

**117 - THE IMPORTANCE OF LUDIC ACTIVITIES TO REDUCE THE CHILD OBESITY IN THE SCHOOL ENVIRONMENT**

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**INTRODUCTION**

There are studies showing that currently, 40% of the population is suffering from obesity, whether acquired by a misguidance about the diet or by a sedentary lifestyle - lack of practice of regular and constant physical activities.

With the technological growth and a decreasing number of leisure spaces, the contemporary society has been showing outstanding features, including an increasingly sedentary lifestyle and, as a sequel of it, the large percentage of people suffering from obesity, in other words, the excess of accumulated fat in the body. This situation is so chaotic that is attacking even children of pre-school age and also in the elementary school.

It is known that the practice of recreational activities is very important in the lives of children, mainly because it's an opportunity for them to improve their motor skills through games, toys and playful activities and also to stimulate the cognitive, social and emotional improvement.

The children that are stimulated to move by the practice of the recreational games and physical exercises have fewer tendencies to become obese, probably because they tend to move away from sedentary habits, becoming more active and consequently consuming more energy.

We noticed a lack of materials and studies about this topic, so, we believe that the points presented in this research may contribute as an important source for professionals working in the health field, such as pediatricians, psychologists and physical education teachers about the possible benefits of recreational activities in reducing childhood obesity.

Based on this, this study aims to verify, based on the literature, that the playful activities can contribute to the minimization of childhood obesity in the school environment.

More specifically, we intend to rescue, through the mentioned literature, playful activities that encourage elementary school students from 1st to 4th year to participate more frequently in bodily activities, to present a proposal for educational recreational activities that can contribute to the minimization of childhood obesity in the school environment and also to point out, through the studied literature, the main characteristics of childhood obesity.

**METHODOLOGY**

To develop this study we used the literature reviewed method. The strategy for the search was based on an extensive literature review on books, scientific journals and websites available on the Internet, between the period of 1988 to 2006, related to obesity, playful activities and the Physical Education in the school.

**DEVELOPMENT****OBESITY: CONCEPTS AND UNDERSTANDINGS**

In this part of the study, we sought to present the understandings and the key concepts presented by the literature about obesity.

According to Silva (2002), the obesity can be defined as an excess of body fat. It is a multifactorial disease, that involves genetic and environmental causes ..

To Wilmore; Costill (2001), obesity refers to a condition in which a person experiences an excessive amount of body fat, considering the actual amount of body fat.

Guedes (2003) states that "the progressive obesity is characterized by a gradual increase of the amount of fat, since the earliest ages to the adult stage" (Guedes, 2003), accusing severe risks to health.

According to Nieman (1999), many experts pointed to three main factors for obesity. The first refers to genetic influences: some people are more susceptible to obesity due genetic factors, these people should be more careful in their eating habits. The second refers to diets with high calories and fat: when the ingestion of fat is high, the person tends to gain weight. The third refers to the insufficient energy expenditure: obese individuals tend to exercise less than slim individuals, so, they spent less energy.

Miranda; Zago (2006) pointed out that the WHO - World Health Organization (2005), found alarming indicators, given that 155 million young people are overweight worldwide. In Brazil, obesity increased approximately 240% over the last 20 years.

According to Ribeiro (2007), the World Health Organization (WHO) registered in 2006, more than one billion over weighted adults and 300 million clinically obese people. In Brazil, the situation is also alarming, since, in the same period, the Ministry of Health pointed out that 40% of the population suffers from overweight and more than 10% have clinical obesity.

**HEALTH RISKS OF OBESITY**

Obesity is one of the most worrying problems for both doctors and public health, given the many dangers related to the health of obese people.

Nieman (1999) highlights eight problems: emotional difficulty, related to a huge demand of society, because obese people might suffer from depression, anxiety and low self-esteem; increase in osteoarthritis: people who have overweight have a higher risk of osteoarthritis on the hip and knee; increased incidence of hypertension: the risk of hypertension increases greatly with excessive weight; increased levels of cholesterol and other fats in the blood: the obese person has increased levels of cholesterol and triglycerides; increase in diabetes: the obese has three times more chances to have diabetes; increase in heart disease: obese people not only present the risk of heart disease, but also of dying due to complications in a higher level; increased cancer: the obese person has increased chances of having cancer; increase of premature death: many researchers have shown that obese people die earlier than thin people.

