

Wonkaville Weighs In – Calories Create Coalition

*A Case Study in Assessment and Policy Development
Mid-America Regional Public Health Leadership Institute Year 12 Fellows*

Gayle Berger, BA—Program Coordinator, Peoria City/County Health Department, Illinois
Whitney Cassens, MPH, BS—Director of Health Protection, Adams County Health Department, Illinois
Alicia Davis, MA—Administrator, Menard County Health Department, Illinois
Jennifer Martin, BS—Injury Prevention Specialist, Illinois Department of Public Health
Julie Peter, BS—Assistant Administrator, Macon County Health Department, Illinois
Kate Mackz, MBA, Mentor—Training and Resource Center, Illinois Department of Public Health

The collapse of an overweight junior high school student in Wonkaville prompted the community to take action. Prior to this event, the Wonkaville Local Health Department (WLHD) possessed data indicating the growing trend of overweight children in their community and had attempted to initiate a coalition to address the issue. At that time, the lack of community support hindered further development of the coalition. Upon assessing the problem in depth and contacting the medical community, the WLHD staff discovered that the incidence of chronic disease prevalent among adults was now more common in children due to obesity. This case study examines how the WLHD was able to engage other community partners in the policy development process, upon the occurrence of this sentinel event. These efforts resulted in the development of a community-wide coalition to tackle the problems of childhood obesity and chronic disease in Wonkaville.

HISTORY

According to the 2000 Census, Wonkaville, Illinois, located in a rural county, had a population of 52,964 and was the largest city in the region. A majority of the residents were employed at the famous Wonka Chocolate Factory, owned by Willy Wonka, Sr. In 1988, Wonka Sr. contracted with the public school district to provide all vending items at school facilities and functions.

The BMI (Be More Involved) for Healthier Children Coalition:

First Attempt:

Health Department

Ms. Windelmann, Administrator
Ms. Violet, Health Promotion/Illinois Plan for Local
Assessment of Needs (IPLAN) Coordinator
Mr. Gloop, Health Protection Coordinator
Mr. Fit, Nutrition and Physical Activity Coordinator

Wonkaville School District

Ms. Salt, School Nutritionist
Ms. Bucket, School Nurse
Mr. Teevee, Physical Education (PE) Instructor
Ms. Veruca, Parent Teacher Association (PTA) President

Medical Community

Dr. Pancreas – Local Physician

Mr. Loompa, Executive Director of the Wonka County
Health Council and Chief Financial Officer (CFO)
of Loompa Memorial Hospital

Ms. Tinker, Local Dental Hygienist

Ms. Windelmann, Administrator of the Wonkaville Local Health Department (WLHD), knew the importance of living a healthy lifestyle; however, she did not realize the extent of the problem facing American youth until she read a journal article.¹ While searching for information on risk factors for obesity that lead to chronic diseases in adult populations, she discovered this interesting article. It cited a study where nine pathology laboratories collected arteries and tissues from over 2000 young adults whose deaths were attributed to homicides, accidents or suicides. Autopsy risk factors for chronic conditions included such things as smoking, diabetes, obesity and hypertension. The study documented the process of progressive thickening and hardening of the walls of medium and large-sized arteries as a result of fat deposits on their inner lining.

At the next WLHD staff meeting, Ms. Windelmann presented these findings and voiced her concerns. During this discussion, the nurses explained they had similar discussions recently with local physicians and school nurses. It seemed over the past several years, individuals in the medical community noticed an increased number of juvenile Type II diabetes, and there appeared to be a consistent increase in the youths' Body Mass Indexes (BMI). Body Mass Index is defined as weight in kilograms divided by height in meters squared. The 85th percentile (BMI of 25 – 29) is considered overweight and the 95th percentile (BMI of 30 and above) is considered obese.²

Ms. Windelmann realized that the next step was to identify the problem; therefore, she instructed her staff to work with the medical community and assess the past five (5) years to determine why these increases were noted. Ms. Violet, IPLAN Coordinator, with assistance from Mr. Gloop, Director of Health Protection, Mr. Fit, Director of Nutrition and Physical Activity and Dr. Pancreas, a local physician, began the surveillance process to quantitatively estimate the extent of this health problem in Wonkaville.

