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NUTRITION AND PHYSICAL PERFORMANCE

The diet of Greek athletes

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The first difficulty of anyone coming today to the study of any aspect of Greek athletics is to grasp the length of the period over which the tradition persisted. Organized sport appears an inseparable part of modern life, yet its history in modern times goes back for not much more than a century. In Greece the first Olympic games were held in 776 BC, and the festival continued every 4 years without interruption in peace or war until the end of the fourth century AD, a period of over 1000 years. Even so, the first Olympics were not the beginning; the Homeric poems take the story back a further five centuries.

If we disregard this early activity and confine our attention to the 1000 years of the Olympic games, we have still to remember that Greek society at the end of that time was very different from that at the beginning. In the eighth century BC the Greek world consisted only of a number of small and not wealthy city states on the mainland, the Aegean islands and the west coast of Asia Minor. During the next two centuries the Greeks carried out a widespread colonizing movement and established Greek cities on many coasts of the Mediterranean, from the Black Sea to North Africa, Sicily and South Italy, and even to the south of France and East Spain. In the fourth century BC the conquests of Alexander the Great absorbed into the Greek world Asia Minor, Syria, Egypt, Mesopotamia, Persia and even part of India. The Greek language became the lingua franca of these countries, and the Greek way of life, including its athletics, was widely followed. Two centuries later much of this Greek world was conquered by the Romans and became part of their Empire, but although it was governed by Romans it preserved its Greek character almost unchanged.

These changes inevitably brought an increase in wealth to the Greeks, but no greater equality in its distribution. The peasants, as always, remained not far above the subsistence level, while the rich grew enormously richer; but between there developed a middle class, mostly city-dwellers. In this changing social scene, the position of athletics changed too. In the early centuries of our period, sport was mainly the prerogative of a small leisured class. Before the beginning of the Christian

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era, it had become and remained in its upper levels an exhibition by professional performers for the amusement of vast crowds of spectators drawn mostly from the urban middle class. The development was exactly like that in the world of football in the last century: the sporting scene in which Liverpool were winners of the FA Cup in 1965 is very different from that when the Old Etonians won it in 1879.

The mention of football brings to mind one distinction between the Greek world and our own. Whether as players or spectators we enjoy a wide variety of sports and games. Among the Greeks, athletics held almost a monopoly. The only other sport organized on a considerable scale for spectators was horse and chariot racing.

If the social setting of athletics changed with the times, the events remained unaltered to a degree hardly credible today. Well before 600 BC the programme at Olympia had become stereotyped, and it was unchanged when the games were abandoned 1000 years later. Moreover, such was the prestige of Olympia that the same programme was used at every athletics meeting all over the Greek world. To us it seems remarkably restricted. There were three fighting events, boxing, wrestling, and a specialized form of wrestling called the pankration; four flat races of 200 yd, 400 yd, about 3 miles, and a race in armour of 400 yd; and finally a pentathlon consisting of javelin-throwing, discus-throwing, long jump, a 200 yd race and wrestling. In the fighting events there was no division into classes by weight, and so only heavyweights had any chance of winning. These were the most popular events with spectators, and for this reason Greek writers, when they speak of athletes, are often referring only to boxers or wrestlers. This is important where statements are made about diet. Much of our evidence clearly relates to the eating habits of these heavyweights, whose needs were very different from those of sprinters or long jumpers.

The professional trainer appears early in the history of Greek athletics. There are of course two kinds of trainer; one instructs in the particular skills of each event, boxing or discus-throwing, while the other is concerned with the general physical health of his charges. It is not surprising that there is an early connexion between athletics and the medical profession. The first trainer known to us by name is Herodicus of Megara, who taught medicine to the great Hippocrates, and in the body of medical writing which has come down to us under the name of Hippocrates, it is made clear that the insistence of Greek doctors on the importance of diet is due to their early interest in the diet of athletes. Perhaps it is no accident that the city of Croton, which produced an extraordinary crop of outstanding athletes in the sixth and fifth centuries BC, was during the same period equally famous for its medical school.

Before we come to the peculiarities of athletes' diet, we must consider the food of the ordinary Greek, and here some generalization is legitimate. Apart from the addition of imported luxuries to the tables of the wealthy, diet did not change much during our period. In the absence of refrigeration and canning, the diet of the city-dweller did not differ notably from that of the countryman. Fresh supplies were brought in daily from the countryside and sold in the city market, as today. The basic food was barley or wheat, eaten in the form of bread or thin porridge. Meat did

