

Eat Smart, Move More North Carolina: An Obesity Prevention Movement

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Eat Smart, Move More North Carolina was established in response to the state's rapidly worsening obesity epidemic. Since its inception in 2002, the Eat Smart, Move More North Carolina movement has grown to include more than 90 member organizations and has developed and disseminated North Carolina's plan to address obesity for 2007-2012 and 2013-2020.

Many experts see obesity as the major public health threat of the 21st century. Over the past 20 years, rates of adult and childhood overweight and obesity have increased steadily and continuously throughout the United States, and most population health professionals now deem this problem to be an epidemic. In 2004 the Trust for America's Health began publishing its *F as in Fat* report, and since 2008 the Robert Wood Johnson Foundation has also collaborated on this endeavor. These annual reports have tracked the evolution of the obesity epidemic across the country.

In the 2000 report, no state had an adult obesity rate greater than 25%. By 2012, however, every state had a rate greater than 20%; 41 states had an adult obesity rate of at least 25%; and 13 states had rates above 30% [1]. North Carolina's adult obesity rate was 25.9% in 2005 [2], and in 2012 it reached a high of 29.6% [3]. In spite of continued increases in the percentage of adults in the state who are obese, North Carolina's rank in comparison with other states has remained relatively stable: In both 2011 [4] and 2012 [3], North Carolina ranked 17th highest in the nation (meaning that 16 states had a higher rate of adult obesity).

With regard to the rate of childhood obesity, North Carolina has ranked in the top third of states for the past decade. In 2004, 14.9% of children aged 2-4 years from low-income homes in North Carolina were obese [5]. By 2011, 15.4% of North Carolina children in this group were obese, and the state's obesity rate for this group was the 7th highest in the nation [5]. For youths aged 10-17 years, the percentage who had a body mass index greater than the 95th percentile for their age group improved slightly, from 19.3% in 2004 to 16.1% in 2011, and North Carolina's national ranking for this age group improved from 5th highest in the nation in 2004 to 18th highest in 2011 [6]. Although it is encouraging to see some improvement in the youth segment of the

population, North Carolina continues to experience increasing obesity rates for adults and for very young children from low-income homes.

North Carolina is a large state with 3 distinct geographic regions: the Coastal Plain, the Piedmont, and the Mountain region. Each region has unique characteristics and challenges that contribute to the overall picture of obesity in the state. The Coastal Plain is predominantly rural; its population spreads across 28 counties; and access to full-service grocery stores, farmers' markets, and organized physical activities is limited for many people in this region. Of the state's 3 regions, the Coastal Plain has the highest average adult obesity rate, at 31.5% [7].

The Piedmont region encompasses 50 counties and includes a greater number of urban centers than the other 2 regions of the state. In much of the Piedmont, residents have access to healthy foods and physical activity, yet the average adult obesity rate in this region is still 30.1%.

The Mountain region is a rural area consisting of 22 counties, where geography and income levels limit access to healthy foods and organized physical activity. Yet the average adult obesity rate in the Mountain region is the lowest of the state's 3 regions, at 27.8%. The region's climate, lifestyles that support and encourage outdoor activity, and significant regional collaboration to increase support of and access to local foods are factors that may contribute to this region's lower rate of obesity.

Two significant assets position North Carolina to respond to the emerging obesity epidemic: a robust public health system and a history of collaboration. Drawing on both of these strengths, state leaders from the fields of public health, health care, and education and from nonprofit organizations and businesses launched a unified response to the obesity epidemic at a landmark conference in 2002. A recent article by Dunn and Kolasa [8] provides a compelling description of how the statewide obesity prevention movement—called Eat Smart, Move More North Carolina—evolved from this conference, how the movement built a statewide leadership

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team, and how it developed programs and resources that are now available at little or no cost. The article also provides an in-depth account of how the obesity prevention plans for North Carolina for 2007–2012 [9] and 2013–2020 [10] were organized, written, vetted by stakeholders, and distributed for use across the state.

For more than a decade, Eat Smart, Move More North Carolina has provided health professionals, stakeholder organizations, policy makers, and residents with a rallying point for the obesity epidemic, and it has made resources, evidence-based strategies, and materials readily available. The Eat Smart, Move More North Carolina obesity prevention plans [9, 10] also provide guidance for institutions, organizations, and individuals wanting to encourage policies, environments, and behaviors that will move North Carolinians toward a healthy weight. By 2014 the Eat Smart, Move More North Carolina leadership team had grown to include members of more than 90 organizations. Many of these organizations have statewide reach, which ensures that Eat Smart, Move More North Carolina can impact virtually all North Carolinians.

Policies regarding healthy eating and physical activity are a focus of the Eat Smart, Move More North Carolina movement. In 2009 the movement created a policy strategy platform, which is updated periodically; the latest version is the *Eat Smart, Move More North Carolina Policy Strategy Platform 2012* [11]. A companion document [12], which is updated annually, catalogs evidence-based obesity prevention policies that have been introduced in the North Carolina General Assembly since 2009; this document includes details on each bill, its status, and links to the North Carolina General Assembly's Web site. The policy strategy platform serves as an advocacy tool for groups and local communities across the state that are working to promote and establish effective obesity prevention environments and practices.