McArdle (1998) presents a report of the National Institutes of Health. They conclude that obesity should be seen as a chronic degenerative disease, because there are multiple biological hazards of illness to people with not very high levels of fat,

with just 2 to 4,5 kg above the desirable body weight. Therefore, it is apparent that a large amount of fat is not necessary for the health be impaired.

### **CHILDHOOD OBESITY ON THE XXI CENTURY**

Trecco (2006) says that childhood obesity has turned into one of the most worrying problems for public health.

Abrantes (2002), in this context, says that obesity is strongly growing in childhood and adolescence, and tends to persist on the adulthood.

According to Mello et al (2004), childhood obesity is related to many complications, as well as a higher mortality rate. And the longer a person remains obese, greater the chances of health complications.

According to Miranda; Zago (2006), the family and the school are essential to prevent and to control obesity in children because they are directly linked to the environment in which the child lives. This way, these institutions can guide the kids on healthy eating, stimulating daily physical activities.

According to Engstrom; Angels (1996), childhood obesity can be considered a great risk of obesity in the adulthood. In addition, Viuniski (2008) comments that obesity in childhood and adolescence is the fastest growing nutritional problem in Brazil. More recent epidemiological studies published showed that 15% of young Brazilians are obese.

### **THE IMPORTANCE OF THE LUDIC**

We seek, in this part of the text, present the importance of playful activities as an auxiliary tool to reduce childhood obesity. However, initially, it is necessary to understand what the ludic activities are.

According to Awad (2006), ludic means play. In this plays are included games, toys, entertainment and the practice of playful activities, the action with the objectives and with the world around him.

The ludic is necessary for each and every human being at any stage of life, according to Santos; Cruz apud Awad (2006), the practice of leisure activity should not be seen just as fun, because the playful exercise facilitates the learning process, personal, social and cultural development, and contribute to a good mental and physical health.

Maluf (2003) states that playful games provides the search for new skills, develops naturally new competencies. This activity is one of the basic needs of the child, and it's essential for a good motor, social, emotional and cognitive.

As reported by Machado (2003) the playful activities area also ways to think, discover, persist and persevere and learn to lose, realizing that there will be more opportunities to win, to strive, to have patience and to not give up easily.

Hurtado (1998) says that a child who has good health, presents a balanced motor and mental development. Health is the support base of the human being, because it determines the balance of the great vital functions.

### **THE LUDIC ON THE MINIMIZATION OF THE CHILDHOOD OBESITY**

It is believed that the child that plays, that moves in appropriate intensity for their age group and have a balanced diet, will have less chance of being an obese child. Based on this, the study seeks to demonstrate the benefits of recreational activities to minimize childhood obesity.

According to Borba (2006), ludic activities are very pleasant and also a great device for the kids develop a healthy lifestyle.

Martins (2006), in a different perspective, states that the child spends calories in all activities done, besides fat burning, muscle mass development, avoiding disturbances caused by obesity.

According to Piccolo (1995), through the games, the fantasy interacts giving hope to create and transform the environment in which it is. The kids have to move, because through games and recreational activities they will have better development and a better learning. In addition, this playful action could be extended to the educational environment

Awad (2006) says that educational measures should be encouraged in the school environment, so it can be extended to the familiar life of the kids, in the quest to provide the opportunity to them live the fullness of their childhood, reviewing what they most enjoy, the leisure activities, and at the same time it contributes on the maintenance of a healthy and balanced body when it comes to the percentage of fat.

It can be observed that the school can play an important space for the habit of the practice of recreational and physical activities, because children spend most of the time in school and can thus practicing, playing, activity of body movements.

### **PROPOSALS FOR EDUCATIONAL LUDIC ACTIVITIES FOR THE SCHOOL ENVIRONMENT**

In this part of the study we present a set of recreational and educational activities that can be applied to the students of the first grades of elementary school.

It is important to emphasize that the following activities want to create opportunities for bodily movement allied to pleasure and the welfare of the child. However, beyond the practice of recreational activities, the school must act to provide healthier meals to the students.

Awad (2006) suggests some possible activities that can be performed in the physical education classes, during the break time and at the not teaching times, as:

Elaboration of supervised activities in school breaks, which can be redeemed activities and popular games such as jump rope, hopscotch, pick the flag, the various catch-up games, hide and seek, among others. Toys and leisure games will also be a part of the school break, such as; stilts, bets, soap box cart, bag's race, tug of war and the most varied kinds of relays.

