

# EXPERT ADVICE ON HEALTH

## "The Listener" Launches Weekly Series Of Authoritative Articles



Spencer Digby photograph

**DR. H. B. TURBOTT** is a graduate in medicine of the New Zealand University. After a period of house surgeon's work in New Zealand he went to South China in 1923 where he had experience in hospital work and maternity and child welfare work in villages, and did research under the Rockefeller Foundation and post-graduate study at the Peking University.

In 1926 and 1927 he was back in New Zealand as lecturer in Bacteriology at Otago University. After securing the Diploma of Public Health, he was appointed Medical Officer of Health and School Medical Officer at the East Cape, where he spent the next six years. While in that area he carried out research into nutrition by a mass milk-feeding experiment in 1931 as well as research into the susceptibility of children to tuberculosis, diphtheria, scarlet fever, and hydatids, and work on the prevalence of tuberculosis among Maoris.

Dr. Turbott went to Samoa in 1935 as Chief Medical Officer, and inaugurated child welfare work there. He spent from 1935 to 1939 as Medical Officer of Health at Hamilton. While in the Wai-kato he organised a tuberculosis clinic for the Maoris and ran a diphtheria campaign under which approximately 11,000 children were protected.

In 1940 he was appointed Director of the Division of School Hygiene, Health Department.

(Continued from previous page)

of politics, his brilliant term as Governor of New York, his desperate fight against infantile paralysis. Later comes the culmination of his years of public life, his election to the Presidency. From then on the story has all the authenticity of a series of newsreel shots, until he makes his dramatic denunciation of war and his prophesy, "Let no one think America can escape. War is a contagion."

The script of Roosevelt, *Man of Destiny*, which necessitated a great amount of biographical research, was the work of J. O. Reid and Irene Sheldon, who worked under the editorship of R. C. Hickling, known in Australian radio for the *March of Time* feature.

"Roosevelt, Man of Destiny," is heard every Tuesday and Friday at 9.15 p.m. from all ZB stations.

Are you interested in health? You must be to some extent or you would not be alive to read this. But there is a big difference between merely keeping alive and keeping well. In point of fact, most of us have probably become more health-conscious today than ever before, but with so many voices proclaiming ways to keep well it would be strange if we were not sometimes bewildered to know which to listen to and accept as authoritative.

So we are sure that our readers will welcome the series of short and informative articles on health and diet which we launch in this issue. These articles are written by Dr. Muriel Bell, Nutritionist to the Department of Health, and by Dr. H. B. Turbott, Director of the Division of School Hygiene; and that they are authoritative is obvious from the summaries of the writers' careers on this page. Dr. Bell and Dr. Turbott will take it in turn each week to contribute these articles, which will include such topics as "Canned Foods," "Nutrition and the Teeth," "Colds, the Common Enemy," "Family Pets and Family Health," "The Argument for Wholemeal Bread," "Liver and Bacon," "Dr. Diet," "Dr. Quiet," and Dr. Merryman, "Influenza," "How to Avoid Tuberculosis," "The Adolescent Appetite," "Food for the Expectant and Nursing Mother," "Sore Throats," "Household Pests," and many others equally as varied and vital. The first of the series appears below.

No. 1.

## APPLES — THEIR NUTRITIONAL VALUE

By Dr. Muriel Bell

**C**HILDREN never say "No" to fruit, whatever may be their reaction to spinach. Farmer Brown's apples are always a temptation—escapades in plenty are on record of excursions into forbidden territory and up forbidden trees. Perhaps this is an instinctive compulsion, for apples are one of the "protective" foods. We classify foods into those that are protective and those that are supplementary or energy foods.

Why can they claim to be called "protective"? Possibly you will contend that they are nearly all water. But they have food value, too. They contain starches and sugars in varying proportions, giving them a little fuel or energy value as well. The protective nature of the apple arises partly from its power of acting as a laxative to the intestine, partly from its action in assisting in resistance against disease.

Its laxative qualities come from the stimulating effect which the material of the cell walls of all plant tissues have on the movements of the intestine, as well as from the organic acids present. These organic acids actually turn into alkalis before the body has finished

with them, and the apple has indeed more alkali in it than acid. The organic acid contained in ripe apples is only a mild acid, and possesses no retarding effect on the digestion of starch, and indeed the apple exemplifies the fact that there is no harm in combining acids and starches in our foods.

### Resistance to Disease

Its power of helping us to resist disease is conferred by two constituents. First, the vitamin C which is protective against scurvy by keeping our capillary blood vessels strong, and which helps the baby form good teeth, and which also provides us with a means of acquiring immunity to the action of harmful bacteria. Vitamin C is always used up in illnesses when we run a temperature; when we have a cold we crave for orange and lemon and black currant drinks which are the richest sources of this vitamin.

The second protective substance is pectin, the material which the housewife boils out to form her apple jelly. It is by virtue of the pectin present that grated ripe apples are useful as a cure for summer sickness in babies, a home remedy that has been known in Europe for a century, but only recently applied in English-speaking countries. Pectin contains substances called uronic acids; these have the power of combining with toxins produced by the bacteria which causes diarrhoea. The pectin has the further power of helping the blood to congeal when there is inflammation. Thus we find that the apple has a sort of two-



**DR. MURIEL E. BELL** is a graduate of the Otago Medical School, where she also had 12 years' teaching experience in the subjects of Physiology, Biochemistry and Experimental Pharmacology, followed by three years' experience in hospital laboratory work in England and New Zealand. During three years' tenure of a Scholarship of the Royal Society of Medicine for Medical Women of the British Empire, she did nutrition research at the Department of Biochemistry, University College, London, under Professor J. C. Drummond, who is now Scientific Advisor to the British Ministry of Food. In 1928, Dr. Bell married James Saunders (Dunedin) who died last year. During a trip abroad in 1928 she studied in Vienna and London, and on her return to New Zealand took up laboratory work at Napier Hospital. Research work in New Zealand has included work on the diagnosis of goitre in human cases and investigation of the deficiency disease known as "bush sickness" in animals.

Dr. Muriel Bell was appointed as Nutritionist to the Department of Health in October, 1940. As this is a dual position, involving research work, she is stationed at Dunedin, where laboratory facilities are available at the Medical School, and where co-operation with the Home Science School is possible. The position also entails being called on for advice on dietetic matters in connection with schools, training colleges, hostels and hospitals, as well as routine nutritional problems of the Department of Health.

way action—protective against constipation and curative of diarrhoea. The pectin is still present in cooked apples, indeed it is liberated during the process of cooking. The apple is still valuable therefore after it has been cooked, even though its vitamin C may have been destroyed during the cooking.

If we add to these qualities its mineral salts and the value of a raw apple in cleansing the teeth, the apple is truly an agent which keeps not only the doctor, but also the dentist away.

[Next week: "Colds—the Common Enemy"]