

Faced with a new environment, our ancestors encountered a bleak prospect. They had to become either better killers than the old-time carnivores, or better grazers than the old-time herbivores. We know today

`- " that, in a sense, success has been won on both scores;

but agriculture is only a few thousand years old, and we are dealing in millions of years. Specialised exploitation of the plant life of the open country was beyond the capacity of our early ancestors and had to await the development of advanced techniques of modern times. The digestive system necessary for a direct conquest of the grassland food supply was lacking. The fruit and nut diet of the forest could be adapted to a root and bulb diet at ground level, but the limitations were severe. Instead of lazily reaching out to the end of the branch for a luscious ripe fruit, the vegetable-seeking ground ape would be forced to scratch and scrape painstakingly in the hard earth for his precious food.

His old forest diet, however, was not all fruit and nut. Animal proteins were undoubtedly of great importance to him. He came originally, after all, from basic insectivore stock, and his ancient arboreal home had always been rich in insect life. Juicy bugs, eggs, young helpless nestlings, tree-frogs and small reptiles were all grist to his mill. What is more, they posed no great problems for his rather generalised digestive system. Down on the ground this source of food supply was by no means absent and there was nothing to stop him increasing this part of his diet. At first, he was no match for the professional killer of the carnivore world. Even a small mongoose, not to mention a big cat, could beat him to the kill. But young animals of all kinds, helpless ones or sick ones, were there for the taking, and the first step on the road to major meat-eating was an easy one. The really big prizes, however, were poised on long, stilt-like legs, ready to flee at a moment's notice at quite impossible speeds. The protein-laden ungulates were beyond his grasp.

This brings us to the last million or so years of the naked ape's ancestral history, and to a series of shattering and increasingly dramatic developments. Several 19