

# Physical Activity and A Child's Mental Well- Being

**A guide for understanding physical activity and its possible effects on a child's mental health.**

- How does physical activity affect a child's mental health?
- What have studies shown? What are limitations or barriers of these studies?
- What needs to be in place for interventions, namely school-based interventions, to be successful?

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## What is the purpose of this booklet?

*The purpose of this booklet is to provide insight into the possible correlation between a child's physical activity and mental well-being.*

*It is an attempt to bring awareness, not only to schools but to the entire community, to understand the importance of physical activity intervention programs.*

*My goal is to enhance the entire community's role in physical activity programs. By making the community aware of the association between a lack of physical activity and a child's overall well-being, the people that play a dominant role in children's daily lives will become increasingly instrumental in the implementation of intervention programs. With this implementation comes the possible decrease of childhood obesity as well as possible decrease in mental-health problems witnessed in our children and adolescents today.*

## Introduction: An Outline of Physical Activity and One's Mental Well-Being.

Several studies have examined the correlation between a child's physical activity level and their mental well-being. These studies have indicated that a lack of physical activity adversely affects the child's physical and mental health.

Over the past two decades, researchers have shown an association between increased physical activity and a decrease



in both anxiety and depression, as well as an increase academic improvement. Both public and scientific databases have shown an influx of childhood obesity, indicating that physical activity and nutrition have been replaced by fast food and sedentary

activities such as computer and other video games.

Simultaneously, there has been a growing trend in children and adolescent's mental health disorders. Research on adults has consistently indicated a positive correlation between

## How Do We Make Physical Fitness Interventions Successful?

Researchers have indicated the importance of training school staff to keep the program operational once the study has ended. School administrators, as well as the community, must understand the impact of physical activity and education on a student's social, emotional, physical, and academic health. School and community psychologists, with their knowledge of children's mental health, are in the best position to provide recommendations regarding school-based interventions.

With community support, the school may be provided the financial support they had when the study was being conducted. By making the community more aware of the association between weight problems, lack of physical activity, and the child's mental well-being, communities and schools become increasingly instrumental for interventions.

Intervention programs must be flexible and tailored to the needs of the student, family, and school. Promotion of cognitive and behavioral learning are also vital to increase sustainability of physical fitness into the lives of the children.

## What are the Limitations of Intervention Programs?

The limitation of today's interventions is their sustainability. It is difficult to keep intervention programs running once they are no longer financed by researchers. Along with being financially cumbersome, they are also time-consuming.

Further limitations are set in place when students are unwilling to change their behavior, parents are unable or unwilling to help their children attain their set goals, and school administrators do not allow for the implementation of interventions and prevention programs.

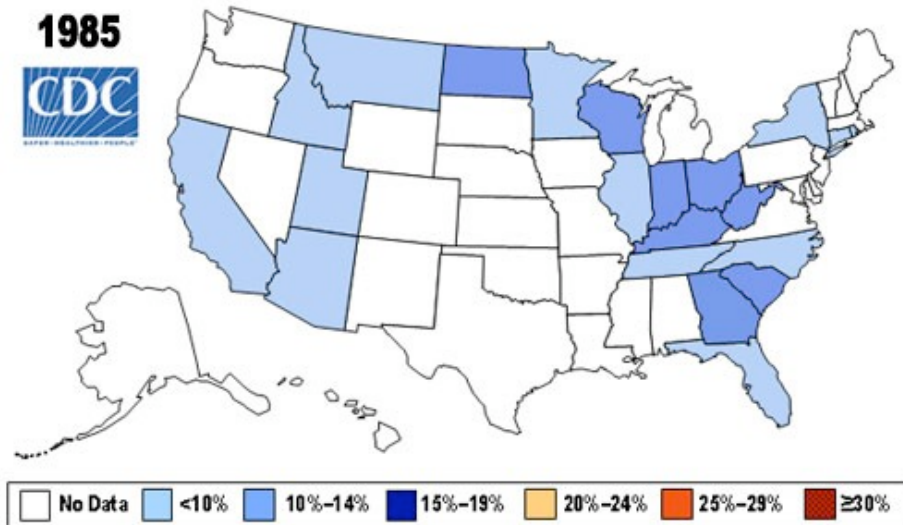


physical activity and mental health. But what has research indicated with children and adolescents? In the following sections, I will highlight studies conducted with children that indicate a possible correlation between a child's physical activity and mental well-being.

