



CORRESPONDENCE

Ancel Keys centenary and the definition of healthy diet

On 26th of January Ancel Keys' 100th birthday was celebrated in Pioppi, a small sea village on the Southern Coast of Italy, the ancient Magna Grecia, where this distinguished scientist, with his wife Margaret, spent long periods of time in the last 50 years, experiencing directly the Mediterranean life style and diet.

Ancel Keys, a physiologist, nutritionist, epidemiologist, crossed with his impressive work the whole of last century. He is known to the general public for two main reasons: the K ration for US soldiers, immediately after the second World War, results of his (and coworkers) extraordinary work on semistarvation in man¹ and even more for the lucky definition of Mediterranean Diet, proposed after the Seven Countries Study—probably the most popular definition of a diet at least by a qualified scientist, and an expression of what he described as habitual diet in some countries of the Mediterranean area.^{2,3}

After Ancel Keys' pioneering work, many studies, all over the world, have dealt with this topic.

Nowadays, maybe still with a low tone, some people⁴ tend to support the idea that even the Mediterranean diet might be unhealthy for its high carbohydrate content (no matter whether complex, with a low glycemic index, as part of fibre rich foods, etc) which, through at least the traditional mechanism of hyperinsulinaemia and insulin-resistance, may facilitate the onset of obesity, prevalent splanchnic distribution of body fat and related diseases such as diabetes, hypertension, hyperlipidemia, etc. No matter that the Mediterranean population is one of the fattest in the world, not only in adult but also in developing ages.^{5,6} No matter that the prevalence of diabetes, hypertension and hyperlipidemia, and consequentially cardiovascular (and other chronic degenerative diseases) are increasing around the Mediterranean Sea!^{7,8}

Why this apparent paradox?

Apart from the changes in food habits, although not totally radical, we have observed a real

dramatic change in "Mediterranean" life style, with a massive drop in physical activity, in both working and leisure time. A CHO rich diet, whatever type of CHO used, is characterized by prompt use "fuels" which need therefore to be utilized in a relatively immediate period of time with some physical activity i.e. farming, gathering, sailing, handcraft, once typical of the Mediterranean (though not only of) areas. We have personally seen Ancel Keys, and his wife, working in the small garden nearby the house and walking some kilometres from their villa to the village and viceversa almost every day, while in Pioppi!

Now the first question is, has obesity, and its related life styles typical of the globalized society, definitely killed the Mediterranean diet or, does the Mediterranean diet really produce obesity, the metabolic syndrome and its complications? Unexpectedly (!?) we tend to support the first hypothesis, that the overimpression of westernized life styles is definitely destroying some traditional beneficial human behaviours making them even dangerous or unhealthy.^{9,10}

The next question is: whatever the above cause-effect relationship, have the Mediterranean diet and his Inspirer made their time, because nowadays this diet is definitely unhealthy? Again the reasonable answer comes from basic clinical nutrition and general clinical practice principles, to which Ancel Keys has contributed. Since his presence on the planet, man's diet has continuously changed according to the environment characteristics and biological needs. We would be close minded if we did not recognize that any diet, including the Mediterranean diet, has to change according to the current human life style for a healthy interchange between man and environment. As always, this is the crucial topic, the here and now of the survival process, by which human beings, even in the paradoxical scenario of abundance of food and technologies, have to face. The Transition Diet, another successful definition which clearly identifies this process, should also monitor the complex interaction between traditional and new healthy foods, past and present life style habits in a new and complex globalization context.^{11,12}

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