WELLNESS AND FITNESS

Montesano P.

University of Naples "Parthenope" - Department of Motor Sciences and Wellness - Naples

Abstract

The research was conducted on a sample of 50 adolescents (30 males and 20 females) aged between 16 and 19 years to assess the effectiveness of physical activity in overweight subjects. The study was carried out by administering a questionnaire and through the participation in one extra hour of training per week over a period of six months beyond the scheduled curricular hours of Physical Education in a secondary school in Naples.

Method The questionnaire was administered at the beginning to test how interested adolescents are in the problems related to obesity. Participants were offered a program of additional training after their body weight had been measured, and then grouped by similar weight (average weight). The survey was then carried out at the end of extra sessions.

Results and Conclusion the results showed that 26 subjects on a sample of 50 reduced their body weight by carrying out a simple additional training session per week. The collection of data confirmed the importance of holding physical activity even if it does not qualify as competitive sports activity.

KEYWORDS: Wellness. Obesity. Fitness.

1. INTRODUCTION

The protection of health is one of the main objectives of the World Health Organization (WHO, 1998) and of all UN member states. The increasing spread of economic wealth and mechanization are the historical and social causes – now universally recognized – for the syndrome of failure or insufficient exercise called hypokinetic disease. The lack of movement leads to problems of overweight, and obesity in some countries like ours is reaching dangerous levels .

Globesity, i.e. global obesity, emphasizes the international dimension given by the World Health Organization (WHO), the current prevalence of body overweight and the consequent low level of physical activity (Diehl, Choi, 2008). Its identification as an epidemic of the new millennium is confirmed by the World Health Report, which certifies more than a billion overweight people in the world, including 300 million obese (Adami, 2003). In Italy, the estimation of the obese population stands at around 12% of the total, of which 30% are children overweight or obese. The phenomenon of globesity – a problem of considerable social relevance – is the result of a prolonged energy imbalance in carbohydrate and proteins consumption; it means that children, adolescents, but also adults introduce a surplus of calories compared to what the body actually needs. Statistics on mortality (WHO,2009) and morbidity, show that obesity is a serious risk factor for both cardiovascular and respiratory complications, and diseases that are frequently associated with it, such as diabetes mellitus, hypertension, hyperlipidemia and osteoarthritis . At the international level, numerous studies have indicated some guidelines, such as the Global Strategy on Diet, Physical Activity and Health (WHO, 2002), Global recommendations on physical activity for health (WHO 2010) on Identification, Evaluation and Treatment of Overweight and Obesity in Adults (NIH, 1998). In Europe, where obesity has increased by 10-50 % in the last decade, there have been a few initiatives, such as the Strategy on nutrition, overweight and obesity-related health issues, the White Paper (European Commission, 2010) on a strategy for Europe on nutrition, overweight and obesity, diet , physical activity and health (EU Platform, 2005) and the monitoring of progress to improve nutrition and physical activity and prevent obesity in the European Union (NOPA, 2008).

In Italy, 30% of adults aged between 18 and 69 years appears to be sedentary (Istat, 2010) so it is recommended to perform physical activity (Rapporto Passi 2011). Adequate information about energy needs, wellness resulting from physical activity, and food hygiene should be pursued since childhood. Educating the child to healthy eating habits and adequate physical activity reduces the risk of obesity in adolescence and adulthood, and tends to induce in the person and in the family, positive changes in eating behavior and more generally of the lifestyle, so that they remain stable and long-lasting.

The observation that the widespread tendency of adolescents to overeating resulted in the idea of the present research. It was carried out at the IPSSCT "G. Fortunato" by the "Parthenope" University of Naples, on a sample of 50 students aged between 16 and 19 for six months. It was developed by administering a questionnaire and offering an out-of-school gymnastics program.

2. MATERIAL AND METHODS

Addressees and Objectives

The study was conducted on a sample of 50 subjects, 30 males and 20 females, aged between 16 and 19 years, with a body weight between 62 kg and 75 kg. The specific objective of this research was to verify the improvement of the reduction in body weight (Leone, 2006) through the application of additional weekly hour of training to be made indoors. The initial and final surveys highlighted the trend of body weight (average) of those involved. All 50 students participated regularly in additional training sessions (Barba, Tafuri 2007).

