160 - FUNCTIONAL TRAINING AND OBESITY: A LITERATURE REVIEW

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1. INTRODUCTION

Recently, functional training is conquering its space in gyms and personalized way due to their application form and help people in their everyday functions. However, this training methodology is not new, because, according to Dias (2011) functional training originated with physical therapy professionals, since they were pioneers in the use of exercises that simulated what patients They were in their day-to-day course of therapy, thus allowing a quick return to normal life and their normal duties after an injury or surgery. Thus, it was based on the success achieved in its implementation in the functional rehabilitation training program came to be used in physical training programs, athletic performance, and to minimize possible injuries (PRANDI, 2011).

It is known that functional training is supported in the proposed improvement of neurological aspects that lead to functional capacity of the human body, using exercises that stimulate the different components of the nervous system, causing thus its adaptation (SILVA, 2011; FIELDS and CORAUCCI NETO, 2004).

According to Clark (2001 cited Dias, 2011), movements functional refer to associated movements, and covering multiplanar reduction, stabilization and power production; ie functional exercises refer to movements that employ more than one body portion simultaneously and may be performed at various levels and involving various muscle actions (eccentric, concentric and isometric). In other words, the functional training working movements, not muscles alone, involving thus all physical abilities - balance, strength, speed, coordination, flexibility and strength - an integrated manner through multiarticulars and multiplanar movement and engagement the proprioceptive system, the latter, according to Ribeiro (2006 cited SILVA, 2011) related to the sense of movement (synesthesia) and joint position, and that among the main features of this system are the maintenance of balance, orientation body and injury prevention.

The use of movements from day to day to get in shape is one of the characteristics of functional training, to improve performance, reduce the risk of injury and assist in fitness. These exercises have been increasingly used in the training of athletes of different modalities. The combination of weight training exercises, functional training has conquered people seeking to improve fitness and quality of life. With only natural movements we do everyday, we can keep the body fit and find great results.

That run, jump, play, crouch or go to a point and back several times and the like are functional training, they have the goal of keeping the body always active and movements that keeps health and wellness. People who can do these types of exercises are varied, as they somehow already do in your daily life, these movements are really simple and can be done in different ways.

Long note is overweight and sedentary lifestyle explicit in the lives of children and young people in the world. The lack of interest in physical exercise combined with poor diet are presented as the individual characteristics that lead to childhood obesity. The child health became a public liability problem. Parents, school and society are responsible for seeking better solutions for the future of children.

The aim of this study is to motivate individuals to practice free physical activity sets, and freedom of movement execution, using an individualized planning and in groups, regardless of their level of fitness, age and activities they develop, using exercises that include specific activities of the individual and that effectively transfer their earnings to their daily lives. Therefore, work with functional training proposes to use up all the physical abilities of the individual and enhance them. Developing activities in places such as squares and parks.

2-METHODOLOGICAL ASSUMPTIONS

For this type of search the approach chosen was the qualitative type of literature, that provides a means to interpret, describe, understand and analyze as a direct source of data the main theoretical assumptions on the Functional Training and Obesity.

To survey the articles in the literature, rea¬lizou up a search in the following databases related to CAPES Journal Portal (Higher Education Personnel Improvement Coordination) as PubMed, BVS (Virtual Health Library), SciELO (Scientific Electronic Library Online), Google Scholar, among others. Books were also used to expound on the subject to contain better information and consistent with the subject being developed.

Were used to search for articles, the descriptors Descriptors Library in Health Sciences (DeCS): Childhood obesity and Functional Training The inclusion criteria for the selection of the articles were: articles published in Portuguese, full articles which reflect the themed street racing and published and indexa¬dos articles in these databases since 2000 until today.

As for technical procedures, that is, the way I obtained the data necessary for the preparation of the research was to literature from secondary sources, ie through scientific articles found in databases SciELO, CAPES Journal Portal and Virtual Library of Health.

