Obesity – Get our Children Moving

Our project is attempting to fight childhood obesity by raising awareness of the benefits of physical activity and implementing a program that will allow children to become active.

Tag Words: Obesity, Childhood Obesity, Pay to Play, Budget Cuts, After school Activities, Children

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Summary:

The issue of childhood obesity a growing concern throughout America. Maintaining a lifestyle that promotes physical wellness is important to ensure a healthy prolonged life. Due to the increase in budget cuts, many elementary, middle and high schools cut their afterschool sports and programs to save money. To increase awareness we have emailed the local board of education and plan on presenting a powerpoint that illustrates the advantages of “Pay To Play.” Eventually we plan to present this to other schools in NJ.
Issue: Childhood Obesity

History of Obesity in United States (MH)
The issue of childhood obesity has dramatically risen and become a serious concern worldwide. Results from the 2003-2004 National Health and Nutrition Examination Survey (NHANES), shows that the number of overweight children has rose dramatically. As seen in Table 1, overweight increased from 7.2% to 13.9% in 2-5 year olds and it increased from 11% to 19% in 6-11 year olds between 1988-94 and 2003 and 2004 (National Center for Health Statistics, 2006).

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963-65</td>
<td>2</td>
</tr>
<tr>
<td>1966-70</td>
<td>5</td>
</tr>
<tr>
<td>1971-74</td>
<td>10</td>
</tr>
<tr>
<td>1976-80</td>
<td>15</td>
</tr>
<tr>
<td>1988-94</td>
<td>19</td>
</tr>
<tr>
<td>1999-00</td>
<td>20</td>
</tr>
<tr>
<td>2001-2</td>
<td>20</td>
</tr>
<tr>
<td>2003-4</td>
<td>20</td>
</tr>
</tbody>
</table>

It is estimated that approximately 25% of children and teenagers are either overweight or obese. The number of obese children and teens is more striking in the minorities such as the Pima Indians, Latinos, Asians and African Americans. The reason for this is because of their inactive lifestyle and consumption of fast foods. As seen in Table 2, America is ranked number 9 in the ranking of the most obese countries, 74.1% of its’ population is still considered obese. Although America may not be the number one most obese country, its large population makes it one of the countries with the most obese people. For example, ranked number 3, the Cook Islands have a population of approximately 14,000 with 13,000 obese people and a percentage of 90.9% obesity. America, ranked number 9, has a population significantly larger, with about 237 million citizens being overweight, which is only 74.1% of the population. The percentage of obese individuals in America may be smaller, but the overall number of obese individuals is immensely larger (World Health Organization, 2008).
### Table 2

<table>
<thead>
<tr>
<th>Country</th>
<th>% of population considered overweight or obese</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nauru</td>
<td>94.5%</td>
<td>A small island in the Pacific</td>
</tr>
<tr>
<td>2. Micronesia</td>
<td>91.1%</td>
<td>A small island nation between Hawaii and Indonesia</td>
</tr>
<tr>
<td>3. The Cook Islands</td>
<td>90.9%</td>
<td>Of a population of approximately 14,000, roughly 13,000 are obese</td>
</tr>
<tr>
<td>4. Tonga</td>
<td>90.8%</td>
<td>Tongans are genetically predisposed to gaining weight</td>
</tr>
<tr>
<td>5. Niue</td>
<td>81.7%</td>
<td>Another remote South Pacific Island. Here obesity is seen as a sign of wealth</td>
</tr>
<tr>
<td>6. Samoa</td>
<td>80.4%</td>
<td>Biological anthropologists believe that Samoans genetics favour calorie storage as fat tissue. This type of trait is prevalent in communities that have historically experienced food shortages</td>
</tr>
<tr>
<td>7. Palau</td>
<td>91.1%</td>
<td>Another island. Obesity here is attributed to lack of availability of fresh fruits and vegetables</td>
</tr>
<tr>
<td>8. Kuwait</td>
<td>74.2%</td>
<td>One of only 2 countries not in located in the South Pacific. Kuwait has the highest number of overweight people of all Arab nations. Cardiovascular disease is a leading cause of death</td>
</tr>
<tr>
<td>9. United States of America</td>
<td>74.1%</td>
<td>It is estimated that 237 million Americans are currently overweight</td>
</tr>
<tr>
<td>10. Kiribati</td>
<td>73.6%</td>
<td>A cluster of 33 islands in the South Pacific with few natural resources. Kiribati’s problem with obesity can be rooted back to their reliance on high fat imports and little availability of fruits and vegetables</td>
</tr>
</tbody>
</table>

Along with obesity are complications and risks such as high blood pressure and diabetes. The leading cause of childhood obesity is often associated with increased risk of emotional problems. Obesity needs to be controlled at a young age, because it can often become a lifelong problem. In order to manage obesity in children, there should be a change in eating habits, a control in the portion size of meals, a reduction in the consumption of daily calories, and many other precautions should be taken (Obesity in Children and Teens, 2008).

