In contrast, Dill and Costill (1974) reported that protein was lost from the circulation during prolonged running: they observed protein losses from the circulation equivalent to 6% of the initial concentration. Viru and Körge (1971) had earlier reported no change in the plasma protein concentration during marathon running. In agreement with the present results, however, Wells et al (1982) observed an increase in plasma protein concentration following a marathon race, the increase being greater than that which could be attributed solely to the decrease in PV. Maron et al (1975) also observed a similar response and calculated, on the basis of results obtained from six marathon runners, that approximately 27 g of protein had entered the circulation during the race. From the conflicting nature of these results, it is apparent that several factors may be involved in the regulation of the plasma protein content during prolonged running and that the changes which are observed are not simply the result of changes in PV. As the subjects in the present study represented a wide range of levels of fitness and running speed, it is unlikely that either of these factors is of major significance. It seems probable that variations in environmental conditions, such as temperature and humidity, and differences in the peripheral circulatory response of the subjects may be important contributory factors to the differences recorded in different studies. The present study also illustrates the large variability in the changes in body water which occur in response to marathon running. Some of the changes in PV calculated on the basis of changes in PCV and haemoglobin concentration are so large as to appear to be in error, but this cannot be stated with certainty in the absence of direct measurements.

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References


OBITUARY

Dr. Adam Hunter Smith, MB, ChB, DPH

Few Loughborough students of previous decades will fail to remember, and learn with regret of the death of 'Doc' Smith on August 7th, at his home in Leicester, at the age of 78. He was born in Lanarkshire, and qualified as a school teacher, later teaching English and History at the Scots College, in Palestine. Later he studied medicine at Glasgow University, qualifying in 1941, and almost immediately he joined the RAMC and was posted to West Africa. His description of a Regimental Sergeant Major trying to instruct and demonstrate the use of the standard Army latrine to primitive tribesmen is unforgettable! After the war, he entered general practice in Cheshire, during which time he gained the DPH, but in 1947 he came to the Loughborough Colleges on the dual role of Student Health Officer and Lecturer in Anatomy and Physiology. His impact on the students in both these roles was dramatic, and he is still remembered with affection world wide, and quoted in, Australia, Singapore, India and many other places to which his former students have spread. "Sorry for being late for this lecture? — You're no' late for this lecture, — you're early for the next! GET OOT!" or his advice to a tired freshman — "Do you smoke, laddie? Drink? Go out with women? — You don't? — no wonder you feel jaded and lifeless!" The same questions were asked of final year students, who gave a positive answer, so were advised "If you do all these things, no wonder you get breathless, fail exams, lose form on the track! — GIVE THEM UP!"

I took over his teaching duties in the Physical Education Department in 1958, and found it hard to succeed him in his job. He devoted his time to the clinical work of the colleges, which were growing fast, and in the mid-1960's established the Student Health Centre for the newly formed University of Technology, where he worked until his retirement in 1972. He was keenly interested in the sporting life of the Colleges and University, and his reduction of a dislocated shoulder immediately after its occurrence was masterly. He was always available for emergencies, at all hours of the day and night, and usually to be found on the touch line or edge of the track whenever there was a match. He joined the British Association of Sport and Medicine in 1961, and gave us his support until he moved out of Loughborough in 1972. Although I had not seen him for several years, I feel a deep personal loss, and we extend our sincerest sympathy to his wife, Dr. Helen Smith, and to his family.

H. E. Robson