not figure much in the menu, mainly for economic reasons. Wild animals or birds, especially hares, were a welcome addition to the table; but in antiquity animals were domesticated as beasts of burden or for their milk, hair, wool or skins rather than for their flesh. Most Greeks ate meat only at religious festivals, when parts of the sacrificed animal not offered to the god or retained by the priest as his perquisite were shared among the worshippers. The domestic fowl was kept, and provided eggs to vary the diet. Few Greek cities are very far from the sea, so there were abundant supplies of fish; it could be salted or sun-dried, but in this form it was not highly esteemed. Vegetables were grown for the pot, onions, carrots, cucumbers, marrows and green-stuff, though not apparently brassicas. Fruit was plentiful, and some of it, grapes and figs for instance, could be preserved by drying. The oranges and peaches, which bring colour to market stalls today, had not yet been introduced into the region, but they had apples, pears and nuts, and that unsatisfactory fruit the pomegranate seems to have been curiously highly prized. There was plenty of milk, especially goat's, but keeping it fresh presented problems, and most of it was made into cheese. For the same reason, butter was not made, and its place in cooking was taken by olive oil, which was also used for other purposes; athletes, for instance, used it where to-day they would use soap or embrocation. Sugar was hardly known; honey was abundant and was used in many kinds of sweet cakes.

Apart from milk, their drink was limited to water and wine, which they rarely drank undiluted. Even at parties, a mixture of one part of wine to three of water was considered strong, and one to five was more usual. They did not distil spirits. Intoxication was certainly not unknown among the Greeks, but it was caused by excitement rather than by the strength of their drinks. Alcoholism was not a serious problem in antiquity.

The earliest Greek athlete of whose special diet we are told anything is Charmis of Sparta, who is said to have trained on dried figs. He won the 200 yards in the Olympic games of 668 BC, and the tradition would seem to indicate that as a sprinter he found the extra sugar in fruit useful. Pausanias in the second century AD says that the first athlete to train on a diet mainly of meat was Dromeus of Stymphalus, a long-distance runner of about 480 BC. More probable is the account which attributes this innovation to Eurymenes of Samos, a heavyweight of the previous century. A curiosity about this tradition is that he is said to have acted on the advice of his trainer Pythagoras, the mathematician and philosopher, and Pythagoras is generally supposed to have been a vegetarian. But a meat diet for heavyweights probably went back even farther than this, if we are justified in taking any notice of the anecdotes about the eating feats of Milo of Croton. This man was the outstanding figure in the history of Greek athletics. He won the wrestling at seven successive Olympiads and twenty-six victories in other great Panhellenic festivals. He seems to have been something of a 'character', and stories gathered round his name, just as cricket anecdotes tend to become attached to Dr W. G. Grace. His daily diet is said to have consisted of 20 lb of bread, 20 lb of meat and 18 pints of wine. Some wag, obviously determined to produce a Milo story to end all Milo stories, invented the legend that he once carried a 4-year-old bull round the stadium at Olympia, killed it with a

single blow of his fist and then ate it all in one day.

The temptation to eat large quantities of meat must have been particularly strong for competitors in the fighting events, where sheer body-weight counted so much. It is not surprising that moralists sometimes denounced this overeating. Their attitude was perhaps not entirely untinged with envy; most Greeks had less meat than they would have wished. Yet athletes could be abstemious. Xenophon tells us that they kept off bread; clearly they realized the dangers of too much starch. In the first century AD, Epictetus warns his readers that if they wish to succeed as athletes they must observe restraint in their eating and avoid rich confectionery. Writing at about the same date to the Corinthians, St Paul, who knew a great deal about athletics, reminds them:

'You know (do you not?) that at the sports all the runners run the race, though only one wins the prize. Like them, run to win! But every athlete goes into strict training. They do it to win a fading wreath, we, a wreath that never fades.'

The Greek word here translated 'goes into strict training' implies strong self-restraint. In this connexion it is interesting to note that our word 'ascetic' is the Greek adjective for an athlete 'in strict training'.

A century after St Paul, Philostratus, the author of the only surviving Greek book devoted wholly to athletics, throws a strange light on those popular idols of his day, the star professional performers in the stadium. He regards them as effeminate, and puts the responsibility on doctors, who have imposed on athletes a dietary system more suited to convalescents. 'Medical science', he says, 'introduced elegant cooks and dieticians, who turned athletes into finicky gluttons; they fed them on soft cakes sprinkled with poppy seed'. These medical trainers, he tells us, argued endlessly about the kinds of fish suitable for their charges, saying that those from muddy water were fat, those which fed near cliffs were soft, deep-sea ones meaty; those that fed on seaweed were thin, those which ate green slime were tasteless. They insisted on the merits of pork in the training diet, but demanded that the pigs should not be pastured near the sea or a river, because their flesh might be contaminated by the garlic and crabs which they would eat, but that they should be fed on cornel berries and acorns. In considering this evidence, we must bear in mind that Philostratus disliked the athletics of his own time, and looked back to an earlier period as the Golden Age of sport. It is possible too that in talk of this kind the trainers were acting as publicity agents for their charges, and that we should regard this gossip about athletes' diet as the equivalent of modern tittle-tattle about the domestic habits of film actresses.

Today there appears to be less discussion about the dietetics of sport than there was 50 years ago. This no doubt is partly due to the fact that the general principles of a well-balanced diet are now very widely known and followed. So nowadays, if an athlete hopes to produce a spectacular improvement in his performance, he tends to turn not to diet but to dope. But that is another and a sadder story.