Contents additional training

The program of additional training (Barba, Tafuri, 2007), carried out in an indoor facility, includes a ten-minute slow run, eight-minute motion exercises, three-minute breathing exercises, twelve-minute exercises, the use of small tools and small weights, six-minute abdominal and back exercises, ten-minute ball games, three-minute stretching exercises, an eight-minute slow run.

Material and Equipment

Indoor Stadium
Elastic Fitband
Wheels Fitness
Ball normally used in the games (basket and football)
Medicine ball : 1, 2, 3 kilos
Questionnaires
Reporting Grids

3. RESULTS

The subjects were divided into nine levels. For each level have been reported, the number of subjects and the average weight corresponding. The first survey showed (table 1 and Graphics 1) a range between 62 kilos and 74.5 kilos. After six months of research the number of subjects with the greatest weight (74.5 Kilos) decreased. The final measurement (table 2 and graphics 2) showed an increase in patients with lower weight at initial recognition and a decrease in the average weight higher (73 Kilos).

4. CONCLUSIONS

The issues related to overweight and obesity clearly to be taken into account when devising the necessary strategies for the health protection (Iacovone, Guatelli, 2004), which appears to be the primary objective for the world population. Therefore, health should also be protected through movement (Leo, 2006) and the benefits that physical activity (Ainsworth, Haskell, Leon et al., 2000) leads both to maintain an adequate mental and physical balance. The study conducted on a sample of 50 adolescents showed the effectiveness of physical activity, together with a correct diet, in reducing even significantly the excess weight. In fact, about 26 people, out of a total of 50, reduced their weight in kilograms by participating in the weekly session of additional training in non-school hours.

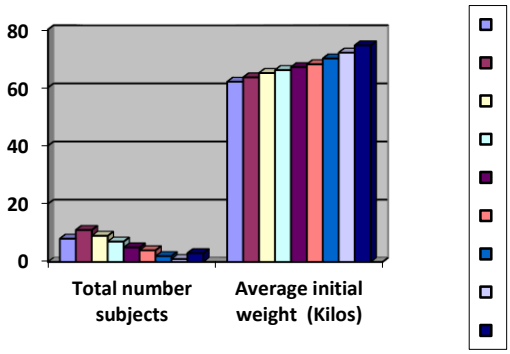
5. DISCUSSION AND PERSPECTIVES

A healthier body means feeling good about themselves. The results, as Lavalle and Shepard argued, show that during exercise, the psyche gets double pleasure (Lavalle, Shepard et al., 1980): a euphoric effect for the production of endorphins and an anxiolytic effect because while the body sweats, the mind is freed from everyday worries and tension is reduced. Fragmentation and lack of synergy of interventions, such as the prescription of a diet or generic invitation to conduct a not well identified physical activity, do not meet the suitable requirements for the treatment of obesity. The multidisciplinary approach oriented to the monitoring of the disease and to ongoing support is the appropriate route to pursue in order to get effective results.

6. TABLES AND GRAPHICS

Table 1 – Initial Survey
Average weight of 50 subjects

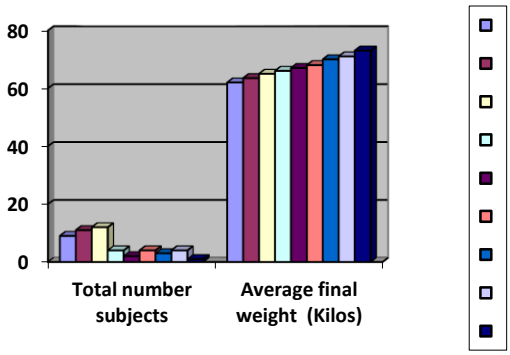
Total number subjects	Average initial weight (Kilos)
8	62
11	63,5
9	65
7	66
5	67
4	68
2	70
1	72
3	74,5



Graphic 1 – Initial View
Average Weight 50 subjects

Table 2 – Final Survey
Average Weight 50 subjects

Total number subjects	Average final weight (Kilos)
9	62
11	63,5
12	65
4	66
2	67
4	68
3	70
4	71
1	73



Graphic 2 – Final View
Average Weight of 50 subjects

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Address for correspondence

Authors: **Montesano P.** University of Naples "Parthenope" - Department of Motor Sciences and Wellness – Via Medina, 40 – 80133 Naples
E-mail address: pieromontesano@libero.it