The design of the project took as its starting point the choice of databases, the availability of adequate and reliable data, credibility of the sources of such data and the compatibility of available data. Then a search on the Library Descriptors in Health Sciences to choose the keywords that will be used in the searches took place, and they run, athletics, quality of life and physical activity.

According to the MeSH descriptors has the following definition:

Obesity: is defined as in adults, by an excessive accumulation of fat mass (Frelut & Navarro, 2000). Obesity is a multifactorial disease of highly complex, making it difficult their control and prevention. It must be regarded and treated as a disease that develops morbid different risk factors are associated with an increased mortality (DÂMASO, 2001).

Functional training: training that aims to improve the individual's performance in a specific activity is in your daily activities or in any sport. Is based on the natural movements of the human being, like jumping, running, pull, squat, turn and push.

Quality of life: generic concept reflecting a concern with the modification and improvement of the components of life, eg. physical, political, moral and social environment; the overall condition of a human life.

Physical activity of a human or animal as a behavioral phenomenon.

From the descriptors were carried out information searches in databases, to find articles that will contribute to the development of projeto.No however, will focus here on the selection of appropriate terms for drawing up the search strategy for the field subject search advanced form, allow the search for information by any data or specific fields of basic fields such as document title, subject and / or summary journal in which the paper was published, publication date, country of publication, language of publication, type of publication (books, conference proceedings, journal articles, theses and dissertations, etc.) and availability provided that they meet the objectives of the proposed theme. In addition to these possibilities, some databases allow to search for documents based on the number of quotes that had, ie, the relevance level to possess.

3-ANALYSIS AND DISCUSSION OF DATA

Childhood obesity is defined as in adults, by an excessive accumulation of fat mass (Frelut & Navarro, 2000). Among the children's nutritional disorders, it is one of the most common health problems; for this reason, it is considered a serious public health problem (Battaglini, Zarzalejo, & Alvarez, 1999; Cintra, 1999).

In developed countries, childhood obesity reaches epidemic proportions, beginning to replace malnutrition and infectious diseases, making it a significant factor in health problems (Brownell & O'Neil, 1999). These countries have concentrated their efforts on public health and prevention of noncommunicable diseases, with an emphasis on reducing obesity, food standard modification and reduction of inactivity (National Research Council, 1989).

Childhood obesity has increased dramatically in all industrialized countries, where physical inactivity seems to contribute in the same way that high and unbalanced food intake (Frelut & Navarro, 2000). Some studies suggest obesity as the most common nutritional problem in the US, reaching affect one third of the general population and 15% to 20% of children. Obesity can start at any time of life, but its appearance is more common especially in the first year of life, between five and six years old and adolescence (Damiani, Carvalho & Oliveira, 2000; Fisberg, 1995), but It must be considered that in any stage of life obesity requires special attention.

Klesges et al (cited MELLO; MEYER E LUFT, 2004) observed a significant reduction in resting metabolic rate while the children watched a specific television program, still lower in obese. So besides the metabolic expenditure involved in daily activities resting metabolism can also affect the occurrence of obesity. Inactive children can become sick adults.

It is notable that obesity has been increasing significantly and it determines various complications in childhood and adulthood. In childhood, the management can be even more difficult than in adulthood because it is related to changes in habits and availability of parents, as well as a lack of understanding about the child obesity damage.

Obesity is a multifactorial disease of highly complex, making it difficult their control and prevention. It must be regarded and treated as a disease that develops morbid different risk factors are associated with an increased mortality (DÂMASO, 2001).

Hernandes and Valentini (2010) add that obesity it is a nutritional and metabolic disorder that can be measured by the increase in the amount of body fat and consequent increase in body weight.

Bernardes; Pepper and Caputo (2002) present a classification of the causes of obesity. According to the authors, obesity may be neuroendocrine; iatrogenic (disease caused by medical error); It can be caused by nutritional imbalance and / or physical inactivity; besides being a feature from genetic disorder. The work also suggests that medical, social, economic and psychological consequences that are not treated, they tend to reflect for life as emotional difficulty, because of the strong societal pressures to be thin, anxiety, depression and low self -esteem; increased prevalence of osteoarthritis of the knees and hips; increase in diabetes, increased prevalence of cancer; increased prevalence of premature death; increase in heart disease, increased incidence of hypertension; Increased levels of cholesterol and other blood fats and low levels of high density lipoprotein cholesterol.

