North Carolina’s Plan to Address Overweight and Obesity

Balance how we eat, drink, and move.

A plan to guide professionals who work in the area of prevention and management of overweight, obesity, and related chronic diseases
Eat Smart, Move More North Carolina Movement

Eat Smart, Move More North Carolina is a statewide movement that promotes increased opportunities for healthy eating and physical activity wherever people live, learn, earn, play, and pray.

We work to help communities, schools, and businesses make it possible for people to eat healthy food and be physically active. We also encourage individuals to think differently about what they eat and how much they move, and to make choices that will help them feel good and live better.

Eat Smart, Move More North Carolina is guided by the work of the Eat Smart, Move More Members, a multi-disciplinary team composed of statewide partners working together to increase opportunities for healthy eating and physical activity.

Vision
A North Carolina where healthy eating and active living are the norm, rather than the exception.

Mission
To reverse the rising tide of obesity and chronic disease among North Carolinians by helping them to eat smart, move more, and achieve a healthy weight.

We have gleaned evidence-informed or evidence-based strategies from the best available science to create a plan to guide professionals who work in the area of prevention and management of overweight, obesity, and related chronic diseases.
Overweight and Obesity Defined

**Overweight**

**Adults** (aged 20 years and older):
BMI* between 25 and 29.9

**Children** (aged 2–19 years):
BMI ≥ 85th and < 95th percentile for children of the same age and sex

**Obese**

**Adults** (aged 20 years and older):
BMI ≥ 30

**Children** (aged 2–19 years):
BMI ≥ 95th percentile for children of the same age and sex

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*BMI = body mass index, a ratio of weight to height that is used to classify adults with overweight or obesity. The formula for calculating BMI is:
weight (kg) / [height (m)]^2
or weight (lb) / [height (in)]^2 x 703
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Preventable Costs of Obesity

**Obesity and Obesity-Related Conditions**
Practicing a healthy lifestyle is linked to decreasing the leading causes of preventable death. A healthy lifestyle can decrease the risk of:
- Heart disease
- High blood pressure
- Type 2 diabetes
- Metabolic syndrome
- Sleep disorders
- High blood cholesterol
- Atherosclerosis
- Orthopedic problems
- Some forms of mental illness
- Certain forms of cancer

**Type 2 Diabetes in North Carolina**
Over 50,000 adults in North Carolina are newly diagnosed with Type 2 diabetes each year. The prevalence of overweight or obesity among adults with Type 2 diabetes in North Carolina is 87%.5,6

**Obesity Increases Medical Costs**
Obesity and its associated preventable conditions cost the United States billions of dollars each year.7,8

- The estimated annual medical cost of obesity is $342.2 BILLION.
- The medical costs for individuals with obesity are $1,429 HIGHER than those of normal weight.
- Adults with obesity spend 42% MORE on direct healthcare costs.
- Healthcare costs for adults with severe or morbid obesity are 81% HIGHER than adults of normal weight.

**Impact on Employer Productivity**
Obesity contributes to an increase in both job absenteeism and presenteeism. Job presenteeism costs employers 10 times more than absenteeism.9,10

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Hunger-Obesity Paradox

Hunger, food insecurity, and obesity can co-exist in the same individual, family, or community. Low-income individuals and families are particularly vulnerable to both food insecurity and obesity. While researchers continue to examine this relationship, several reasons for this paradox have emerged:

- Lack of access to affordable, healthy foods.
- Cycles of food deprivation and overeating.
- High levels of stress, anxiety, and depression.
- Fewer opportunities for physical activity.
- Greater exposure to marketing of obesity-promoting products.
- Limited access to healthcare.
- Lack of access to affordable, healthy foods.
- Cycles of food deprivation and overeating.
- High levels of stress, anxiety, and depression.
- Fewer opportunities for physical activity.
- Greater exposure to marketing of obesity-promoting products.
- Limited access to healthcare.

Determinants of Health Model

If we are going to be successful at preventing or treating obesity, we must find solutions to challenges facing individuals, families, and communities that directly correlate to where and how they live. We have learned that a person’s zip code is as much a predictor of their health and lifespan as their genetic code—or more so. We must consider:

- Neighborhood Design including housing, transportation, safety, parks, and walkability.
- Educational Opportunities that lead to greater economic prosperity.
- Access to Healthy Food that leads to reduced hunger and food security.
- The Effect of Toxic Stress created by social and environmental pressures.
- Individual and family Support Systems and social connections.
- Access to Healthcare and how the quality of that care impacts individuals’ and families’ ability to achieve and maintain overall good health, leading to healthy, active lifestyles.
- Employment Opportunities that provide a living wage for individuals and families.
Move More

Physical activity is critical for lifelong weight management and overall health. Physical activity refers to any bodily movement that requires energy expenditure, whether it’s for work or play, daily chores, or daily commuting. Because of its role in energy balance, physical activity is a critical factor in determining whether a person can maintain a healthy weight, lose excess weight, or sustain weight loss. Adults need at least 150 minutes of moderate-intensity physical activity per week and should perform muscle-strengthening activities at least two days a week. Adults who want to maintain weight loss or lose more than 5% of their body weight should increase their moderate-intensity physical activity to at least 300 minutes per week. People with chronic conditions or disabilities who are not able to follow the key guidelines for adults should adapt their physical activity program to match their abilities, in consultation with a healthcare professional or physical activity specialist. Children ages 6 to 17 need at least 60 minutes of physical activity every day and should get a mix of bone strengthening, muscle building, and aerobic activities.

