

APPENDIX

**Testimony of Eddy A. Bresnitz, MD, MS
Deputy Commissioner/State Epidemiologist
New Jersey Department of Health and Senior Services
Assembly Regulatory Oversight Committee
Monday, May 21, 2007**

Issue: Childhood Obesity

Good morning Mr. Chairman and members of the Assembly Regulatory Oversight Committee.

I appreciate the opportunity to provide the Committee information on the important issue of excess weight, specifically childhood obesity and overweight.

Excess weight is a public health crisis, often starting in childhood. It is a growing global public health problem and New Jersey is not exempt.

A CDC-sponsored survey in 2005 reported 37.1% of adults are overweight and 22.1% are obese in New Jersey

Excess weight is the nation's second leading cause of death after smoking contributing to as many as 300,000 deaths annually.

In the last 30 years, the percentage of overweight youth has doubled nationally for ages 6-11, and tripled for ages 12-19.

According to a national Survey (NHANES), 15 percent of children aged 6-11, and 12-19, are obese, estimated to rise to 20% by 2010.

The DOE and DHSS conducted a retrospective records survey of ~2400 6th graders in 2003 - 2004 selected randomly from 40 schools from varying socio-economic groupings found that 20 % were obese and 18 % were overweight, higher than the national average.

Higher obesity levels were observed among poorer school districts and among all racial/ethnic groups.

The state's African-American and Latino youth are more likely to be overweight than are white youths.

New Jersey has the nation's second highest obesity rate for WIC children of those states and US territories that report this data.

The prevalence of obesity among Hispanic children exceeds national rates. Results from the 2005 New Jersey Student Health Survey indicate that about three in 10 middle- and high- school students, based on self-reporting of their height and weight were either overweight or at risk of being overweight.

An ongoing plan to review and analyze student health records for height and weight data is critical in order to measure the State's progress in reducing childhood obesity.

The problem of overweight in childhood is known to persist into adulthood because the food and physical activity choices learned in early childhood will continue throughout life.

And obesity is costly, with New Jersey's share of the annual national total in 2003 estimated to be \$2.3 billion.

According to one estimate, insured children treated for obesity are approximately three times more expensive than the insured child without obesity, costing the US approximately \$750 million per year.

For adults, obesity-related health conditions cost the nation \$75 billion a year in medical expenses in 2003, with taxpayers paying half those costs through the Medicare and Medicaid programs.

Early intervention is needed so that overweight/obese children do not become overweight/obese adults.

There are numerous physical consequences that place children at risk for life-long health problems.

Increases in blood pressure and cholesterol levels due to obesity, place children at-risk for early heart disease.

Excess body fat increases resistance to insulin causing Type II diabetes.

Other physical problems include asthma, sleep apnea, menstrual abnormalities, and orthopedic problems.

In addition to physical health problems, there are emotional and social consequences including depression, being bullied and poorer academic performance.

Obesity results from an imbalance of consuming more calories than the amount of calories expended.

The causes are multi-factorial and for some, are genetically or physiologically determined.

However, childhood obesity is largely the result of a decrease in regular physical activity and poor eating habits.

Other factors come into play and can be broadly defined into three groups: demographic, cognitive and behavioral and community.

Demographic include socioeconomic status and race/ethnicity.

Cognitive and behavioral factors include attitudes, beliefs, and perceptions and sedentary behaviors – for example, watching television, playing video games and computer use.

Community factors include decreased school-based physical activity as well as an inadequate “built” environment- the way that land and buildings are designed and used and a transportation system that provides or limits opportunities for physical activity and travel-

The “built environment” is an increasingly emerging focus for health interventions.

It involves how community designs impact physical activity and how neighborhood factors influence eating patterns.

Some key factors are availability of sidewalks, bike paths, recreational spaces, safety of communities, types and numbers of restaurants and grocery stores in neighborhoods, and sprawl.

And earlier this year, Governor Corzine unveiled a \$74 million comprehensive pedestrian safety initiative that provided funds to local governments for the creation of safer walkways, bikeways and street crossings and other measures that will promote more exercise in the community.

In addition to this initiative by the Governor, allow me to mention just a few of the other initiatives of our Department.

The overarching goals of Healthy New Jersey 2010 are to increase the quality and length of healthy life; and eliminate disparities in health outcomes based on race and/or ethnicity.

To this end, the Department has and continues to undertake activities to prevent obesity and promote physical activity and nutrition including:

- Convening of a New Jersey Childhood Obesity Roundtable in June 2002 and a follow-up Summit in December 2003 that brought together key stakeholder groups to share information and make recommendations to combat the obesity problem. The attendees focused on what could be done in: Schools, Community, Industry/worksites, Insurance/ HMOs, Legislative/policy, Advertising/advocacy, Government, Research and 'other' areas.
- The Department staffed the activities of the Obesity Prevention Task Force established by the Legislature in 2003.
- Creation of an Office of Nutrition and Fitness to implement Task Force's recommendations outlined in its report, *The New Jersey Obesity Prevention Action Plan*. Five key areas for intervention will be- increased physical activity; decreased screen time (television, video games, and computer use); improved nutrition, in particular the increased consumption of fruits and vegetables; and exclusive breastfeeding of infants. The report mentioned that special efforts are needed to reduce the disproportionate rates of overweight and obesity in African Americans, Latinos and low-income people. The coordination of initiatives is imperative to maximize resources and minimize duplication of services.

We have implemented many educational programs to encourage physical activities.

Examples:

- *Kid Strong (Inside and Out)* and its follow-up curricula, *Jump Start Your Bones* were distributed to 1500 New Jersey public schools and focuses on healthy eating and regular physical activity for bone health in 10-14 year olds.
- Four Community Partnership for Healthy Adolescents grantees and several individual schools have implemented either in- or out- of school pedometer projects.
- Availability of mini-grants from the New Jersey Council on Physical Fitness and Sports, *Leaders' Academy for Healthy Community Development* (20 mini grants of \$2500 were offered in FY 2007; to be repeated in FY 2008) to communities to improve the health and wellness of the community through projects focused on increasing access to walking and biking opportunities.

- DHSS, Rutgers University and the PLAY Task Force are developing a workshop *for Preschoolers* for a near future statewide launch to impact childhood obesity. This effort is based on a number of strategies recommended in the *Obesity Prevention Action Plan*.
- Collaboration with Rutgers Cooperative Extension through a multi-year memorandum of agreement (MOA) on a statewide obesity prevention campaign: *Get Moving, Get Healthy New Jersey* (GMGH NJ). Through their County-based network of offices, two goals will be realized:
 1. New Jersey youth and families will make healthy eating and physical activity choices as part of their daily lives.
 2. The Department of Health and Senior Services and Rutgers Cooperative Extension will be recognized as the state leadership facilitating the collaboration of public and private partnerships to create a healthier New Jersey.

Other programs that address nutrition and physical activity throughout the lifespan include:

Our WIC Program (with DOA) to promote healthy eating and good nutrition:

- New Jersey 5 A Day, Fruits and Vegetables – More Matters is coordinated through the WIC Program in cooperation with the NJ Department of Agriculture and many other partners that promote nutrition and physical activity to reduce obesity. For example, the WIC Farmers Market Nutrition Program provides select groups of WIC participants with four - \$5.00 vouchers for the purchase of fruits and vegetables at approved farmers markets.
- The New Jersey State WIC Program provides on-going promotion and support of breastfeeding, increased fruit and vegetable consumption, nutrition education for growth and development, and age-appropriate education on physical activity.

Child Health Regional Network training of professional staff

- Through the Child Health Regional Network (CHRN), health professionals working in local health departments participate in trainings that update their knowledge and skills in a variety of topics including nutrition and childhood obesity and oral health.

Oral Health Program

- The Oral Health program developed an Oral Health and Nutrition Resource Guide for school-based personnel working with youth in the State's 31 special needs districts. These manuals were distributed in 2002 to WIC

Coordinators, NJ State School Nurses, each College of Nursing in the State that has a School Nurse Certification Program and CHRN program attendees.

-Family Planning agencies distribution of educational materials

- Brochures and training materials with specific nutrition and physical activity recommendations are disseminated through Family Planning agencies.

We have many programs targeted at adults

- The Division of Aging and Community Services (DACS): Project Healthy Bones (PHB) is a 24-week exercise and nutrition education program for older adults at risk, or who have osteoporosis. The program is offered at 125 community sites throughout the State. PHB is designed to improve strength, balance and flexibility. More than 1400 seniors participate in the peer led program.
- The Senior Nutrition Program is partnering with HealthEASE, a project funded by the Robert Wood Johnson Foundation in 2002, on a physical activity initiative called "Steps to Healthy Aging" being offered at local senior nutrition centers. The program includes the use of pedometers and education on healthier eating.
- A "Live Long, Live Well" statewide walking program for older adults is being co-sponsored with the New Jersey Commission on Aging. A New Jersey walking recognition award is a component of the initiative.
- The Office of Cancer Control and Prevention (OCCP) has collaborated with Family Health Services and other key stakeholders in the development of two work products: the nutrition and physical activity chapter of the Comprehensive Cancer Control Plan (CCCP). The chapter, compiled by an expert sub-committee, focuses on increasing fruit and vegetable consumption, reducing obesity and overweight and increasing leisure time physical activity. The document, *Nutrition and Physical Activity Programs in New Jersey*, published in 2002 was recently updated and provides information on current activities, program gaps and facilitate dissemination of successful programs available to New Jersey residents.

Other State Departments are also addressing childhood obesity. Some highlights include:

- Department of Education - revised core curriculum content standards for health and physical education and requires 150 minutes per week of health, physical education and safety.
- Department of Agriculture - has mandated that each school have a School Wellness policy that shall be implemented by September 2007
- Department of Transportation - has launched *Safe Routes to School* with federal grant funding
- Department of Community Affairs - through their Office of Recreation, is working with local parks and recreation departments to support local initiatives.

Let me conclude by stating that leading experts have indicated that for the first time in recorded public health history, that if we don't address the problem of excess weight head on in a multi-pronged approach, the current generation of youth will live shorter and sicker lives than their parent's generation. Addressing overweight and obesity NOW will improve the quality of life for our future generations and will strengthen the health of our nation. Thank you.

Testimony of Linda Holmes
Executive Director – Office of Minority and Multicultural Health
New Jersey Department of Health and Senior Services
Assembly Regulatory Oversight Committee
Monday, May 21, 2007

Issue: Health Disparities

Good Morning Mr. Chairman and members of the Assembly Regulatory Oversight Committee. I appreciate the opportunity to provide the Committee information on the important issue of health disparities.

As we have often heard Dr. Fred Jacobs, M.D., J.D., Commissioner of Health and Senior Services, say reducing and ultimately eliminating disparities in health outcomes is the core mission of the Department of Health and Senior Services. This remains the one of department's top priorities.

Over the years, the Department has worked to reduce disparities through various initiatives such as Rapid HIV testing and the Cancer Education and Early Detection Program, both of which target minority population at risk.

A year ago when providing testimony to this committee, I indicated that the Department was working on a Health Disparities Plan. Today I can say, for the first time, the Department of Health and Senior Services has developed a Strategic Plan for Eliminating Health Disparities in New Jersey, released in March. The plan is now being implemented.

The Department's Plan makes a number of recommendations for strengthening programs and developing new initiatives that will help the Department reduce and ultimately eliminate health disparities among various racial and ethnic groups.

In addition, this plan establishes goals for strengthening the infrastructure of the Department. For example, the Plan recommends increasing the number of minorities in management positions through a new mentoring program. This initiative is being directed by Human Resources.

Other steps we are taking to address strengthening the department's infrastructure include making certain that health education information that is culturally and linguistically sensitive is increasingly available on the Office of Minority and Multicultural Health website. Standardizing the collection and reporting of race/ethnicity data across the Department is another priority. We do not know if there is equity in the delivery of health care services without race and ethnic specific data to measure the quality of those services.

This plan lists actionable strategies for the Department to follow in order to eliminate health disparities. For example, in addressing disparities in asthma, the Department has examined our best practices and created a framework for eliminating asthma disparities in New Jersey.

The Commissioner's Annual Asthma Summit provides opportunity for collaboration among national and local experts in designing strategies to reduce asthma disparities.

The first summit in September 2005 allowed health care providers to exchange ideas on how to: (1) implement new asthma interventions in minority communities and low-income populations; (2) incorporate best practices as the basis of asthma management; and (3) develop partnerships with public and community health systems.

The Pediatric/Adult Asthma Coalition of New Jersey (PACNJ), partially supported by NJDHSS, continues to serve as the statewide coalition on asthma awareness. PACNJ, with over 150 participating member organizations and six active task forces, is undertaking the following initiatives: (1) school nurse asthma trainings; (2) asthma-friendly childcare trainings; (3) distribution of personalized *Asthma Action Plans* for individual children to manage their asthma; (4) train-the-trainer programs; (5) Asthma Friendly School Awards; and (6) annual media campaigns.

Other initiatives in the Department include Educating Physicians in partnership with the New Jersey Academy of Pediatrics; and the Partnership with the Trenton Childhood Asthma Program. Additionally, AHRQ selected New Jersey as one of six states to participate in the *Learning Partnership to Decrease Disparities in Pediatric Asthma* project.

Also, this year, the Office of Minority and Multicultural Health will be awarding small grants to faith based and community organizations to support efforts to empower communities with health information about how to be more effective in self management of chronic diseases. This will be the theme for our upcoming minority health month activities in September.

The strategic Plan for Eliminating Health Disparities will not "sit on a shelf". This Disparities Plan is the roadmap that the Department will use over the next three years to make a difference in the health of New Jersey minorities. The Department will measure progress against the goals outlined in the Plan. A department-wide Health Disparities Group, including Senior Staff and program directors, will meet quarterly to track progress made.

The time is now, but there is more work to do. While the current plan addresses eight medical areas (asthma, cancer, cardiovascular disease, diabetes, obesity, HIV/AIDS, infant mortality and unintentional injuries), we will be updating the plan this year to include kidney disease Hepatitis C, immunizations, violence, and sexually transmitted diseases.

To reach our goal, continued collaboration with academia, community based organizations, faith based groups, health care providers including federally qualified health centers, elected officials and the media are key.

Testimony of Felicia D. Stoler, MS, RD
NJ Dietetic Association, Host of TLC's Show *Honey We're Killing the Kids!*
May 21, 2007

Thank you for the opportunity to speak. First, I would like to tell you that the members of the NJ Dietetic Association are the premiere resource for nutrition information in the State of NJ. I am here wearing many hats... I host a reality show on the Learning Channel about unhealthy kids and their families, I am a mother, a registered dietitian & exercise physiologist, a member of the NJ Council on Physical Fitness & Sports, in addition to being the immediate past-president of the NJ Dietetic Association. I am a doctoral student @ UMDNJ & my research has been in obesity in adults. I am one of the few private practitioners that works with children, adolescents & teens who are overweight or obese in the state.

I can tell you that overweight and obesity are problems that may actually begin in infancy, and continue to get worse throughout childhood. Since overweight and obesity is a multifactorial problem – which stems from what we call an energy imbalance... between energy in (food) & energy expended (physical activity). Where do we start to put responsibility on this imbalance?

Do we start with the parents? They are usually struggling with their own weight issues... without access to the proper support to maintain an appropriate body weight. Our culture is bombarded with information in the media – the question, which information is correct? The Federal Trade Commission estimates that over \$30 billion is spent each year on weight loss products & programs. Funny, but the obesity epidemic is getting worse, not better. Finkelstein et al estimated that NJ will have spent \$2.3 billion on obesity-attributable expenses for adults in 2003. The economic costs of an unhealthy diet and physical inactivity add up to almost \$100 billion per year or approximately eight percent of the national health care budget in direct medical costs. The CDC reported that \$31 billion of direct treatments costs for cardiovascular disease was related to overweight and obesity.

According to Olshansky et al, "obesity and its comorbidities may decrease the adult lifespan by five to 20 years" – this means that for all the advances we have made in medicine & science, we actually will have a generation of children who may not out live their parents. How can we reverse this trend in children? Schools alone cannot be the answer – they can be part of the solution, but they are challenged with the need to generate revenue in food service, vending and fundraising. Our schools are making money to sustain their existence, at the expense of our children's health. Even with the school wellness policy that needs to be adhered to in NJ... there is still a disconnect with the access that kids have to unhealthy food during school hours.

No child left behind, should become, no child should be left ON their behind. Physical education has taken a back seat to children's performance on standardized testing. Look at the cycle of physical education, from elementary school – children are lucky if they even have physical education once per week... then when they get into middle school, they have it more than once per week... by the time they get to high school it's daily – but by then, the damage is done... we cannot afford to wait until our kids turn 14 & 15 to instill the behavior of daily physical activity... it needs to start in kindergarten.

Recognize that insurance companies do pay for the intervention that is effective – nutritional counseling, unless there is diabetes or kidney disease. Insurance companies do not pay for additional physical activities. Insurance companies would sooner pay for bariatric surgery... which is expensive, invasive, dangerous and over time has proven to NOT be successful for sustained weight loss. Making better nutrition choices and increasing physical activity are the least expensive, least invasive and most effective way to fight overweight and obesity.

I wish I had the magical answer to make this go away. Personally, hosting my show is one way that I can hopefully bring a solution to millions of households – by turning around the lives of 13 families on national television. I would like to tell you about resources that are available in NJ.

Registered dietitians provide medical nutrition therapy and nutrition education to youth and adults in NJ. The NJ Dietetic Association has a membership of 2,300 members in NJ and ADA has 67,000 members. About 50 % working in the community in government, schools, public health, Cooperative Extension and consultant work. The other half work in hospitals, nursing homes, and a variety of facilities. We all promote healthy eating, reducing fat, salt and sugar in our diets for improved health. Some examples of state-wide programs that are currently going on:

- Rutgers Cooperative Extension is working with counties to deliver full-day "Children's Health Summits" which focus on Childhood Obesity and create a local grassroots network to get the public "moving and eating healthier". The next summit is at the NJ Hospital Association on Alexander Rd in Princeton, NJ on May 24th. Another will be offered in Morris County on November 2nd at College of St. Elizabeth. Dietitians, nutritionists, public health professionals, teachers, school food service, school nurses and administrators along with hospital and health care professionals have attended these full-day events in 7 counties since 2005. (See <http://www.njaes.rutgers.edu/> for more info.
- Dietitians continue to work with schools, corporations, local government to provide support for walking and health promotion programs, NJ Mayor's Wellness Campaign, providing "School Wellness Trainings" in collaboration with Child Nutrition Bureau and NJ Dept of Agriculture. All schools in NJ currently need to comply with the school wellness legislation.
- Registered Dietitians work in private practice, in school-based programs, in public health and Cooperative Extension along with hospitals and other facilities to provide nutrition education and Medical Nutrition Therapy. NJ Dietetic Association members are the nutrition professionals with advanced training in a variety of areas.

