

## YWCA Fit & Fun: Developing Fitness Programs To Prevent Childhood Obesity

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## YWCA Fit & Fun

The YWCA Elmira & the Twin Tiers implemented in 2010 an unique fitness program for obese children and families in Chemung County.

Identifying need: Statistics in New York State and the entire United States show that obesity in children is a growing concern. Obesity places children at greater risk for weight related health problems such as orthopedic injuries, high cholesterol and type 2 diabetes.

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## Obesity Prevalance New York State

- The percentage of New York State adults who are overweight or obese increased from 42% in 1997 to 60% in 2008.
- The percentage of obese adults in New York State more than doubled from 10% in 1997 to 25% in 2008.
- Obesity among children and adolescents has tripled over the past three decades. Currently, a third of New York's children are obese or overweight.
- Health care to treat obesity-related illnesses and conditions cost the United States an estimated \$150 billion and New York State more than \$7.6 billion every year. <http://www.health.state.ny.us/prevention/obesity/>

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## Chemung County

WIC data revised December 2009

Indicator	3 Year Total	County Rate	State Rate
% Pregnant Women in WIC Who Were Prepregnancy Overweight (BMI 26 - 29), Low SES (2005-07)	247	13.6	15.4
% Pregnant Women in WIC Who Were Pre pregnancy Very Overweight (BMI Over 29), Low SES (2005-07)	632	34.9	26.1
% Overweight Children in WIC, 2-4 years, Low SES (2004-06)	500	12.7	15.2

Indicator	County Rate	CI #	State Rate	CI #
% Adults Overweight or Obese (BMI 25+)	63.3	± 4.4	56.7	± 1.2
% Adults Who Participated in Leisure Time Physical Activity in Last 30 Days	75.3	± 3.7	74.6	± 1.0
% Adults Eating 5 or More Fruits or Vegetables per Day	23.0	± 3.6	25.8	± 1.4

<http://www.nyhealth.gov/statistics/prevention/obesity/county/chemung.html>

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## YWCA FIT & FUN

- YWCA Elmira & the Twin Tiers will provide obese children (BMI >30), and their families with exercise and nutrition in a safe, structured and fun environment and provide them with knowledge and opportunities to help them lead healthier lifestyles. The YWCA is excited to offer low-cost fitness to area youth and families to increase the physical activity levels of obese children (BMI >30), ages 6 months to 12 years, making exercise fun and a part of a healthy life style.
- The YWCA Fit & Fun Program initially was set up to run for 10 weeks, starting March 29 through June 6, 2010, with open enrollment during this entire period.
- Obese children could be referred by a family member, school or medical professionals with a referral stating they would benefit by participating in the YWCA Fit & Fun Program. An initial weight and height will be provided by school or medical office, or can be done at the YWCA, to determine eligibility, with BMI greater than 30 for their age.

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## YWCA FIT & FUN

- **Benefits for YWCA Fit & Fun**
- Reduced rates to YWCA Pool Programming and special events such as Tropics Swim Party, Halloween Party, Party for Peace, Splash Parties and more!
- Reduced rates to family members.
- YWCA Fit & Fun Cooking Class will promote healthy nutrition with child friendly food. Fit & Fun members will prepare healthy snacks and eat together as a group. Themes for holidays will make eating healthy fun.
- Special Recognition will be awarded for participating in the program on a consistent and regular basis. Fit & Fun participants will be encouraged to exercise twice weekly for 1 hour each time. Records will be kept for attendance and Certificates of Excellence will be awarded to participants meeting goals. Splash Parties will be provided for participants.
- YWCA Fit & Fun Program participants will receive an identification card giving them eligibility to swim at a reduced rate (\$1 per session) at any of our Family or Open Swims. The entire family is encouraged to participate and swim with the child, making exercise a family priority.
- Accompanying family members will also receive a reduced rate (adult \$2, additional children \$1.)
- Swim 9 times and the 10th is free.
- \* Limited scholarships may be available through the YWCA.

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## Learn to Identify the obese child by CDC BMI Standards

- Definition: **What is BMI?**
- **Body Mass Index (BMI)** is a number calculated from a child's weight and height. BMI is a reliable indicator of body fatness for most children and teens. BMI does not measure body fat directly, but research has shown that BMI correlates to direct measures of body fat, such as underwater weighing and dual energy x-ray absorptiometry (DXA).<sup>1</sup> BMI can be considered an alternative for direct measures of body fat. Additionally, BMI is an inexpensive and easy-to-perform method of screening for weight categories that may lead to health problems.
- For children and teens, BMI is age- and sex-specific and is often referred to as BMI-for-age

[http://www.cdc.gov/healthyweight/assessing/bmi/childrens\\_bmi/about\\_childrens\\_bmi.html](http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html)

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## BMI for Age in Children

OBJECTIVE : Define BMI for age

Overweight: BMI 25-29.9

Obese: BMI 30-39.9

Morbidly Obese: BMI >40

Requires 3 data points: Weight

Height

Date of Birth

Computer access: <http://apps.nccd.cdc.gov/dnpabmi/>

BMI is accurate for most people but not all. It may overestimate body fat if you are muscular or athletic and report a high BMI. Likewise, if you have low muscle mass it may underestimate your body fat and report a low BMI.

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## Limitation of BMI for Athletes

- Study by Ode and colleagues from Michigan State University in East Lansing compared BMI measurements to body fat percentages in 226 college athletes and 213 non-athletes. Found that BMI overestimated the fatness of male and female athletes and male non-athletes, while underestimating the fatness of female non-athletes.

