# THE CITY OF COLUMBUS
# EARLY CHILDHOOD OBESITY PREVENTION PLAN

**DEVELOPED BY THE CITY OF COLUMBUS EARLY CHILDHOOD OBESITY PREVENTION COALITION**

***MARCH 2011***

## OUR VISION

Columbus is a community in which all children have daily opportunities for active play and access to nutritious foods that lead to children entering kindergarten ready to live, learn and play at their best.

## INTRODUCTION

***The City of Columbus Early Childhood Obesity Prevention Coalition*** was first convened in April 2009 and represents a collaboration of community, service, early childhood education and healthcare organizations that impact the lives of pregnant women and children birth to kindergarten entry. This coalition, made possible through the ***Ohio Department of Health's Office of Healthy Ohio Community Obesity Prevention Program Grant***, has committed to actively changing the Columbus community to provide children the earliest possible opportunity to develop a healthy lifestyle and to reduce their risk of childhood overweight and obesity.

The problem of childhood obesity continues to grow in our community. In 2002, the Franklin County Health Assessment found that thirty percent of Columbus children were overweight[1]. In 2004-2005, the Ohio Department of Health found that nearly fifty percent of Columbus' inner city third grade students were at risk of becoming overweight or were overweight[2]. In 2007, Nationwide Children's Hospital reported the number of patients with a diagnosis of obesity or excessive weight had increased to 4,461 from only 1,360 patients in 2002[3].

The economic and societal costs of this epidemic are beginning to emerge. Conditions such as metabolic syndrome, type II diabetes, high blood pressure, elevated blood cholesterol levels and obstructive sleep apnea in children are rising at an alarming pace[3]. Children who are overweight or obese are also more likely to remain overweight and obese in adulthood[5]. It has been estimated that the cost for treating obese patients are approximately thirty-seven percent higher than the cost of treating a patient with a normal weight[6]. In spite of extensive research, effective treatment modalities for overweight and obesity remain elusive. Healthy eating habits and increased physical activity are the cornerstones of obesity prevention and treatment efforts. While healthy lifestyles and moderate weight loss have been associated with improvement in obesity related medical conditions[7, 8], healthy lifestyles have failed to produce the large and sustained weight losses necessary to fully ameliorate the health risks associated with overweight and obesity. Only a few drugs are approved for the treatment of overweight and obesity and they too have failed to produce large and sustained weight losses. Surgical interventions for weight loss have produced significant, sustainable weight loss but the health risks associated with these procedures limit their utilization in a large cross-section of people, especially children.[10]

As a result of the increasing prevalence of overweight and obesity and the lack of effective and safe treatment modalities, obesity prevention has become an important goal for the medical community and in public health. Evidence suggests that preventing childhood obesity begins at the time a woman becomes pregnant. Achieving a healthy weight gain during pregnancy, breastfeeding through the first year of life and establishing healthy eating and physical activity habits early in life are all essential to obesity prevention [9, 10]. To effectively combat the economic and societal costs of overweight and obesity, The City of Columbus Early Childhood Obesity Prevention Coalition has chosen to target prevention efforts starting with a pregnant woman's first contact with the care community and continuing through the time a child enters kindergarten.

## GOALS

Through resources, policies, and education, this plan is intended to:
1) increase the initiation and duration of breastfeeding for infants
2) increase access to healthy foods for pregnant women and children birth to kindergarten entry
3) increase opportunities for daily activity for pregnant women and children birth to kindergarten
4) increase screening and referral to promote awareness and action in the community

In conjunction with community partners and other local efforts, the goal of this plan is to increase the number of Columbus children entering kindergarten at a healthy weight.

## BASELINE

2009/2010 School Year:
Columbus City Schools completed Body Mass Index (BMI) screening for one hundred percent children entering kindergarten. Approximately, sixty-five percent were at a healthy BMI ($5^{th}$ - $85^{th}$ percentile BMI for age).

The City of Columbus Early Childhood Obesity Prevention Coalition would like to recognize the work of local communities, coalitions and partners who have created plans and guiding documents that have laid the foundation for the writing of this plan.
We thank the individuals and agencies who have worked to create .....