We need:

- Grant dollars available to start up local nutrition and health programs that benefit local residents.
- Dept of Health should apply for federal money from USDA and NIH/CDC so local NJ groups (non-profits, schools, colleges, local governments) could apply for that money to provide local wellness programs.

- NJDA could provide leadership in assisting with the applications for major federal obesity money and assist in developing a working plan for setting up obesity intervention projects in NJ.
- Registered dietitians/Nutritionists need to be hired in school districts to assist in supporting school wellness policy and to provide nutrition education classes to youth, parents and teachers. Nutrition education needs to be taught to students at ALL age levels in NJ schools and "health" needs to be taught as a core curriculum class.
- Dietitians continue to work with MDs to teach individuals about their risks for disease due to obesity. We provide MNT so clients/patients reduce their risk factors for major diseases. Our members help New Jersey residents understand the science behind healthier eating and the importance of being physically active and fit. For every dollar spent on nutrition education, \$ 6.00 is saved as documented by the federally-funded Expanded Food and Nutrition Education Program (EFNEP)
- We are the nutrition professionals that care about the health of NJ residents and we are helping to improve the diets of our NJ residents.
- We need licensure for dietitians/nutritionists in the state to stop the misinformation that is out there. NJ is one of 6 states left in the US that does not have licensure and it is a threat to public health and safety when inadequately trained individuals give out inappropriate information – especially when it affects the health of our children and their families.

For further information, please feel free to contact me by email ts101er@att.net or by telephone 732-946-4436.

Good morning, Assemblyman Payne, committee members, staff and guests. Thank you for holding this very important hearing to discuss the problem of childhood obesity.

My name is Barbara Skinner, and I am a registered dietitian working in a hospital-affiliated medical practice in southern New Jersey and am here to testify as a member and past president of the New Jersey Dietetic Association.

The New Jersey Dietetic Association has a membership of 2,300 nutrition professionals working in the community in government, schools, public health, Cooperative Extension and consultant work. Others work in hospitals, nursing homes, and a variety of facilities. We all promote healthy eating, physical activity and lifestyles for improved health. Good nutrition is our business.

Registered dietitians and The New Jersey Dietetic Association have been on the forefront of New Jersey's efforts to battle childhood obesity. Activities have included serving on the 27-member New Jersey Obesity Prevention Task Force, and planning Child Health Summits to focus on childhood obesity and develop grassroots networks to work on the problem.

Additionally, dietitians continue to work with schools, corporations, and local governments to provide support for walking and health promotion programs, as well as the NJ Mayor's Wellness Campaign, and "School Wellness Trainings" in collaboration with the Bureau of Child Nutrition Programs and the NJ Dept of Agriculture.

Many will testify (have testified) here today about the prevalence and scope of the childhood overweight and obesity problem. It is alarming that over the past three decades, the childhood obesity rate has more than doubled in just about every age category, from preschoolers to school-aged children between the ages of 6 and 19 years.

Obesity increases a child's chance of getting a chronic disease, ranging from high blood pressure to diabetes. Real and potential consequences of childhood obesity cannot be ignored. As a specialty-trained dietitian and certified diabetes educator, diabetes care and prevention is my business and passion, so I would like to talk about this for a moment.

When I was a school-aged child, I remember my grandmother taking twice daily insulin shots because she had "old-age diabetes". Now called Type 2 diabetes, this devastating disease of adults is appearing in children and adolescents. According to the Institute of Medicine, case reports from the 1990s showed type 2 diabetes accounting for twice as many new cases of pediatric diabetes than before that time. This upward trend clearly parallels the increasing prevalence in childhood obesity.

Diabetes is more than just "a touch of sugar". Some of us have experienced it personally, or through our families and friends. We know that especially over time, it can be a debilitating disease leading to serious, life-threatening health problems and poor quality of life. It costs our country more than \$100 billion per year.

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The younger the person is when they develop type 2 diabetes, the longer the disease has to work its damage. We must do better at preventing it, especially in our children - and we can.

We know that having a family member with type 2 diabetes increases a child's risk of developing the disease. In fact, 45–80% of children with type 2 diabetes have a parent with the disease, and 74–90% report at least one affected first- or second-degree relative. But for diabetes to start, it takes more than strong genetics. The body must first become resistant to its own insulin. Insulin resistance can be “triggered” by obesity, in both adults and children. The good news is that studies have shown weight loss can lessen insulin resistance in both adults and adolescents, and hopefully prevent or delay the onset of type 2 diabetes.

I work as a registered dietitian and diabetes educator in a community with a high prevalence of type 2 diabetes. Although my work is primarily with adults who have this disease, I try to make my nutrition interventions family-focused. Parents are health and nutrition role models for their children, and many of my patients are mothers-to-be or parents of young children.

Many of my patients have at least one child who is obese or overweight, and are motivated to change the family's eating and exercise habits. The focus of our nutrition counseling sessions might include topics that help the patient and their family - keeping healthier foods in the home, choosing alternatives to fast foods, learning how to make quick and healthy meals, and fun physical activities for the whole family.

In conclusion, nutrition professionals interact with children and caregivers of children in many different settings. We are the experts in improving the health and nutritional status of New Jersey's children.

The New Jersey Dietetic Association is interested and willing to continue leading and assisting in developing and implementing future plans for obesity treatment and prevention projects in New Jersey. To this end, we recommend that dietitians and qualified nutrition professionals:

- Continue to work with healthcare providers to teach individuals about how to lessen their risk for obesity-related diseases such as diabetes.
- Be hired to work in school districts, with active involvement in school wellness policy and in providing nutrition education classes to youth, parents and teachers.

Finally, we support nutrition education being to be taught to students at ALL age levels in NJ schools.

Thank you for this opportunity to address the committee today.

Respectfully,
Barbara Skinner, MS, RD, CDE
Registered Dietitian and Certified Diabetes Educator
NJ Dietetic Association

**New Jersey State Legislature
Assembly Regulatory Oversight Committee
May 21, 2007**

Testimony

**Maris Chavenson, Associate Coordinator
The Pediatric/Adult Asthma Coalition of New Jersey
Sponsored by the American Lung Association of New Jersey
1600 Route 22 East, Union, NJ 07083, 908-687-9340, www.pacnj.org**

Dear Assemblyman Payne and Committee Members:

Asthma is one of the most common chronic diseases affecting children and results from the 2003 National Survey of Children's Health suggest that about 255,484 New Jersey children (12%) have a history of asthma. This Survey also suggests that 180,159 children in New Jersey (9% of the pediatric population) currently have asthma. When uncontrolled, asthma can result in activity limitations, missed school days, emergency department visits, hospitalizations and even deaths.

The burden of asthma is outlined in the attached notes we are submitting but in speaking with you today, I want to highlight some key concerns.

Seven years ago the American Lung Association of New Jersey and its medical arm the New Jersey Thoracic Society sent out a call across the state to those interested in changing the way asthma is managed in New Jersey to come together as a coalition for statewide change. The Pediatric/Adult Asthma Coalition of New Jersey (PACNJ) was formed with over 130 interested parties representing schools, child care, physicians, health insurers, communities, and environmental agencies. Funding for statewide initiatives came from the Centers for Disease Control and Prevention through the NJ Department of Health and Senior Services, the United States Environmental Protection Agency, Region 2, Foundations, and Corporations. Maintaining a statewide coalition that targets communities most in need with new programs and then expands those programs for statewide change is becoming more difficult each year. Funding allocated annually to sustain a statewide coalition to continue the work with schools, child care, communities, physicians and environmental agencies is needed.

The National Heart, Lung, and Blood Institute had issued Guidelines for Best Practice in asthma management and the Coalition saw the need to ensure that physicians, schools, and families were following those guidelines. Experts in the field of asthma and representatives from those systems that impact on children were enlisted on six task forces to design education programs and materials to bring people together in a coordination of care. PACNJ focused on statewide system change.

Asthma Hospitalizations:

- Children are more likely to be hospitalized with asthma than adults. In 2004, there were 5,175 asthma hospitalizations for children in New Jersey, and children under 5 years of age have the highest hospitalization rate for asthma.
- In 2004, black children in New Jersey were over 3 times more likely to be hospitalized with asthma when compared to white children. In the same year, Hispanic children in New Jersey were more than 1 ½ times more likely than non-Hispanic children to be hospitalized for asthma.
- Hospitalizations for asthma demonstrate seasonal patterns among children in New Jersey. These seasonal peaks are most apparent among school age children. For example among

elementary school age children, the May asthma hospitalization rate is over 4 1/2 times the July asthma hospitalization rate and the September and October rates are over 5 times the July asthma hospitalization rate.

Children are in school during their peak seasons for hospitalizations. PACNJ addressed asthma management in the schools in an effort to change the system from a **reactive response** to an emergency, to a **proactive preventive approach** that addressed triggers and recognized the early warning signs of an asthma episode so a child could get help before it became an emergency. To achieve this statewide system change, PACNJ developed all the educational materials and tools and implemented them statewide.

This was made possible because NJ has one of the most comprehensive laws in the nation on asthma management in the schools. This Law that went into effect in September 2001 and requires asthma education for school nurses, annual asthma education for school faculty, a nebulizer in every school, and an asthma action plan that also lists triggers for every child that has permission to carry an inhaler.

This is an outstanding law and PACNJ developed the educational tools needed to facilitate schools complying. Then we created the PACNJ Asthma Friendly School Award to recognize those schools that not only complied with the NJ Law and provided the education, but also went above and beyond by taking the NJ Department of Environmental Protection Agency "No Idling Pledge" and participating in the USEPA Indoor Air Quality Tools for Schools Training, forming and IAQ team.

- 262 New Jersey schools serving over 150,000 children have received the PACNJ Asthma Friendly School Award
- We are currently partnered with the Newark public schools and are working to have all 84 schools receive the award

PACNJ would like to recommend that to expand this statewide effort for system change and continue to motivate schools to remain proactive in their approach to asthma management, that policies be established to offer those schools who are recognized as complying with the Law and being asthma friendly receive priority when state funding is made available to schools.

To reach the under five population PACNJ worked in partnership with the child care health consultants from the 21 resource and referral agencies throughout the state to develop two levels of asthma education to impact statewide on asthma management.

- PACNJ developed a bilingual asthma video resource kit "Steps to Controlling asthma in the Child Care Setting" for child care providers and this was piloted in Camden Trenton and Burlington. The 21 Child Care Health Consultants were trained to continue offering the program in their counties across the state and over 500 child care providers have received the training.
- PACNJ recently developed a training for child care center directors and family home providers, "Policies and Practices for Asthma Friendly Child Care" for those who establish policies at their centers. That program was piloted in Newark, Plainfield and New Brunswick. All 21 Child Care Health Consultants were trained to facilitate this program and continue to conduct it across the state. Over 200 directors have received the training at local sites and statewide conferences since September 2006.
- PACNJ is currently working with Professional Impact NJ to establish these trainings as part of their Directors Training Academy so that it will be sustained as an on-going

training program statewide for Child Care Center Directors and Family Child Care Providers.

- PACNJ is partnering with the Newark Pre-School Council Head Start program to provide both training programs to their 300 child care providers and 30 center directors.

The next step in establishing this system change to reach over 9000 child care settings in New Jersey is to establish an incentive program with an Asthma Friendly Child Care Center Award. PACNJ would like to recommend that funding be targeted to continue this effort and that PACNJ continue in the role of bringing the partners together to facilitate progress.

Emergency Room Visits:

- Children are more likely to visit the emergency department for asthma when compared to adults. In 2004 alone, there were 19,160 emergency department visits for asthma among children in New Jersey.
- In 2004, black children in New Jersey were over 3 times more likely to visit the emergency department with asthma when compared to white children. In the same year, Hispanic children in New Jersey were more than 1 ½ times more likely than non-Hispanic children to be hospitalized for asthma.
- The burden of asthma is disproportionately distributed throughout the state with Essex County experiencing the highest age adjusted hospital discharge rate for asthma and the highest age adjusted Emergency Department Visit Rate for asthma. For example, the age adjusted ED visit rate for asthma in Essex County (1370 visits per 100,000 population) was more than 6 times higher than the Hunterdon County rate (215 per 100,000 population) in 2004.

As mentioned before, in addition to schools and child care providers, PACNJ is working with physicians, communities, health insurers and environmental agencies for statewide system changes. It is this approach that is aimed at reducing emergency room visits.

Physician Education for System Change

This past year PACNJ worked with the New Jersey Chapter of the American Academy of Pediatrics to develop an asthma education program for system change in physician's offices. This program is being piloted in Trenton with 11 physician practices and involves all office personnel and medical staff in the establishment of systems that improve asthma care. This requires a shift from an acute care perspective to a chronic care model and can be expanded to other cities with appropriate funding.

The National Heart, Lung and Blood Institute identified in their Guidelines for Best Practice in asthma management the importance of an asthma action plan for communicating between physician and patient. This tool has been developed by PACNJ and tracked for effectiveness through the school nurses. It has now been revised in response to the school nurse survey that identified problems with physicians in implementation. PACNJ has partnered with the New Jersey Primary Care Association to link with the New Jersey Federally Qualified Health Centers participating in the Asthma Collaborative to test this tool with their patients.

Communities for Change:

New Jersey was selected as one of six states to participate in a national initiative by the Agency for Healthcare Research and Quality (AHRQ) to address disparities in asthma. PACNJ has participated on the AHRQ team and as a result, all the PACNJ asthma educational materials were reviewed for cultural competency. Currently the AHRQ is developing guidelines PACNJ and others in the state can use for developing asthma tools that are culturally competent for the

diverse populations in New Jersey. The tools will include patient cultural beliefs and folk remedies associated with asthma that can be a barrier to patient compliance. The AHRQ is also developing a protocol for convening focus groups on asthma from the target populations hardest hit by the disease. PACNJ has a unique opportunity to implement these tools through our Community Task Force and revise our current materials to more fully meet the needs of the children and their families with asthma.

The New Jersey AHRQ team is also looking at asthma morbidity at the city level and is finding that certain cities experience disproportionate hospitalization and Emergency Department visit rates for asthma. The team is planning an Emergency Department intervention to target Trenton and Camden with the hopes of raising awareness, garnering support, and extending the program to other affected cities including Newark.

PACNJ has maintained a website that increasingly serves as a statewide resource for all our materials and links to many resources statewide. We anticipate that soon it will be necessary to revise our materials to stay current with changes in asthma management including cultural competency, changes in the NHLBI Guidelines, and changes in medication.

We need your help to sustain our statewide coalition that targets communities most in need with new programs and then expands those programs for statewide change. Funding allocated annually to continue the work with schools, child care, communities, physicians and environmental agencies is needed. And as stated before, policies need to be established to offer those schools who are recognized as complying with the Law and being asthma friendly to get priority when state funding is made available to schools.

Thank you again for the invitation to speak with you about the burden of asthma, PACNJ's effort to impact statewide with sustainable system change for managing asthma and the need for funding to support this effort.

New Jersey Asthma Statistics

Asthma is a one of the most common chronic diseases affecting children:

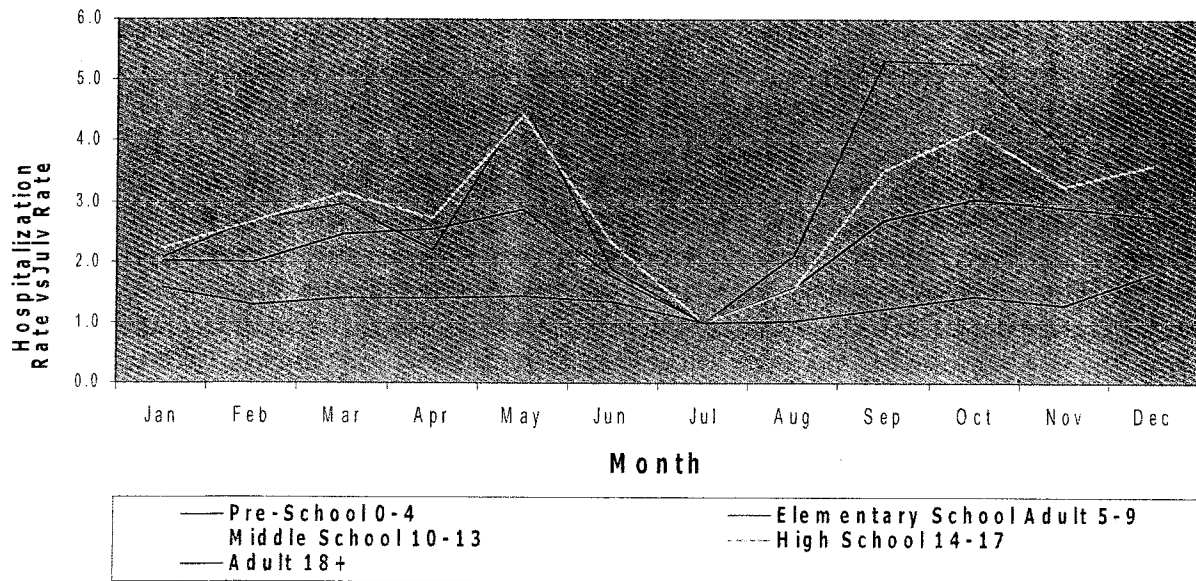
- Results from the 2003 National Survey of Children's Health suggest that about 255,484 children in New Jersey (12% of the pediatric population) have a history of asthma.
- Results from the 2003 National Survey of Children's Health also suggest that about 180,159 New Jersey children (9% of the pediatric population) currently have asthma.

Asthma has a widespread impact on children:

- When uncontrolled, asthma can result in activity limitations, missed school days, emergency department visits, hospitalizations and even death.
- According to national estimates from CDC, asthma accounts for about 14 million lost days of school annually.
- National data from the 2005 Youth Risk Behavior Surveillance System suggest that about 38% of high school students with current asthma experienced an episode of asthma or asthma attack in the prior year.
- Children are more likely to be hospitalized with asthma than adults. In 2004, there were 5,175 asthma hospitalizations for children in New Jersey.