**References**

http://www.cdc.gov/nchs/data/hestat/overweight/overwght_child_03.htm
(National Center for Health Statistics, 2006)

http://www.aacap.org/cs/root/facts_for_families/obesity_in_children_and_teens
What is childhood obesity? (SC)

Obesity is the most prevalent, chronic, fatal, relapsing disease of this age. It is the leading cause of death in the United States. The definition of Obesity is excessive adipose tissue. Obesity is a disorder that affects about one-third of the adult American population in the United States (The Obesity Society, 2010). Obesity is associated with many adverse effects, which include high blood pressure, type 2 diabetes, high cholesterol, fatty liver disease, sleep apnea, heart failure, etc (NEJM).

Childhood obesity has been steadily increasing in the United States recently as well. 15 percent of adolescents, between the ages of 12 and 19, and children, ages 6 – 11, are obese in the United States (Ferry Jr. MD.). Childhood obesity is caused by numerous factors. Genetics alone does not contribute to the obesity of children. When a child eats even just 100 calories extra a day, by the end of the year, the child will have gained about 10 pounds (Ferry Jr. MD) Lack of daily physical activity, and the popularity of video games, television, and computer games promote a sedentary lifestyle for children. Low family income contributes to unhealthy eating habits. Many times, foods that are higher in saturated fats and calories are the cheapest to buy. Only 1/3 of children in the United States are offered physical education in schools. BMI, or Body Mass Index, is a method used to calculate the relationship between an individual’s height and weight. It can possibly be misleading in the cases of very muscular people and women who are pregnant or lactating (The Obesity Society, 2010). Obesity is diagnosed when a individual’s Body Mass Index is greater then 30, as seen below.

BMI cutoffs:

| Below 18.5 | Underweight |
| 18.5-24.9  | Normal weight |
| 24.5-29.9  | Overweight |
| 30 and greater | Obese |
| 40 and greater | Morbid or extreme obesity |

References:

Robert Ferry, Jr., MD
http://www.obesity.org/information/what_is_obesity.asp
2010 The Obesity Society
http://content.nejm.org/cgi/content/full/357/23/2325
NEJM

Benefits of physical activity and preventing childhood obesity (RH)

On an absolute level, being an overweight or obese child does not carry the same degree of health risks as an equally overweight or obese adult. However, the major problem with childhood obesity is that obese children are likely to be obese adults. Not only will they then have the problems facing an obese adult, but having been obese for an extended period including
childhood will lessen the age at which obesity related health problems will occur. As mentioned, the obesity epidemic is not only caused from the change in eating habits that has occurred in our country, but the combined decrease in physical activity that children are getting as well.

Here are some stats to help understand the state that today’s children are in:
- As of 2006 less than one third of 15 years olds got the minimum amount of required physical activity during the week and on weekends it dropped to just 17%
- On average kids spend 5 ½ hours a day on media driven sedentary activities
- 3 hours of the 5 ½ is spent watching television
- Teens spend an average of 6 hours a day on media driven sedentary activities
- Only 10% of schools offer daily physical education classes, and many of those don’t meet the time requirements of weekly exercise

The daily physical activity is decreasing at an alarming rate. Should we reverse this trend, enormous strides towards reducing childhood obesity can be taken. In addition to kids not being overweight other factors also arise that are positive aspects of engaging in physical activity such as: having stronger muscles and bones which decreases the risk of injury; decreased risk in the future of developing health issues such as Type 2 Diabetes, high blood pressure, and high cholesterol; improved cognitive functioning, and potentially most important of all higher self-esteem. A study done in Switzerland specifically showed that: “A school based multi-component physical activity intervention including compulsory elements improved physical activity and fitness and reduced adiposity in children” (Kriemler S). All these benefits take place solely from engaging in as little as 60 minutes a day of physical activity. Something that is so simple, cheap, and has such a profound effect on our youth, shouldn’t be neglected the way that it has.

Obesity vocabulary and topics (NB)

Elementary Child Obesity- is when a child between the ages of 4 and 9 has excess body fat to the point where it is affecting his health and well being. In order to find your body fat there are many tests that will give you your BMI. [http://www.nhlbisupport.com/bmi/]

Issues- When a child between the ages of 4-9 is obese the first thing that usually happens is they become self conscious and it hurts their self esteem. It mainly affects their emotional self esteem and this is very important in a young child because during these years of their life is when they are the most moldable. Although this is very important, there are many more serious issues that can occur if a child continues to be obese. It affects their health greatly some health problems that can occur are heart disease[http://www.mayoclinic.com/health/heart-disease/DS01120] and diabetes[https://health.google.com/health/ref/Diabetes] just to name a few.