- *Healthy and Fit: A Community Action Plan for Franklin County Children and Families.*
- *The United Way of Central Ohio **Bold Goals** for Nutrition and Fitness.*
- *The Ohio Obesity Prevention Plan.*
- *The Franklin County Physical Activity Plan.*
- *Ohio's Physical Activity Plan.*
- *Nationwide Children's Hospital Full Potential Reports*
- *Columbus City Schools Pinpoint-Plan for students 0-5.*

**For more information about the plan, please contact:**

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CITY OF COLUMBUS

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## BREASTFEEDING

Available data suggests that breastfeeding may play a role in the prevention of obesity. While the mechanism through which breastfeeding protects a child from obesity is unknown, greater ability to self-regulate food intake and mother-infant feeding interactions have been suggested as possible factors[10]. Given this and other known health benefits associated with breastfeeding, The American Academy of Pediatrics Expert Committee recommends that clinicians encourage breastfeeding until at least twelve months of age[10].

In spite of public health goals to increase breastfeeding rates, especially in populations most affected by health disparities including obesity, breastfeeding initiation and duration in Franklin County and the City of Columbus remain well below targets[11, 12]. A number of social, economic and other factors have been implicated in the failure to meet breastfeeding initiation and duration goals. Increasing breastfeeding rates will require a multi-faceted community approach.

***The City of Columbus Early Childhood Obesity Prevention Coalition*** encourages all community partners to utilize this plan to provide supportive environments and positive messages that support mothers in breastfeeding successfully through their baby's first year of life.

### BREASTFEEDING GOAL

More women in Columbus will be breastfeeding at hospital discharge.

**Baseline:**
2011 – Establish a baseline measure of how many of the seven maternity hospitals serving Columbus have documented breastfeeding policies consistent with the World Health Organization's (WHO) Baby Friendly Hospital[13] recommendations.

**Baseline:**
2009 – sixty-three percent of babies born in Franklin County were breastfed at hospital discharge.[14]

**BREASTFEEDING IMPACT OBJECTIVE 1:** By December 31, 2015, five new policies in healthcare, childcare, public buildings and/or worksites will support the initiation and duration of breastfeeding.

**Measure:** 1) The number of new policies/practices implemented; 2) The approximate number of people impacted by the implementation of new polices.

**Target:** At least one new policy that supports breastfeeding will be implemented annually.

**Evaluation:** Baseline and annually, survey Coalition partners, childcare centers, Worksite Wellness Partners, and City of Columbus to document written breastfeeding policies for employees, visitors, and clients. All documentation should include date of implementation and approximate number of people impacted by each new policy.

### BREASTFEEDING POLICY STRATEGIES:

1) Provide training and technical assistance to increase the number of local policies that support breastfeeding in city and county government facilities, child care centers, worksites/businesses and public venues.
2) Offer support and technical assistance for Columbus maternity hospitals to draft and implement policies consistent with WHO Baby Friendly Hospital[13] recommendations.
3) Advocate for and support the efforts of community partners to promote state and national policies that support and protect breastfeeding.

**BREASTFEEDING IMPACT OBJECTIVE 2:** By December 31, 2015, positive education and social marketing messages that support and encourage pregnant women in choosing to breastfeed and mothers of infants to continue breastfeeding will be displayed in at least five new locations.

**Measure:** 1) The number of locations implementing breastfeeding education and/or social marketing programs; 2) The approximate number of women reached through the display of new social marketing and positive education.

**Target:** Expand or introduce breastfeeding education and social marketing programs in at least one location annually.

**Evaluation:** Baseline and annually, survey Coalition partners, childcare centers, Worksite Wellness Partners, and City of Columbus to identify number of sites that display positive messages that support breastfeeding. All documentation should include date of implementation and approximate number of people reached by each new site.