- Children are more likely to visit the emergency department for asthma when compared to adults. In 2004 alone, there were 19,160 emergency department visits for asthma among children in New Jersey.
- Hospitalizations for asthma demonstrate distinct seasonal patterns among children in New Jersey. Rates are lowest during the summer and highest during the spring and fall months. These seasonal peaks are most apparent among school age children. For example among elementary school age children, the May asthma hospitalization rate is 4.6 times the July asthma hospitalization rate and the September and October rates are 5.3 times the July asthma hospitalization rate.

**Seasonal Hospital Discharges for Asthma,
New Jersey 2003-2004**



Black and Hispanic residents are disproportionately affected by asthma:

- Childhood asthma prevalence varies by race/ethnicity with Hispanic and black children experiencing higher rates when compared to non-Hispanic and white children.
- In 2004, black children in New Jersey were over 3 times more likely to be hospitalized with asthma when compared to white children. In the same year, Hispanic children in New Jersey were more than 1 ½ times more likely than non-Hispanic children to be hospitalized for asthma.
- In 2004, black children in New Jersey were over 3 times more likely to visit the ED with asthma when compared to white children. In the same year, Hispanic children in New Jersey were more than 1 ½ times more likely than non-Hispanic children to be hospitalized for asthma.

Geographic disparities exist throughout the state:

- The burden of asthma is disproportionately distributed throughout the state with Essex County experiencing the highest age adjusted hospital discharge rate for asthma and the highest age adjusted Emergency Department Visit Rate for asthma. For example, the age adjusted ED visit rate for asthma in Essex County (1370 visits per 100,000 population) was more than 6 times higher than the Hunterdon County rate (215 per 100,000 population) in 2004.

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- The New Jersey AHRQ team is looking at asthma morbidity at the city level and is finding that certain cities experience disproportionate hospitalization and ED visit rates for asthma. The team is planning an ED intervention to target Trenton and Camden with the hopes of raising awareness, garnering support, and extending the program to other affected cities including Newark.

Respectfully Submitted by,
Maris Chavenson
Associate Coordinator
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The Pediatric/Adult Asthma Coalition of New Jersey, sponsored by the American Lung Association of New Jersey, is supported by a grant from the New Jersey Department of Health and Senior Services (NJDHSS), with funds provided by the U.S. Centers for Disease Control and Prevention (USCDCP) under Cooperative Agreement 1U59EH000206-1. The contents of this document are solely the responsibility of the authors and do not necessarily represent the official views of the NJDHSS or the USCDCP. Although this document has been funded wholly or in part by the United States Environmental Protection Agency under Agreements XA97256707-0, XA98284401-2 and CH97268901-0 to the American Lung Association of New Jersey, it has not gone through the Agency's publications review process and therefore, may not necessarily reflect the views of the Agency and no official endorsement should be inferred. Information in this document is not intended to diagnose health problems or take the place of medical advice. For asthma or any medical condition, patients should seek medical advice from their health care professional.



Horizon Blue Cross Blue Shield of New Jersey



April 21, 2007

Dear [School Name],

Horizon Blue Cross Blue Shield of New Jersey and Rutgers, the State University of New Jersey, thank you for your active participation in the *Shape it Up!* program from 2004 through 2006.

We have received the results from this past year's surveys and have attached a summary of the findings. The Eagleton Institute of Politics measured the impact of the program using pre- and post-surveys completed by elementary students throughout New Jersey.

The results indicate a good understanding of the tested healthy behaviors in elementary school children. We encourage you to continue this program annually to further promote regular exercise and healthy eating habits. If you plan to conduct this program in the future, we will be happy to provide you with the materials used (i.e., posters and booklets).

We appreciate the positive feedback we received from several schools. We are excited to learn that many schools have implemented similar programs. It is encouraging that many schools have taken the initiative to conduct programs addressing the obesity epidemic by focusing on healthy food choices and exercise. As you know, developing healthy eating and exercising habits as children is crucial in developing good eating and exercising habits as adults.

Thank you again for inviting Horizon BCBSNJ and Rutgers to your school. We hope the results help you realize the impact of the program and the need for continued obesity intervention.

Sincerely,

Saira A. Jan, M.S., Pharm.D.
Director, Clinical Pharmacy Program Management
Horizon Blue Cross Blue Shield of New Jersey



Horizon Blue Cross Blue Shield of New Jersey



Shape It Up! Summary

Shape It Up! is a childhood obesity prevention program developed and implemented by Horizon Blue Cross Blue Shield of New Jersey (Horizon BCBSNJ) in collaboration with Rutgers University's Ernest Mario School of Pharmacy with funding from Sanofi-Aventis pharmaceutical company. The key program objectives are to promote exercise and healthy eating habits among New Jersey elementary school children. Program activities and materials include an interactive workshop, an activity book and family guide, posters, a Web site and educational field days.

Shape It Up! presented workshops to 89,736 children at 257 New Jersey elementary schools during the 2004-2005 and 2005-2006 school years. To evaluate the intervention, 6,419 students at 49 schools were asked about their satisfaction with the program and answered questions about their knowledge and attitudes towards exercise and healthy eating before and after the *Shape It Up!* Program. School administrators also completed a follow-up survey.

Key *Shape It Up!* findings:

- 94 percent of children correctly answered a question about the role of dietary fat in clogging arteries after the intervention compared to 62 percent before.
- 90 percent of children responded correctly to a question about healthy portion size after the intervention compared to 15 percent before.
- 89 percent of children responded correctly to a question about the sugar content of soda after the intervention compared to 58 percent before.
- 97 percent of children agreed with the statement that exercise makes your heart strong after the intervention compared to 93 percent before.
- 86 percent of children registered favorable attitudes towards health eating and exercise after the intervention from 83 percent before the intervention.
- 92 percent of children gave *Shape It Up!* a positive rating.
- 84 percent of 44 New Jersey school administrators reported that *Shape It Up!* helped create dialogues about healthy eating within their school community.

For additional information, please visit the *Shape It Up!* Web site at www.HorizonBlue.com/shapeitup.

CHILDHOOD OBESITY

"SHAPE IT UP"

Saira A Jan, M.S., Pharm.D.

Director of Clinical Programs, Pharmacy Management, Horizon
Blue Cross Blue Shield of New Jersey.

Associate Professor, Ernest Mario School of Pharmacy, Rutgers
State University of New Jersey

Definition of Obesity

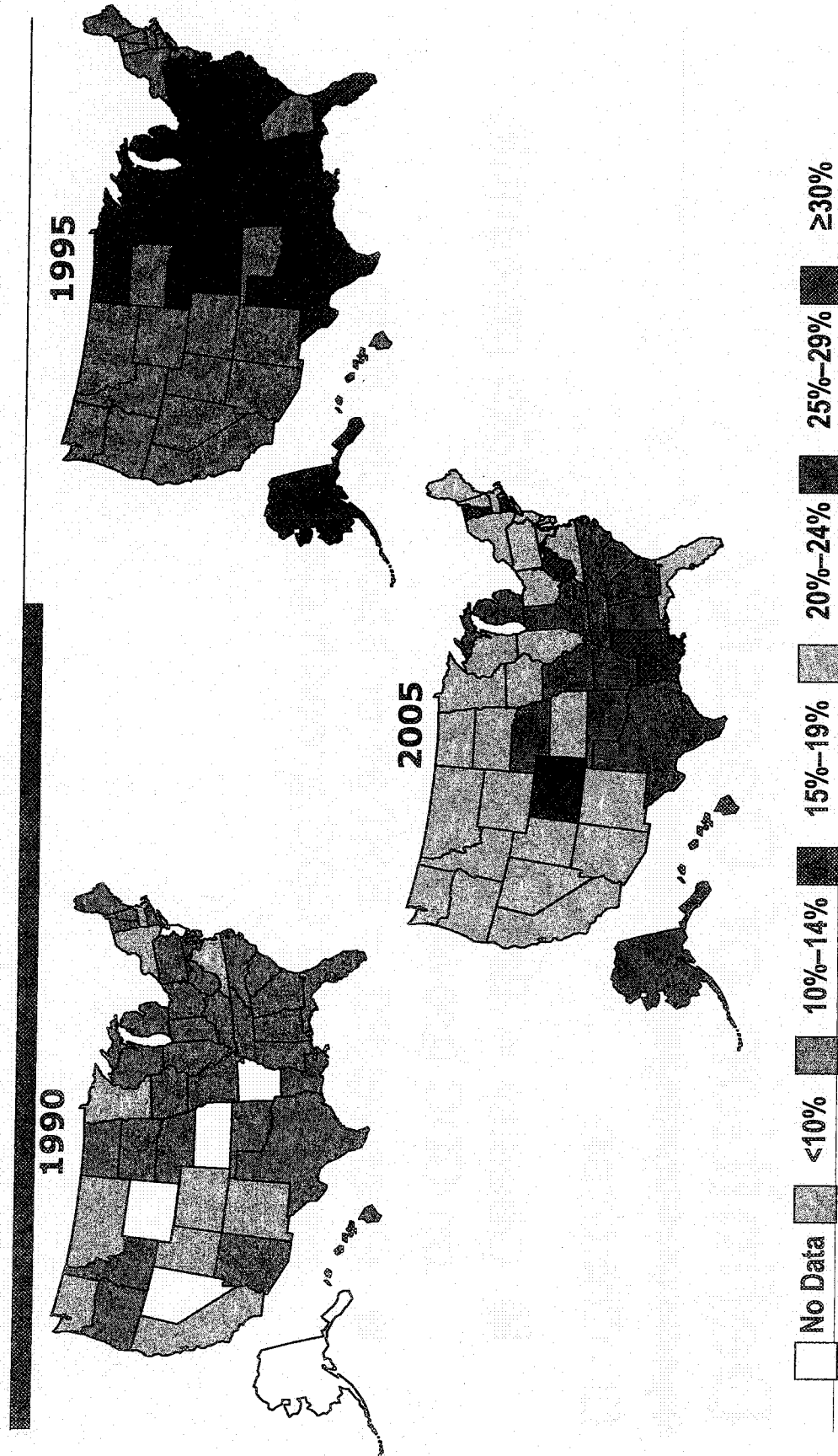
- Adults
 - BMI (Body mass Index) 25-29 overweight
 - BMI 30+ obese
 - BMI 40+ morbid Obesity
 - BMI 30 Approximates 30 pounds of excess weight
 - 66% of US adults are obese (32%) or overweight
 - 32% of NJ adults are obese (22%) or overweight (BRFSS, 2005)

Definition of Obesity

- Children
 - Obesity = BMI at or above the 95th percentile on CDC growth charts
 - Overweight = BMI at or above the 85th percentile on CDC growth charts

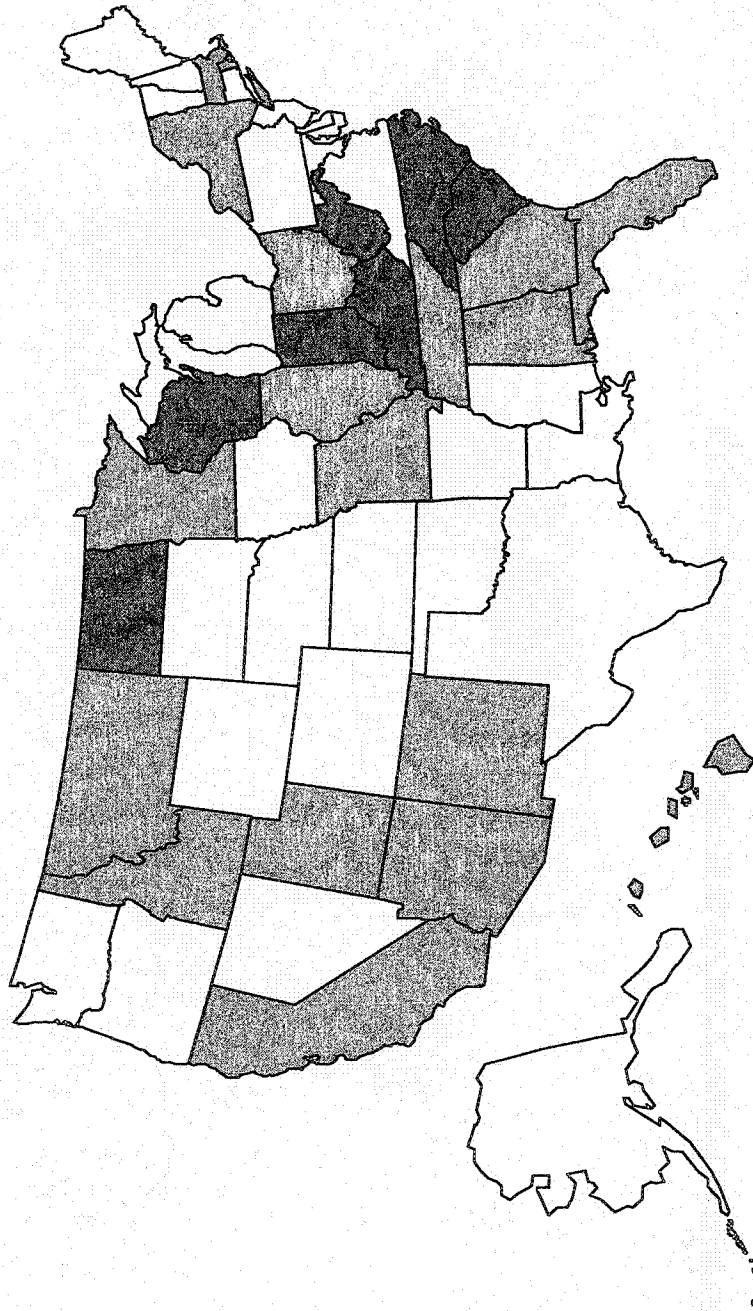
Obesity Trends* Among U.S. Adults BRFSS, 1990, 1995, 2005

(*BMI ≥ 30 , or about 30 lbs overweight for 5'4" person)



Obesity Trends* Among U.S. Adults BRFSS, 1986

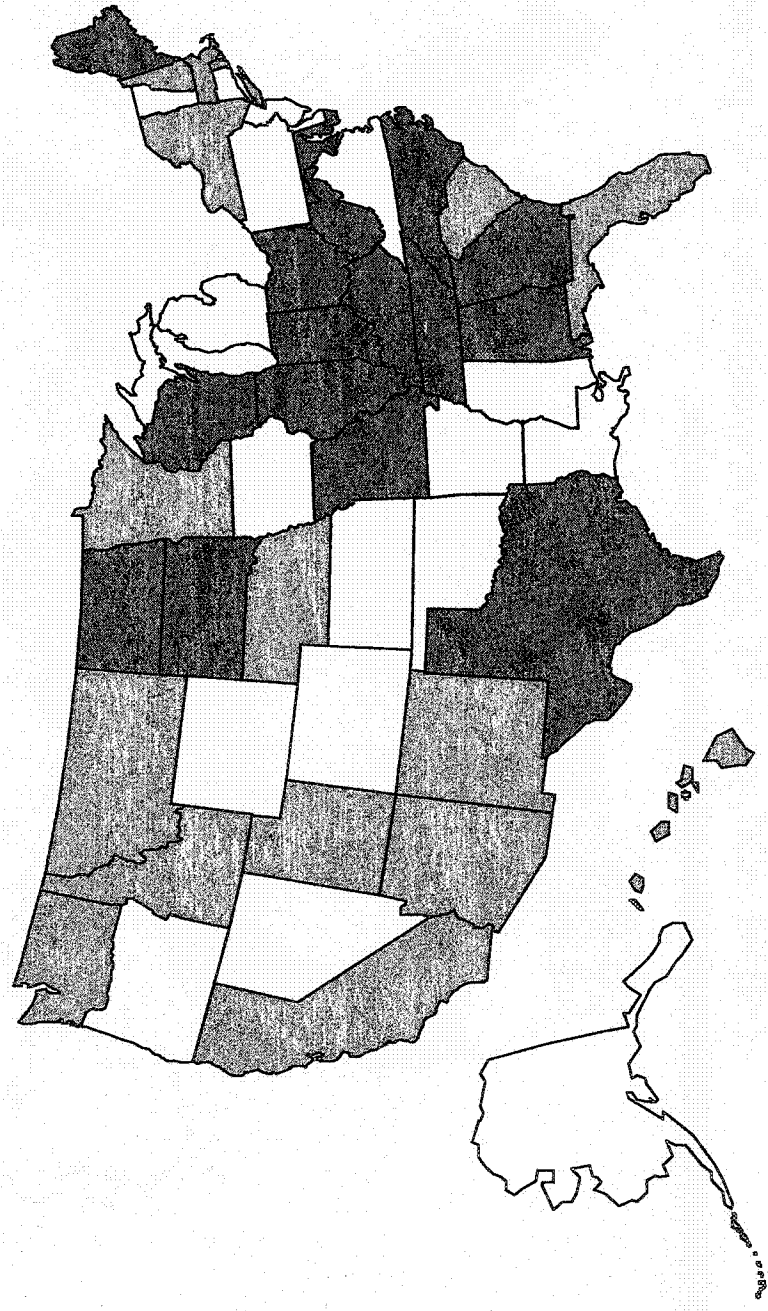
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