The results of the surveillance of datasets were:

- *Centers for Disease Control and Prevention's Pediatric Nutrition Surveillance System (CDC PedNSS)* showed the prevalence of overweight children from birth to age 5 was 13.1%.³ CDC data also indicated 30% of low-income children in Illinois, aged 2 to 5 years, were overweight or at risk for being overweight.³
- In 2001, *Illinois Youth Risk Behavior Surveillance System (YRBSS)* data confirmed that 32.5% of students grade 9 through 12 described themselves as slightly or very overweight. Regarding physical activity, 29.4% of students did not attend PE class daily, and 25.9% of students did not report exercising or participating in physical activity that made them sweat and breathe hard for at least 20 minutes on 3 or more of the past 7 days.⁴

- *CDC Youth Media Longitudinal Survey* showed 61.5% of children aged 9 to 13 years reported no involvement in organized sports during nonschool hours. Also, 22.6% reported no free-time physical activity during the 7 days preceding the survey.⁵
- According to *IPLAN* data, they found that approximately 24 youth had been hospitalized for diabetes within the last year.
- A review of *local medical records* showed there were three times as many children overweight today than there were 20 years ago. They also indicated that Type II diabetes has increased 700 percent.⁶ Children with Type II diabetes by the age of 15 will experience a life expectancy shortened by 17 to 27 years.² This could be the first generation of kids to lead shorter lives than their parents.⁶

Six (6) months later, the surveillance was complete, and the medical community began attempts to recruit other professionals.

Initiating a Coalition

Ms. Violet, Mr. Gloop and Mr. Fit identified those that had already organized programs to promote healthier lifestyles and invited them to serve on a steering committee to strategize in the development of a coalition.

- Ms. Salt, School Nutritionist for the Wonkaville School District, coordinated the Five A Day for Better Health Program. Her goal was to achieve the *Healthy People 2010* objective for increasing the per capita consumption to five or more servings of fruits and vegetables daily.⁷
- Ms. Bucket, Wonkaville Junior High School Nurse, has noticed an increase in children being prescribed diabetes medication.
- Mr. Teevee, an innovative PE Instructor at Wonkaville Junior High School, just received a CATCH (Coordinated Approach to Child Health) grant and has coordinated the Kids Walk to School initiative in their community for the past five years.
- Ms. Veruca, PTA President, has approved funding for the Five a Day for Better Health Program through the Wonkaville PTA.
- Mr. Loompa, Executive Director of the Wonka County Health Council and CFO of Loompa Memorial Hospital
- Ms. Tinker, a local dental hygienist, has coordinated the Healthy Smiles-Healthy Growth surveillance project to assess oral health, as well as children's heights and weights.

The first project of the steering committee was to conduct a community assessment. The findings from this survey showed the following:

- Increased *TV viewing time and screen based activities*, especially after school when both parents were at work and the youth were home alone. Also, many of the prizes for school fundraisers, selling Wonka candy, were electronic games.
- Since the majority of parents work full-time and youth activity choices have increased, they got home late from work, and they found it easier to go through a *fast food* drive-thru to provide for dinner.

- In 1988, Willy Wonka Sr. contracted with the public school district to provide all *vending items* at school facilities and functions. The contract with Wonka Chocolate Factory provided candy machines in all of the schools in the Wonkaville School District, in exchange for a monetary benefit. Most of this money went to building the football stadium and maintaining the football programs for the Junior High and High School.
- Even though *PE* was required in the schools, full participation was not obtained due to various waivers and/or *lack of quality, uniform standards*.
- *Lack of parental knowledge* of the risks of being overweight or obese as a child.
- *Lack of parental education* regarding proper nutrition and adequate physical activity.