**Moderate-intensity aerobic activity**
Anything that gets your heart beating faster counts.

**Muscle-strengthening activity**
Do activities that make your muscles work harder than usual.

*If you prefer vigorous-intensity aerobic activity (like running), aim for at least 75 minutes a week.

If that’s more than you can do right now, **do what you can**. Even 5 minutes of physical activity has real health benefits.
Eat more healthy food, less junk and fast food\textsuperscript{14-15}

Today’s typical American diet is often higher in calories than needed and consists of food and beverage choices that are not nutritious. These empty calories are mostly from unhealthy fat and sugar. Similar to a financial budget, food choices can be evaluated by their cost to a daily calorie budget. In these terms, foods high in empty calories are also “expensive” calorie choices that may not fit into a daily calorie budget. In other words, they are not nutrient-dense. Tracking food choices can help determine when and how many calories to spend. To meet vital nutrient needs while staying within a calorie budget, choose more nutrient-dense foods, close to their natural state such as fruits, vegetables, nuts, seeds, lean meats, and low-fat dairy, and limit empty calorie foods.

Eat more fruits and vegetables\textsuperscript{16-18}

Of all the healthy foods, fruits and vegetables are particularly important. Fruits and vegetables in their natural state are low in calories and high in vitamins and minerals. Eating a diet rich in fruits and vegetables makes it easier to consume fewer calories. The consumption of low-calorie foods such as fruits and vegetables is associated with better weight management. It is recommended to eat 2 cups of fruit and 2½ cups of non-starchy vegetables each day, whether fresh, frozen, canned, or dried. It is important to choose a variety of colors, especially deep green and orange fruits and vegetables, such as spinach, kale, collards, turnip greens, arugula, cantaloupe, and carrots.

Drink more water, less sugar-sweetened beverages\textsuperscript{16, 19-25}

Make water your go-to beverage. Sugar-sweetened beverages include any drink that is sweetened with any form of sugar such as corn sweetener, corn syrup, dextrose, fructose, high-fructose corn syrup, honey, or sugar. This includes but is not limited to lemonade, sweet tea, cola, sports drinks, and energy drinks. Sugar-sweetened beverages are the leading source of added sugar in the American diet. Sugar-sweetened beverages are ubiquitous in our society and are consumed by an estimated 49% of adults and 63% of children daily. Drinking sugar-sweetened beverages is associated with weight gain, obesity, and type 2 diabetes. Limiting sugar-sweetened beverages can help maintain weight and protect against weight gain.
Sit less\textsuperscript{13, 26}

One in four adults sits for over eight hours per day. This sedentary lifestyle, regardless of other physical activity, can increase the risk of cardiovascular disease and all cause mortality in adults. The more sedentary a person is, the less likely they are to maintain a healthy weight. Moving more and sitting less, even short episodes of physical activity, has proven immediate and long-term health benefits. Light-intensity physical activity can be a beneficial first step in replacing sedentary behavior. Given the high levels of sitting and low levels of physical activity in the US population, most people would benefit from sitting less and moving more. When adults with chronic conditions or disabilities are not able to meet the above key guidelines, they should engage in regular physical activity according to their abilities and should avoid inactivity.

Start and continue to breastfeed\textsuperscript{27-30}

The health benefits of breastfeeding are well documented. Breast milk is a dynamic, bioactive fluid, that changes in composition throughout lactation to mirror the child’s needs. This allows for breast milk to respond to maternal and environmental factors to provide the optimal nutritional benefit to children. Breastfeeding is associated with a decreased rate of childhood, adolescence, and adulthood overweight and obesity. The duration (the length of time a child is breastfed) and exclusivity (providing only human milk) of breastfeeding are both linked to reducing childhood obesity risk by up to 25%. The American Academy of Pediatrics recommends that children be exclusively breastfed for the first 6 months and continued breastfeeding with complementary foods through 12 months.