With these studies, come suggested interventions. Most researchers support the idea of school-based interventions. Children and adolescents spend most of their waking hours at school. Therefore, the hope is that by increasing physical activity in school, children will adopt a life-long habit of exercising. To implement interventions and guarantee their success, researchers must gain the approval and support of school administrators. Furthermore, interventions must be flexible for the children, parents, and education. Most importantly, programs must be gradual and enjoyable for children.

# History of Physical Education

Exercise has long been identified as a key factor in influencing one's quality of life. Researchers have suggested that physical exercise interventions may be capable of enhancing both a child's physical and mental health. As evidence of the lack of physical education and activity in schools, the following are obesity trends in the United States provided by the Center for Disease Control and Prevention (2010).



Source: Center for Disease Control and Prevention. (2010). *U.S Obesity Trends*. Retrieved from <http://www.cdc.gov/obesity/data/trends.html#State>

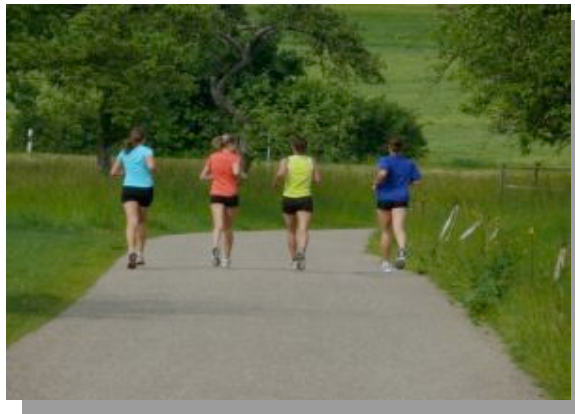
# Interventions: A Pilot Study

Dr. Maureen R. Benjamins and her co-author Dr. Steven Whitman, both of The Sinai Urban Health Institute, developed an obesity prevention program for two Jewish schools in Chicago. Subjects were boys and girls, grades first through eighth, from two neighboring Jewish schools. Benjamins and Whitman (2010) used the Coordinated School Health Program model as the intervention. This pilot study lasted for two years. Schools were mandated to form a wellness council and create a wellness policy, targeting five areas. These five areas included health education, physical education, school environment, family involvement, and staff wellness. A special spotlight on mental health was added for girls the second year. Here, body-image, stress management, and other mental health issues were discussed.

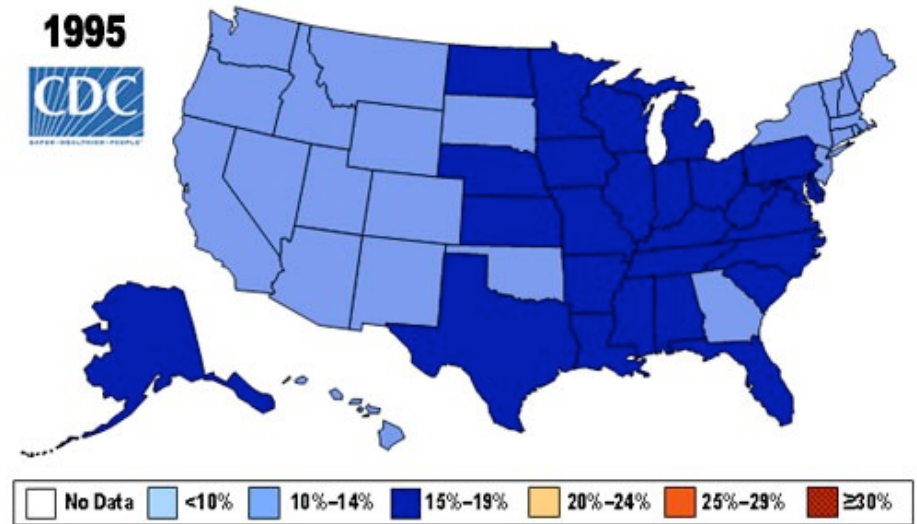
# Intervention Programs

Following is a list of school-based intervention programs that have been implemented in schools to address childhood obesity:<sup>5</sup>