In 2012 a statewide survey of local Eat Smart, Move More North Carolina coalitions was conducted by the North Carolina Center for Health and Wellness (of the University of North Carolina Asheville) on behalf of the Eat Smart, Move More North Carolina leadership team. The purpose of the survey was to determine whether policy-related activity was a focus of local coalitions' work and, if so, what policies from the Eat Smart, Move More North Carolina policy strategy platform were included in those efforts. Survey responses indicated that more than half (58.7%) of the coalitions were focused on policies for improving access to healthy food

through farm stands and farmers' markets, and nearly half (44.7%) were focused on policies for improving physical education and offering healthful living programs in schools [13].

The key to sustaining the Eat Smart, Move More North Carolina movement has been the production and distribution of resources for promoting healthy eating and physical activity. Two Web sites provide access to free downloadable information, materials, and documents that support these goals (see Table 1). At www.eatsmartmovemorenc.com, professionals can find resources such as the Move More after-school standards; the Eat Smart, Move More North Carolina handouts (which are available in English and Spanish); the Faithful Families Eating Smart and Moving More program; the WorkWell NC Toolkit; and links to funding sources and opportunities. At www.myeatsmartmovemorenc.com, consumers can find information and materials such as *Aisle by Aisle*, a series of supermarket shopping videos; simple tips for eating smart and moving more; a quiz about healthy eating and active living; and links to healthy recipes. The North Carolina Division of Public Health supports these Web sites and manages them for the Eat Smart, Move More North Carolina movement. The Web sites reflect the priorities and directives of the Eat Smart, Move More North Carolina leadership team and support the goal of the state's 2013–2020 obesity prevention plan [10], which is to increase the number of North Carolinians who have achieved a healthy weight.

Sustainability and impact are 2 measures of success for any social or health-related movement. Here, sustainability is defined in terms of time, investment of human capital, and the expansion and engagement of stakeholders and partners. The Eat Smart, Move More North Carolina movement was conceived in 2002 and remains the focal point for obesity prevention in North Carolina, which clearly indicates its continued viability and the stability of the state's collaborative obesity prevention efforts. When the state's first obesity prevention plan was introduced in 2006, the Eat Smart, Move More North Carolina leadership team included representatives from 23 organizations across the state [9], but by the time the 2013–2020 plan was introduced, the leadership team included 90 member organizations [10]. The North Carolina Division of Public Health plays a pivotal role in the success and coordination of the Eat Smart, Move More North Carolina movement, in part by diligently ensuring that member organizations are empowered to assume leadership and ownership of the movement.

TABLE 1.
Online Resources From Eat Smart, Move More North Carolina

Web site	Available resources
www.eatsmartmovemorenc.com	Move More after-school standards; Eat Smart, Move More North Carolina handouts (available in English and Spanish); Faithful Families Eating Smart and Moving More program; the WorkWell NC Toolkit; links to funding sources and opportunities.
www.myeatsmartmovemorenc.com	Supermarket shopping videos; simple tips for eating smart and moving more; a quiz about healthy eating and active living; links to healthy recipes.

Impact is the most critical measure of success for any movement. Since Eat Smart, Move More North Carolina was introduced in 2002, the number of organizations officially aligned with the movement has more than tripled. As a way to wrap up the 2007-2012 obesity prevention plan, a final report [14] was commissioned to assess and document the impact the plan had had on healthy eating and physical activity in North Carolina and to highlight progress toward the 4 goals identified in the plan. Not all of the quantitative goals for the 2007-2012 plan were achieved, but the final report paints a compelling picture of its impact. For example, the North Carolina Expanded Food and Nutrition Education Program used Eat Smart, Move More North Carolina messages to enhance their curriculum; as a result, many families

reported increases in fruit and vegetable consumption, level of physical activity, and number of meals eaten together, as well as a decrease in consumption of sugar-sweetened beverages. Other examples of the movement's impact include 2 obesity prevention initiatives in Pitt County: the Making Pitt Fit Community Garden and the Making Corner Stores Fit for Pitt. The final report also describes how 45 faith communities enacted more than 170 policy and environmental changes using the *Faithful Families Eating Smart and Moving More Planning Guide*. Additionally, the North Carolina Council of Churches developed Partners in Health and Wholeness, a faith-based initiative that helps church congregations adopt practices and policies that support healthy eating, physical activity, and healthy lifestyles [14].

In summary, the final report notes:

The obesity epidemic took longer than five years to develop and will take longer than five years to reverse. Important strides have been made over the previous five years: new partnerships have been formed and existing partnerships have been strengthened; partners from sectors outside of health have come to understand that their work influences the health of community residents and are partnering to create healthier communities; and the evidence for effective obesity prevention strategies has continued to increase [14].

The state's obesity prevention plan for 2013-2020 builds on the successes and momentum created by the 2007-2012 plan. North Carolina has built on its tradition of responding to challenges through collective action and collaboration. Eat Smart, Move More North Carolina is an effective rallying point for obesity prevention across the state, and it represents a movement toward enhanced health for all North Carolinians. **NCMJ**

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