Get enough sleep\textsuperscript{31-35}

Insufficient sleep is a widespread problem in the US with as many as one in three adults not getting at least seven hours. Sleep is a restorative process and plays an important role in overall health of the entire body and mind. There is a growing body of evidence on the importance of sleep as it relates to increased risk of obesity. There is a link between low sleep quality and short sleep duration (less than 7 hours of sleep per day) to increased risk of obesity and poor obesity treatment outcomes. Poor sleep (either duration or quality) results in many metabolic and endocrine alterations that can impact risk of obesity. Improving sleep quality and quantity is important in addressing overweight and obesity.
Mindfulness**40-46**

In recent years, there has been increased interest in mindfulness as it relates to obesity. Mindfulness refers to the learned ability to be open, accepting, and present in the moment. The practice of mindfulness includes being consciously aware of habits, thoughts, emotions, and behaviors. Mindful individuals demonstrate more self-compassion, self-regulation, self-control, and emotional regulation. An increase in mindfulness may allow an individual to be more purposeful in food selection.

Mindful eating, a specific type of mindfulness, is eating with awareness of what food we choose and how the food smells and tastes. When we eat mindfully, we are fully present and eat as a singular event without distraction of computers, TV, phone, or while driving.

Mindful eating increases an individual’s sensitivity to the physical signs of hunger, satiety cues, pace of eating, the food environment, and food characteristics. These cues are important to be able to control the urge to consume high-calorie foods. There is strong support for inclusion of mindful eating as a component of weight management programs and may provide substantial benefit to the treatment of overweight and obesity.

**Manage stress**36-39

High levels of stress are common in our society. Demands from work and family may cause stress. There are added stress burdens in those who are living in poverty or are food insecure. Stress has been linked to overweight and obesity through multiple interactions. The hormone cortisol is secreted during times of stress. This hormone causes higher levels of insulin and can trigger overeating. Stress also interferes with cognitive processes including self regulation. Stress also causes physiological changes that may be related to overweight and obesity, including changes to hunger and satiety hormones as well as changes to the gut microbiome. Studies have shown a relationship between stress and weight in children and adults. Managing stress through mindfulness, physical activity, or other means is an important part of addressing overweight and obesity.
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You
Eat smart and move more to achieve and maintain a healthy weight. Track your steps or minutes of exercise each day. Include fruits and vegetables at every meal. Learn to recognize hunger and satiety. We are all role models and can be part of the solution.

Friends and Family
Encourage the families you work with to plan and fix simple healthy meals and make healthy snacks easy to “grab and go”. Suggest they meet a friend for a walk or start a walking group in their neighborhood or work place. Have them explore local parks and playgrounds. Have them find outdoor and indoor recreational activities that are fun for them and their family.

The Places You Go
Make it easier and safer for people to be physically active, whether at the office, in the neighborhood, or to and from school. Advocate for more walking paths, trails, sidewalks, and greenways. Help make fruits and vegetables accessible to all including mobile markets and farmers markets. When serving meals or snacks, offer water and healthy food options. Make healthy choices possible for your employees, clients, patients, or students.
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**Strategies**

There are 8 strategies listed in no particular order. Each strategy represents the best available evidence. An extensive review was conducted to assure that the most up-to-date resources were used. This included personal contacts with national leaders at CDC and USDA. See page 22 for the documents used.

### Healthcare Care for others

Healthcare can help individuals achieve and maintain a healthy weight, and can support environments and policies that enable individuals to carry out their personal health prescriptions.

Clinicians and other healthcare professionals can screen for and diagnose overweight and obesity, provide treatment plans, and increase awareness of the health risks of obesity. They can accept and support the inherent diversity of body shapes and sizes. They can advocate for time spent to counsel patients with overweight or obesity, and they can refer appropriately to community-based resources. Clinicians and healthcare professionals can work for the creation of healthy environments, including vending, in healthcare worksites (e.g., hospitals, clinics). They can promote and advocate for breastfeeding. Healthcare professionals can be powerful advocates for healthy eating and physical activity environments across all sectors of their communities.

- **Assess**, counsel, and advise patients on physical activity and how to do it safely.
- **Screen** all adults annually using a BMI measurement; in most populations a cutoff point of $\geq 25 \text{ kg/m}^2$ should be used to initiate further evaluation of overweight or obesity.
- **Measure** waist circumference when evaluating patients for adiposity-related disease risk. Men should have a waist circumference $< 40$ inches, women $< 35$ inches.
- **Implement** a practice policy to require measurement of weight and length or height in a standardized way and plotting of information on World Health Organization or the CDC growth charts as part of every well-child healthcare provider visit.
- **Screen** patients with overweight or obesity and patients experiencing progressive weight gain for prediabetes and type 2 diabetes and evaluate for metabolic syndrome by assessing waist circumference, fasting glucose, A1C, blood pressure, and lipid panel that includes triglycerides and HDL.
- **Screen** patients with overweight or obesity for obstructive sleep apnea.
- **Treat** patients with overweight or obesity with lifestyle therapy that includes healthy eating and physical activity to reduce the risk of type 2 diabetes and hypertension.
- **Treat** patients with medications that are more weight-neutral, and emphasize behaviors to minimize weight gain.
Screen all patients for food insecurity using standardized questions and refer them to appropriate federal, state, or local food and nutrition assistance programs.

