

Michelangelo and the prevention of childhood obesity

by Martin Maimon, MD, MPH

The role of early childhood educators

Are child care professionals really in a position to help children learn a healthy lifestyle 'frame of mind'? My answer is a resounding "Yes!". Of course, it is challenging and difficult. But, early childhood educators are exactly the people that I would choose to design creative and entertaining ways to help children understand the difference between food that helps them grow and food that appeals to their taste buds. (Of course, these things are not mutually exclusive.) These are the people that I want helping me brainstorm new and exciting ways to keep children physically active.



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A recent article in the British Medical Journal (Westley, 2007) described how a European community initiative referred to as EPODE (an acronym for a French program entitled "Together, Let's Prevent Obesity in Children") has shown some progress:

- Towns that participated have slowed the increase of childhood obesity, while the rate doubled in the rest of the region.
- The number of families who ate french fries once a week went from 56% to 39%.

These results are encouraging. The target group for these efforts is children ages 5 to 12, though, and it's likely that an impact can be made in younger children as well.

Child care professionals are in a unique position to teach children healthy lifestyle habits. It's not easy, but quality programs are getting it done. One factor that determines the quantity and quality of physical activity in child care settings is the education and training of staff (Story, 2006). Can all staff learn basic strategies for promoting healthy food consumption and physical activity? Sure they can; it just needs to be a priority.

Strategies for teaching young children

There are three key strategies for communicating with young children about good nutrition and physical activity:

- Children need to encounter healthy food and drink choices, as well as appropriate portion sizes.
- They need to detect and encounter an environment that incorporates structured and unstructured physical activity.
- These measures should be reinforced with lessons that explicitly teach about healthy living, created with the aid of community specialists.

Strategy One: Healthy Eating

Healthy eating is a complex issue. The expense of fruit and vegetables, the ubiquity and convenience of fast and unhealthy food choices, and understanding proper portion sizes, are only some of the challenges in planning for healthy eating. Not to mention what the taste buds are saying. But if we model these healthy behaviors explicitly and consistently, children will have an

understanding and awareness of healthy habits.

Relate key messages to challenges families live with in this day and age, for example, the availability and convenience of fast food. One message might be: French fries don't count as a vegetable. Teach kids and adults about different food groups and provide fruit and vegetable choices. Teach children the difference between 'growing food' (nutritious food that helps their bodies grow) and taste bud choices (foods that taste really good, but have little, if any, nutritional value). Shine the spotlight on some tasty 'growing foods.'

Another key message around good nutrition is: Control portion size. Remember that as we grow our stomach is roughly the size of our fist. This gives a rough guide of how much food it takes to fill our stomach (compare the amount of food offered to a child's fist). Eating too much is not good for our bodies. Consider family-style meal service where children serve themselves and determine their own portion size.

Strategy Two: Physical Activity

Physical activity, in general, is a little easier to plan for, given children's natural tendency to be physical and active. I recall a time seven years ago when my wife and I heard about a house that was going to be for sale, but was not yet 'on the market.' We happened to have a connection, and arranged a visit with the charming, elderly, owner. As we explored every room of the house, I remember thinking of the four flights of stairs in the home as a drawback. "Ugh! Wherever we go, we'll need to climb up or down stairs." During the same visit, however, I also remember being impressed that Mr. Barkey flew up and down those stairs with great agility, despite being in his 80s. He'd lived in his home for more than 45 years and, apparently, had

become accustomed to his multi-level home.

Children should engage in at least one hour of planned physical activity on a daily basis, with structured (15-20 minute sessions) and unstructured activities.