• SOURCE: Medicine & Science in Sports & Exercise, March 2007




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### Program Planning

- What age do you want to target?
- For example younger children will need to be supervised by an adult.

**YWCA Fit & Fun-** We decided to use the ages that already had YWCA programming in place and where we would be promoting the program. We provide daycare from infancy through kindergarten, and Kid's World after school programming through 6<sup>th</sup> grade. Our structured pool programming starts already Starfish from age 6 mo's to 5 years.

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### Staff Needs

- Do you have the staff to do new programming or will you just provide individuals space to do an individual program in?
- Is your staff trained to provide the fitness or nutritional components?
- Do you have the funding to hire more staff or train staff already employed?
- Can another agency provide the skilled staff you do not have?

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### Facilities

- What facilities do you have to offer?  
**YWCA Fit & Fun:** Gym, pool, outdoor play structures.
- If you do not own some of these facilities can you share with another agency or promote their program to your clients.
  - **YWCA Fit & Fun** we cross promote Ernie Davis Community Center who offer supervised gym activities for their obese children through F.F.I.S.T covering age 6-17 years.
- Will all people be able to access your facility? Handicap accessibility.
- Is there a public transportation available to reach facility? Does it run during the hours available for activity?

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## Outcome Assessment

Did our YWCA FIT & FUN program meet its goals? No, limited participation in first 3 months.

- We had sent letters to all public, private elementary schools, physicians (Pediatricians, Family Practice, Medicaid Clinic). We then at 2 months called to talk to staff, to re-promote and to see if their were any barriers to implementation. Our nurse found Medical Offices happy to see the program in place and where the child met the criteria had given the parents ours and other resources for the family. To expand we asked that the flyer be placed in the waiting room as a resource for families.
- Publicity: we did an op-ed piece in the Star Gazette supporting Michele Obama's public stand against childhood obesity.
- We tried do a shorter program to increase participation. No noticable change in client numbers.

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## YWCA FIT & FUN

Where are we today 9 months into the program?

1. Traditional client motivated reduced fee child and family swim is still in place.
2. Quarterly Friday FIT & FUN events. 1 hour swim combined with healthy snacks, crafts and co-sponsoring First Tee Golf. This is open to the public and YWCA members. Published in our after school program serving over 425 children and in the events section of the local paper. This is done as a free add on to our already established well attended family swim.
3. Expanded to Kid's Camp a nine week day camp the YWCA with daily swimming for all participants. This also includes a weekly 1/2 page handout: 1<sup>st</sup> side has eight exercise or nutritional advice for the family, and the second side has a nutrition snack or meal recipe for the family to make together

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### Sample Publication for Kid's World

<ul style="list-style-type: none"> <li>• YWCA Fit &amp; Fun</li> <li>• Friday Food Facts: July 30, 2010</li> <li>• TIPS FOR CHOOSING A HARVEST OF COLORFUL VEGETABLES</li> <li>• <b>1. Buy fresh vegetables in-season.</b> Go to a local farmers market; they cost less and are likely to be at their tastiest.</li> <li>• <b>2. Put a green vegetable on your dinner plate.</b> Make it easy by simply slicing a romaine lettuce leaf, topped off with a spoonful of another vegetable. "invite" broccoli or bok choy to your dinner table more often. Try making some steamed greens.</li> <li>• <b>3. Choose vegetable with more potassium.</b> Select beet greens, winter squash, spinach, and sweet potatoes often. Also choose lima beans, cooked lentils and split peas, and tomato products (paste, sauce, and juice) for potassium.</li> <li>• <b>4. Add color to salads.</b> Use baby carrot, shredded red cabbage, or spinach leaves. Throw in a handful of mixed frozen vegetables that have had time to defrost. Frozen vegetables are already partially cooked but will still add a crunchy texture. Cook an ear of corn, cut off cob and toss in.</li> <li>• <b>5. Munch on raw vegetables.</b> Add carrot sticks or sweet red pepper strips at lunch. Snack on celery sticks in the afternoon. Slice up peppers and cucumbers and dip away.</li> <li>• Think <b>ORANGE:</b> acorn, Hubbard or butternut squash, carrots, pumpkin</li> <li>• Think <b>DARK GREEN:</b> broccoli, bok choy, collard greens, kale, spinach, turnip greens, mustard greens, romaine lettuce</li> </ul>		<ul style="list-style-type: none"> <li>• YWCA Fit &amp; Fun</li> <li>• Friday Fitness Facts: August 6, 2010</li> <li>• Fitness can be done with little to minimal equipment.</li> <li>• You can use your own body weight to increase resistance. A classic upper body exercise example is the classic push-up working shoulders, arms, chest. To even increase the workout, do a pull-up. It requires you to pull all of your body weight up using your arms mainly. For abdominals, the sit-up requires you to pull your head, neck and torso up off the floor.</li> <li>• Lower body work is as easy as walking. You want to make it more challenging, you can lunge steps, side-step, shuttle step, grapevine and even walk backwards. As you increase your activity level you can increase the speed of the step and start to jog or run. Interval training, walk and run cycles helps raise heart (cardiovascular) fitness.</li> <li>• If you like music you might enjoy line dancing, folk dancing or hip-hop. Put some music on and have everyone move until the song stops. The faster the beat the harder you should move. Make exercise fun so you will want to do it!</li> <li>• YWCA</li> <li>• <b>Elmira &amp; the Twin Tiers</b></li> <li>• 211 Lake Street</li> <li>• Elmira, NY 14901</li> <li>• www.ywcaelmira.org</li> <li>• 607.733.5575</li> </ul>	
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