The steering committee held a public meeting to announce their findings; however, only a handful of people attended. After six (6) months of trying to get additional members involved with The BMI (Be More Involved) for Healthier Children Coalition with no results, these members were at a standstill because no one seemed to view these issues as a problem in Wonkaville.

TURN OF EVENTS

Wonkaville Word

Thursday, October 2, 2003

Wonkaville Weighs In – Calories Create Coalition

By G. Oompa-Loompa

Wonkaville Word Staff Writer

Wonkaville, IL—The collapse on Tuesday of a local 14 year old has the citizens of Wonkaville calling for action. While participating in blocking drills with his football team, Willy Wonka, Jr., a starting defensive tackle for the Wonkaville Junior High Blueberries, fell to the ground. He was rushed by ambulance to Loompa Memorial Hospital, where doctors say he is expected to make a full recovery. According to Mr. and Mrs. Willy Wonka, Sr., it was discovered that Wonka, Jr. suffers from hypertension and Type II diabetes, due to his overweight stature.

The prevalence of overweight and obese children has steadily increased in the United States from the 1970s to the present. According to the American Obesity Association,⁸ approximately 30% of children age 6 to 19 are overweight and an

additional 15% are obese. The Wonkaville Local Health Department's (WLHD) Health Promotion Coordinator, Ms. Violet stated, "Wonkaville's children are actually experiencing this alarming trend at a higher rate than the national average." In an attempt to address this problem head on, Violet confirmed that WLHD is currently engaging other community partners to discuss potential policy development and changes.

What is behind the increase in pounds in pupils? Poor eating habits and lack of physical activity are the main factors. The Centers for Disease Control and Prevention (CDC) reports that 60% of young people eat too much fat and less than 20% eat the recommended 5 A Day servings of fruits and vegetables.⁹ The United States Department of Agriculture (USDA) states

that only 2% of school-aged children meet the recommendations of the Food Guide Pyramid for servings from the five major food groups.¹⁰ Along with the poor eating habits, the lack of physical activity also plays a role in this increase. More than a third of adolescents, grade 9 through 12, do not perform vigorous physical activity 3 or more days a week, and about 73% do not participate in moderate activity on 5 or more days a week.⁹

Our school systems are compounding this dismal situation. CDC reports that 93% of high schools, 75% of middle schools and almost 50% of elementary schools have vending machines or snack bars that sell high calorie, high fat, high sugar foods.¹¹ Only 6 to 8% of schools require daily physical education classes for the entire school year.¹² Illinois is the only state that requires daily physical education classes for

students in grades K through 12;⁸ however, certain students and in some cases, entire grades, may waive this requirement.

As a result of increased childhood obesity, diseases that are prevalent among adults are now becoming more common in America's children. Type II diabetes, heart disease, hypertension, asthma, orthopedic conditions and psychosocial stigma are being identified in children.⁸

Ms. Windelmann, WLHD Administrator, encourages community members to support the efforts of the BMI (Be More Involved) for Healthier Children Coalition. As Willy Wonka, Sr. stated, "Our children's lives and futures depend on it!"

For more information on childhood obesity and the coalition, contact Ms. Violet at 555-SAV-LIFE.

The BMI (Be More Involved) for Healthier Children Coalition:

Second Attempt:

Wonkaville was known by local sports enthusiasts to have the largest football frontline in the county. When they spoke of the "largest" frontline, they were not talking about height, but their weight. The smallest defensive tackle for the junior high tipped the scale at 180 lbs. On September 30, 2003, their star defensive tackle, Willy Wonka, Jr., suffered health complications while practicing for the Wonka Classic and collapsed to the ground. Wonka, Jr. was rushed to Loompa Memorial Hospital by ambulance, where he was diagnosed with hypertension and Type II diabetes due to his overweight condition.