Strategy Three: Healthy Living

In the same issue of the British Medical Journal cited above, a study that compared the longevity of European old master painters and sculptors was reviewed (Dobson, 2007). The study compared 262 great painters and 144 great sculptors, and found that the "old master sculptors lived, on average, three years longer than the old master painters." Among other reasons, the authors pointed out that sculpting stone is a more strenuous activity than painting. Doesn't this make sense? Michelangelo, who apparently saw himself predominantly as a sculptor, and created some breathtaking sculptures, lived to the ripe old age of 89 years — certainly above average for the 16th century. He was also known to be "indifferent to food and drink, eating 'more out of necessity than of pleasure'" (Wikipedia). (Although, there were probably fewer convenience stores and candy bars back then.)

Living in a house with stairs, your body and — more importantly — your mind, begins to expect movement in order to get things done. Living in a house with stairs, your body and, more importantly your mind, begins to expect movement in order to get things done. This is much different than programming your body and mind to expect inactivity (e.g. sitting on the couch, and watching television in one's bedroom).

Our children (ages eight, six, and four), have grown up in a house with a bunch of steps. Not once have they complained about that fact. "I'm too tired to go to school," "I'm not hungry

for fruit," "Can you put my shoes on for me?," "Can you brush my teeth?," are common refrains. But not, "There are too many steps in this house." I'm sure some day we'll hear this comment, but so far the children have been silent on this issue, the number of stairs accepted as a given. I think it's because the steps are built into our environment; they are unavoidable. It's like playing on a swing. Children learn that if they want to have fun on a swing they've got to be pumping their legs.

Michelangelo had a talent and love for sculpting. We bought a multilevel home. Look for ways to integrate physical activity into your program.

As an effort to improve children's health and nutrition, expand your list of strategies to include new program policies and community linkages. First, develop and refine your program's health policy to call attention to the fact that health is critical to successful early learning. Among other important topics, highlight your chosen strategy for modeling healthy behaviors (e.g. physical activity and nutrition). Second, reach out to professionals in your local community who can assist you in your efforts. Cultivate a relationship with a health care professional who can be an advisor on health-related issues and content for your program (local pediatrician, family doctor, nurse health consultant, nutritionist, or health educator).

The way I see it, the child care industry is in a position to teach entire communities about healthy living. I have a lot of faith in child care professionals, the people who work tirelessly to teach and support children. One day at a time these measures can be incorporated into existing programs. It can be done. And, it will help our children sculpt their own active and successful lives.

Possible Interventions

Consistent evidence, from multiple studies, shows an association between the recommended behavior and energy balance (Barlow, 2007):

- Limit consumption of sugar sweetened beverages
- Limit television and other screen time to no more than 2 hours per day
- Remove television and computer screens from children's primary sleeping areas
- Eat breakfast daily
- Limit eating at restaurants (particularly fast food)
- Encourage family meals in which parents and children eat together
- Limit portion sizes

References

Barlow, S. (2007, December). Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report. *Pediatrics*, 120, Supplement 4, S164-S192.

Dobson, R. (2007, December). Did sculpting give artists a health advantage before antibiotics? *British Medical Journal*, 335, p. 1233.

Story, M. (2006, Spring). The role of child care settings in obesity prevention. *Future of Children Volume*, 16(1), 143-168.

Westley, H. (2007, December). Thin living. *British Medical Journal*, 335, 1236-1237.

Bare essentials of obesity prevention in child care:

- Build in at least one hour of planned physical activity on a daily basis — with structured (15-20 minute sessions) and unstructured activities.
- French fries don't count as a vegetable. Teach kids, and the adults in their lives, about different food groups, and provide fruit and vegetable choices.
- Cultivate a relationship with a health care professional who can be an advisor on health related issues and content for your program (local pediatrician, family doctor, nurse health consultant, nutritionist, health educator).
- Develop and refine a health policy that calls attention to the fact that health is critical to successful early learning. Among other important topics, it should highlight your chosen strategy for modeling healthy behaviors (e.g. physical activity and nutrition).
- Portion size — remember as we grow our stomach is roughly the size of our fist. This gives a rough guide of how much food it takes to fill our stomach. Eating too much is not good for our body. Consider family-style meal service where children serve themselves and determine their own portion size.