Promote a positive, comfortable, welcoming, and accessible office environment to reduce weight bias and improve patient care.

Accommodate patients of all sizes by providing access to armless chairs, scales for patients above 350 pounds, longer speculums, and extra-large blood pressure cuffs.

Utilize patient-first language for individuals with overweight or obesity.

Counter and minimize the abundance of unscientific and inappropriate weight-loss products and claims.

Shift to healthier food and beverage choices. Offer nutrient-dense foods and beverages across and within all food groups in place of less healthy choices.

Limit advertisements of less healthy foods and beverages in healthcare settings.

Counsel caregivers about risk factors for obesity, such as children’s weight-for-length, BMI, rate of weight gain, and parental weight status.

Establish policies and practices to offer counseling and behavioral interventions for adults identified as obese, and integrate with other community-based interventions.

Use terms that are appropriate for families and children to define healthy weight and BMI, and explain how to achieve this goal.

Promote effective prenatal counseling about maternal weight gain and the relationship between obesity and diabetes.

Assess and record information on patients’ dietary patterns.

Establish policies and practices to train and educate health professionals to increase children’s healthy eating, and counsel parents or caregivers about their children’s diet.

Implement and maintain Baby-Friendly hospital initiatives.

Establish ongoing monitoring and data-management systems.

Ensure that all staff have sufficient knowledge, competence, and skills to support breastfeeding.

Inform all pregnant women about the benefits and management of breastfeeding.

Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.

Support mothers to initiate and maintain breastfeeding and manage common difficulties.

Give newborns no food or drink other than breast milk, unless medically indicated.

Practice “rooming in”—allow mothers and infants to remain together 24 hours per day.

Encourage breastfeeding on demand.

Give no artificial teats, pacifiers, or bottle nipples to breastfeeding infants.

Coordinate discharge so that parents and their infants have timely access to ongoing support and care.

Achieve and maintain the North Carolina Maternity Center Breastfeeding-Friendly Designation.

Promote exclusive breastfeeding for six months after birth and continuation of breastfeeding in conjunction with complementary food for one year or more.

Provide point-of-decision prompts to encourage the use of stairs in clinical settings.

Advise caregivers of children ages two to five years to limit screen time to less than two hours per day, including discouraging the placement of televisions, computers, or other digital media devices in children’s bedrooms or other sleeping areas.

Train healthcare providers in the area of prevention and management of obesity based on the National Academies of Science, Engineering, and Medicine suggested provider competencies.

Partner with other sectors to promote access to community-based physical activity programs.

Practice healthy lifestyle behaviors, be role models for patients, and participate in community coalitions.
Children often spend more waking hours in childcare and preschool than with their families. Ideally, families can choose a childcare facility that provides healthy foods daily, offers a variety of physical activity, includes nutrition education in the curriculum, and supports the development of healthy eating and physical activity habits in all children. Childcare providers and preschool teachers can adopt and implement policies and practices in their classrooms that promote healthy eating, allow for active play, and reduce sedentary time. Childcare facility owners and operators can adopt and monitor facility-wide policies that support healthy environments and behaviors. Legislators and other childcare policy makers pass and enforce legislation to make good nutrition and physical activity the norm in childcare facilities.

**Implement** policies that give preschool-aged children physical activity throughout the day regardless of ability.

**Train** adult caregivers of preschool-aged children to encourage active play that includes a variety of activity types.

**Implement** policies that ensure that the amount of time toddlers and preschoolers spend sitting or standing still is minimized.

**Implement** policies that reduce screen time.

**Complete** the GO NAPSACC Self-Assessments for Infant and Child Physical Activity and Nutrition, Outdoor Play and Learning, Oral Health, Screen Time, and Breastfeeding.

**Implement** policies that limit consumption of sugar-sweetened beverages and promote drinking water.

**Implement** policies that require child care providers and early childhood educators to practice responsive feeding.

**Implement** educational programs tailored to individuals and change organizational practices, approaches, and/or policies to support healthy food choices where food decisions are being made.

**Implement** and maintain breastfeeding-friendly child care initiatives.

- Develop a written policy that promotes and supports breastfeeding, especially exclusive breastfeeding, and share with employees as part of orientation/training, and families as part of enrollment.
- Offer community breastfeeding resources and information about continued breastfeeding in the child care setting.
- Train early educators in skills to promote breastfeeding and support family feeding choices.
- Provide a breastfeeding-friendly environment.
- Provide interactive and developmentally appropriate learning opportunities that normalize breastfeeding for children in the program.