### BREASTFEEDING EDUCATION STRATEGIES:

4) Provide training and assistance to community partners to expand educational programs and/or social marketing campaigns that promote breastfeeding.
5) Disseminate location and description of educational classes, support groups and breastfeeding support services.
6) Advocate for and support the efforts of community partners to implement innovative breastfeeding education and social marketing campaigns throughout the community (e.g. mass media, social media, etc.).

## PHYSICAL ACTIVITY

The importance of physical activity in obesity prevention has been well documented. However, community health surveillance data continues to suggest that many Americans fail to meet the minimum recommendations for physical activity. Local data indicates that Franklin County and Columbus residents are failing to meet physical activity recommendations.[16] While specific data regarding physical activity levels of children birth to kindergarten and pregnant women in the City of Columbus are not tracked, their activity levels are unlikely to significantly exceed the physical activity levels of the general population.

The 2008 Physical Activity Guidelines for Americans recommend that healthy women should get at least 150 minutes of moderate intensity aerobic activity a week during pregnancy and the postpartum period. Pregnant women who regularly participated in vigorous activity or were highly active prior to pregnancy may continue to participate in these activities during and after their pregnancy as well. The American Academy of Pediatrics recommends that children engage in at least sixty minutes of moderate to vigorous physical activity every day.[17] The National Association for Sport and Physical Education recently published age specific physical activity guidelines for young children. They recommend that infants be allowed to be naturally active and the use of movement limiting devices such as swings and infant seats should be limited. Toddlers should engage in at least thirty minutes of structured, adult led activity and at least sixty minutes of unstructured play every day. Preschoolers should be encouraged to participate in at least sixty minutes of structured, adult led activity each day as well as sixty minutes of unstructured play.[18]

Sedentary behaviors such as television, video games and computer use have also been implicated in overweight and obesity. One study found that preschool age children, who watched more than four hours of television a day had a significantly higher BMI than those who watched less than two hours per day. Having a television in a child's bedroom was also associated with a greater risk of being overweight.[19] Interventions promoting "decreased media use" without specific promotion of active behaviors has been shown to reduce BMI in controlled investigations.[19] In response to this and other data related to media use and childhood obesity, The American Academy of Pediatrics recommends no television for children under the age of two years old and limiting screen time to no more than two hours per day for children older than two. They also recommend removing televisions and computer screens from children's primary sleeping areas.[17]

The ***City of Columbus Early Childhood Obesity Prevention Coalition*** encourages all community partners to utilize this plan in conjunction with the ***Franklin County Physical Activity Plan.*** (Available at http://publichealth.columbus.gov/fc-physical-activity-plan.aspx ). Implementation of these plans will support increased daily physical activity and decreased screen time for pregnant women and young children through
1) increased availability of resources for daily activity and active alternatives to screen time,
2) implementation of policies that increase opportunities for physical activity and reduce screen time,
3) consistent, positive, and culturally sensitive education and messages promoting physical activity and reduced screen time.

### PHYSICAL ACTIVITY GOAL:

All pregnant women and children birth to kindergarten in the City of Columbus, especially in the zip codes identified by US Census Data as having the highest obesity rates, will be more physically active every day.

**Baseline:** Data not available at this time.

**PHYSICAL ACTIVITY IMPACT OBJECTIVE 1:** By December 31, 2015, five new physical activity resources (e.g. physical activity equipment, etc.) will be available for pregnant women and children birth to kindergarten.
**Measure:** The number of new physical activity resources.

**Target:** Introduce at least one new physical activity resource for pregnant women and children birth to kindergarten annually.

**Evaluation:** Baseline and annually, survey Coalition partners, hospitals, childcare centers, Worksite Wellness Partners, and City of Columbus to identify programs, services and resources for physical activity distributed in places where pregnant women and children birth to kindergarten live, learn or receive care. All documentation should include date of implementation.

**PHYSICAL ACTIVITY RESOURCE STRATEGIES:**

1) Increase the availability of innovative, low cost or free physical activity programs for pregnant women and children age birth to kindergarten.
2) Advocate for the specific needs of pregnant women and children age birth to kindergarten in the development of community physical activity referral networks and resources.
3) Raise the needs of pregnant women and children birth to kindergarten in the development of spaces where residents can be physically active.

