

with a concentration of more than one part of iron to 50,000 of water is poison to the cells. Yet if the solution entirely lacks iron the tissue stops growing and will not resume growth until at least a trace of iron is supplied. Other tests have suggested that plant cells prefer to feed on sucrose (cane sugar) rather than the

simpler sugar, glucose; a conclusion at variance with the statements in most textbooks. Still further researches are being conducted on mineral requirements, vitamin, enzyme and hormone reactions, and other physiological problems simplified by the undifferentiated samples of plant life in the laboratory dishes.

Science News Letter, January 3, 1942

can greatly improve diet, Dr. Clark said. The improved diet is not always reflected in improved school work, however. Where children are suffering an extreme lack of some vitamin, supplying the vitamin in large amounts greatly stepped up their rate of learning. In cases not so extreme the effect was little.

Science News Letter, January 3, 1942

PSYCHOLOGY—MEDICINE

Scared Feeling, Tearfulness Cured in 30 Minutes

Injections of Vitamin B₁ Give Quick Relief When Difficulty Is Caused by Vitamin Lack

A CONSTANT scared feeling, short tempers, poor memory, easily hurt feelings and tearfulness can be cured in from 30 minutes to 20 hours by injection of vitamin B₁ (thiamin) when the upset state of mind and feelings has been caused by lack of that vitamin in the diet, Dr. Tom D. Spies, of the University of Cincinnati and Hillman Hospital, Birmingham, told members of the Association for Research in Nervous and Mental Disease.

The patients whom he and his associates, Dr. John Bradley, Dr. Milton Rosenbaum and Dr. John R. Knott, examined did not have any symptoms of beriberi or polyneuritis, the serious ailments due to lack of vitamin B₁. But questions about what they usually ate showed they were not getting enough of this vitamin.

Not every nervous, frightened, irritable person can be cured by the vitamin because such upset emotional states, generally called neurasthenia, may occur from other causes than lack of vitamin B₁, Dr. Spies emphasized. The vitamin treatment, therefore, is advised only for patients who have not been getting enough of it in their food.

The swift recovery of the patients he reported apparently shows that the vitamin lack had kept their brains from functioning efficiently but had not damaged the brain cells. In some cases actual damage to brain structure might occur from the vitamin lack and in such cases recovery will not come "overnight," Dr. Spies pointed out. In such cases all the doctor can do is to supply the lacking vitamin to halt the damaging process and help the body repair the damage.

Science News Letter, January 3, 1942

PSYCHOLOGY

Better Teaching In School Will Help Children's Diet

Experiment Shows That Even in Poor Community General Diet Can Be Improved Without Other Aid

GIVING a child better food to eat may not improve his school grades, but improving the instruction he gets in school will insure that he eats better food, Dr. Harold F. Clark, of Teachers College, Columbia University, told the American Association for the Advancement of Science in Dallas.

In wartime, as well as in peace, schools

can be a crucial factor in bringing about an adequate diet to make America fit, he said in revealing details of an experiment conducted by the Sloan Foundation to show that through the schools the diet of even a very poor community can be improved without outside aid.

Even among the bottom third of the population, the proper school instruction

Need Understanding Peace

WHEN peace comes it must be based on understanding if it is not to be another Munich Pact sort of peace, Dr. H. Meltzer of the Psychological Service Center, St. Louis, told the American Association for the Advancement of Science.

In industrial relations, he said, in family relations, school relations as well as international relations, there is no promise in the peace that is a fiction, an hypocrisy.

Language should be the best means of providing understanding. But as it is used by some people, Dr. Meltzer indicated, it only serves to excommunicate them from their fellows rather than to promote mutual understanding.

"There is only one kind of peace the mental hygienist would advocate," he said, "and that is based on the kind of understanding that makes further understanding possible."

Science News Letter, January 3, 1942

Bilingual Teaching

IMPORTANCE of teaching both Spanish and English to grade school children in America's Southwest and Puerto Rico was stressed by Prof. Herschel T. Manuel, of the University of Texas, speaking before the American Association for the Advancement of Science.

"If English-speaking and Spanish-speaking peoples of the United States are to build an effective democracy," said Prof. Manuel, "they must speak a common language."

In Puerto Rico, he pointed out, a child starts his schooling in his vernacular, Spanish, and does not begin to read the second language, English, until the middle of the second year. From that point on, the part English plays gradually increases.

In the Southwest, however, the Spanish-speaking child generally has no opportunity to study his vernacular until he reaches high school. Many of these children, Prof. Manuel said, fail to develop proficiency in either language.

Science News Letter, January 3, 1942