**Achieve** and maintain the North Carolina Breastfeeding-Friendly Child Care Designation.

**Implement** policies and practices that support any or all aspects of Farm to ECE (local foods purchased, promoted and served in meals, snacks or taste tests; education activities related to agriculture, food, health and nutrition; and childcare gardens where children engage in hand-on experiential learning through gardening).
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Schools
Care for students, teachers, and staff

Over 1.5 million students attend North Carolina schools. Schools have considerable influence on what children eat and how they move. Many people can help schools promote healthy weight for North Carolina’s children and youth, including superintendents, school board members, administrators, teachers, child nutrition staff, school nurses, and families. Families are powerful advocates for making schools places that support healthy weight behaviors. School staff can model healthy weight behaviors for young people. School administrators can establish policies and procedures that support students in achieving healthy behaviors and maintaining healthy weight. Teachers can educate students about healthy behaviors. Students can advocate for schools to support healthy eating and physical activity.

**Implement** the Move More North Carolina: Recommended Standards for After-School Physical Activity in all after-school programs.

**Implement** and monitor all sections of the Healthy Active Children Policy to ensure schools provide the recommended minutes of quality physical education, required minutes of daily physical activity and required nutrition guidelines.

**Establish** policies and practices to create a school environment that encourages a healthy body image, shape, and size among all students and staff members, accepts diverse abilities, and does not tolerate weight-based teasing or stigmatizing healthy eating and physical activity.

**Provide** a quality school meal program and ensure that students have only appealing, healthy food and beverage choices offered outside of the school meal program.

**Implement** a comprehensive physical activity program with quality physical education as the cornerstone.

**Implement** health education that provides students with the knowledge, attitudes, skills, and experiences needed for healthy eating and physical activity.

**Discourage** consumption of sugar-sweetened beverages, promote drinking water, and restrict the availability of less healthy foods and beverages.

**Teach** educators and other school personnel how to increase children’s physical activity, decrease their sedentary behavior, and advise parents or caregivers about their children’s physical activity.

**Implement** policies and practices to provide evidence-based Healthful Living curricula in schools.

**Comply** with federal regulations regarding school meals and wellness policies.

**Implement** policies and practices to improve the availability of mechanisms for purchasing locally grown foods.

**Implement** policies to limit advertisements for less healthy foods and beverages.

**Require** high-quality physical education that meets North Carolina Department of Public Instruction standards in all district schools.

**Implement** policies and practices that provide opportunities for extracurricular physical activity.

**Implement** policies to enhance infrastructure that supports bicycling and walking to school.

**Implement** policies and practices to promote joint use and community use of school facilities.

**Implement** policies and practices that support any or all aspects of Farm to School (local foods purchased, promoted and served in meals, snacks or taste tests; education activities related to agriculture, food, health and nutrition; and school gardens where children engage in hand-on experiential learning through gardening).
North Carolina has more than one million students in the community college, college, and university settings, along with tens of thousands of staff and faculty. The environment of a college campus can support healthy weight behaviors. From the president or chancellor to the student entering college for the first time, each person has a role to play. Students can identify ways in which the environment could be more supportive of healthy eating and physical activity, and they can help make appropriate environmental changes. College officials can consider health in policies related to campus food offerings, food procurement, and land use. Student health providers can include healthy eating and physical activity as critical points in plans to address student health. Faculty, staff, and students can engage communities to disseminate evidence-based practices and best practices to promote health.

**Colleges and Universities**

**Care for students, staff, and faculty**

**Expand** intramural sports and campus recreation opportunities for students of all abilities.

**Provide** opportunities for students, faculty, and staff to volunteer with community coalitions or partnerships that address obesity.

**Limit** advertisements for less healthy foods and beverages on campus.

**Improve** the capacity of university dining services to purchase locally grown food.

**Increase** the number of campus organizations with policies and practices that provide opportunities for physical activity and healthy eating.

**Enhance** the university infrastructure to support all students, staff, faculty, and visitors in bicycling, walking, and wheeling on campus.

**Implement** policies and practices to encourage joint use of fitness facilities by faculty, staff, and community members.

**Implement** policies and practices that enhance personal safety in university settings where people are or could be physically active.

**Implement** policies and practices that enhance traffic safety in areas on campus where people are or could be physically active.

**Develop** and implement a campuswide comprehensive plan for land use and transportation that creates opportunities for physical activity and that aligns with comprehensive plans for the city and county.

**Implement** policies to discourage consumption of sugar-sweetened beverages and increase consumption of water.

**Implement** routine BMI screening, counseling, and behavioral interventions to improve physical activity and healthy eating within student health services.

**Shift** to healthier food and beverage choices. Offer nutrient-dense foods and beverages across and within all food groups in place of less healthy choices.

**Implement** educational programs tailored to individuals and change organizational practices, approaches, and/or policies to support health food choices where food decisions are being made.

