UNUSUAL MOTHER

The shy bird that has turned its back on the camera is a Mallard duck, found nesting on this high branch.

first week of nesting the mother would leave the nest whenever anyone came near, but later she would stay until I approached within eight feet. After leaving the nest the mother mallard swam around the lake, appearing indifferent, even to crawling on the bank to sun herself and to preen her feathers. However, she would not return to the nest until she was sure that no one was near. Then she would fly to the ground, just below the nest, and look all around, before flying to a nearby branch to sit awhile before cautiously approaching the nest to sit on the eggs.

I visited the nest at 3 P.M. on the day before the eggs hatched, and noticed that only one egg was cracked. When I picked up this egg the duckling was squirming in the shell. Upon returning the following day at 1 P.M., the baby ducks were out of the nest and swimming about in a small ditch of water beneath the tree. Five of the eggs had hatched.

As I approached the mother and her brood, the young ones scurried for cover, while the mother flew a short distance out over the lake and tried to distract my attention from her babies by screaming and flapping her wings, doing a tail-skid along the top of the water and pretending she was injured.

I gathered the five downy ducklings together and after photographing them put them into the water so that they could swim to their mother, who was now about 30 feet from the shore. Immediately one of the little ducks dived from sight and swam under water for about six feet.

Science News Letter, April 4, 1936

MEDICINE

Study May Make Possible the Prevention of Mottled Enamel

A WAY to prevent the dental condition known as mottled enamel which has disfigured thousands of children in the Southwest and certain other parts of the country was suggested by Dr. George R. Sharpless of the Henry Ford Hospital, Detroit, at the meeting of the American Institute of Nutrition.

If the human body reacts toward aluminum compounds as the rat's does, a preventive for the disfiguring tooth condition may have been found. All that would then be necessary would be to add the right amount of aluminum chloride, which is a salt, to the diet of infants and children in regions where the water supply is high in fluorine content.

Mottled enamel is caused by fluorine in the water used for cooking and drinking. As little as one part per million of fluorine in the water will cause the condition, for which there is no cure. So far, there has been no practical preventive either. A few communities have been able to solve the problem by changing water supplies, but most communities where the water supply is high in fluorine content are located in the arid Southwest where there is no other water available.

Working with rats, Dr. Sharpless found that he could prevent the dental condition resulting from fluorine by adding aluminum chloride to the animal's diet. The result is achieved by a chemical reaction in which the aluminum combines with the fluorine to make a compound, aluminum fluoride. Aluminum compounds are not absorbed by the rat, so when the fluorine enters into compound with the aluminum it is eliminated from the body without getting a chance to harm the teeth.

Other substances that form insoluble compounds with fluorine were tried but were ineffective.

Science News Letter, April 4, 1936

NUTRITION

Spinach Not So Healthful As Has Been Supposed

GOOD NEWS for spinach-haters! The leafy vegetable, obnoxious to many and unwillingly eaten because of widely heralded health value, is losing its high standing, discussions at the opening session of the American Institute of Nutrition revealed.

Spinach has been considered a valuable food because it has a high content of blood-and-bone-building iron and calcium. Less than half of the iron content of spinach, however, and less than a third of its calcium are in a form that can be used by the body, it appears from a report by Drs. M. K. Horwitt and G. R. Cowgill of research made by them at Yale University with the late Prof. L. B. Mendel.

Similarly, the amount of protein available for human nutrition is not what would be thought from the amount found in spinach by analysis.

In their research, the Yale investigators devised a method which in the future can be used for determining in other foods besides spinach the amount of nourishing substances actually available to the body, as compared with the amount theoretically available as judged by the total content of these substances found in foods by analysis.

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