His father, Willy Wonka, Sr., was outraged at the medical and educational communities for not monitoring the health and physical fitness of the student athletes more closely. At that time, he contacted the Wonkaville Local Health Department (WLHD) and learned of their ongoing efforts to establish the BMI (Be More Involved) for Healthier Children Coalition.

After reading the article in the Wonkaville Word and learning that their star athlete had health complications and would not be able to play the rest of the season, citizens in the community wondered what they could do to help or could have done to possibly prevent this tragedy. Many contacted WLHD at this time. This was the perfect opportunity for the original steering committee to formally organize the BMI for Healthier Children Coalition to deal with the issues of childhood obesity and chronic disease in Wonkaville. WLHD staff began talking to the inquiring citizens to determine who was involved with youth and what opportunities they had to assist and educate the youth.

A second public meeting was held. These were the viewpoints and concerns of participants:

Parents

- Inadequate screening prior to sports participation.
- Lack of public areas to walk, especially during adverse weather conditions.
- All fundraising efforts were focused on candy sales.
- Only Wonka products are approved for sale at the school and any school-related event – An exact quote was, “We are a public school not a public subsidiary.”
- Football was the only organized sport adequately funded and supported.

PTA

- The school district should have been more responsible in their approval of commercial advertising at school events.
- More education, parental involvement and advocacy for more funds for physical activity programs.

Healthcare community

- Willingness to work with the schools, families and community in any capacity needed.
- Replacement of candy in the vending machines with healthier choices.
- Development of universal and targeted approaches to healthier eating and fewer 'empty' calories.

Willy Wonka

- “I don’t think I should apologize to anybody. I donated over \$20,000 last year. This is money that went largely to fund the football program, which promotes physical activity and fitness.”
- “I am willing to consider development of a healthy line of snack products for vending machines.”

Local Business Owners

- The contract between the Wonka Chocolate Factory and the Wonkaville School District may have been doing more harm than good.
- They wanted to research other funding options that would support healthier lifestyles.

After this public meeting, the steering committee met again to discuss what the coalition’s next step would be. They agreed to add new members that were initially not represented. The following individuals were invited to join the coalition in order to tackle the issues at hand:

Parents

Mr. and Mrs. Willy Wonka, Sr.
Parents of the other football players

Youth

Willy Wonka, Jr.
Other members of football team

Business Owners

Walker Wobble, Owner of the Walk In Wobble Out

Restaurant

Wanna Waist, Owner of Fat Fighters

Arnold Wonkanater, Owner of Fit-Not-Fat Fitness Center

Youth Organizations

Wonkaville Youth Community Association (WYCA)

4-Health

Boy and Girl Scout Troops

After several meetings, the BMI (Be More Involved) for Healthier Children Coalition developed the following mission statement, vision and goals:

Mission Statement

The BMI (Be More Involved) for Healthier Children Coalition is a grassroots community organization committed to providing a positive impact on the health problems of the youth in Wonkaville.

Vision

We believe that all children can lead healthy and active lifestyles. We believe that providing good role models who provide a variety of opportunities will ensure youth success. We believe that every youth deserves the opportunity for nutritional education and guidance for a more physically active lifestyle in order to develop self-knowledge, which is necessary to make sound health decisions throughout his/her life. We believe all youth inherently want to lead a healthy lifestyle, and we must all share the responsibility for helping them reach their potential. To make our vision a reality, we have set forth the following goals:

- To define and to assist with the understanding of the causes of childhood obesity in the community of Wonkaville:
 1. Family environment and lifestyle
 2. Limited physical activity
 3. Heredity
 4. Limited community recreational facilities/areas.
- To educate families of Wonkaville on establishing healthy lifestyles:
 1. Importance of physical activity in the home.
 2. Importance of good nutrition in the family unit.
- To assist the Wonkaville School District in creating both a physically active and nutritionally sound environment.
 1. Uniform standards for physical education classes.
 2. Well-balanced school lunch programs that meet USDA guidelines.