According to Mello, Meyer and Luft (2004) definition of obesity is simple when is not related to scientific or methodological formalities. The look of the body is the major element to be observed. In childhood, the disease can stimulate precocious puberty, which causes an early skeletal maturation with final height decreased, due to the early closure of the growth cartilage. Bueno and Fisberg (2006) add that childhood obesity it is difficult to assess due to the intense modification of the body structure (bone mass, muscle mass, water and fat) during growth.

Studies have warned that genetics is not the only cause of overweight in childhood. It must be attentive to children's habits and behavior of parents, who may err in feeding the children (BERNARDES; PEPPER AND CAPUTO, 2002; PIERINE et al, 2006; CALIANI, 2009; HERNANDES And Valentini, 2010).

According Giugliano and Carneiro (2004) in recent decades, children have become less active encouraged by technological advances. A positive relationship between inactivity, such as time spent watching television, and increased adiposity in children was observed. Increased physical activity, on the other hand, reduces the risk of obesity, acting in the regulation of energy balance or maintaining lean body mass (bones, muscle and water), rather than fat mass (fat).

Still, Giuliano and Carneiro (2004) reported that 75% of the daily routine of children include sleep time and sitting time. For the authors, the number of hours of sleep interferes with the body fat in children. Sleep can act favorably in the maintenance of body composition and should be encouraged in cases of overweight and obesity.

Mello, Meyer and Luft (2004) indicate that the total amount of fat, excess fat in the trunk or abdominal region and excessive visceral fat are complications of childhood obesity that can cause chronic degenerative diseases such as increased cholesterol and hypertension, which together increase the risk of coronary heart disease in addition to diabetes and physical inactivity. These complications increase mortality rate. Author's claims are corrobadas by Oliveira and Fisberg (2003), which highlighted a rapid increase in childhood obesity demonstrating concern for metabolic disorders such as dyslipidemia, hypertension, type 2 diabetes mellitus and cardiovascular disease. Thus, Pierine et al (2006) point out that childhood obesity is a systemic disease, where 30% of obese children may also developing cardiovascular diseases and metabolic syndrome.

Several factors are important in the genesis of obesity, such as genetic, physiological and metabolic; however, it could explain this increasing number of obese individuals appear to be more related to changes in lifestyle and eating habits. Increased consumption of foods high in simple sugars and fat, with high energy density, and decreased physical exercise are the main factors related to the environment. The study by Oliveira et al., Also published in this issue, found that childhood obesity was inversely related to the practice of systematic physical activity, with the presence of TV, computer and video games in the home, in addition to low consumption of vegetables, confirming the influence of the environment on the development of overweight in our midst. Another important finding was that the children study in private school and be begotten, as the main predictive factors in determining excess weight gain, demonstrating the influence of socio-economic factors and family microenvironment. The easier access to foods high in simple sugars and fats, as well as to technological advances such as computers and video games, could explain to some extent the higher prevalence of obesity found in private schools. However, these data are not in agreement with

those found in developed countries where there is an inverse relationship between the level of education or socio-economic and obesity.

Exercise is considered a physical activity planned, structured and repetitive. Physical fitness, in turn, is a characteristic of the individual that includes aerobic power, strength and flexibility. The study of these components can help identify children and adolescents at risk of obesity. Children and adolescents tend to become obese when they are sedentary and obesity itself can make them even more sedentary. Physical activity, even when spontaneous, is important in body composition, to increase bone mass and prevent osteoporosis and obesity. Sedentary habits such as watching television and playing video games, contribute to reduced daily calorific expenditure. Klesges et al. They observed a significant reduction in resting metabolic rate while children watched a particular television program, still lower in obese. So besides the metabolic expenditure involved in daily activity, resting metabolism can also affect the occurrence of obesity. Increased physical activity, therefore it is a goal to be followed, accompanied by decreased food intake. With physical activity, individuals tend to choose less calorific food.