**Implement** menu-labeling policies and practices in college and university dining facilities.
Worksite Care for employees

Healthy workers are more productive at work and at home. Avoiding preventable health costs helps both the bottom line and employees’ personal finances. The worksite can support healthy weight behaviors. Team members and co-workers can help create a workplace environment that supports healthy weight behaviors. They can encourage each other to make healthy choices in food and physical activity. Supervisors can use their authority to make the healthy choice the easy choice in areas they control. Owners and management can maintain worksites and benefit plans that support health and productivity. State policymakers can create legislation that promotes a healthy, competitive workforce across the state.

Encourage workers to be physically active. Provide facilities and encourage their use through outreach activities.

Encourage opportunities in the workplace for regular physical activity though active commuting, activity breaks, and walking meetings.

Consider access to opportunities for active transportation and public transit when selecting new worksite locations.

Shift to healthier food and beverage choice policies and practices. Offer nutrient-dense foods and beverages across and within all food groups in place of less healthy choices.

Implement educational programs tailored to individuals and change organizational practices, approaches, and/or policies to support healthy food choices where food decisions are being made.

Participate in community coalitions or partnerships to address obesity.

Institute policies and practices to offer options for smaller portion sizes in food services and vending.

Provide and promote free or subsidized lifestyle coaching/counseling or self-management programs that equip employees with skills and motivation to set and meet their personal nutrition goals.

Implement policies to limit advertisements for less healthy foods and beverages.

Support exclusive breastfeeding for six months and continuation of breastfeeding for as long as mothers desire by providing a clean, private, comfortable space with a lockable door and electric outlets for pumping. This area cannot be a bathroom.

Achieve and maintain the Breastfeeding-Friendly Business and Workplace award.

Provide all lactating employees breaks to express milk or nurse their children.

Promote worksite mechanisms for purchasing locally grown foods, including expanding farmers markets and farm stands.

Enhance site infrastructure to support bicycling, walking, and wheeling.

Implement policies and practices for joint use of site or community physical activity facilities with schools and community organizations.

Provide worksite wellness programs, and promote healthy foods and physical activity.

Assess health risks, and offer feedback and intervention support to employees.

Use point-of-decision prompts to encourage the use of stairs, drinking water, and eating healthy.

A wide range of business and industry partners can promote healthy lifestyles and prevent obesity through the products they develop. Shared value is a concept that merges the priorities of meeting important social needs and making a profit, claiming that the two can happen simultaneously. Business and industry partners are encouraged to check out sharedvalue.org for information.
Community Care for its members

Community-based organizations, including faith-based organizations and other non-profits, have powerful influence over whether policies and environments support healthy weight. Faith-based and community-based organizations can start with their own members by making healthy choices available at meetings, events, and gatherings. Faith and community leaders can encourage members to take action in changing the local environment to support physical activity and healthy eating. If an organization has assets such as playgrounds or walking trails, it can share them during off hours with the community at large.

**Participate** in community coalitions or partnerships to address obesity.

**Implement** healthier food and beverage policies and practices.

**Provide** access to affordable healthy foods.

**Institute** policies and practices to provide options for smaller portion sizes.

**Train** lay leaders to increase children’s physical activity, decrease children’s sedentary behavior, and advise parents or caregivers about their children’s physical activity.

**Promote** and support exclusive breastfeeding for six months and continuation of breastfeeding in conjunction with complementary food for one year or more.

**Implement** policies and practices to improve the availability of locally grown foods by expanding farmers markets and farm stands.

**Provide** incentives for the production, distribution, and procurement of foods from local farms.

**Implement** policies ensuring that the amount of time toddlers and preschoolers spend sitting or standing still is minimized by limiting the use of equipment that restricts movement.

**Increase** point-of-decision prompts to encourage the use of stairs.

**Enhance** infrastructure to support bicycling, walking, and wheeling.

**Adopt** practices that enhance personal safety in areas where people are or could be physically active.

**Adopt** practices that enhance traffic safety in areas where people are or could be physically active.

**Allow** community members to use facilities (e.g., outdoor space, meeting rooms, playgrounds) for physical activity.

**Give** all children opportunities to be physically active throughout the day.

**Advocate** for implementation of comprehensive local plans for land use and transportation.

**Discourage** consumption of sugar-sweetened beverages, and encourage drinking water.

**Advise** adults to limit screen time to less than two hours per day for all children.
Local and State Government
Care for residents

Local and state government play a role in creating healthy weight environments in communities. Local and state government include elected officials, local and state health departments, boards of health, planning departments, planning boards, parks and recreation departments, and police departments, among others. Local and state government can make the healthy choice easier by creating safe places to be active, planning land use with physical activity and access to healthy foods in mind, providing public transportation, and supporting farm stands and grocery stores, especially in underserved areas.