**Advocate for and support the efforts of community partners to…..**

4) Increase the availability of safe and accessible play areas in neighborhoods.
5) Increase the miles of paved sidewalks and bike paths in neighborhoods.
6) Increase the number of shared use agreements for use of school athletic facilities.
7) Restore availability of neighborhood recreation centers and programming.

**PHYSICAL ACTIVITY IMPACT OBJECTIVE 2:** By December 31, 2015, five new physical activity and/or screen time policies will provide pregnant women and children birth to kindergarten with more opportunities for daily physical activity.

**Measure:** The number of new physical activity /screen time policies implemented.

**Target:** At least one new policy that promotes increased physical activity and/or reduced screen time for pregnant women and children birth to kindergarten will be implemented each year.

**Evaluation:** Baseline and annually, survey Coalition partners, childcare centers, Worksite Wellness Partners, and City of Columbus to identify new physical activity and/or screen time policies in places where pregnant women and children birth to kindergarten live, learn or receive care. All documentation should include date of implementation.

**PHYSICAL ACTIVITY POLICY STRATEGIES:**

1) Through Quality Rating Systems, licensing regulations, technical assistance and/or training, childcare centers will
    - Limit screen time to less than two hours per day of quality programming for children two years and older.
    - Eliminate screen time for children under the age of two years.
    - Require that children are provided with at least sixty minutes of physical activity per day including both teacher led activity and free play.
    - Infants are provided with opportunities to be naturally active every day and use of movement limiting devices is minimized.

**Advocate for and support the efforts of community partners to…..**

2) Increase the perceived safety of physical activity in neighborhoods for pregnant women and families with children birth to kindergarten entry.
3) Consider the needs of pregnant women and children birth to kindergarten when policies intended to promote increased physical activity are drafted or revised.

**PHYSICAL ACTIVITY IMPACT OBJECTIVE 3:** By December 31, 2015 messages and education to support and encourage physical activity and/or limiting screen time will be displayed in at least five new places that serve pregnant women and children birth to kindergarten.

**Measure:** Number of new sites displaying messages that encourage physical activity and/or limiting screen time.

**Target:** At least one new site each year will display messages that encourage physical activity and/or limit screen time.

**Evaluation:** Baseline and annually, survey Coalition partners, childcare centers, Worksite Wellness Partners, and City of Columbus to identify new or enhanced physical activity and screen time education and social marketing messages implemented in places where pregnant women and children birth to kindergarten live, learn or receive care. All documentation should include date of implementation.

**PHYSICAL ACTIVITY EDUCATION STRATEGIES:**

1) Through technical assistance and training, expand existing educational programs and social marketing campaigns to include targeted physical activity and/or screen time messages for pregnant women and children birth to kindergarten.
2) Form a partnership with one or more organizations or venues in Columbus that market/appeal to young children and families (e.g. professional sports clubs, museums, zoo, etc.) to implement or expand a social marketing campaign to promote physical activity and/or limit screen time.
3) Advocate for culturally sensitive and size-diverse representation of pregnant women and children birth to kindergarten in social marketing and messaging promoting physical activity and/or limiting screen time.

## AWARENESS AND ACTION

A growing body of evidence suggests that childhood obesity prevention efforts can and should be initiated in pregnancy. Factors during pregnancy, including maternal overweight, excessive weight gain and exposure to gestational diabetes have all been associated with a higher BMI in children.[17] A 2009 report by The Institute of Medicine (IOM) identified that more women are overweight or obese when they become pregnant. Additionally many women are gaining too much weight during their pregnancy and not losing the excess weight prior to subsequent pregnancies, thereby repeating the risk cycle[20]. In response to these trends, the IOM completed and published revised guidelines for weight gain during pregnancy. The IOM recommends that women who are overweight (a pre-pregnancy BMI of 25-29.9 kg/m$^2$) should gain approximately fifteen to twenty-five pounds or an average of 0.6 pounds per week during the second and third trimesters. Women who are obese prior to pregnancy, (a pre-pregnancy BMI of greater than 30.0 kg/m$^2$) should gain approximately eleven to twenty pounds or an average of 0.5 pounds per week in the second and third trimester. The IOM recommends that those who provide prenatal care to women should inform them of both the total recommended weight gain during pregnancy and the suggested rate of weight gain and should offer tailored dietary and physical activity guidance.[20]

