

years later markers for hepatitis virus were found in 97.7% of those vaccinated and subsequently admitted to hospital, and in 72% of those vaccinated but asymptomatic. In contrast only 13% of a control group of service personnel were seropositive. However a striking result was the very low incidence of carriers of the hepatitis B surface antigen, at 0.5%, where previous studies had predicted a carrier rate of 5–10% after acute hepatitis. This finding has attracted much interest in the field of hepatitis research.

An interesting study utilising a registry of twins who were inducted into the US Army, and for whom medical records were available, indicating that genetic factors do contribute to the variation in the use of alcohol, tobacco, and coffee in late adulthood. However a significant finding was the reported history of tobacco use by 82% of the population studies. The origin of this high use was attributed to the distribution of free cigarettes to World War II soldiers. Similarly, and unfortunately, modern British soldiers also smoke more than their civilian peers, and this is probably due to the availability of duty free tobacco when abroad.

A further paper in this volume describes the follow up of the haemorrhagic fever with renal syndrome which occurred in Korea, and makes a connection between viral infection and the development of chronic renal disease following similar virus infections in modern Baltimore. The latter may well represent a multimillion dollar public health problem.

A unique cohort of former prisoners of war was found still to have notable psychiatric sequelae nearly 40 years after release from captivity, and higher rates of depressive symptomatology were linked with the severity of treatment during captivity. Recent events in the Middle East show that this problem is likely to remain of considerable concern worldwide.

In a subset of military veterans exposed to the herbicide Agent Orange in Vietnam, no excess of dioxin, one of the toxic contaminants, was found in adipose tissue when comparing Vietnam veterans, non-Vietnam veterans, and civilian controls.

The last paper concerns radiation risk factors in military populations. Accurate exposure data were seldom available, but the cohorts were large and well identified, and there was potential for quick and easy mortality follow up. An excess of leukaemia deaths from one particular atomic test series was demonstrated, but no other form of cancer. Interestingly, when data from men in all the test series were combined there was no excess of leukaemia compared to contemporary US mortality rates, and a sizable decrease in deaths from all forms of cancer.

This series of papers gives a remarkable insight into the variety of uses to which military medical data may be put and the considerable opportunities such data may provide for significant epidemiological research. It contains careful and readable studies of a variety of epidemiological problems and is highly recommended to all those interested in public health medicine.

PETER BLACKBURN  
RAMC Training Group  
Keogh Barracks  
Aldershot

**Epidemiology of Peripheral Vascular Disease.** Ed F G R Fowkes. (Pp 336; DM 225.) Springer Verlag, London, 1991. ISBN 3-540-19696-X

Peripheral vascular disease is often somewhat neglected, probably because it is believed to be more benign than arterial occlusive disease of the heart or the brain. Yet it is immensely important in many ways. It affects a large proportion of the adult population; it is associated with a poor prognosis; it is amenable to treatment; it causes enormous costs.

The book is therefore a welcome addition to the literature. It is written by a number of top experts, mostly (but not exclusively) from the United Kingdom, and subdivided into six main parts: measurement, descriptive epidemiology, vascular risk factors, social and life style factors, genetics, and natural history including prevention. Thus the title of the book is a slight understatement—the work covers epidemiology but certainly expands beyond that.

The text is highly informative. The editor should be congratulated for assembling prominent scientists from all relevant fields to give a rounded, well balanced, and complete picture. Each chapter is self contained and extensively referenced. All the information is surprisingly up to date. The text is completed by a detailed and useful index. In my view, this book should be in the library of anybody who has an interest in vascular diseases, no matter whether practical or theoretical. It provides an excellent basis for clinical as well as research work, and will surely be a basic text on the subject for quite some time to come.

PROFESSOR E ERNST  
Department of Physical Medicine and  
Rehabilitation  
University of Vienna

**DNA Polymorphisms as Disease Markers.** Eds D J Galton, G Assmann. (Pp 158; \$US 59.50.) Plenum Press, New York, 1991. ISBN 0-306-44039-3

This is volume 214 in the NATO Advanced Science Series which aims to disseminate scientific and technical knowledge with a view to strengthening links between scientific communities. Volume 214 reflects the proceedings of a workshop of some 24 distinguished participants which was held in September 1990 to consider the value of DNA polymorphisms for the prediction, diagnosis or elucidation of aetiology of common diseases.

There are four sections to the volume on the theoretical background, diabetes mellitus, hyperlipidaemias, and atherosclerosis. In each section various strategies for application of DNA polymorphisms are considered and consensus findings summarised. Most studies to that time had utilised association analysis and whilst these had been successful in identifying some genetic determinants (eg, apolipoproteins in hyperlipidaemias) they are unreliable in the presence of mutational heterogeneity. Cosegregation analysis (the central approach to single gene disorders) was

also considered but appeared to be more difficult to apply in human pedigrees for common disorders with reduced penetrance or in quantitative traits.

Subsequent progress has utilised new approaches, in particular cosegregation analysis with selective breeding in animal models of disease, transgenic animals with aberrant candidate gene expression, sib-pair analysis, and mutational screening in candidate genes. These new approaches have already helped to provide further insight into genetic determinants of common disease but the field is still in its infancy and the prediction of the editors that DNA polymorphisms as disease markers will provide a wealth of new genetic markers for analysis of the inherited basis of common diseases remains valid.

PROFESSOR J M CONNOR  
Duncan Guthrie Institute of  
Medical Genetics  
Glasgow

**Diet, Life-Style and Mortality in China.** By C. Junshi, T C Campbell, L Junyao, R Peto. (Pp 894; £95.) Oxford University Press, Oxford, 1990. ISBN 019-2618431

Having just returned from South China I can testify that the improvement in the quality and the amount of the food is as notable as any of the other changes I have seen during the past 10 years. This encyclopaedic volume can serve as a baseline for studies of future changes as well as associations in the present or recent past between diet, lifestyle, and mortality.

A mortality study throughout China involving about 800 million people in 1973–75 is summarised, followed by a detailed study in 65 counties ranging from plasma, red cell, and urine measurements to food samples, dietary surveys, and a lifestyle questionnaire. The basic presentation comprises 733 A4 pages of data including maps and correlations. Two plotted correlations display something of the breadth of the data—mortality rate from stomach cancer for each county against the percentage of individual plasma samples positive for *Campylobacter pylori* IgG antibody, and mortality rate for colorectal cancer against mortality from schistosomiasis.

There are only 30 pages of author commentary in this massive book, but Peto gives some general reflections on the principles and purposes of such an enormous study. He points to the increasing relative importance of chronic disease control in China, in particular emphasising the emergence of cigarettes as the major cause of premature death (his expression). This is a change from very high death rates in the 1940s from nutritional deficiencies and infective and parasitic diseases.

A non-random example of the data—mortality from myocardial infarction and coronary heart disease—illustrates what the volume has to offer. Among 49 counties (some had missing data) significant high correlations were shown with mortality from cervical cancer (0.51), mortality from stroke (0.72), red cell levels of phosphatidylcholine