It is of great knowledge that a balanced nutrition and regular physical activity are fundamental to have a good quality of life and combat obesity. Obesity and a physically inactive lifestyle are two of the most prevalent risk factors for common chronic diseases of the Western world. Both entail huge costs for health and the economy, being recognized as the major risk factors for cardiovascular disease, diabetes, cholesterol and hypertension etc.

Obesity has become in a public health problem of considerable importance. This problem is growing as more people reach a certain age at which fat is easily acquired and hard to miss, and are common degenerative diseases.

Regardless of age exercise is extremely important, in addition to preventing disease, it brings many benefits to everyday life of the people is central to portares of chronic diseases such as obesity. The laziness, lack of time, associated with poor health, causes us to have a "quality inadequate life affecting our food, making it scarce and irregular to keep our body healthy."

Based on body mass index (BMI) obesity is a situation in which the individual has a BMI greater than 30 kg / m2. It is understood that regardless of the setting obesity constitutes a greater threat to the quality of human life, and weight training with hypertrophic purposes contributes to the increase in metabolically active body mass, increasing the basal energy expenditure, further favoring weight loss . The weight takes aerobic characteristics provides the maintenance of low total fat content of the body as well as reducing the rate of accumulation of fat cells. However, the weight may take as much as therapeutic preventive aspects in relation to the control of obesity.

For good quality of life, Santarém (2003) mentions the ability to accomplish the required activities, the homeostatic and biomechanical point of view, or risk to the proper functioning of the human organism. Developing new habits, with a greater emphasis on the practice of physical activities is a key step in the overall improvement of organic health and therefore quality of life. Various exercises such as walking, running, cycling, swimming, aerobics, weight training, among others, increasingly gaining membership of a population that seeks the development of well-being and physical and mental health.

The obese person, to undergo the most intense workouts, such as running, can strain your joints, if they are not prepared to endure more intense and cyclic exercises can generate among other joint disease osteoarthritis in several joints, which could cause pain, limited range of motion and reduce the number of viable options exercises.

In this case, Guedes reports that the practical training with strength exercises, appears to be an effective training method, with the aim of strengthening the skeletal muscles and thus reduce the risk of impact injuries, and increase caloric expenditure. It is recommended all people to engage in a regular exercise routine.

It is generally accepted that the decreased amount of physical activity has contributed to the increasing prevalence of overweight and obesity.

Compared to aerobic training, one of the most obvious adaptation is the increase in muscle oxidative capacity, determined mainly by increasing the number and size of mitochondria and the higher enzyme activity. About the morphological adaptations of the year, another important change, determined by the increased mitochondrial density in skeletal muscle is the expansion in the oxidative capacity of fat (free fatty acid) during exercise.

The practice of exercises is paramount as a means of therapeutic treatment for various diseases and / or metabolic disorders. Several studies show that frequent physical activity can bring better benefits than any pharmacological intervention. From there, exercise while oriented therapeutic treatment causes positive changes in controlling obesity, as well exercise can control the pathological processes of insulin resistance.

Strategies for treating obesity comprising promote aerobic exercise decreases in body weight through the reduction of body fat levels, but there is also a relative loss of lean body mass. The addition of resistance exercise, also called strength training, such as prescription for weight loss has shown significant results in increasing and maintaining lean body mass (fat-free).

The practice of physical exercise shown an important ally in the overweight control and the fight against childhood obesity, reducing problems that manifest themselves in childhood and worsen in adulthood, such that cardiovascular diseases, diabetes, musculoskeletal injuries and some cancers (WHO, 2011). Physical activity helps to combat childhood obesity by increasing energy expenditure, reducing the difference between intake and energy expenditure, as well as induce metabolic changes that facilitate lipid metabolism and increase fat-free mass in the body, increasing consequently, basal metabolism (MCARDLE et al., 2001). Highlighted the problem of obesity and highlighted the exercise as an aid in your fight, we will treat the contributions of sport.