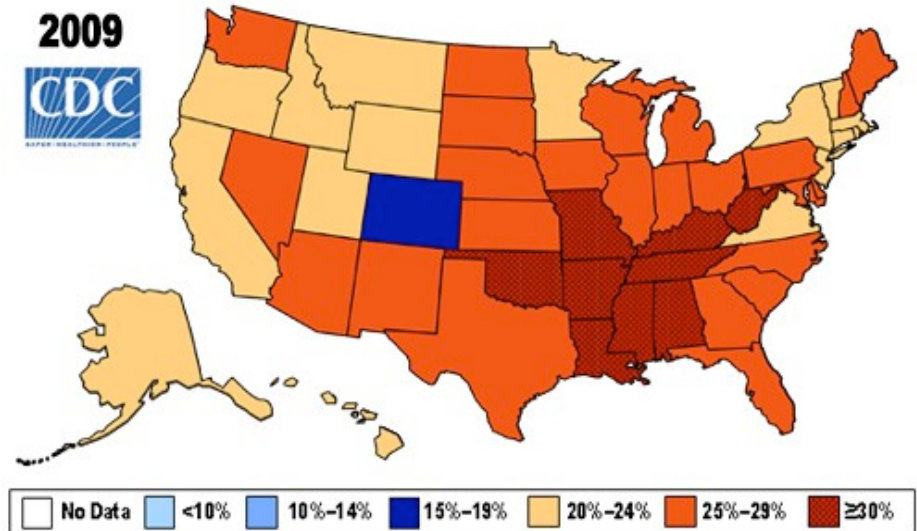
- *Pathways* (2003) - Aims to change the child's food intake, physical activity level, and family involvement.
- *Be Smart Program* (2003) - Aims to change a child's nutrition and physical activity level
- *Eat Well and Keep Moving* (1999) - This is a behavioral intervention that focuses on increasing the intake of healthy foods and decreasing fat intake. This intervention also aims to increase physical activity and decrease the amount of time a child spends watching T.V or playing video games.
- *Planet Health* (1999) Focuses on cognitive and behavioral skills.



5. Pyle, S. A., Sharkey, J., Yetter, G., Felix, E., Furlong, M. J., & Poston, W. S. C. (2006). Fighting an epidemic: The role of schools in reducing childhood obesity. *Psychology in the School*, 43(3), 361-376.



Source: Center for Disease Control and Prevention. (2010). *U.S Obesity Trends*. Retrieved from <http://www.cdc.gov/obesity/data/trends.html#State>



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# Common Misconceptions of Children's Physical Activity

The American College of Sports Medicine (2006) highlights these five misconceptions.

1. **Children Are Too Fragile** - Children are not physically fragile. Until recently resistance training was thought to be inappropriate for children, however research has proven this to be incorrect.
2. **Exercise Guidelines Are Universal** - Children are not miniature adults, therefore, they do not need to work in a certain target heart rate. Physical fitness programs must be unique for each child.
3. **Girls Are Not Interested In Physical Activity** - Girls on average may be less active than their male counterparts, but this does not mean they do not benefit from nor interested in physical activity
4. **Fitness Is Our Paramount Goal for Children** - "Fitness" and "Fatness" are not the same. We want to promote 'activity' in children. The best way of doing so is by following physical education guidelines especially designed for children.
5. **Activity in Childhood Means Activity in Adulthood** - Children are typically active in childhood by participating in physical education or by being a member of a sports team. This is not true for most adults.