Festive games of a specific month can be deployed. In June, for example, the specific games as greasy pole, cockfighting, fishing, game of rings, jail, ball in the can, among others

Pre-sports games may be encouraged in schools: dodge ball, giant volleyball, hand football, mini-basketball, mug basketball, rebound, control, among others.

The different styles of dance and rhythm games can be applied in a playful way, such as sung toys, circle dances, popular and / or cultural dances, modern dance, choreographed dances, "crazy gymnastics," matrogymnastic, among others.

In physical education classes and in the special programs, some big games may happen to take up the entire extern structure such as: treasure hunt, ghost hunting, "diamonds of power," "strange hunt" and "Around the World".

Recreational programs can be composed of physical activities circuits, as: jumping jacks series, push-ups, sit-ups, zig-zag between cones, jump obstacles.

Another possibility is to perform physical-recreational and sportive activities on the weekends, on the school facilities, which can be opened to offer tangible practices (guided and free) to students and families, providing opportunities and spaces for practices of healthy activities, and contribute to the creation of continuous physical habits.

It's important to remember that these are suggestions among many that can be applied in a targeted or free form to

motivate the continued search for activities that require an increased body movement, increased energy expenditure and consequently a reduction in the body fat, contributing to the minimization of childhood obesity. In addition, these activities contribute to the development of the child, helping to increase their motor skills, promoting socialization and cooperation, stimulating reflexive thoughts and promoting attention, agility, speed, wide coordination, among others.

#### FINAL CONSIDERATIONS

Based on the previous, it can be said that the ludic activities, through games, toys and recreational activities, as well as the practice of leisure activities in childhood can contribute to the creation of qualitative habits in order to minimize childhood obesity in the school environment.

It's important to point that, constantly, schools have enlarged the quality of their facilities, seeking to refine their didactic and pedagogical equipment, expanding its research collection. However, when it comes to space for the practice of recreational / sporting activities, actions have not been the same, in other words, the school has been concerned with the intellect of the child "head" and forget the physical well-being - "body".

In our vision, physical and mental well-being must be in harmony, because when one is overloaded, the other tends to suffer the consequences. The kids must live the fullness of their childhood, reviewing what they appreciate most, the leisure activities, and at the same time contribute to maintain a healthy and balanced body, when it comes to the percentage of fat.

It is suggested that schools should rethink their actions and seek alternatives to their students be able to move around more often and to develop the habit of practicing healthy physical activities.

According to Bergman et al (2005), the school is the starting point for the prevention of childhood obesity.

However, this is a flag that should be raised for all the people that are a part of the school. In addition, the parents should be aware about the importance of ludic activities and body movement for the formation of a more active and healthy citizens.

Finally, it is suggested the continuity of this study through the practical application of recreational activities, with field research, seeking the verification of practical results related to the minimization of childhood obesity using recreational and physical activities.

The physical education professional has a very important role in the lives of children, because he is one of the professionals with greater responsibility for the quality of life for his extensive knowledge and commitment to a better quality of life.

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#### THE IMPORTANCE OF LUDIC ACTIVITIES TO REDUCE THE CHILD OBESITY IN THE SCHOOL ENVIRONMENT

##### ABSTRACT

The obesity is one of the most worrying problems for public health nowadays because of the many problems caused to people's health. The obesity growth has been alarming, especially in children, extending the problem to the adulthood. The childhood obesity has been the subject of many studies; it has increased intensively and quickly. The family and the school have a key role in preventing childhood obesity, allying a healthy diet and joyful activities to make the kid do some exercises. This study aims to analyze through the literature, if playful activities can contribute to the minimization of childhood obesity in the school environment. The method used in this study is based on an extensive literature related to the subject in the period of 1988 to 2007, in books, articles and websites available on the internet and in magazines. It is considered that the practices of playful exercises are important to the achievement of a better apprenticeship, personal, social and cultural development, and also to a good mental and physical health. Besides, the practice of recreational activities is something very pleasant, and a great device to the child achieves healthier habits.