□ No Data ■ <10% ■ 10%–14%

Obesity Trends* Among U.S. Adults BRFSS, 1987

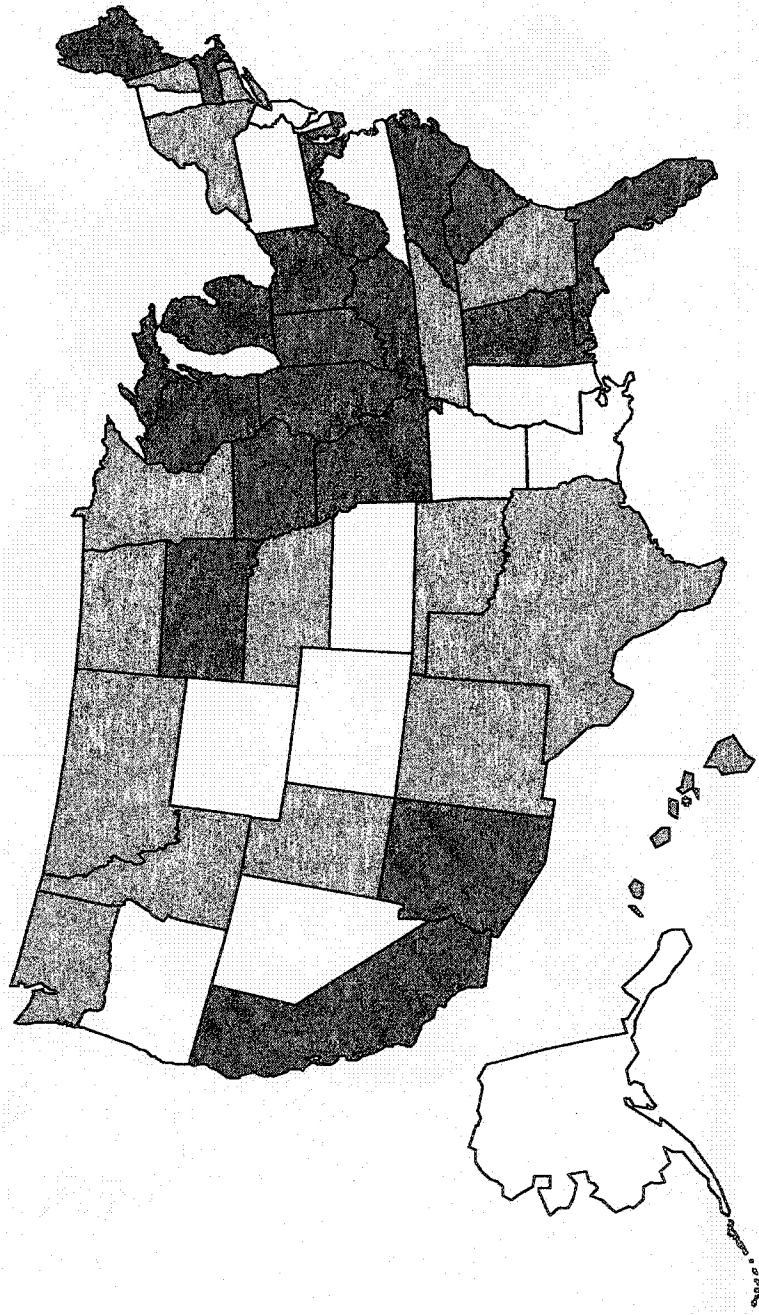
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



No Data <10% 10%-14%

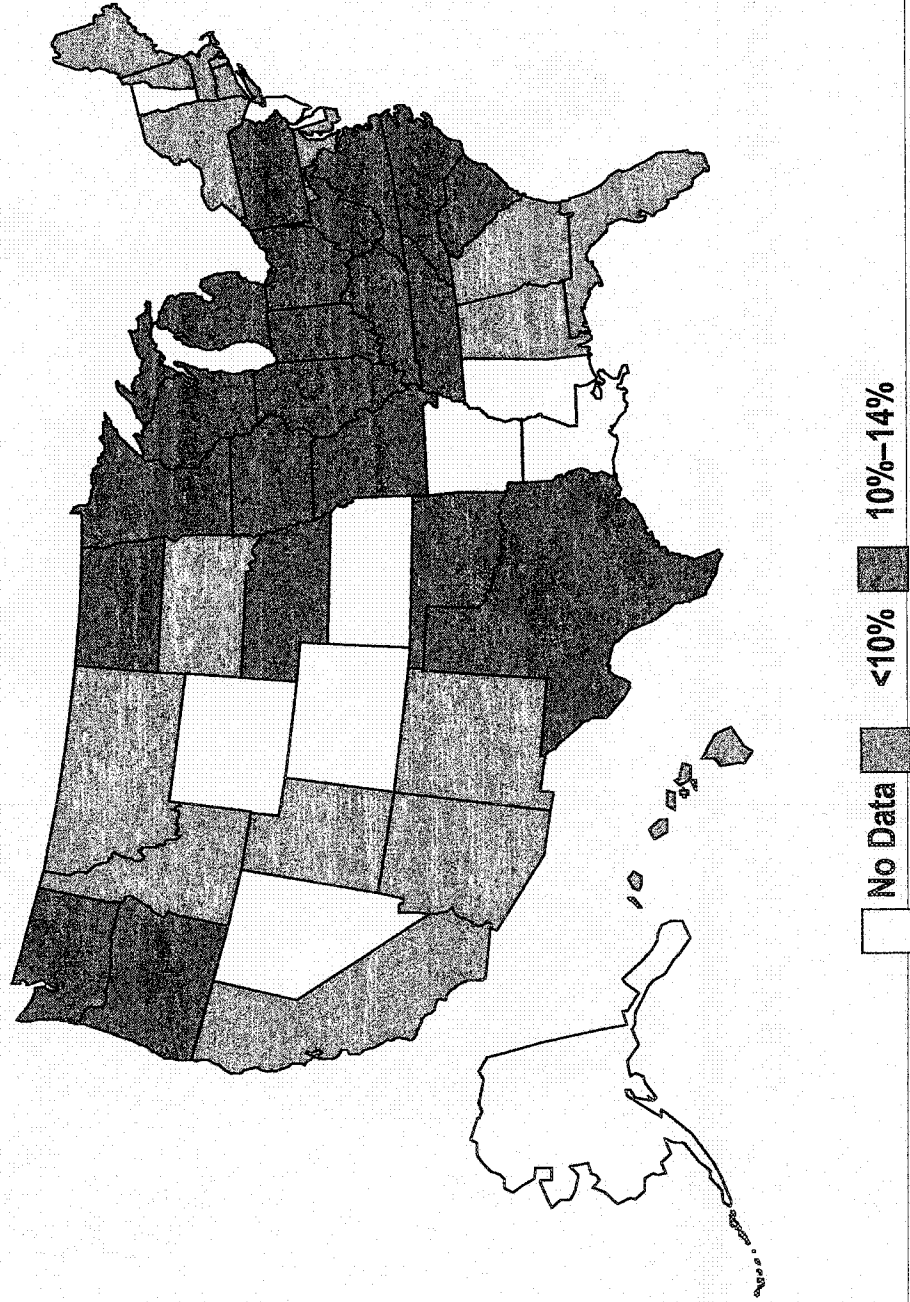
Obesity Trends* Among U.S. Adults BRFSS, 1988

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



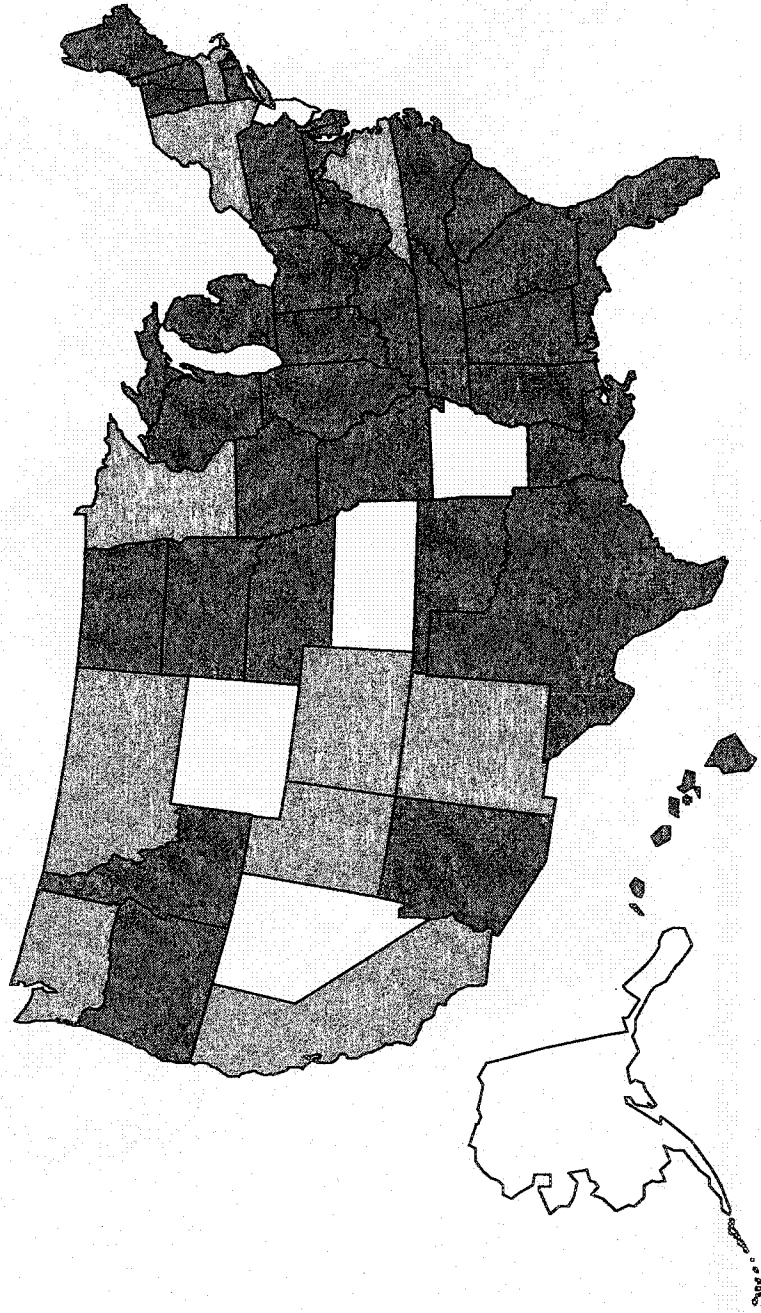
Obesity Trends* Among U.S. Adults BRFSS, 1989

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults BRFSS, 1990

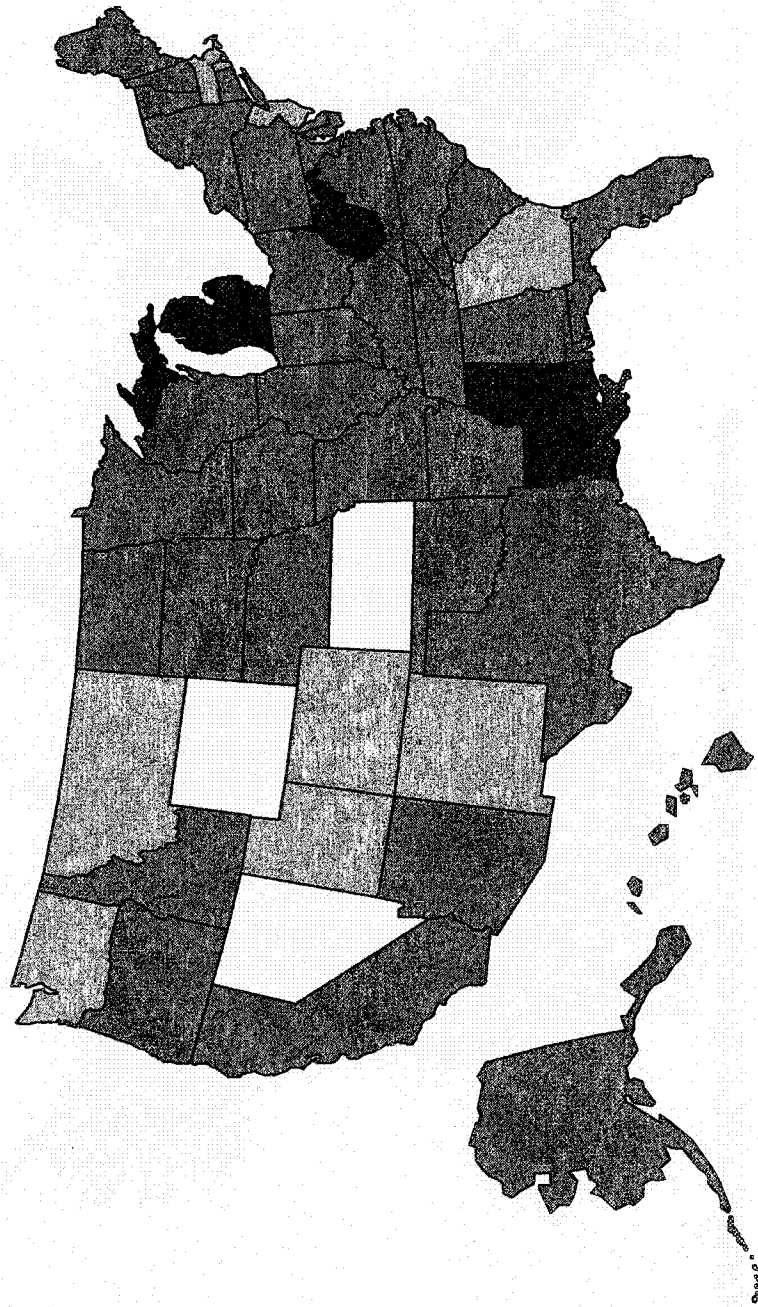
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Legend:
□ No Data
■ <10%
■ 10%-14%

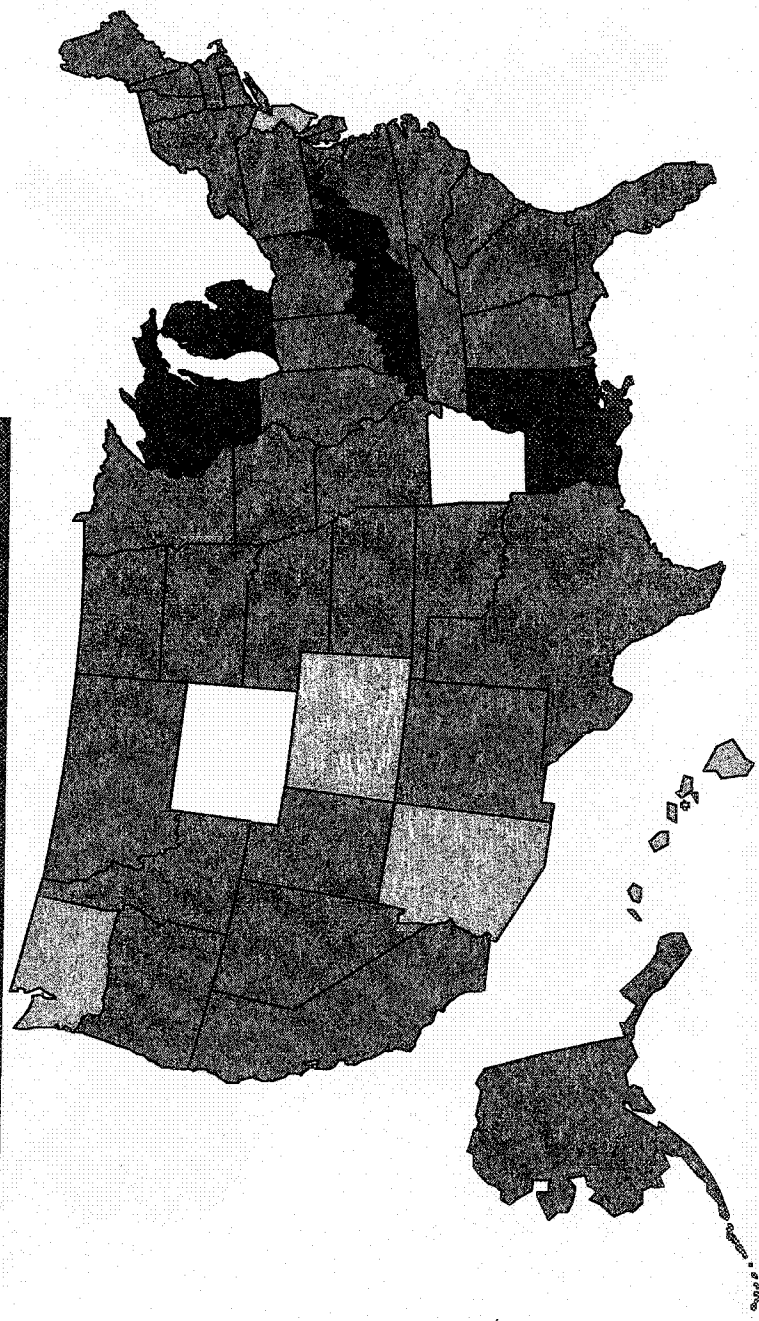
Obesity Trends* Among U.S. Adults BRFSS, 1991

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



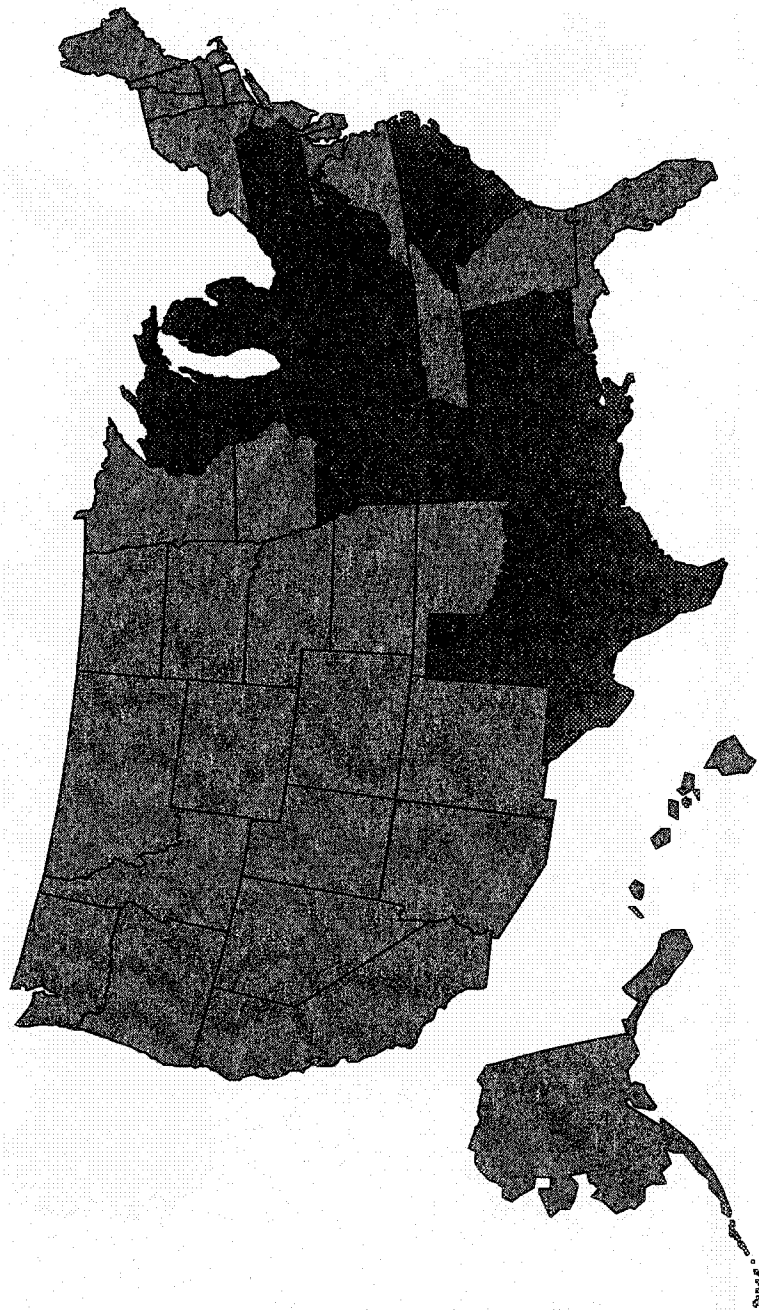
Obesity Trends* Among U.S. Adults BRFSS, 1992