Causes- The main causes for childhood obesity is diet, physical activity and genetic

Results- There was a three year controlled test where they took a little over 1,700 3rd grade kids and fed them 2 healthy meals a day and made them exercise however the body fat didn’t seem to be greatly affected. However it is proven that exercise and a balanced diet will help you live a healthier life and get rid of body fat.

Genetics play a very big role in the body fat of a child. You have between a 5 and 25 percent chance of being obese if it is in your genetics. [http://organizedwisdom.com/Genetics_and_Childhood_Obesity]
Solutions - Currently there are no medications that can cure obesity and there is nothing besides surgery that can medically cure obesity. Some ways to live a healthier lifestyle and to lower your body fat are that you work out regularly, eat healthy foods and make sure you stay active. A study shows that 35% of parents believe that their schools are not teaching the students properly about obesity and its dangers. If the kids were more educated on the subject of obesity and if it was taken more seriously, then there would be greater strides made to help the health and well being of young children.

Resources


http://www.cdc.gov/obesity/childhood/prevalence.html
http://tulanepadova.pbworks.com/f/1177684072/HealthEstat1206.gif
http://en.wikipedia.org/wiki/Obesity_in_the_United_States
http://www.aacap.org/cs/root/facts_for_families/obesity_in_children_and_teens
http://www.getkidsinaction.org/exercise/
http://www.scumdoctor.com/obesity/physical-activity/Benefits-Of-Physical-Activity-In-Children.html
http://www.obesity.org/information/what_is_obesity.asp
http://content.nejm.org/cgi/content/full/357/23/2325
Community Service Project: Letter to Board of Ed

Our service project is to speak with the Superintendent of New Brunswick Public Schools regarding the current state of youth activity in the city. If there is not a sound established regulation for physical activity in children then we will help to develop one and put it into place. Possible ways to get the children more active are: to develop a program where students from our University go to the New Brunswick schools and supervise after school or during school activity, develop a non-profit organization that seeks to raise funds for athletics or other structured physical activity programs, develop a method for physical activity to be integrated into the curriculum such as physical activity assignments that must be signed off on by parents. We contacted New Brunswick’s Board of Education, through both phone and email, to ask to speak with them at their next meeting about the benefits of Pay to Play. We are still waiting to hear back from them. We put together a presentation that will hopefully allow them to see the need of after school sports for children is a vital necessity. We will be presenting to the board of education, starting with New Brunswick, and hopefully keep it going throughout NJ.

Cover Letter:

To Whom It May Concern:

My name is Sheel Chokshi. I am writing to you, along with my peers, Nate Bourdeau, Roland Howard, and Michelle Huey, to implement a program with the help of our Ethics and Science class, a course affiliated with Rutgers University. We have enclosed with this email a document that shows our proposal as a whole.

We are proposing a program that incorporates Pay to Play to allow children to stay physically active with competitive sports throughout our rough economy. With the budget cuts, a lot of after school activities have been cut to save money. With only a minor fee, children will be able to play competitively throughout the state of NJ.

After reading out proposal, I hope you understand the importance of Pay to Play during our current economic state. Thank you.

Sincerely,
Nate Bordeau
Sheel Chokshi
Roland Howard
Michelle Huey

Editorials:

Michelle Huey
Sent to:
Gary Schoening,
Nationwide Obesity Control Program

Childhood obesity is becoming an epidemic across America, and actions need to be taken to implement a change from this devastating trend. It has become apparent that due to current economic times, many public schools have cut their budgets, leading to the cut of afterschool sports programs. Cutting these athletic programs means cutting physical activity for these young children. Schools and parents need to look at the possibility of starting a program known as pay-to-pay. This pay-to-play program would require a small fee; $20-$30; in order for children to participate in after school sports. Many parents feel this is not fair, that as a tax payer in their town, their children should be 100% funded for participation in all of their school related functions. In order to educate the parents and school members of the positive aspects of pay-to-pay, I am hoping to present a power point presentation at local school board meetings. In this power point presentation I will emphasize the pay-to-play program and how it can be beneficial at local schools. Physical activity is a necessity to maintain and lower childhood obesity. It needs to be controlled at a young age, so a long and happy life can be lived.

