

which they had been excluded. But he also found that the carbohydrates in fruits and vegetables caused little if any trouble. So with protein milk, which is milk free from sugar-containing whey and which is largely curd. Feed a celiac child protein milk, bananas or vegetables (except potatoes) that contain carbohydrates and the celiac symptoms gradually disappear; allow cane or beet sugar and the usual starches (bread, cakes) and there is a relapse.

#### Experiments With Fats

Having discovered that the kind of carbohydrate given to a child made all the difference between good health and bad, Dr. Haas began to experiment with fats. It turned out that on the banana-fruit-vegetable diet, supplemented with protein milk, a child had no difficulty in digesting fat. Dr. Haas gave his children what his colleagues in pediatrics once regarded as dangerous amounts of fat. Children thrive on it.

These observations and conclusions have been confirmed by the pediatricians of Bellevue. There 603 cases of celiac disease have been treated in accordance with Dr. Haas' methods; of these, 370 could be closely studied. Only 2.2 per cent were not cured. The incurables were those who could not take a full diet at the end of three years. Some of the incurables would not adhere to the dietary rules.

Sixty years ago celiac disease was incurable and often even fatal. Today cures are certain in over 90 per cent of the cases, and deaths are rare.

There is no doubt now that by experimenting with the diet it is no longer difficult to diagnose a case of celiac disease. The method of curing the disease is also established. But what is the cause? Bellevue would like to know—one reason why it is looking for more cases to study.

## 'Celiac Disease'

### Most Children Are Now Cured But Cause Is Still Unknown

Earlier in the month, specialists in children's diseases of the New York University-Bellevue Medical Center held a joint meeting with the Society for Pediatric Research and the American Pediatric Society at French Lick, Ind. Among others who spoke was Dr. L. Emmett Holt Jr., whose name, like that of his father, has become a household word for baby health. Dr. Holt explained the revolutionary treatment of celiac disease introduced some years ago by Dr. Sidney V. Haas, a pediatrician who broke all rules by feeding the right kind of carbohydrates (starches and sugar) and normal amounts of fat to celiac children, but with strict control of other elements in the diet.

"Celia" means "belly," and "celiac disease" diarrhea. "Celiac disease" was therefore one of those meaningless, pompous names for a disease which is most often seen in children under six. The term covered up much ignorance—until Dr. Haas began his work. Before him pediatricians had little success to show for their efforts to overcome emaciation and diarrhea and to reduce huge abdomens.

#### Role of Carbohydrates

By the early Nineteen Twenties it was known that carbohydrates must not be given to children who have celiac disease. To the carbohydrates, Dr. Leonard Parsons of the University of Birmingham added fats. Even at this day many physicians follow his demonstrably invalid teaching that fats as well as carbohydrates must be withheld whenever it is found that a child apparently cannot absorb fat.

When he first began to study celiac disease, prompted to do so by the late Dr. L. Emmett Holt, père, Dr. Haas found out that the prepared carbohydrates (starch, flour and sugar in such forms as cereal, bread, cakes and sweets) certainly caused relapses after they had been restored to a diet from