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



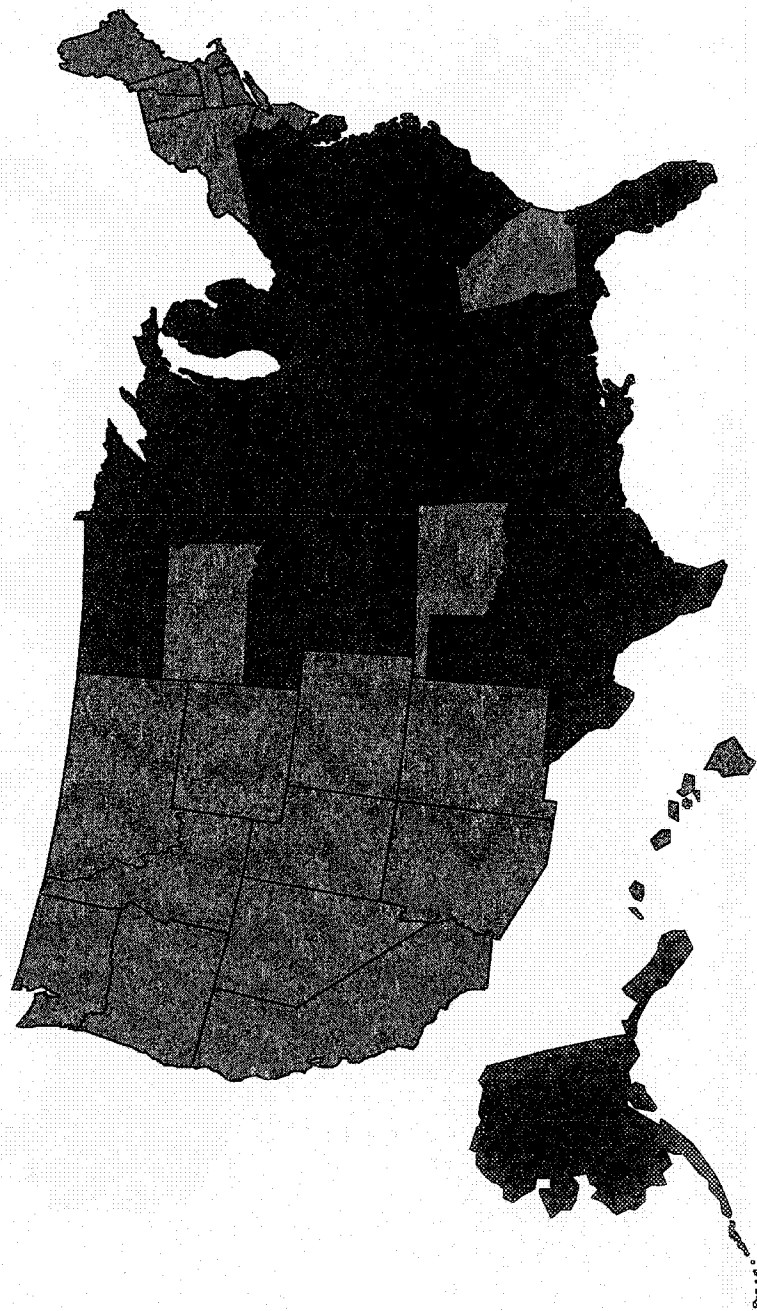
Obesity Trends* Among U.S. Adults BRFSS, 1994

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults BRFSS, 1995

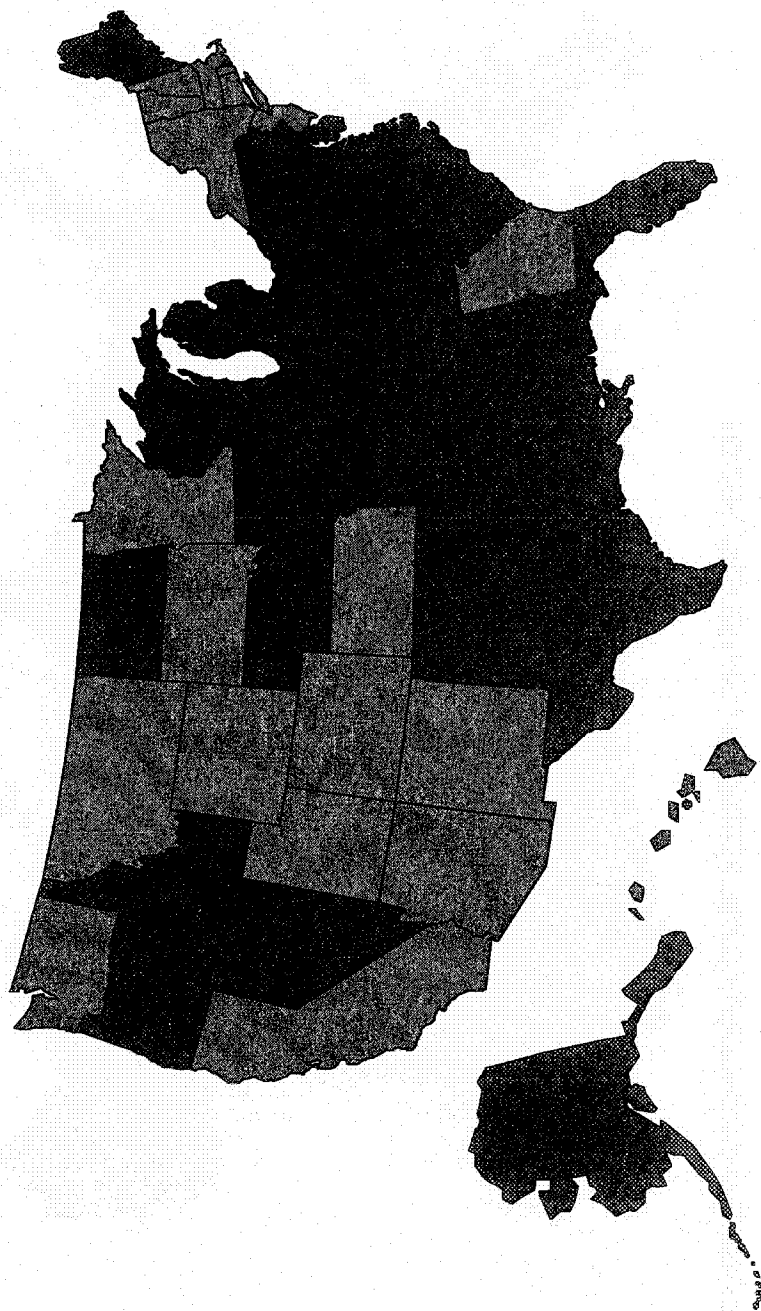
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



□ No Data □ <10% □ 10%–14% □ 15%–19%

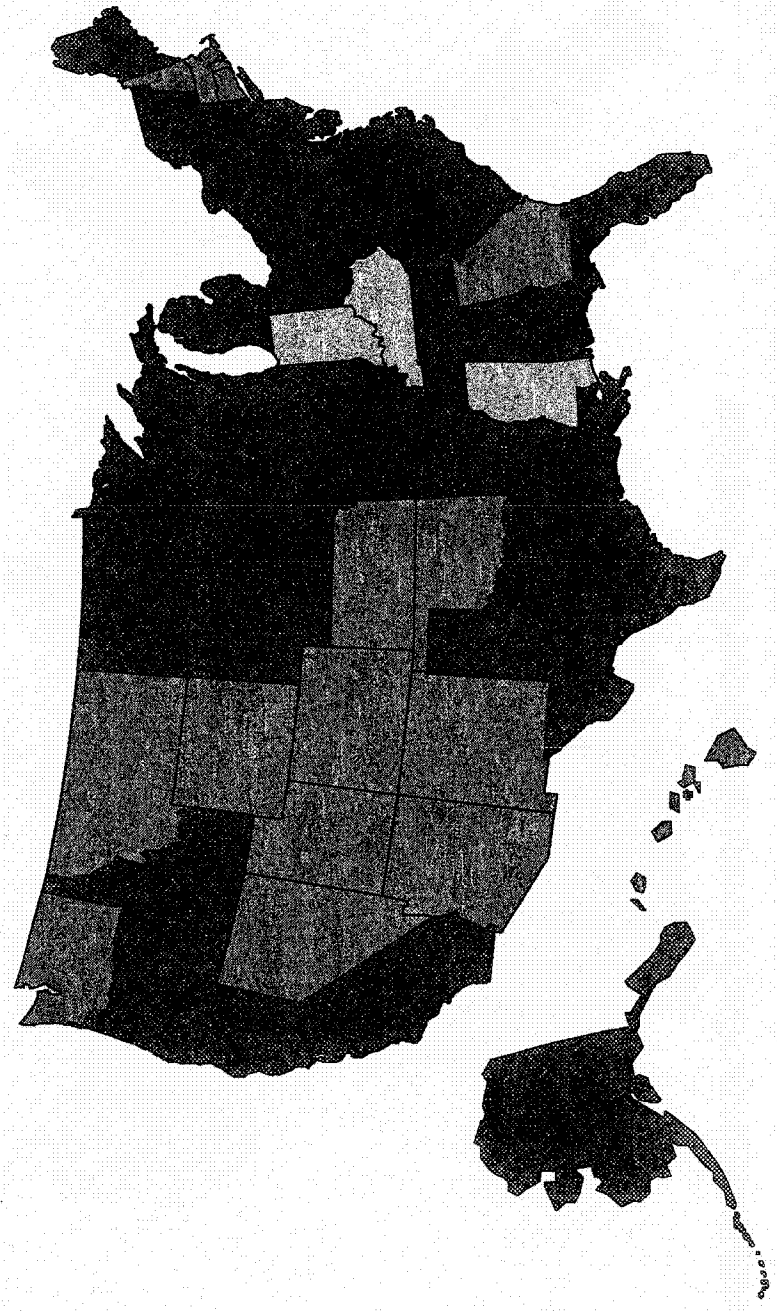
Obesity Trends* Among U.S. Adults BRFSS, 1996

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



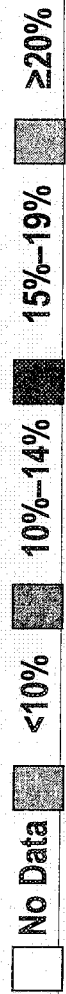
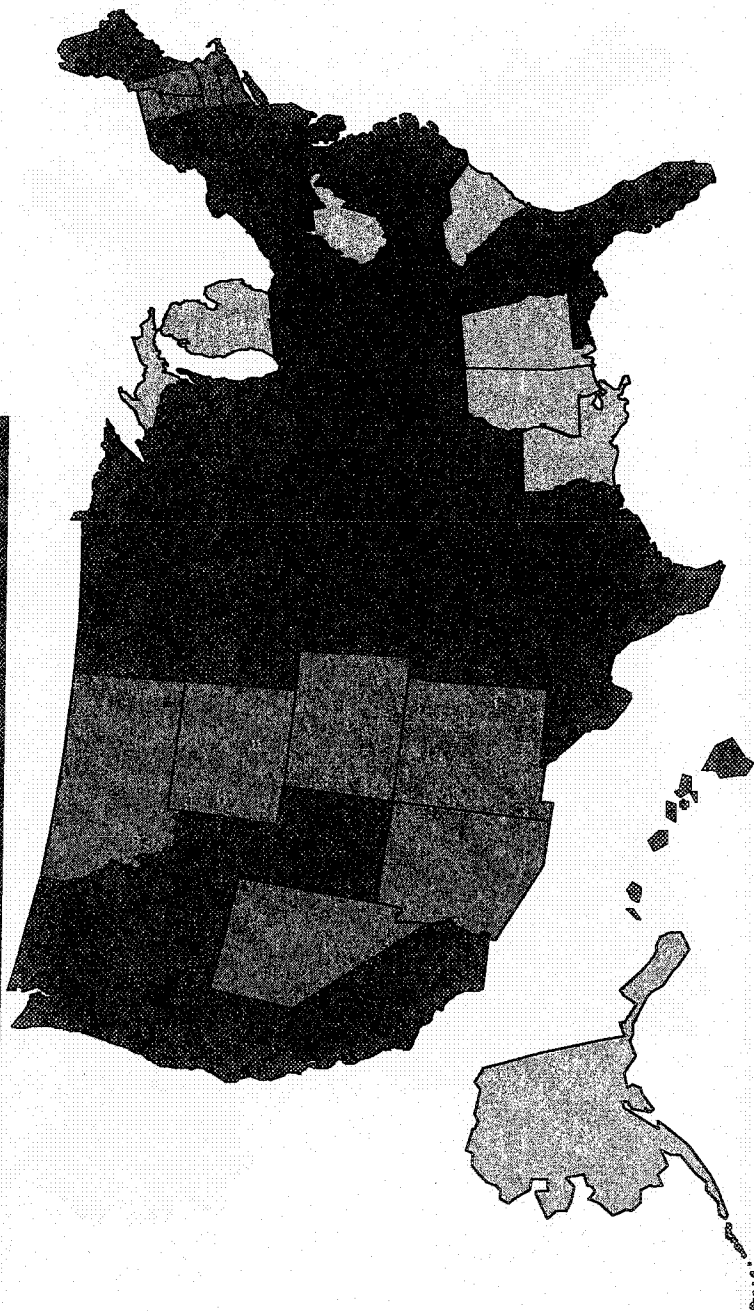
Obesity Trends* Among U.S. Adults BRFSS, 1997

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



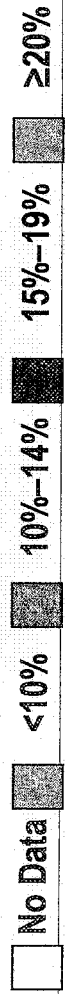
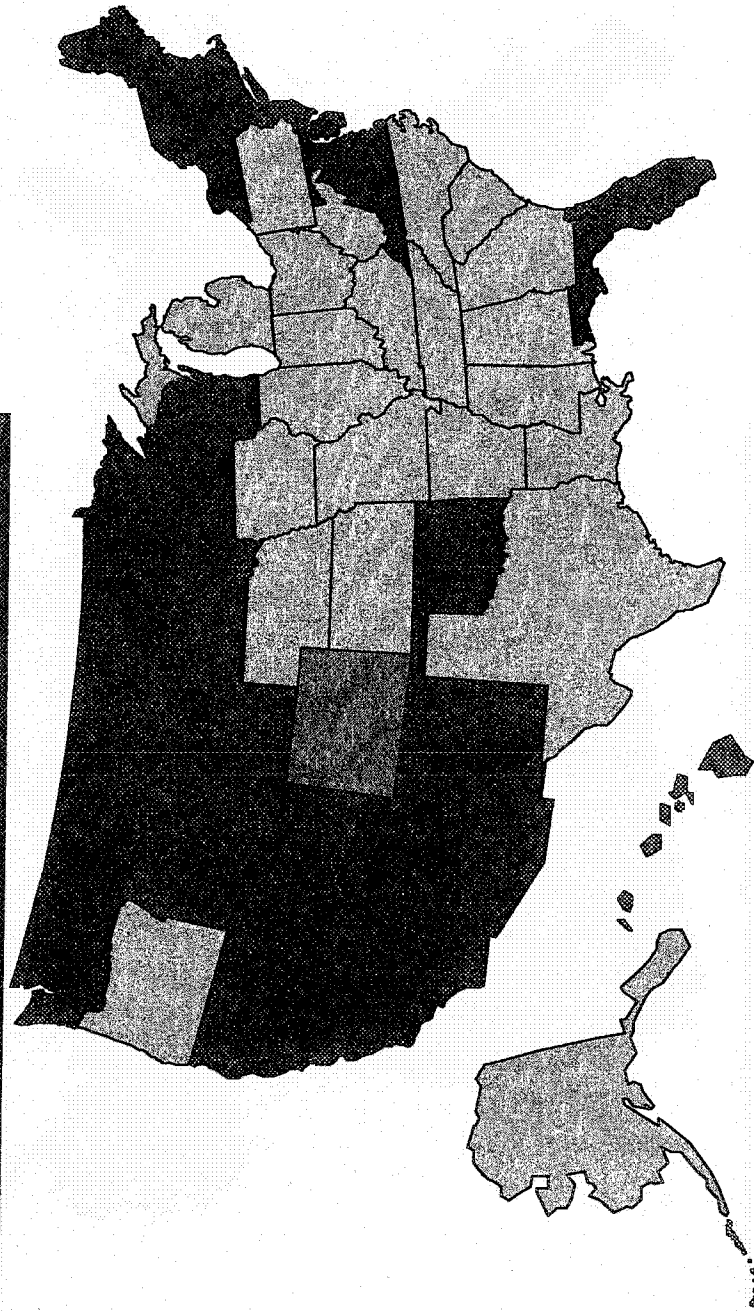
Obesity Trends* Among U.S. Adults BRFSS, 1998

