

Obituary notice

Professor Dr Chem. Barend Coenraad Petrus Jansen

(1 April 1884–18 October 1962)

In a statement about an old friend whose loss we all feel deeply, it is not possible to convey the charm, the great capacity for friendship, combined with friendly criticism, which was so characteristic of Professor B. C. P. Jansen to those who had the privilege to know him. The bare recital of the facts about his life and his scientific achievements so easily hides under the dry facts the essential warmth of his personality.

Nevertheless, one wants to gain an impression of his career from an early time. This has been given before; but some of the main facts may be repeated here. It is of course the difference between history taught as a set of facts and history considered as an activity of human beings.

Turning then to the bare facts, Barend Coenrad Petrus Jansen was born in Zwolle on 1 April 1884. Entering the University of Amsterdam in 1904 to study chemistry, he passed his finals in 1909, and then became assistant to Professor G. van Rijnberk in the Physiology Department of Amsterdam University. Under his influence Jansen became interested in biochemistry, studying digestion in the intestinal tract, e.g. enterolipase and cholic acid. In 1913 he became Doctor of Chemistry in the University of Utrecht, which led him to be *Privaat docent* in Physiological Chemistry in Amsterdam. Especially interesting was his work in 1915 on the synthesis of urea from amino acids by mammalian liver *in vitro* which laid to rest a controversial subject.

His leaning towards nutrition appeared early. Moving to Batavia (now Djakarta in Java), he became head of the Department of Pharmacy and Chemistry of the Medical Laboratory. Java was then the capital of the Dutch East Indies. This medical laboratory sited in a new building was part of the Institute, where the famous researches of C. Eijkman and later G. Grijns on polyneuritis gallinarum and human beriberi laid the foundation of our knowledge of vitamin B₁ now known as thiamine; basic information indeed, which has now contributed so significantly to the whole vitamin and nutritional field. In 1918, papers began to appear on the water supply of Batavia and on 'the quantity of fat soluble vitamins in coconut oil'; the latter heralded a lifelong interest. From 1920 onwards there came papers on the anti-beriberi vitamin and rice bran. These culminated in 1926 in the most important work of Jansen's life. With W. F. Donath he isolated from rice polishings the anti-beriberi vitamin, known for long as vitamin B₁ and aneurin, before its final christening as thiamine. It is important to emphasize that this was isolated in crystalline form. This achievement rightly established his international reputation; skilful use was made of adsorbents, and as a test animal of the small tropical bird, the *bondol*. Thiamine was the first vitamin to be isolated. By this step in science, voices previously raised in support of the idea that vitamins did not exist as separate entities, that they were merely changed properties of some known tissue constituent, were finally silenced. Nutritional work could progress on a sound basis with the aim of identifying other



W. c. P. Jansen.

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accessory food factors. In 1927, there came the appointment of Jansen to the Professorship of Chemistry at the new Medical School in Batavia. This appointment was merely the prelude to his recall to Holland in 1928 to be Professor of Physiological Chemistry at his original University of Amsterdam, where he took over as a laboratory for Physiological Chemistry part of the old physiological laboratory, suitably altered and extended. It was at this period (1929/1930) that the writer first had the pleasure of meeting him and of comparing in Oxford preparations of vitamin B₁ made from yeast with his own from rice; the results appeared in 1930 in a joint paper together with H. W. Kinnnersley and V. Reader. It was for the writer the beginning of a life-long friendship. Jansen with much enterprise soon made his laboratory a centre of nutritional research in the Netherlands. Quite properly he became Director of the Netherlands Institute for the Nutrition of the People (Volksvoeding), activities which were merged in his Laboratory. Professor Westenbrink has written: 'His devotion to the improvement of human nutrition was one of the chief causes of the rapid diffusion of the modern views in nutrition among the Dutch people. Under his direction many young physicians and chemists were trained in nutrition research; his lectures for the students of medicine generated numerous propagandists for better nutritional habits.' It is not surprising therefore that the Secretary of our Medical Research Council (Sir Edward Mellanby) and the Accessory Food Factors Committee of the Lister Institute and Medical Research Council sought his advice when setting up vitamin standards. In fact he became a well-known figure in the United Kingdom. Of his various pupils, several achieved distinction; perhaps the most distinguished is Professor H. G. K. Westenbrink, now Professor in Utrecht, who has been Rector of that University.

Up to 1935 publications by himself and others from his laboratory amounted to some seventy-one papers. After this time, until he retired in 1954, another seventy-seven papers were published from his Department. All of them owed much to his interest. Virtually all of these works were concerned with wide problems of nutrition and vitamins. He himself developed the thiochrome reaction as a test for thiamine, which has proved increasingly useful. He took part in work on phosphorus metabolism and rickets, the researches being continued by M. J. L. Dols and others. A. Querido worked upon vitamin D requirements, and calcium and phosphorus in the diet. *Inter alia*, interest was also concentrated on butter and the potato.

It must be realized that part of his latter work had to be done against the severities of the wartime occupation, and even more the austerities of the blockade. Jansen's eldest son hazarded the perilous journey of the Pyrenees during World War 2 and it was only by talking to him in Oxford after he reached England that we had news of his family and himself. This son is now practising medicine in Toronto. It is interesting that Jansen's daughter and his second son worked for their theses under his guidance, and received their doctor's certificates from himself. Naturally he received honours, both from the Queen of Holland and from the Sorbonne; he became an Hon. Member of The Nutrition Society.

Professors in Holland retire at the age of 70. After 1954 Jansen still maintained an interest in nutrition and paid regular visits to Canada and the United States. Latterly his

energies declined, perhaps partly owing to a blow on the head, earlier, in the basement of his laboratory. He died peacefully on 18 October 1962 in his 79th year. All who knew him felt that they had lost one of the finest friends of their life. Throughout his career, he received the sympathy and support of his gracious and loving wife and of a devoted and united family.

The writer is indebted to Mrs Jansen and Dr J. D. Jansen for the photograph, and to Professor Westenbrink for his help in sending him information.

RUDOLPH A. PETERS