Book Reviews

Symposium on Atherosclerosis. Publication 338. National Academy of Sciences–National Research Council, Washington, 1954. 249 pp. Illus. $2.

Although this symposium was requested by the Air Force Directorate on Research and Development and was originally designed to emphasize the pragmatic interests of the Air Force, it constitutes in its final form a broad survey of the etiologic factors of atherosclerosis. The contents of the volume are illustrative of the many facets of investigation that have developed since the concept of the essential identity of old age and atherosclerosis has been abandoned.

The first part of the symposium is devoted to examination of the vessel wall and of local factors that determine patchy distribution of atherosclerosis. Consideration is given to changes in composition of elastin, structure of elastic elements in media of arteries, degree of calcium deposit, thickening of intima, and disturbances in medial circulation. There is detailed scrutiny of the consequences of local injury and degeneration in terms of both initial reaction and healing. Attention is drawn to the possible pathogenetic relationship to atherosclerosis of such reparative processes as subendothelial proliferation and the formation in intima of new capillaries that rupture easily with consequent hemorrhage.

There is a short section on the use of newer techniques in the study of blood vessels. This includes discussion of the applicability of electron microscopy, polarization optics, x-ray diffraction analyses, and x-ray absorption spectrography to the examination of large and small vessels.

The role of lipids and lipid metabolism in the pathogenesis of atherosclerosis receives appropriate attention. Although the focus is still centered about the behavior of cholesterol and its esters, the significance of neutral fats and phospholipids is taken into account. There is a fundamental discussion of the entry, transport, and metabolism of fatty acids, phospholipids, and sterols. There is a critical examination of the character and role of lipoproteins in the metabolism of lipids and in the pathogenesis of atherosclerosis. The influence of diets on development and complications of the disease is discussed from the standpoint of excessive caloric intake, relationship of fat intake to total calories, effects of different forms of fat, and variations in cholesterol intake.

As a whole, the symposium furnishes an authoritative text for all who are interested in causative factors of atherosclerosis and its complications.

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The Story of FAO. Gove Hambidge. Van Nostrand, New York–London, 1955. xii + 303 pp. Illus. + plates. $6.50.

Man may not live by bread alone, but food comes pretty close to being first in priority for human beings as well as for God's other creatures. This is especially true for the approximately two-thirds of the world's population that nutritionists declare are undernourished and among whom deficiency diseases are widely prevalent.

Hunger is not new; but FAO and similar programs, both public and private, now under way in scores of underdeveloped nations are expressions of the new conviction that modern science and technology can reduce, or perhaps eliminate, food shortages as causes of human misery.

Today science and scientists are widely accused of making life more complicated and less happy for the individual than in the good old days before science gave man so much knowledge of, and control over, the forces of nature. But no one has raised his voice against the use of science to increase food production where the people are hungry. L. B. Pearson (now Minister of External Affairs of Canada) put it this way in 1945 when he was chairman of the interim commission that set up the Food and Agriculture Organization (FAO): "We know what science could do if harnessed to the chariot of construction. Man's fears have, however, harnessed it also to another chariot—that of atomic obliteration. On that chariot race, with science driven by both contestants, all our hopes and fears and agonies and ecstasies are concentrated."

In *The Story of FAO* Gove Hambidge has again demonstrated his skill in condensing and making understandable to the man on the street the methods and the findings of science and the many ways in which science can be used to advance man's welfare. It was he who was brought into the U.S. Department of Agriculture in 1935 to edit the new type of Yearbook of Agriculture, which won such wide acclaim from scientists as well as laymen.

No other person has anything like the firsthand experience of Hambidge in the events that led up to the creation of FAO and its activities to date. He played a prominent part in the 1943 Hot Springs conference, called by President Roosevelt, that was attended by delegates of 45 nations. It was at this conference that the decision was made to create a United Nations agency to serve agriculture and to improve the nutrition of the world's hungry peoples. Hambidge became the director of information for FAO when it got under way in 1945 and has served the organization in various capacities ever since.

The book, however, is not about Hambidge, for he is innately a modest person. Instead, it is a well-illustrated and interestingly written account of how the three directors-general of FAO in turn have made it the force it has become in nation after nation in fighting rural ignorance, blind tradition in farming practices, inefficient crop and livestock production methods, and the slowness of governments to bring science to the aid of their farmers, their fisheries, their foresters, and those responsible for the nutritional status and economic advancement of the populations they are expected to serve.

The personality of John Boyd Orr, the first director-general of FAO, shines from the printed pages. His great vision and evangelistic zeal gave this new international agency great impetus in the early years and won for it enormous good will from scientists, government officials, and the general public—both in the more industrially advanced nations and in the remote countries where moden science has yet to make much of an impression. Today we know of him as Lord John Boyd Orr, winner of the Nobel peace prize in 1949. But nutrition workers remember him as head of the Rowett Nutrition Research Institute near Aberdeen, Scotland, who, when World War II broke out, gave Great Britain the technical information on which the nation based its highly successful food rationing.

Orr was destined to be disappointed in his hope that an international agency like FAO could be effective in greatly