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



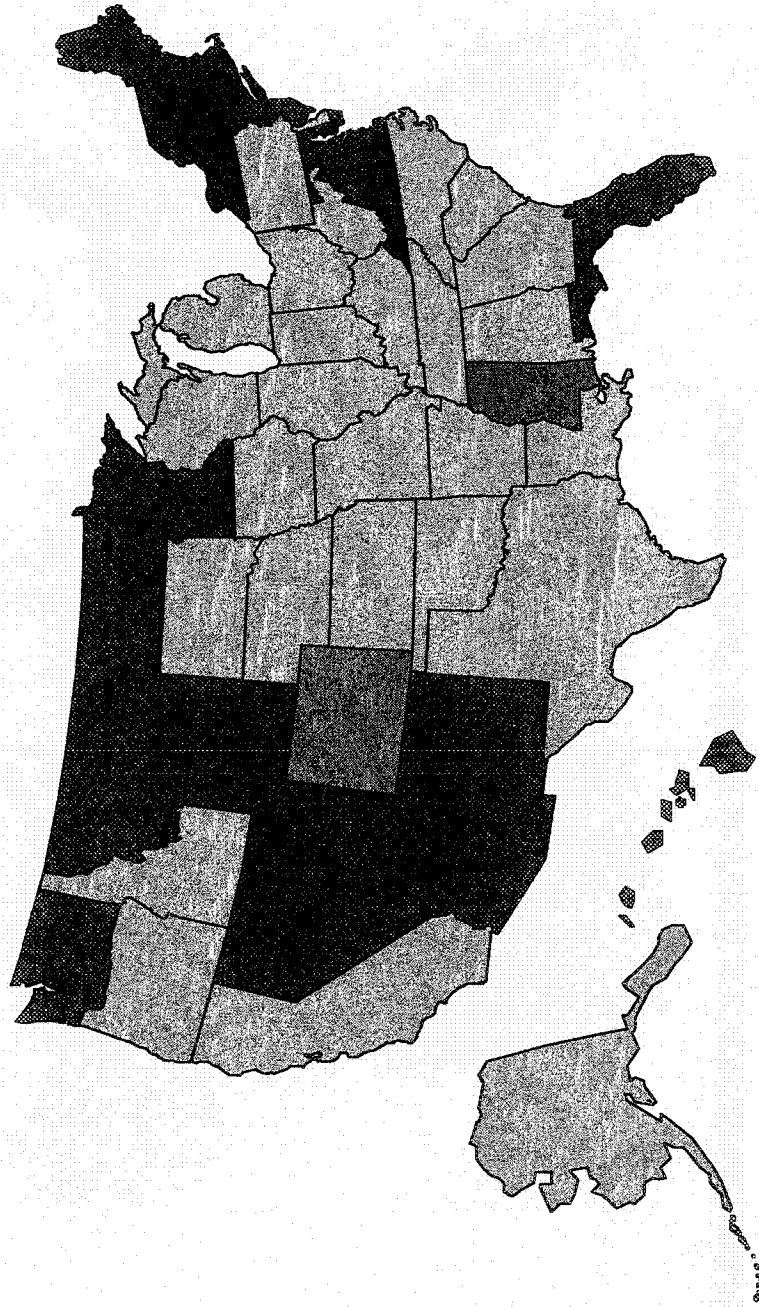
Obesity Trends* Among U.S. Adults BRFSS, 2000

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



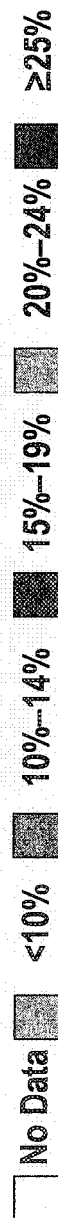
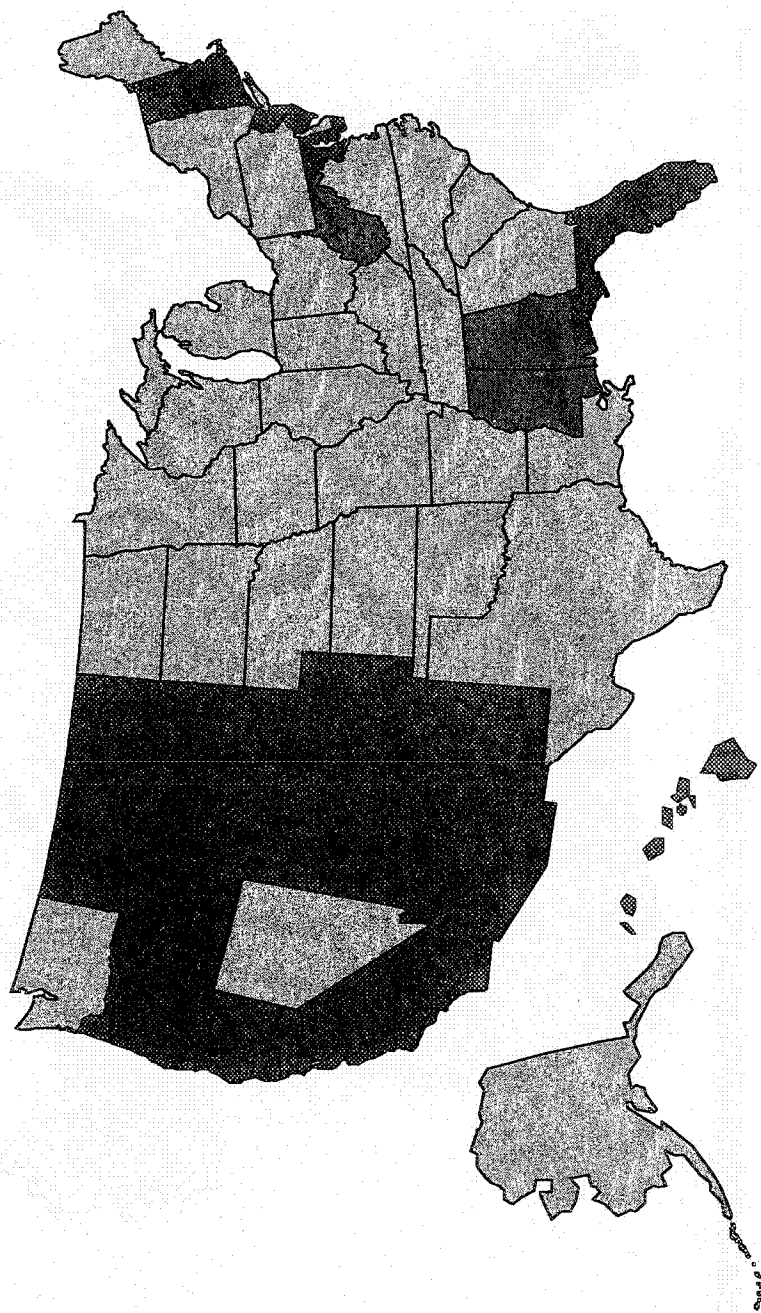
Obesity Trends* Among U.S. Adults BRFSS, 2001

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults BRFSS, 2002

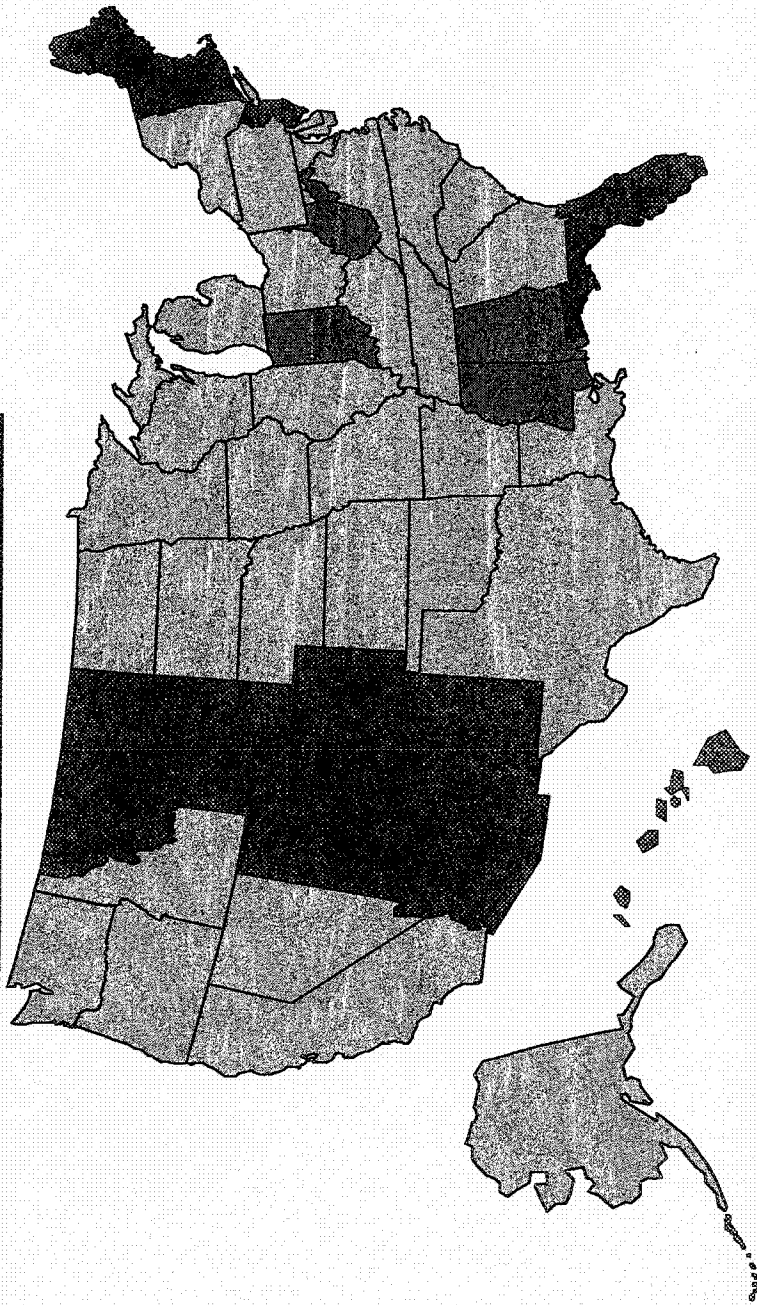
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



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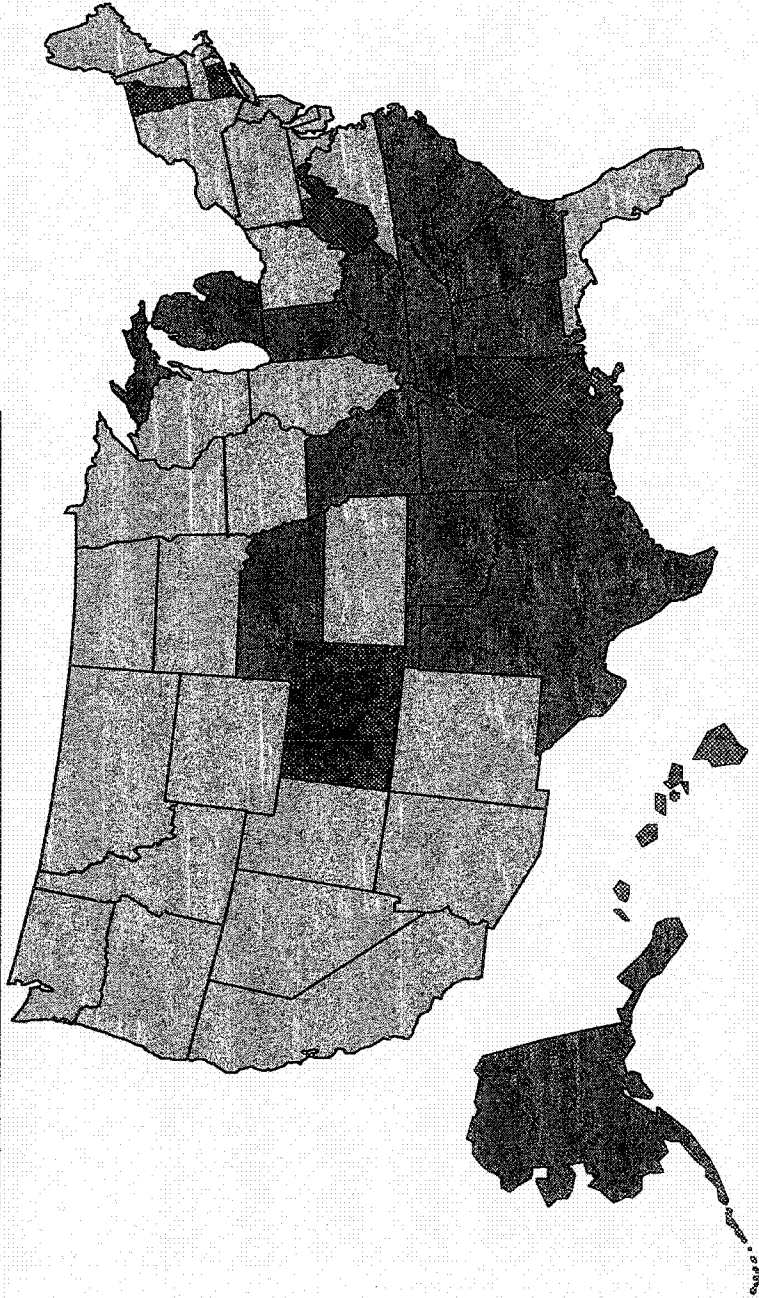
Obesity Trends* Among U.S. Adults BRFSS, 2003

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults BRFSS, 2005

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Childhood Obesity Trends

- Between 1963 - 2004 obesity rates quadrupled in US children ages 6-12yrs
- Overweight adolescents have a 70% chance of becoming overweight or obese adults.
- 25% of NJ high school students overweight/obese, 38% of 6th grade children are overweight/ obese

■ Ref: 2003 NJ student health survey, NJ Dept of health and senior services and Education Survey

Risk Factors for Childhood Obesity

1. Lack of Physical Activity
 2. Sedentary behavior
 3. Socioeconomic status
 4. Eating Habits
 5. Environment
 6. Physiological
 7. Genetics
 8. Race/Ethnicity
-

Health Consequences of Childhood Obesity

1. Type 2 diabetes
Disease
 2. High Cholesterol
Problems
 3. High Blood Pressure
 4. Heart Disease
 5. Sleep Apnea
 6. Liver
 7. Orthopedic
 8. Asthma
 9. Depression
 10. Cancer
-

Economic Costs Related to Obesity

1. 36% increase inpatient and outpatient spending
2. In New Jersey estimated annual costs exceed \$2 billion
3. 77% increase in use of medications
4. National health care expenditure related to obesity and overweight (2004 dollars) range from \$98 billion to \$129 billion (IOM 2005)
5. Obesity associated annual hospital costs for children rose from \$35 million in 1979 - 81 to \$127 million in 1997-99 (IOM 2005)

Childhood obesity - Advancing Effective Prevention and treatment: An Overview for Health Professionals. Apr. 9, 2003.
Prepared for the National Institute for Health Care Management Foundation Forum.

Shape it Up

□ Collaboration between:

- Ernest Mario School of Pharmacy , Rutgers State University of New Jersey
- Horizon Blue Cross Blue Shield of New Jersey
- Analysis conducted by Eagleton Institute of Politics, Rutgers State University of New Jersey
- Grant from Sanofi-Aventis

Shape it Up

- New Jersey Elementary School Based Obesity program presented to 89,739 students during school year 2004-2005, 2005-2006 academic years

Shape it Up Goals

1. Raise awareness about healthy eating and exercise in New Jersey
2. Promote healthy eating and exercise behaviors among New Jersey elementary school children
3. Develop and implement an age appropriate program that meets the requirements of the New Jersey Core Health Curriculum
4. Provide a training program to the teachers

Shape It Up Objectives

A 45-minute interactive workshop designed to educate children in grades K through 6

how to:

1. Determine healthy portion sizes
2. Eat a variety of fruits and vegetables
3. Improve health via exercise

Shape It Up Objectives

4. Improve understanding of the Food Pyramid
5. Understand the disadvantages of excessive soda intake
6. Understand the impact of a high-fat diet

Shape It Up

Program Segments

1. Serving Size & Food Pyramid
 2. Fun with Fruit
 3. Soda and Water
 4. Heart Rate
 5. Healthy vs. Unhealthy Artery
-

Shape It Up

Instructors

1. Pharm. D. Candidates
2. Pharmacy Faculty
3. Pharm. D. Fellows and Residents
4. Horizon Faculty
5. Pharmacy student volunteers

Workshops

1. 60 minute session at elementary schools throughout NJ
2. Interactive
3. Auditorium and Classroom settings
4. Monthly instructor workshops to reinforce the lesson plans

Shape It Up

Educational Materials

1. Students - Activity book, food journal.
2. Parents - Healthy meal plan handouts
3. Schools - Laminated Posters
4. Website - Educational materials for kids, parents, teachers

Shape It Up Days

- Educational field trips for schools that participated in the 2004 - 2005 academic year
- Held 3 events: Trenton Thunder, Atlantic City Surf and Summerset Patriots
- Activities reinforcing Shape It Up presentation including: Food Group Frisbee Toss, Balance your diet, Tooth loss bean bag throw and Food Pyramid relay
- A review of the "Healthy vs. Unhealthy Artery segment was presented
- Each child received a goodie bag at each event

Shape It Up Total Participation

(2004-2005, 2005-2006)

New Jersey Elementary school children : **89,739**

Elementary school children: **257**

Program sessions: **466**

Eagleton Evaluation Study

1. Evaluate the effectiveness of the Shape It Up Program in:
 - a) Increasing student knowledge about nutrition and exercise
 - b) Creating more positive attitudes about nutrition and exercise
2. Provide a snapshot of related behavioral trends among New Jersey students

Research Methods

1. Pretest questionnaire for students
2. Workshop
3. Post-test questionnaire for students
4. Follow-up questionnaire for school administrators

Survey Participation

1. 11,088 students in grades 1-6 participated in the pretest survey, and 11,001 participated in the post-test survey
2. 7,951 students completed both surveys

Pretest Questionnaire

1. 16 closed-ended items
 2. Attitudes toward exercise and healthy eating
 3. Knowledge measures
 4. Behavioral measures
 5. Demographic measures
-

Post-test Questionnaire

- Post-test questionnaire had the same measures of attitudes and knowledge
- Questionnaire also had two evaluative questions concerning Shape It Up

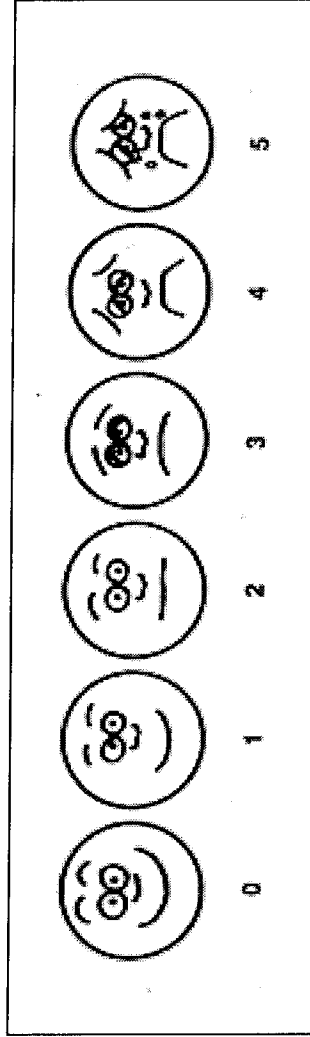
Attitude Questions

1. How do you feel about eating fruit?
2. How do you feel about eating vegetables?
3. How do you feel about doing exercise?

