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David J. R. Millerchip
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**The Food Resources
of Man**

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Preface

Man, as an omnivore, is able to obtain nourishment from foods derived from a wide variety of plants and animals.

Until several thousand years ago, this food was obtained solely from wild plants and animals. Man did not cultivate plants, relying instead on those edible fruits, leaves, stems and roots that were available naturally. Similarly man caught, slaughtered and ate what wild animals he could, and did not herd or raise animals. This **hunter-gatherer** life-style was satisfactory – nutritionally – when the number of people was small. In these circumstances, the quantity of plants and animals consumed by man was negligible in relation to the total numbers and the reproductive abilities of the plants and animals remaining.

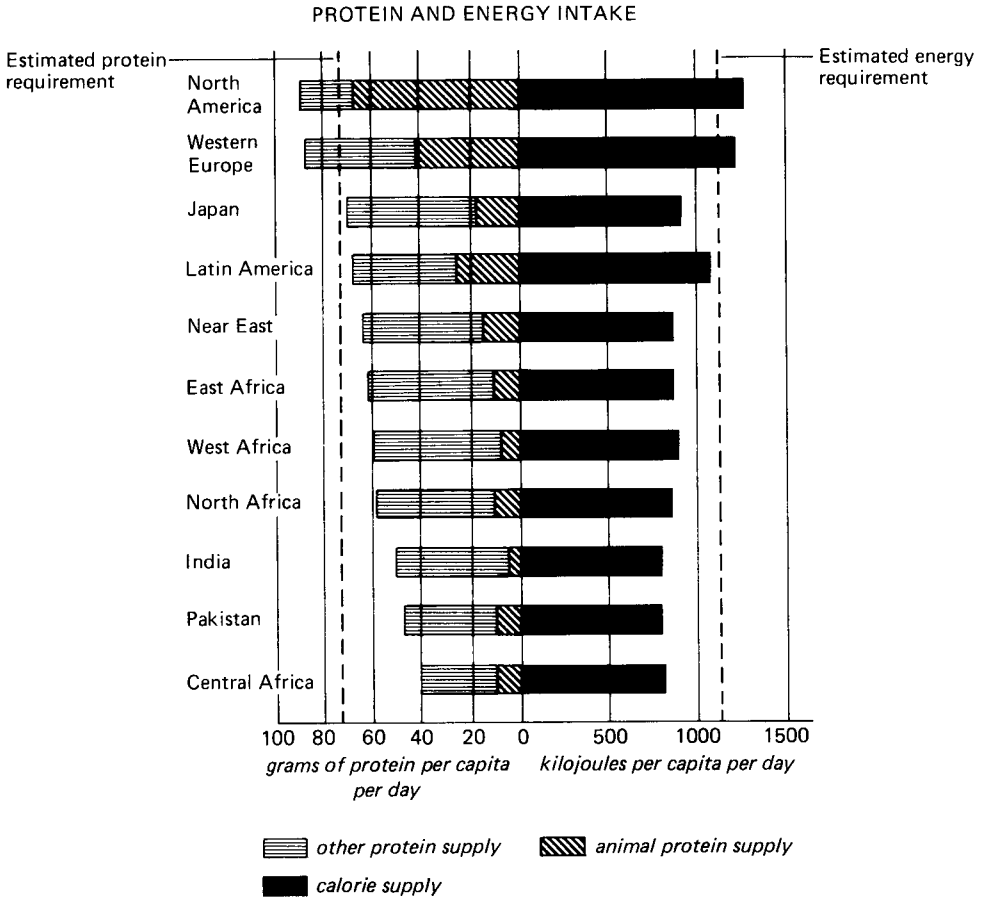
From the hunter-gatherer culture, there evolved gradually a more settled agriculture, which allowed for the social development of man and also provided an increased food supply. To obtain this increase in food supply, man altered the environments of the plants and animals that were useful for food production. For example, he saved seeds for later planting, cleared land to reduce competition from other, less desirable plants, and cultivated his plants in one place to allow easier tending and harvesting. Similarly, he herded together the more docile animals to provide a readily available meat supply.

By altering their environments man also altered the evolutionary selection pressures upon the organisms that he had chosen to domesticate. Thus they evolved – over the millennia – to become the plants and animals of agricultural importance that we know today. It is important to realise that they occupy niches very largely created and maintained by man. Without man's intervention, they would return to the wild. These populations would then probably have difficulty in surviving; those that did survive would represent a modern equivalent of their wild ancestors, and would be very poor sources of food for man. Thus the quantity and quality of virtually all the food produced today is dependent upon man's continuous intervention to maintain these altered environments.

This book looks individually at certain modern plants and animals of major agricultural importance and considers some of the systems by which they are husbanded.

Living in a country in which the amount of food available to each one of us rarely warrants a second thought, we tend to forget that most people in the world are hungry. The figure on page iv shows the average amounts of food energy and protein available to people in different countries. The vertical broken lines relate to the recommended minimum consumption per day. These can

PREFACE



only be informed guesses because food quality varies as does the metabolism of individual people. However, the histogram does emphasise the differences between **developed** and **developing countries**, and highlights the need for increased world food production.

This book therefore considers ways in which food production has been increased in recent years. However, it must be realised that purely scientific/agricultural methods of increasing food production do not necessarily mean an increase in the amount of food available to hungry people. Many detrimental economic, political and social factors contribute to the uneven distribution of food and to the poor nutritional status of people in developing countries, and these problems must be solved before hunger is eliminated.