**Increase** community access to healthy foods through supermarkets, grocery stores, and convenience/corner stores by creating incentive programs to attract supermarkets and grocery stores to underserved neighborhoods, providing transportation, and implementing zoning regulations to enable healthy food providers to locate in underserved neighborhoods.

**Improve** the availability and identification of healthful foods in restaurants by requiring menu labeling in non-chain restaurants and offering incentives for restaurants that promote healthier options.

**Promote** efforts to provide fruits and vegetables in a variety of settings, such as farmers’ markets, farm stands, mobile markets, community gardens, and youth-focused gardens.

**Ensure** that publicly-run entities such as after-school programs, child-care facilities, recreation centers, and local government worksites implement policies and practices to promote healthy foods and beverages, and reduce or eliminate the availability of calorie-dense, nutrient-poor foods.

**Increase** participation in federal, state, and local government food and nutrition assistance programs (e.g., WIC, the National Breakfast and Lunch Programs, the Child and Adult Care Food Program [CACFP], the Afterschool Snack Service, the Summer Food Service Program, SNAP, Expanded Food and Nutrition Education Program [EFNEP]).

**Encourage** breastfeeding and promote breastfeeding-friendly communities by adopting the Baby-Friendly Hospital Initiative USA (United Nations Children’s Fund/World Health Organization), informing parents of their right to breastfeed in public, supporting construction laws that require government buildings to have lactation rooms, and allocating funding to WIC clinics for the Breastfeeding Peer Counselor Program.

**Increase** access to free, safe drinking water in public places to encourage water consumption instead of sugar-sweetened beverages.

**Implement** fiscal policies and local ordinances to discourage the consumption of calorie-dense, nutrient-poor foods and beverages (e.g., taxes, incentives, land use and zoning regulations).

**Promote** media and social marketing campaigns on healthy eating and childhood obesity prevention.

**Encourage** walking and bicycling for transportation and recreation through improvements in the built environment by adopting a pedestrian and bicycle master plan, building and maintaining a network of sidewalks and street crossings that creates a safe and comfortable walking environment and that connects to important destinations.

**Promote** programs that support walking and bicycling for transportation and recreation by adopting community policing strategies that improve safety and security of streets, collaborating with schools to develop and implement a Safe Routes to School program, and increasing transit use.

**Promote** other forms of recreational physical activity by building and maintaining parks and playgrounds that are safe and attractive, adopting community policing strategies that improve safety and security for park use, collaborating with school districts and other organizations to establish joint use of facilities agreements, and other similar strategies.
Local and State Government Strategies, continued

**Promote** policies that build physical activity into daily routines by instituting regulatory policies mandating minimum play space, physical equipment, and duration of play in preschool, after-school, and child-care programs; creating incentives for remote parking and drop-off zones and/or disincentives for nearby parking and drop-off zones at schools, public facilities, shopping malls, and other destinations, and improving stairway access and appeal.

**Promote** policies that reduce sedentary screen time.

**Adopt** regulatory policies limiting screen time in preschool and after-school programs.

**Develop** a social marketing program that emphasizes the multiple benefits for children and adults of sustained physical activity.

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**Food and Beverage Industry**

**Make healthy choices possible**

The food and beverage industry’s role in developing and marketing healthy products is critical to our success. Reformulation of some foods may improve their nutritional content in ways that better support healthy weight. The food industry can examine its marketing practices and increase marketing of healthy choices. Industry trade associations can work with government or nonprofit partners to develop or institutionalize formal guidelines, promising practices, competitions, incentives, or recognition programs that encourage corporate members to develop and promote food and beverage products that support a healthy diet and reward them for doing so.

**Partner** with government, academic institutions, and other interested stakeholders to evaluate progress in preventing childhood obesity and promoting healthy lifestyles.

**Utilize** a variety of in-store merchandising and promotion activities to bring healthier choices to the attention of consumers. These include product sampling, price promotions, shelf markers, package icons or logos, and special displays that can be used to flag healthier products.

**Conduct** educational tours and provide print and online information and menu planning ideas for families.

**Reduce** portion sizes and provide options for selecting smaller portions.

**Reformulate** products to reduce calories, sodium, saturated fats, and trans fats.

**Use** low-saturated fat oils in food preparation.

**Provide** vegetable options prepared with minimal added calories and salt.

**Provide** fruit options served without added sugar.

**Display** calorie content on menus.

**Develop** packaging that allows greater preservation and palatability of fresh fruits and vegetables.

**Make** whole-grain options available for bread, crackers, pasta, and rice.

**Decrease** the salt and sugar contents of processed foods.

**Replace** the saturated fat with low-saturated fat liquid vegetable oils in prepared foods.

**Develop** innovative approaches to market fruits and vegetables to make them more appealing, and increase the convenience of purchasing them.
**Media and Entertainment Industry**

**Promote healthy lifestyles**

Media and the entertainment industry have roles to play in helping North Carolinians make healthier choices. How the media frame stories about healthy eating and active living influences consumer choices, as well as how policy makers and organizational leaders see how their decisions support individuals’ choices. Reporters must ensure their reporting is scientifically sound. Entertainment media have an opportunity, especially with children’s programming, to encourage healthier choices by depicting children and families enjoying healthy, active lifestyles.