Attitude Scale

Attitudinal scale for healthy eating, exercise

Range of 0 for most positive to 5 for most negative



Knowledge Questions

1. The fat in food can clog the blood flow in your arteries
2. A healthy serving size of food is the size of a tennis ball
3. A can of regular soda has one teaspoon of sugar
4. Exercise makes your heart strong
5. Milk and water are better for you than soda
6. How many servings of fruits and vegetables should you eat a day?

Behavior Questions

1. How many days a week do you exercise (play sports, dance, swim, ride your bike, take a walk)?

Response range of none to five or more days per week

Behavior Questions

2. On most days, how many sodas (cans, bottles, or cups) do you drink?

Response range from none to four or more sodas a day

Behavior Questions

3. On most days, how many hours do you watch TV, videos, or DVDs?

Response range of none to four or more hours per day

Behavior Questions

4. On most days, how many hours do you play video games or computer games?

Response range of none to four or more hours a day

Behavior Questions

5. Do you eat breakfast every day?

Yes

No

Demographic Measures

1. Are you a boy or a girl?
2. What grade are you in?

Results:

Behavioral Snapshot: Eating and Exercise

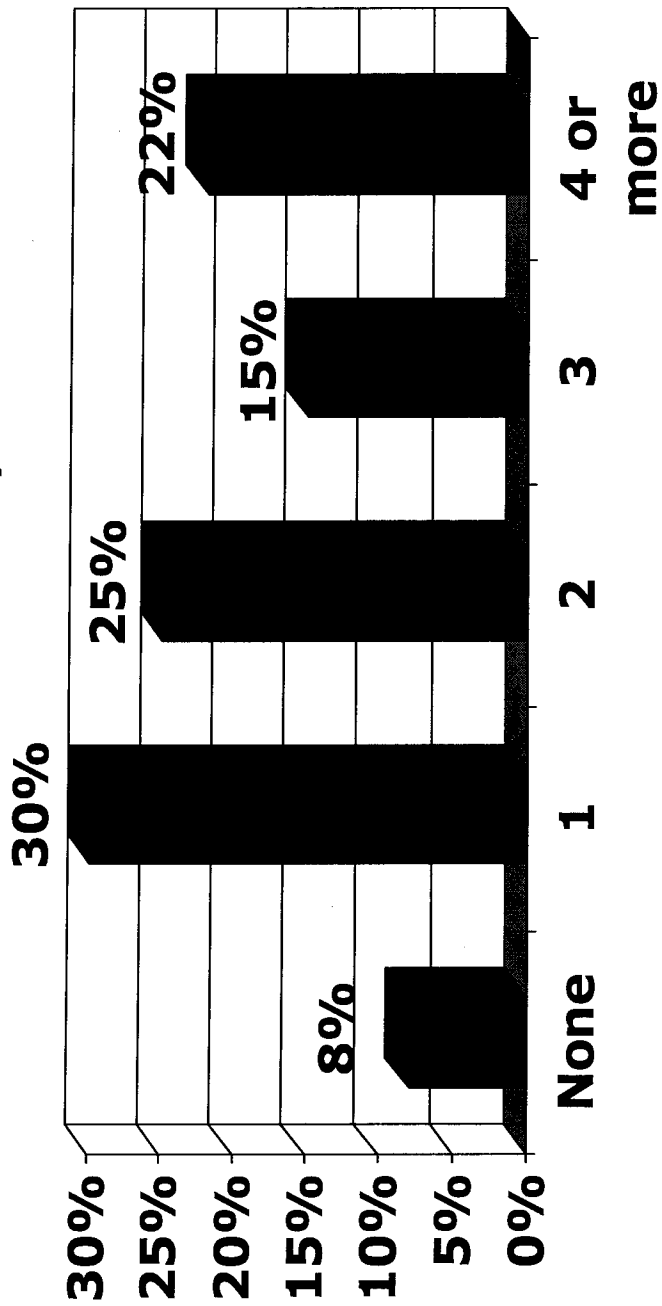
- 51% exercise less than 5 times a week and 20% exercise 2 days a week or less
- 60% consumes one or more sodas on most days
- 81% eat breakfast, ranging from 94% in Grade 1 to 62% in Grade 6

Behavioral Snapshot : Screen Media

- 92% watch at least 1 hour of TV/Video/DVDs per day, 62% watch at least 2 hours , 37% watch at least 3 hrs and 22% watch 4 or more hours per day
 - 79% play video or computer games for at least 1 hour per day, 43% play for at least 2 hours, 26% for at least 3 hours and 17% play for 4 hours or more per day
 - 26% of boys watch 4 or more hours of TV/Videos/DVDs per day compared with 19% of girls
 - 25% of boys play video/computer games 4 or more hours per day compared to 8% of girls
-

Results - Behavioral Snapshot

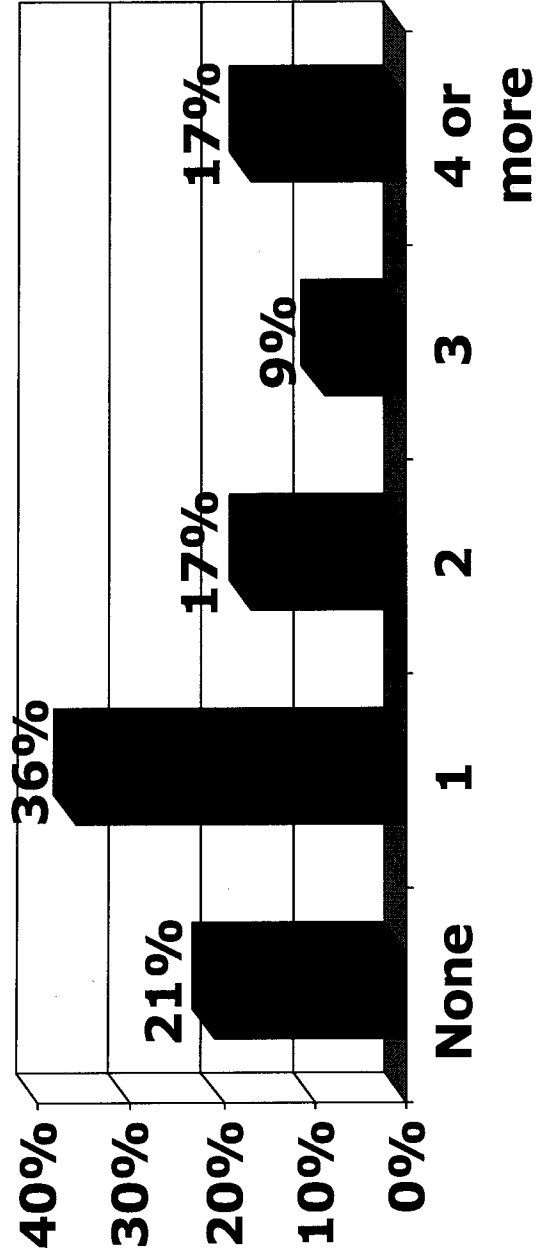
Watching TV, Videos, or DVDs



■ Hours per day on most days

Results - Behavioral Snapshot

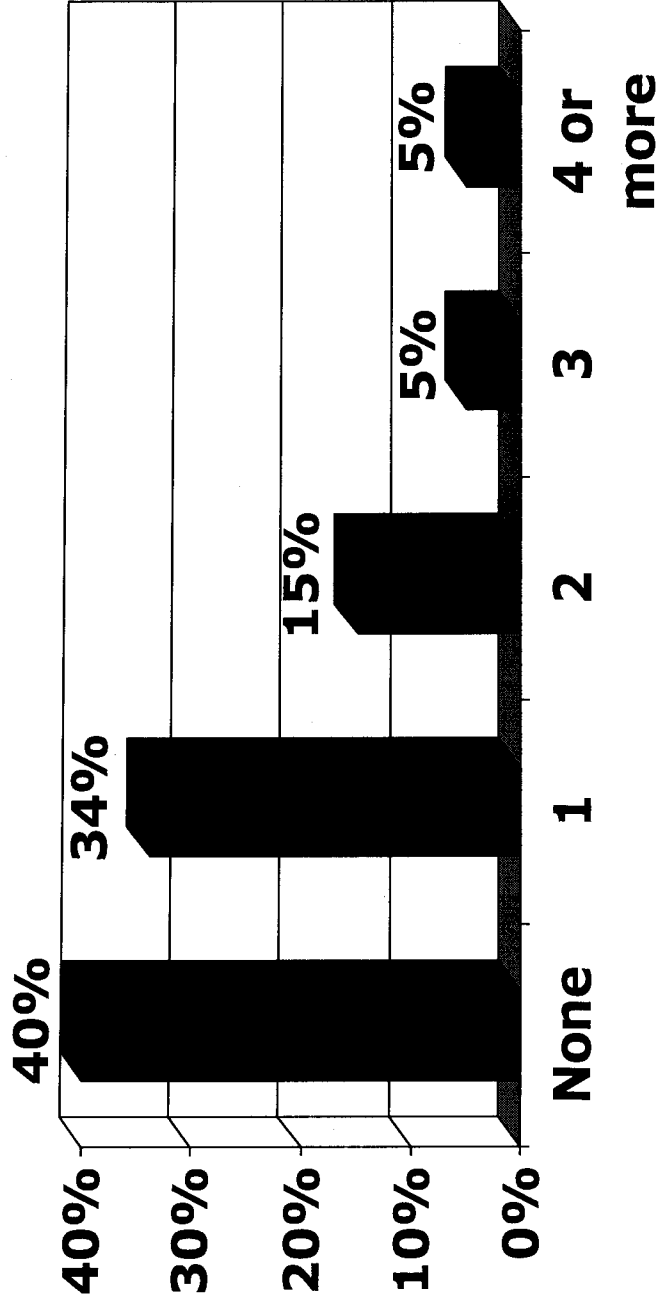
**Playing Video Games or
Computer Games**



■ Hours per day on most days

Results – Behavioral Snapshot

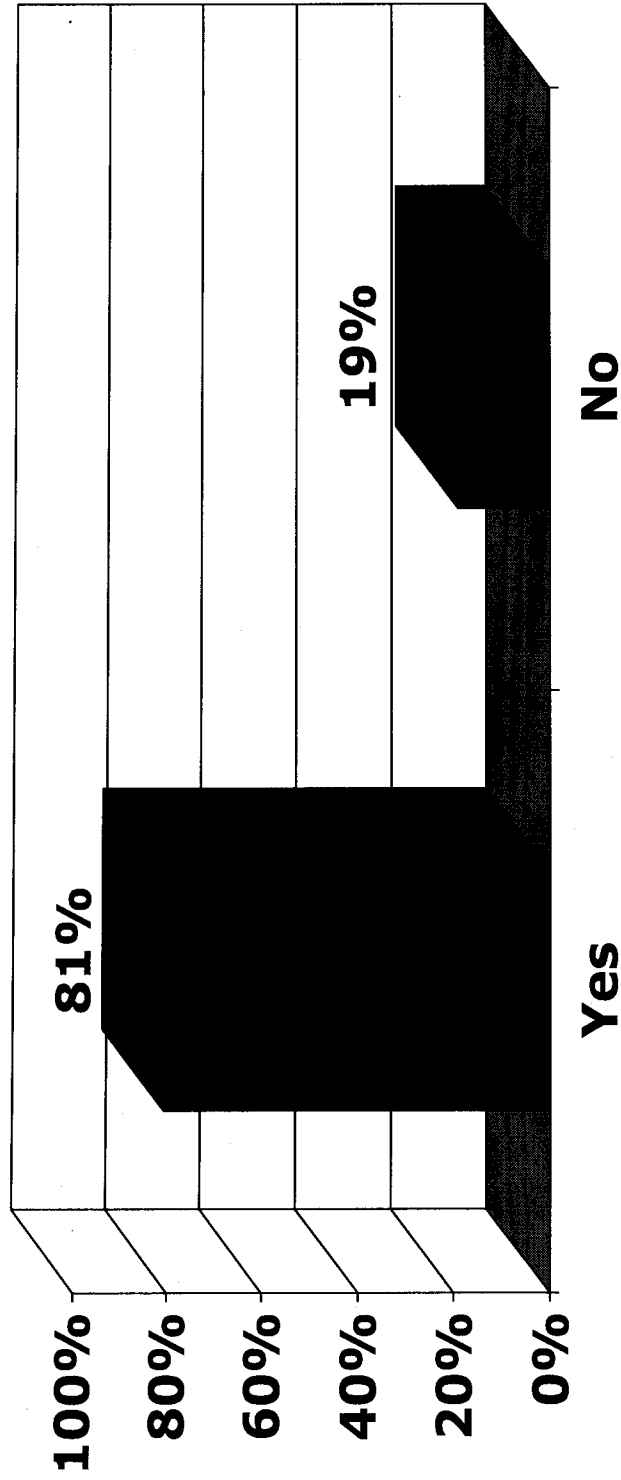
Consumption of Sodas



■ Sodas per day on most days

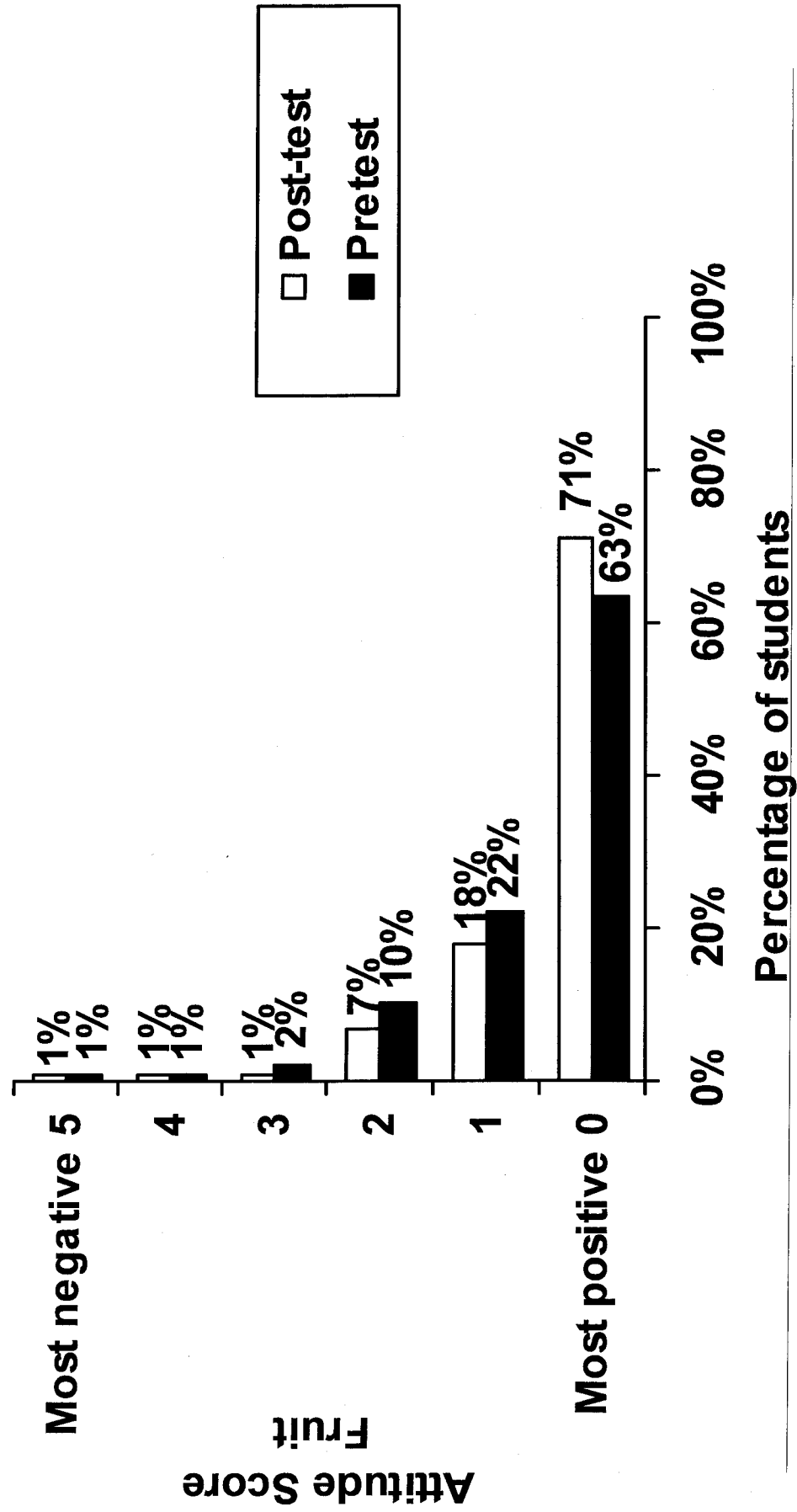
Results – Behavior Snapshot

Breakfast Consumption

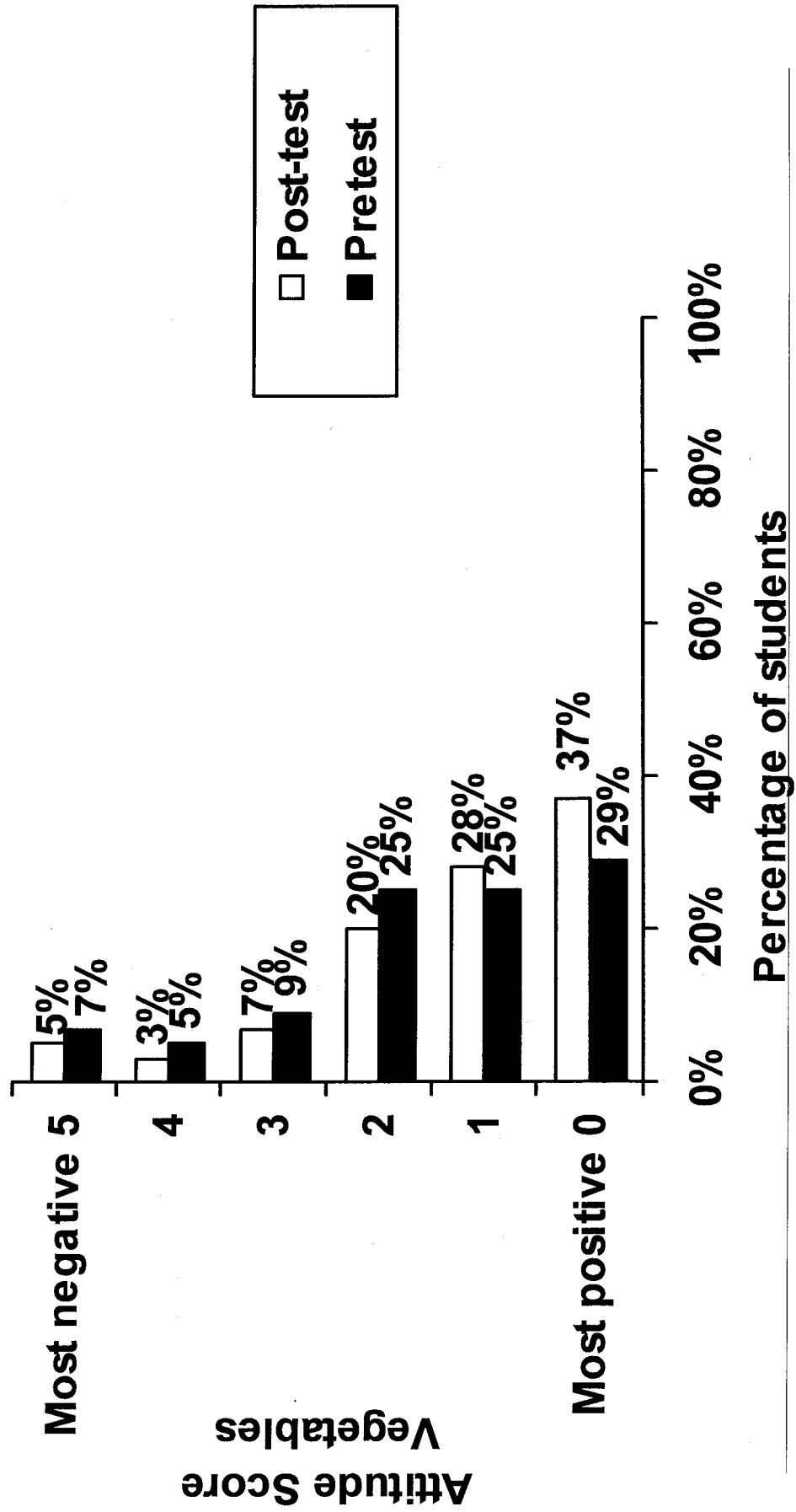


■ Do you eat breakfast every day?