Methods as weight training, running and walking are used to increase the daily energy expenditure in order to reduce the percentage of body fat and increase in lean body mass a relationship that proves essential for fat loss, aimed at both health aesthetics (Fleck, 2008). Knowing these exercises as their influences on metabolism and what the physiological adaptive responses to them are key to a positive result in an exercise program for weight loss, also respecting the biological and aptitude of each individuality in exercise prescription . Currently these methods are much discussed and investigated, as to intensity, time, duration and type of exercise stop to promote fat loss, and especially the lean mass gain for proper maintenance of body weight.

4-FINAL

Functional training is a concept of physical activity very dynamic and more attractive than the conventional activities or workouts. The Functional Training is known to work different physical capabilities with the combination of various exercises related to the specific nature of everyday life. Thus, we conducted a thorough job throughout the body.

Obesity is considered one of the biggest factors detrimental to health, it is characterized by excessive accumulation of body fat, coupled with health problems as a result of factors such as genetics and irregular nutrition, causing psychological, various problems, plus a huge variety of ailments , such as diabetes, cholesterol, depression, among others.

We can use functional training as a strong strategy to fight this great evil, which is a reality today, as well as being a

leisure activity, provides improved traction and its valences as laterality, coordination, balance, etc. Physical activity helps to combat childhood obesity and increase energy expenditure.

Regular physical activity is a key factor in having a good quality of life and combat obesity. Obesity and a physically inactive lifestyle are two of the most prevalent risk factors for common chronic diseases of the Western world. Both entail huge costs for health and the economy, being recognized as the major risk factors for cardiovascular disease, diabetes, cholesterol and hypertension etc.

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FUNCTIONAL TRAINING AND OBESITY: A LITERATURE REVIEW

ABSTRACT

Functional training is conquering its space in gyms and personalized way due to their application form and help people in their everyday functions. Childhood obesity has increased dramatically in all industrialized countries, where physical inactivity seems to contribute in the same way that high and unbalanced food intake The aim of this paper is to discuss this methodological possibility of work.

FORMATION FONCTIONNELLE ET OBÉSITÉ: ANALYSE DOCUMENTAIRE

RÉSUMÉ

Formation fonctionnelle est de conquérir son espace dans les gymnases et de manière personnalisée en raison de leur formulaire de demande et d'aider les gens dans leurs fonctions quotidiennes. L'obésité infantile a augmenté considérablement dans tous les pays industrialisés, où l'inactivité physique semble contribuer de la même manière qu'un apport élevé et déséquilibrée alimentaire Le but de cet article est de discuter de cette possibilité méthodologique du travail.

ENTRENAMIENTO FUNCIONAL Y OBESIDAD: UNA REVISIÓN DE LA LITERATURA

RESUMEN

El entrenamiento funcional está conquistando su espacio en los gimnasios y de manera personalizada debido a su formulario de solicitud y ayudar a la gente en sus funciones cotidianas. La obesidad infantil se ha incrementado dramáticamente en todos los países industrializados, donde la inactividad física parece contribuir de la misma manera que la ingesta alta y desequilibrado de alimentos El objetivo de este trabajo es discutir esta posibilidad metodológica de trabajo.

TREINAMENTO FUNCIONAL E OBESIDADE: UMA REVISÃO DE LITERATURA

RESUMO

O treinamento funcional vem conquistando seu espaço dentro de academias e de forma personalizada devido a sua forma de aplicação e por auxiliar as pessoas nas suas funções cotidianas. A obesidade infantil tem aumentado dramaticamente em todos os países industrializados, nos quais a inatividade física parece contribuir da mesma forma que a ingestão elevada e desbalanceada de alimentos O objetivo desse trabalho é refletir sobre essa possibilidade metodológica de trabalho.