# School-Based Intervention Programs

Schools are an obvious treatment and intervention arena for children's physical fitness. The following is a list of its components:<sup>4</sup>

- *Behavioral Support* - Focuses on the immediate environment. Want to replace unhealthy behaviors with more healthy behaviors.
- *Nutritional Education* - Students are instructed on things such as caloric intake and a balanced diet.
- *Physical Activity* - Moderate physical activity is crucial, however physical activity must be developmentally sound and gradual.
- *Parent Involvement* - Researchers have found that behavior modification therapies and interventions involving parents to be more effective than therapies and interventions not involving parents.



4. Pyle, S. A., Sharkey, J., Yetter, G., Felix, E., Furlong, M. J., & Poston, W. S. C. (2006). Fighting an epidemic: The role of schools in reducing childhood obesity. *Psychology in the School, 43* (3), 361-376.



## Strategies that Help: Possible Interventions

One possible solution, presented by Pyle et al. (2006) is school-based programs. School interventions provide treatment to a larger population in a cost-efficient and supportive manner. Previous research has shown that children in supportive and flexible environments were more likely to continue physical activities in and out of school. Pyle et al. (2006) also found a correlation between parental involvement and successful intervention plans. This demonstrates how vital parental involvement is to a child's increased physical activity and the betterment of the child's mental health.

Physical activity programs must be gradual so children do not become overwhelmed. Obese children may have more difficulty with school-mandated intervention programs due to low self-esteem. Therefore, in cases of mental health concerns, such as low self-esteem and depression, a mental health evaluation should be conducted. In this way, a physical education program may be adapted to meet the needs of the student, thus creating sustainability of physical education throughout one's life (Lagerberg, 2005)

## Combating Misconceptions of Children's Physical Activity

The American College of Sports Medicine (2006) also suggest several ways of combating these misconceptions.

- Recognize that all children are unique and intervention programs must be flexible and gradual to promote a lifetime model for each child.
- Promote opportunities for girls. Their personal needs must be met in order to increase their desire to be physically active.
- Physical educators must follow physical education guidelines designed specifically for children.
- Create self-management skills, through cognitive and behavioral training. Children must learn life skills in order to remain physically active into adulthood.



## Prevalence of Children's Mental Health Disorders

The previous trends in obesity rate as well as the obvious lack of physical education and activity in schools, may be a possible explanation for the following mental health rates.

- 2001 : 1 in every 3 children suffers from depression according to the 2001 National Institute of Mental Health Statistics..
- *Specific Phobia*: Present in about 15% of clinical cases<sup>2</sup>

Commonly begins around age 11 or 12

- *Generalized Anxiety Disorder*: Ranges from 2 to 4 % for all youth

No gender differences in children between ages 9-13

Adolescents—prevalence rates range from 3.7-7.8

33-50% of children diagnosed with GAD also have another anxiety disorder.

- *Eating Disorders*:

*Anorexia Nervosa*: 0.5 percent in adolescent girls

*Bulimia Nervosa*: 1-3 percent

*Binge Eating Disorder*: less than 1 percent to 4 percent of the general population.

- *Depressive Disorders*:

*Major Depression* - 2 percent of children and 5 percent of adolescents

*Dysthymia* - 2 percent of children and 4 percent of adolescents

2. Austin, V., & Sciarra, D. (2010). *Children and adolescents with emotional and behavioral disorders*. Upper Saddle River, NJ: Pearson Education, Inc.



## Misconceptions of Children's Mental Health Disorders

- What Do Children Have to Be Depressed or Anxious About? <sup>3</sup>
- Childhood "Depression" is Not Clinical Depression
- Childhood is a Care-free Place



### What are the Facts?

- Like adults, children also suffer from depression and/or anxiety.
- Childhood depression is intrusive and can be long-lasting if not treated.
- Childhood is not a care-free place. Children have to deal with peer acceptance as well as school and family expectations.

3. Anonymous author. (2010). *Childhood depression: What to do if your child is depressed*. Retrieved from HealthGuidance.org: <http://www.healthguidance.org/entry/2529/1/Childhood-Depression-What-To-Do-If-Your-Child-Is-Depressed>