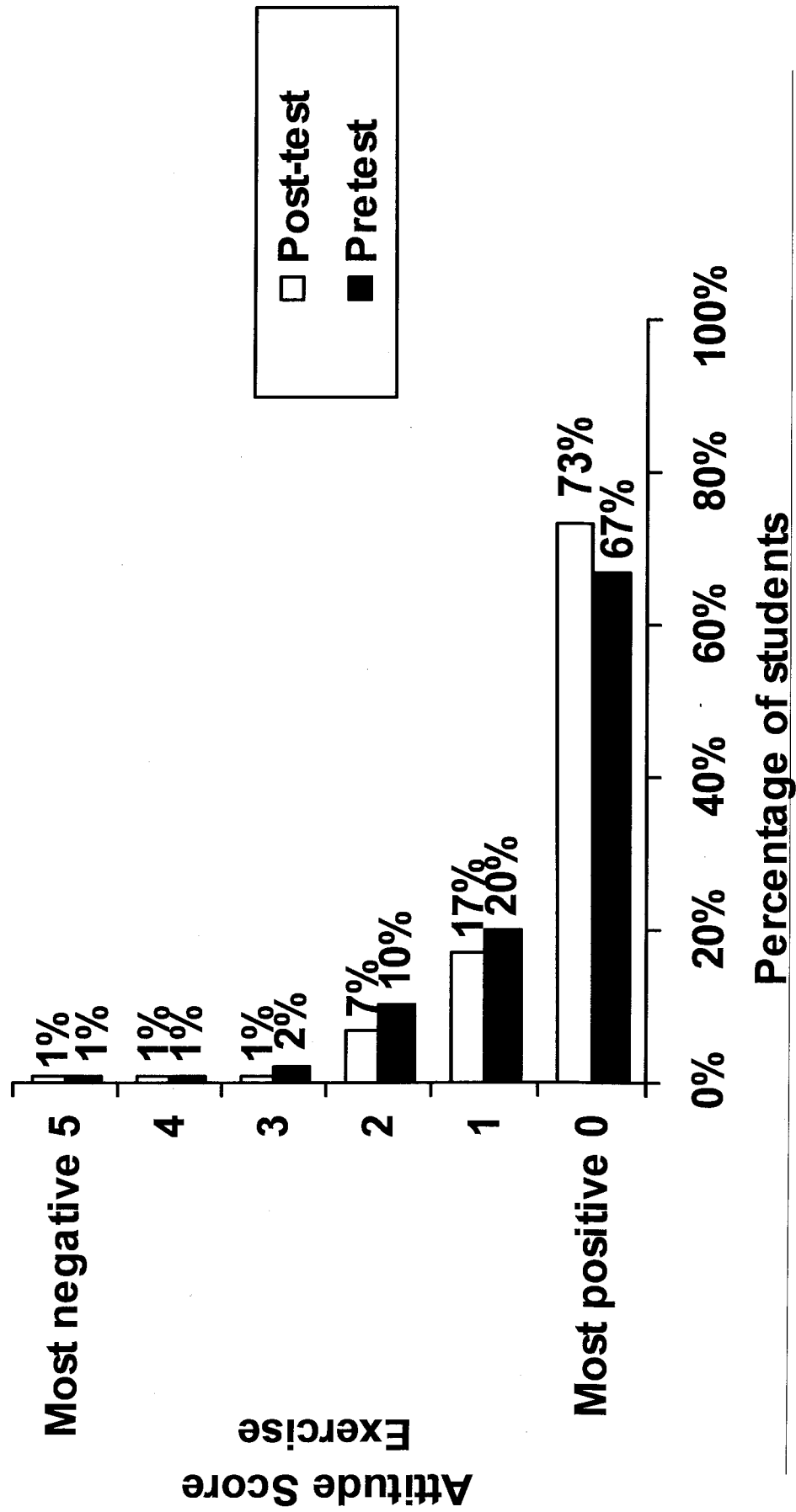
Results – Differences in Attitudes



Results – Differences in Attitudes



Results – Differences in Attitudes



Student Knowledge Results

Percent correct responses to 5 knowledge questions:

| Pretest | Posttest | Gain |
|---------|----------|--------|
| 58.5% | 81.1% | 22.6%* |

* $p < .01$

Results – Differences in Knowledge

- The response increase was higher in students who said that they did not eat breakfast everyday
- Females demonstrated an additional increase of correct responses

Results – Predictors of Knowledge

Multivariate model found the following were positive predictors of knowledge:

- Hours of exercise (pre- and post-test)
- Eating breakfast each day (pretest)
- Gender (males in pretest, females in post-test)
- Grade level (pre- and post-test)

Results – Predictors of Knowledge

Multivariate model found the following were negative predictors of knowledge:

- Sodas consumed per day (pre- and post-test)
- Hours watching TV, videos, DVDs (post-test)
- Hours playing video and computer games (post-test)

Student Satisfaction Results

(N=7,951)

- 91% gave the program a positive rating
 - Of those, 55% gave the program the highest rating possible on the scale provided
-

School Administrator

Survey (N=44)

Shape It Up Helped Our School/Teachers

- 91% Encourage students to participate in exercise
 - 84% Create dialogues about healthy eating
 - 68% Create lesson plans on health eating
-

School Administrator Comments

"The interactive nature of your program was effective... Students still talk about it."

"The program was instrumental in helping our entire school community think of making better choices about snacks and meals"

"Your program reinforced lessons that we have been teaching."

Key Findings

1. Positive attitudes about fruits, vegetables, and exercise increased after the Shape It Up workshop
2. Students demonstrated greater knowledge about healthy eating and exercise after the Shape It Up workshop
3. Knowledge gains were slightly greater for those who did not eat breakfast every day
4. Knowledge gains were slightly greater for females

Limitations of the Study

- Study design did not have a control group it was a single sample design with a pre and post measures
- The duration of the positive impact is difficult to determine from this analysis

Case Study I: Shape It Up

□ CMC created Shape It Up characters and educational materials.

Food Guide Pyramid
Eating foods from the Food Guide Pyramid will help you grow healthy and strong.

Fats, Oil & Sweets (Use sparingly)

Milk, Yogurt & Cheese Group (3-5 Servings)

Vegetable Group (3-5 Servings)

Meat, Poultry, Fish, Dry Beans, Eggs & Nuts Group (2-3 Servings)

Fruit Group (2-4 Servings)

Cereal (6-8 Servings)

Bread, cereal, Rice & Pasta Group (6-11 Servings)

Shape It Up

Horizon
Helping Philadelphia Work.
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RUTGERS

Shape It Up
Activity Book

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Small-Syrntabale is a proud supporter of Shape It Up.



Making Healthcare Work®

Home : *Shape it Up*



- ▶ About the Program
- ▶ Healthy Eating Tips
- ▶ Target Heart Rate for Children
- ▶ Healthy Food Chart
- ▶ Program Materials
- ▶ Helpful Links

Horizon Blue Cross Blue Shield of New Jersey and the Ernest Mario School of Pharmacy at Rutgers, the State University of New Jersey, have developed *Shape it Up*, an age-appropriate program designed to educate New Jersey elementary school students and their families about the importance of good nutrition and being physically fit. Students will learn proper eating habits and get tips for increasing their physical activity. *Shape it Up* will also increase childhood-obesity awareness and prevention by helping parents become proactive about their children's eating habits.



THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

John
Gulabzai



Helpful Links



About the Program

Schedule of Events

Click here for a listing of schools that are scheduled to begin the program this fall.



Pupils learn fighting obesity is elementary

'Shape it Up' program to tour 150 N.J. schools

By KIRK MOORE
STAFF WRITER

How do you make soda pop seem disgusting to a crowd of elementary school children? Just bring in Rutgers University pharmacy students to do a little basic chemistry demonstration.

On a two-thirds, 10-11, 12th Olivia Wang of Howell led the children of West Dover Elementary School in Dover Township in chanting as third-grader J.T. Leveno dumped spoonfuls of sugar into a glass of water. The sugar solution turned cloudy, and Wang's colleagues from the Ernest Mario School of Phar-



The company's philanthropic focus has long been on children's issues, and "for us to be involved in the prevention of obesity as well as the treatment of obesity is important."

— Leslie Hare, spokeswoman for Sanofi-Synthelabo Inc., an event sponsor



macy offered tips, to no takers. "That's how much sugar is in a can of soda," Wang told the children. "Who likes to have their teeth drilled by the dentist?" Sick to water or milk, she added, "and then you can stay out of the dentist's chair."

West Dover was first stop yesterday on a tour of 28 schools in Ocean and Monmouth counties where the new "Shape it Up" program will visit to foster healthy eating habits and combat obesity among elementary school children. It's a statewide effort to 150 elementary schools, sponsored by Horizon Blue Cross Blue Shield of New Jersey and the Rutgers pharmacy school, where nearly half of the 150 pharmacy and post-graduate students have volunteered as teaching aides.

Horizon Vice President and Chief Medical Officer Richard Popiel said the initiative seeks to educate children about the risks that come with being overweight.

One advocacy group, the American Obesity Association, has estimated that 16.5 percent of teens ages 12 to 19 are obese, a three-fold increase since 1990, Popiel said. Similar percentages seen among the elementary-age population between ages 6 and 11 represent a doubling in the last 24 years, he said.

Taking that message to a younger audience is an important experience in their own training, the Rutgers pharmacy students said.

"We're health care professionals. As pharmacists, we're more accessible to the public. To see a doctor you usually make an appointment, but we're around the pharmacy all day talking to people and answering questions," Yang said. "It's kind of hard for a kid to go back



J.T. Leveno (above), a third-grader at West Dover Elementary School, learns that a can of soda can have as much as 12 spoonfuls of sugar while Rutgers graduate pharmacy student Ryan Bucco sets out healthy snacks for the children.

STAFF PHOTOS: TIM HANCOCK

its fatty molecules clog blood vessels. A length of clear 2-inch laboratory hose represented an artery, as the kids donned plastic gloves to gingerly pack vegetable shortening into one end.

"We're going to show what happens if you eat fast food every day," narrated Rutgers student Yoon Young Kim of East Brunswick. "Cheeseburger ... Chicken nuggets, going in ..."

The Shape It Up program is funded in part with an unrestricted \$100,000 grant from Sanofi-Synthelabo Inc., part of the multinational pharmaceutical group Sanofi-Aventis, said Leslie Hare, a company spokeswoman.

The company's philanthropic focus has long been on children's issues, and "for us to be involved in the prevention as well as the treatment of obesity is important," Hare said.

Kirk Moore (732) 557-5728



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Horizon Blue Cross Blue Shield

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PAGE: 2 of 2

The Star-Ledger

October 10, 2004

The war against fat gains new ammunition



September 28, 2004

The importance of eating right

November 16, 2004

Principal discusses child obesity

The Philadelphia Inquirer

November 1, 2004

Schools trim the fat from their lunch menus

THE JERSEY JOURNAL

November 15, 2004

Healthy eating wins student attention with vivid display of junk food's risks

November 25, 2004

Students turned off by fast food demo



January 20, 2005

Shaping up in Florham Park



January 21, 2005

Heart-health lesson greased in Vernon Everyday items used to show pupils value of healthy eating

"Shape It Up" Award

Best of Blue

Sharing innovative and effective Blue Plan programs



March 22, 2005

Mr. William J. Marino
President and CEO
Horizon Blue Cross and Blue Shield
of New Jersey, Inc.
3 Penn Plaza East
Newark, NJ 07105

Dear Mr. Marino:

Congratulations! I'm pleased to inform you that Horizon Blue Cross and Blue Shield of New Jersey, Inc. will be presented with an award in the 9th annual Best of Blue Marketing and Communications competition. Your Plan has won an award for the entry titled *Shape It Up* in the *Public/Media Relations* Category.

The competition received 182 entries in 10 different categories from 35 Blue Plans. The entries were judged by an external panel of marketing and communications professionals.

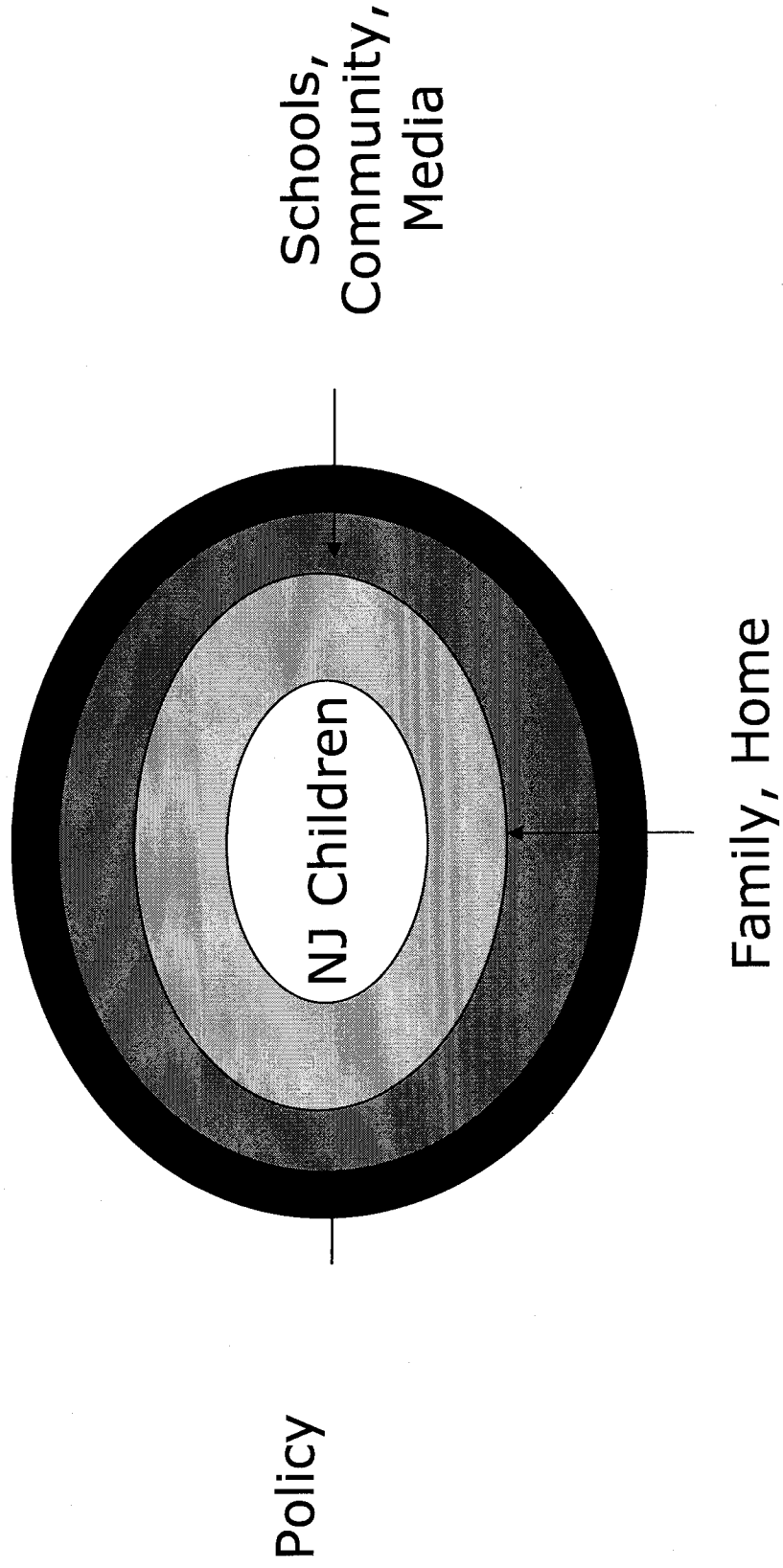
A formal presentation will honor the winners at a Best of Blue Awards breakfast at BCBSA's Marketing, Communications and National Program Delivery Conference in San Francisco on Tuesday, May 3rd.

Once again, congratulations on your Plan's outstanding marketing communications achievement. I look forward to seeing you at the conference.

Best regards,

Joe Bogardus
Executive Director
Brand Marketing Communications
Strategic Services

Ecological Perspective on Factors Influencing Childhood Overweight/Obesity



Questions?
