Physical fitness related to health?

In the last years, we have witnessed an explosion of physical fitness in relation to health, isn’t it? From our point of view, there is a very limited and biased vision of health in relation to physical fitness. One only takes into account physical health. Let us not forget psychological and social health and even the influence of the environment in which we are immersed.

The predominant idea is that a good physical condition directly correlates with good health and this correct perception is translated by most readers as “the more physical fitness, the more health”, which is a half truth. If one persists in having more physical fitness without the adequate control, in one way, as an example, it can be said that overtraining, addiction to exercise and injuries or simply have difficulties to maintain the physical condition level already reached so as to sustain the physiological adaptation. In such instances, physical fitness is not healthy.

Traditionally, since Pate one may consider capacities related to health: mainly cardiovascular endurance, strength and flexibility. Evidently, it is ideal to have low levels of fat in blood, not to have excess of accumulated body fat, a good vascular circulation, an efficient heart, efficient breathing (though not in contaminated contexts), a good joint mobility and levers that work adequately thanks to muscular strength. In this sense, it is evident that this work can be beneficial, but it cannot reach the extreme of supposing any excessive physical, psychological or social stress for those who are training or being evaluated. People must feel satisfied with themselves, being socially integrated and happy to have an adequate physical condition for whatever it is that they do in life and feeling that they are contributing to their health.

Fortunately, to those physical capacities one trains in physical fitness relate to health, there are additional motor skills that take into account the neuromuscular system, the motor-sense coordination and balance as a reality of the expression of the functioning of the nervous system while moving. All this has always been a part of the neurologists’ viewpoint, who have given a great deal of importance to all these aspects, but that, in some instances, sports professionals have focused more on the results of the action that in the performance. It could be affirmed that one has given more importance to the records than to how these are achieved.

Another capacity that normally is considered to have a link with performance more than with health is speed, barring a few authors, as is the case of our research team ActividadFísica, Educación y Salud-UAM. Speed is related with health first to prevent accidents i.e., reaction speed. In this way, as an example, it can be said that quickly withdrawing from a threat equals to health and safety at once. Secondly, children, youth and adolescents, in order to be socially admitted in games and sports must have a minimum of speed because such games and sports do require it, thus becoming an element of psychosocial health.

On the other hand, if one analyzes physical fitness testing that measure physical capacity, one finds that there is no battery of tests to measure such capacities in relation to one’s daily life taking into account all ages, sexes, jobs, occupation, leisure or activity. At present, it is almost impossible to compare different populations e.g., North American citizens, Europeans, Africans, Asians or Australians. But it is even worse that no one can compare his/her evolution from childhood to old age with valid, reliable and standardized tests.

In addition to all this, one could add another interesting point. One always tries to measure the maximum physical capacity of subject, which from our perspective equals to measure performance, but, isn’t it true that what is important is to measure the level from which one could be considered sedentary? One measures a lot the levels of physical activity through footsteps, questionnaires, GPS, accelerometers, etc., but it has been known for a long time that with well planned and executed training one can produce very beneficial adaptations for the human being in all the organs and systems. And on the contrary, with detraining one reverses such adaptation.

And speaking of this last point, what about if one tries to measure the minimum necessary adaptations so as to any human being may not be considered sedentary? Why don’t we try that any citizen may be able to self-measure autonomously his/her physical condition in relation to health? Obviously, the latter is not possible in non-autonomous children or in people with certain disabilities.

In relation to this latter point, What about if we make tests for all people, no matter what their capacities or disabilities may be? i.e., Tests that are valid and objective, for able people, for people with sensory, motor or psychological disabilities, test what enable us to even compare, on the one hand subjects with all sorts of skills and capacities and, on the other hand, subjects with certain disabilities. Today, this is not possible. One creates tests for certain groups: children, elderly people, disable people, etc.

It is a challenge to have data so as to compare the physical condition of each person in percentiles, calculated with a sample of the whole world’s population. Physicians, physical activity professionals and citizens would make their expectations come true because one could give clear guidelines in the sense of what to improve in order not to be sedentary or run the risk of being so.

Actually, our research team is working on physical fitness in relation to health, minimal and functional, adequate to any person. Would this be possible? Our proposal is to create an International Consensus in order to select tests that measure that which we want to measure, tests that can be undertaken in all the countries of the world, developed or not, to any person and to calculate the reliability...
and validity of such tests. There are not so many, after all. We think this is possible.

Acknowledgements

None.

Conflict of interest

Author declares there is no conflict of interest in publishing the article.

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