Abstract

The benefits of regular physical activity have been known since ancient Greek. But in the last Century the scientific knowledge around this topic has progressed enormously, starting with the early studies of JN Morris and RS Paffenberger, who demonstrated that physical activity at work reduced incidence of cardiovascular disease and mortality. In the Harvard alumni study, the lowest risk was associated with a weekly output of 1000 to 2000 kcal performing vigorous activities. Further studies in all age groups have supported these findings and have added that even moderate levels of physical activity provide considerable benefits to health, including lower prevalence of overweight and obesity at all ages. Metabolic fat oxidation rate is highest at exercise intensities between 45 and 65% of VO2max. This means that people must be active regularly and force physiological mechanisms at certain intensities. All this body of evidence has contributed to current WHO physical activity recommendations of 150 min/week of moderate to vigorous physical activity (MVPA) in adults and elderly, and 60 min/day of MVPA in children and adolescents, with additional strength training, apart from adopting an active lifestyle. In the last 50 years, occupational physical activity has been reduced for about 120 kcal/day, and sedentarism has emerged as an additional risk factor to physical inactivity. Even if less than 60 min of TV time in adults have been related to lower average BMI, there is still a need for research to determine the appropriate dose of exercise in combination with sedentary behaviours and other activities in the context of our modern lifestyle in order to prevent obesity at all ages. As public health measures have failed to stop the obesity epidemic in the last 3 decades, there is clearly a need to change the paradigm. The inclusion of sport scientists, physical education teachers and other professionals in the multidisciplinary team which should be responsible for drawing the road map to prevent the increase of the obesity epidemic effectively is a “must” from our point of view.

Keywords

Fitness, Health, Physical activity, Obesity, Prevention.