CLOSING

Childhood obesity will continue to increase in the United States unless both healthcare professionals and the general public stand up and take notice. The causes of obesity are so numerous and varied – TV viewing, lack of safe environments for activity, nutrition in vending and fast food products – that one group or agency can barely make a dent in the problem. Unfortunately, a sentinel event, such as the collapse of an adolescent, sometimes occurs before the public perceives a risk. It is key that we, as public health professionals, do everything possible to gain support and form “healthy” coalitions to address issues before these events take place. As with other public health problems, no action against childhood obesity can trigger a domino effect – chronic diseases at earlier ages and quite possibly, a shorter life span.

STUDY GUIDE

1. Identify 3 –5 stakeholders who were missing in the BMI for Healthier Children Coalition.
2. Were the youth and parents adequately represented in the coalition?
3. Would there be psychological issues for children who are obese, and if so, who would address these issues?
4. What leadership qualities did Ms. Windelmann have or lack? Other stakeholders’ leadership qualities?
5. How would this coalition approach the largest employer in town who, quite possibly, was one of the main causes of obesity in the youth?
6. What additional goals need to be addressed by the coalition?
7. On a scale of one to five (Weak to Strong), how would you rate the coalition in the following areas?¹³
 - Vision/sense of purpose
 - Coalition structure
 - Outreach/communication
 - Coalition meetings
 - Member responsibility/growth
 - Doing projects
 - Research/external resources
 - Sense of community
 - Needs and benefits
 - Relationship with power players

REFERENCES

1. Strong, J.P. (1995). Natural history and risk factors for early human atherogenesis. *Clinical Chemistry* 41(1), 134-138.
2. National Institute for Health Care Management. (2003, Nov). Action Brief. Childhood obesity: Advancing effective prevention and treatment.
3. Polhamus, B., Dalenius, K., Thompson, D., Scanlon, K., Borland, E., Smith, B. & Grummer-Strawn, L. *Pediatric Nutrition Surveillance 2002 Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2003.
4. Grunbaum, J.A., Kann, L., Kinchen, S., Williams, B., Ross, J.G., Lowry, R. & Kolbe, L. (2002, Jun). Youth Risk Behavior Surveillance – United States, 2001. *MMWR* 51(SS04), 1-64.
5. Centers for Disease Control and Prevention. (2003, Aug). Physical activity levels among children aged 9-13 years – United States. *MMWR* 52(33), 785-788.
6. Illinois Office of the Governor, Rod R. Blagojevich. (2004, Jan). Press Release. Blagojevich unveils effort to promote healthy, eating and physical activity among children – Initiative to start in six grade-schools and expand. <http://www.illinois.gov/PressReleases/PrintPressRelease.cfm?SubjectID=3&RecNum=2609> (2004, Jan).
7. United States Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd Ed. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.
8. American Obesity Association. AOA Fact Sheets: Obesity in youth. http://www.obesity.org/subs/fastfacts/obesity_youth.shtml (2003, Oct).
9. Centers for Disease Control and Prevention, Chronic Disease Prevention. (2003, July). Preventing obesity and chronic diseases through good nutrition and physical activity. http://www.cdc.gov/nccdphp/pe_factsheets/pe_pa.htm (2003, Dec).
10. United States Department of Agriculture, Food and Nutrition Service. (2001, Jan). Foods sold in competition with USDA school meal programs. http://www.fns.usda.gov/cnd/Lunch/CompetitiveFoods/report_congress.htm (2003, Nov).
11. Wechsler, H. (2002 Mar). Trends in dietary behaviors and overweight among young people (Testimony before the Maryland Senate Education Committee). <http://www.cdc.gov/washington/testimony/nu031302.htm> (2003, Dec).
12. American Public Health Association. (2003, Apr). Get the facts – Obesity facts at-a-glance. http://www.apha.org/NPHW/facts/obesity_facts.htm (2003, Nov).
13. Kay, G. & Resnick, L. (1994). Diagnosing your coalition: Risk factors for participation. Brooklyn, NY: Community Development Consultants.