid, cure for pellagra with which the disfiguring condition has been confused, does not cure this new disease, Dr. Sebrell found from study of 18 women suffering from the ugly sores at the corners of their mouths.

The sore mouths are probably only the outward signs of a general change in the body resulting from lack of riboflavin in the diet, Dr. Sebrell explained. The condition is new only in the sense that it has just been recognized as a

separate ailment. When more cases have been studied, other and possibly more serious effects of riboflavin lack may be discovered. Dr. Sebrell has christened the new ailment ariboflavinosis. He pronounces that jaw-breaking scientific name with all the vowels long except the last "i" and accents the second and next to last syllables.

## Hunt For Unknown Vitamin

**A** NEW and still undiscovered vitamin, necessary for health and perhaps for utilization of nicotinic acid to prevent pellagra, was hinted at in the report of Drs. C. A. Elvehjem, Harry A. Waisman and A. E. Axelrod of the University of Wisconsin. Dr. Elvehjem's discovery of the importance of nicotinic acid in animal nutrition is what led to its use by physicians to cure pellagra.

Liver extract, for example, does more good to a dog sick with black tongue, canine counterpart of pellagra, than can be accounted for solely by the amount of nicotinic acid in the liver. Search for some other substance in liver, possibly another vitamin, which may account for this effect is now under way.

Various foodstuffs are also being investigated to determine which ones contain most nicotinic acid. Since there are no entirely satisfactory chemical tests yet available, the nicotinic acid content of foods must be determined by "trying them on the dog," that is, seeing which ones are best for curing or preventing black tongue in dogs. Only certain foods,

the Wisconsin investigators found, will produce rapid improvement when given in amounts that a sick dog will readily consume. This group of foods includes practically all animal tissues and yeast.

## Apple Powder vs. Lead

**S**OMETHING in apples, probably the pectin, absorbs lead, such as found in lead arsenate spray, and keeps the lead from being retained in the body when eaten with apples or apple powder, it is claimed as a result of experiments announced by J. B. Shields, Prof. H. H. Mitchell and Prof. W. A. Ruth of the University of Illinois.

This will be taken to mean that there is no need to worry over possibility of lead poisoning from eating the residue of lead arsenate spray along with sprayed apples, but the Illinois investigators stated emphatically that no sweeping conclusions should be drawn as their investigations were not made on the poisonous effects of lead but only on its retention as affected by constituents of apples.

The studies were made on rats that were fed diets containing various combinations of apple powder and lead arsenate and also diets containing lead arsenate without apple powder. As more apple powder was added to the diet, the amount of lead retained in the rats' bodies got smaller. The storage of lead was modified 21 per cent by the presence of 15 per cent apple powder in the diet and 55 per cent by the presence of 60 per cent apple powder in the diet.

*Science News Letter, June 3, 1939*

CHEMISTRY

## Continuous Bleaching For Textiles Developed

**P**EROXIDE is the basic reagent of a new continuous bleaching process announced by the E. I. du Pont de Nemours and Company.

The new process is claimed to be extremely simple. The goods being bleached are saturated in a rope form and pass into a reaction box where the bleaching occurs. Continuously the materials are pulled through washers to the white bins. The method has been successfully applied to cotton piecegoods lighter than sheeting.

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Tracks of a big dinosaur that took 12½ foot strides have been found on the Navajo Indian Reservation near the Grand Canyon.

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