**Promote** capacity to serve as accurate interpreters and reporters to the public on findings, claims, and practices related to the diets of children and youth.

**Incorporate** into multiple media platforms (e.g., print, broadcast, cable, Internet, and wireless-based programming) foods, beverages, and storylines that promote healthful diets.

**Use** celebrity endorsements and partnerships to extend outreach to children and families to encourage physical activity and making choices that contribute to a healthful diet.

**Promote** fruit and vegetable consumption and other healthy behaviors for entertainment media, particularly television programs and broadcast and cable television networks targeting children and youth.

**Ensure** that licensed characters are used only for the promotion of foods and beverages that support healthful diets for children and youth.

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**REFERENCES**

REFERENCES, continued


DOCUMENTS USED FOR STRATEGIES


Centers for Disease Control and Prevention. School health guidelines to Promote Healthy Eating and Physical Activity. MMWR 2011;60(No.5):1-80.


North Carolina’s Plan to Address Overweight and Obesity (Plan) was created under the guidance of the Eat Smart, Move More North Carolina Executive Committee. The Executive Committee established a volunteer writing team of Eat Smart, Move More North Carolina members to develop the new state plan. The 8-member writing team was led by a Past Chair of the Executive Committee and lead author of the previous plan, North Carolina’s Plan to Address Obesity: Healthy Weight and Healthy Communities 2013–2020.

Development of the Plan began in March 2019 with the first writing team meeting. Discussions included documents that were to be used for evidence-based strategies, name of the new plan, sections to include in the new plan, and possible graphics. The writing team had three additional in-person meetings. Meetings were to discuss sections of the plan that were drafted by writing team members between meetings. The lead writer presented periodic updates to the Executive Committee. Two first-line reviewers provided feedback on the July 2019 draft to the writing team. The draft plan was also shared with the Executive Committee in July 2019.

At the September 12, 2019 Eat Smart, Move More North Carolina meeting, the lead writer presented the draft of the new state plan to members. Members were asked to provide feedback to the writing team by October 11, 2019. The writing team met and incorporated suggestions into the draft.

A final version of the Plan was released on December 5, 2019 at the Eat Smart, Move More North Carolina quarterly meeting.

**WRITING TEAM**

Jenni Albright, MPH, RDN  
Coordinator, Eat Smart, Move More NC

Carolyn Dunn, PhD, RDN, LDN  
William Neal Reynolds Professor and Head  
Department of Agricultural and Human Sciences  
NC State University

Dave Gardner, DA  
Worksite Wellness and Early Care and Education Coordinator  
Community and Clinical Connections for Prevention and Health  
NC Division of Public Health

Catherine Hill, MS, RDN, LDN  
Healthy Eating and Communications Coordinator  
Community and Clinical Connections for Prevention and Health  
NC Division of Public Health

Kathy Kolasa, PhD, RDN, LDN  
Professor Emeritus  
Brody School of Medicine  
East Carolina University

Melissa Rockett, MPA  
Built Environment Coordinator  
Community and Clinical Connections for Prevention and Health  
NC Division of Public Health

Cathy Thomas, MAEd  
Branch Manager  
Community and Clinical Connections for Prevention and Health  
NC Division of Public Health

Sherée Vodicka, MA, RDN, LDN  
Chief Executive Officer  
NC Alliance of YMCAs

**FIRST-LINE REVIEWERS**

Diane Beth, MS, RDN, LDN  
Nutrition Program Consultant  
Division of Public Health, Children and Youth Branch

Tekeela S. Green, PhD, MPH, CHES  
Consultant

**EXECUTIVE COMMITTEE**

Joanne Lee, MPH, RD, Chair  
Collaborative Learning Director  
Healthy Places by Design

Jenni Albright, MPH, RDN, Coordinator  
Coordinator, Eat Smart, Move More NC

Dave Gardner, DA, Member at Large  
Worksite Wellness and Early Care and Education Coordinator  
Community and Clinical Connections for Prevention and Health  
NC Division of Public Health

Jayne McBurney, MS  
Steps to Health Program Coordinator  
North Carolina State University  
SNAP-Ed  
Department of Agricultural and Human Sciences

Richard Rairigh, Member at Large  
Director  
Be Active Kids

Special thanks to Sarah Kuester, MS, RDN, Public Health Advisor, Centers for Disease Control and Prevention and Susan Kansagra, MD, MBA, Section Chief, Chronic Disease and Injury Section, NC Division of Public Health for their expert review of North Carolina’s Plan to Address Overweight and Obesity.
Suggested Citation