Sheel Chokshi
Sent to:
The Star Ledger
Richard Vezza
Publisher
Publisher@starledger.com

Lets get our children moving

Walking through the hallways of the elementary school I once attended many years ago, not only did it seem like the hallways shrank and recess time has been reduced, but also health class isn’t taken seriously and the children attending the school now seemed to be slightly heavier. This is a prevalent problem that the United States of America has been experiencing for a few years now. Our nation’s youngest generation is the heaviest in history.

To cope with this on a national level, taking the issue state by state will have the greatest benefit. Beginning with cities in NJ, we will show the benefits of Pay to Play to the Board of Education of townships. Due to the current economic crisis, schools begin cutting their after school programs, which include many sports activities. To fix this problem, we will be proposing a Pay to Play system in each district. This will allow children to keep their sport activities in school, leading to a healthier lifestyle. To implement this system, each child will be required to pay a small fee of about $20-$30 but in turn will attain a longer, healthier life.

Rutgers University students make conference call with superintendant of New Brunswick
Public Schools to discuss increasing physical activity in children despite budget cuts

Article by Roland Howard

On April 14, 2010 several students from a Rutgers University Ethics in Science class took the first step to becoming active in the fight against childhood obesity. The students, Nate Bourdeau, Sheel Chokshi, Roland Howard, and Michelle Huey all sat in on a conference call with the Superintendent of New Brunswick Public Schools to discuss what the current mandates were for in-school physical activity and after school athletic programs. This call was started in the hopes that if New Brunswick currently didn’t meet the standards set by the CDC or if they were planning to cut a program due to the current governor’s budget cuts that a program could be started to financially support the school system in endeavors related to getting the children more active.

The Superintendent informed the students that…

Now that the conference call is over the students are attempting to develop a way to increase activity and decrease obesity. When asked what current options they have Roland Howard said: “right now we are aware of the ‘Pay-to-Play’ program but we may try to start our own organization that specifically focuses on this town for now. By proposing a program that is made specifically for the kids in this town it may give parents extra incentive to become active in the organization since it is personalized and make sure that their children are engaging in enough physical activity to combat obesity.

The Superintendent of New Brunswick seemed … to the proposal of increasing physical activity. This made the students feel confident/apprehensive that starting some type of program or getting the town involved in an existing program will be beneficial.

When asked why the group of students is so adamant about making a change in New Brunswick Roland Howard said: “Well we actually want to make a change across the country since childhood obesity is an epidemic affecting our whole nation. However, we thought it would be best to start small and work our way up so we chose to work locally first. I’m not sure how anyone could not be touched by the effect that childhood obesity has on our children. The risk that obese children are put at for serious health issues when they are older and even Type II Diabetes now is scary. We will have enough problems with disease and ailments when we get older that we can’t help, we should do our best to make sure that children have a head start on their health by making sure the multitude of problems associated with adult obesity isn’t there.”

The Ethics in Science class at Rutgers University is taught by Dr. Julie Fagan. She has all of her students pick a current social or economic issue that hits close to home to them and has them go out and find a way to amend it.

Roland Howard is a Junior at Rutgers majoring in Exercise Science & Sports Studies

Nate B
Sent to:  
The Trenton Times
Brian S. Malone  
Publisher/Editor
Childhood obesity IS A PROBLEM!! Many children do not get out and are not physically fit enough and this is greatly affecting the children's health. It may even be so serious that it could cut your life in half. In order to live a healthy life a child must spend time doing some sort of physical fitness for over an hour. Go outside and shoot some hoops or play some catch, if you don’t like sports than you can do something as simple as just going for a job. Your physical health may be the most important thing in life. You do not want to jeopardize it when it is something very simple to solve!! I believe that every kid should have some sort of exercise for over an hour every single day and then he hopefully will not have major health concerns when they are older.

Letter:

Letter sent to: diana_lopez@nbps.k12.nj.us
Dear Ms. Lopez,

I spoke with you on the phone yesterday regarding a group of 4 people wishing to speak with the board of education. We are aware of how the budget cuts are affecting school districts throughout our state. Unfortunately, school leaders are placed in a difficult position and have to find some way to deal with the lack of funding. The group of students I am with would like to make sure that athletic programs and physical activity requirements for New Brunswick elementary schools are still maintained or even increased if they do not currently meet the recommendations set by the CDC. If cuts have to be made and an athletic program is to be effected by these cuts then we are willing to help develop a program to alleviate the costs of maintaining said programs. The rate of childhood obesity in our country is alarming and we want to do our best to make an impact on those statistics. I believe you said you would forward this to whoever the person is that may need to see it but if I need to speak with anyone else as well please let me know. Thanks in advance for all your help.

Sincerely,

Roland Howard
Rutgers University - Class of 2011
President
Phi Delta Epsilon Medical Fraternity