**KEYWORDS:** Childhood obesity. Playful activities .School environment

**L'IMPORTANCE DES ACTIVITES LUDIQUE POUR RÉDUIRE LA OBESITE INFANTILE EN MILIEU SCOLAIRE****RÉSUMÉ**

L'obésité est l'un des problèmes les plus préoccupants pour la santé publique à l'actualité, en raison des nombreux dangers qui peuvent causer à la santé des personnes. La croissance de l'obésité a été inquiétant, surtout chez les enfants, étendant à l'âge adulte. L'obésité infantile a été l'objet de nombreuses études, puisque il a augmenté intenses et rapidement. La famille et l'école ont un fonction indispensable dans la prévention de l'obésité infantile, rejoindre l'alimentation saine et les activités ludique qui mouvement le corps. Cette étude vise à vérifier, par mieux de la littérature que les activités ludique peuvent contribuer pour la réduction de l'obésité infantile dans l'ambient scolaire. Le méthode utilisée dans cette étude est basée sur une vaste littérature sur le sujet dans la période de 1988 à 2007, dans les livres, les articles, sur les sites disponibles sur Internet et dans les magazines. Il est donc considéré que l'exercice ludique facilite l'apprentissage, le développement personnel, social et culturel, en plus collaborer pour une bonne santé mentale et physique. En outre, la pratique d'activités ludique ainsi que d'être très agréable, il est un excellent moyen pour l'enfant peut obtenir saines habitudes de vie.

**MOTS-CLÉS:** Obésité infantile. Ludique. Ambient scolaire.

**LA IMPORTANCIA DE LAS ACTIVIDADES RECREATIVAS PARA LA MINIMIZACIÓN DE LA OBESIDAD INFANTIL EN EL AMBIENTE ESCOLAR****RESUMEN**

La obesidad es uno de los problemas más preocupantes para la salud pública en la actualidad, debido a los inúmeros peligros que pueden causar para la salud de las personas. El crecimiento de la obesidad ha sido alarmante, principalmente en niños, y se extiende a la edad adulta. La obesidad infantil es motivo de muchos estudios, ya que ha aumentado intensa y rápidamente. La familia y la escuela tienen una función esencial en la prevención de la obesidad infantil, adjuntando una alimentación saludable a actividades recreativas que mueven el cuerpo. El trabajo tiene como objetivo verificar, por medio de la literatura, que las actividades recreativas pueden contribuir para la minimización de la obesidad infantil en ambiente escolar. El método utilizado en este estudio es basado en una amplia investigación bibliográfica sobre el asunto, en el periodo de 1988 a 2007, en libros, artículos y sitios disponibles en el internet y en periódicos. Se considera, por lo tanto, que el ejercicio recreativo facilita el aprendizaje, el desenvolvimiento personal, social y cultural, además de colaborar para una buena salud mental y física. Por otra parte, la práctica de actividades recreativas, además de ser muy agradable, es un gran artificio para que los niños obtengan hábitos de una vida saludable.

**PALABRAS CLAVES:** Obesidad infantil; Juguetón, Ambiente escolar.

**A IMPORTÂNCIA DAS ATIVIDADES LÚDICAS PARA A MINIMIZAÇÃO DA OBESIDADE INFANTIL NO AMBIENTE ESCOLAR****RESUMO**

A obesidade é um dos problemas mais preocupantes para a saúde pública na atualidade, devido aos inúmeros perigos que podem causar para a saúde das pessoas. O crescimento da obesidade vem sendo alarmante, principalmente em crianças, estendendo-se para a vida adulta. A obesidade infantil tem sido motivo de muitos estudos, pois tem aumentado intensa e rapidamente. A família e a escola têm uma função essencial na prevenção da obesidade infantil, unindo uma alimentação saudável a atividades lúdicas que movimentam o corpo. O presente trabalho tem como objetivo verificar, por meio, da literatura que as atividades lúdicas podem contribuir para a minimização da obesidade infantil em ambiente escolar. O método utilizado neste estudo baseia-se em uma ampla pesquisa bibliográfica sobre o assunto no período de 1988 a 2007, em livros, em artigos, em sites disponibilizados na internet e em revistas. Considera-se, assim, que o exercício lúdico facilita a aprendizagem, o desenvolvimento pessoal, social e cultural, além de colaborar para uma boa saúde mental e física. Ademais, a prática de atividades lúdicas, além de ser muito prazerosa, é um grande artificio para que a criança possa obter hábitos de vida saudável.

**PALAVRAS-CHAVE:** Obesidade infantil. Lúdico. Ambiente escolar.