As the child grows, the American Academy of Pediatrics recommends that BMI should be calculated for every child at each well-child visit starting at age two. The BMI should be plotted on the National Institute of Health growth charts to identify the percentile rank. A BMI at or above the level of the 85$^{th}$ percentile should be addressed as should significant changes in BMI percentile even below the 85$^{th}$. When a child's BMI indicates an unhealthy weight or risk for an unhealthy weight, appropriate referral to community-based nutrition and physical activity resources is recommended[10].

Effective and regular screening of BMI and prenatal weight gain, coupled with adequate, consistent and cohesive referral to resources that promote and support healthy lifestyle choices are essential in obesity prevention efforts. However, ***The City of Columbus Early Childhood Obesity Prevention Coalition*** recognizes that in 2010, screening and referral efforts in Columbus are not well connected and offer a significant opportunity to improve prevention efforts. Therefore, the ***City of Columbus Early Childhood Obesity Prevention Coalition*** encourages all community partners who provide care and services for pregnant women and young children to utilize this plan to expand screening and referral efforts for pregnant women and children birth to kindergarten through

1) increasing the number of
    a. prenatal care providers that routinely utilize pre-pregnancy BMI screening to provide tailored advice for a healthy prenatal weight gain in accordance with the Institutes of Medicine guidelines
    b. pediatric health care providers that routinely utilize age specific BMI screening and the American Academy of Pediatrics recommendations for the prevention of childhood overweight and obesity to provide tailored advice for families
2) increasing the number of
    a. pregnant women who understand the importance of a healthy prenatal weight gain and seek advice from their prenatal care providers.
    b. parents who recognize the importance of a healthy weight for their child and seek advice from their child's health care providers.
3) the establishment of a cohesive community referral network of healthy weight resources that serve pregnant women and children birth to kindergarten.

## AWARENESS AND ACTION GOAL:

More pregnant women understand the important of a healthy weight gain during pregnancy and more parents of children birth to kindergarten will know their/their child's BMI/BMI percentile. Pregnant women and parents will increasingly act upon the advice of their healthcare providers related to healthy weight.

**Baseline:** Data not available at this time

**AWARENESS AND ACTION IMPACT OBJECTIVE 1:** By December 31, 2015, at least five new places will adopt and implement policies related to healthy weight screening for pregnant women and/or children birth to kindergarten.

**Measure:** Number of new places where policies are adopted and implemented.

**Target:** At least one new place each year will implement a policy to screen pregnant women and/or children birth to kindergarten for a healthy weight.

**Evaluation:** Monitor and track organizations that develop and implement policies. Conduct annual follow-up to assess policies.

## AWARENESS AND ACTION STRATEGIES:

1) Evaluate current healthy weight screening and referral policies and practices of places that provide care for pregnant women and children birth to kindergarten. Identify model practices.
2) Increase the number of pregnant women who ask their care providers for weight gain recommendations. Promote awareness of the importance of healthy weight gain during pregnancy through educational programs and social marketing campaigns (e.g. culturally sensitive messages about prenatal weight gain)
3) Recruit agencies that provide health care for pregnant women to develop and implement policies to provide individualized weight gain recommendations consistent with the IOM guidelines for healthy weight gain during pregnancy.
4) Increase the number of parents who ask their care providers to evaluate their child's growth using BMI percentile. Promote awareness of the importance of a healthy weight through educational programs and social marketing campaigns (e.g. culturally sensitive messages about childhood obesity prevention)
5) Recruit agencies that provide health care for children two to five to develop and implement policies based on the NIH and American Academy of Pediatrics recommendations to assess growth using the BMI percentile for age and to communicate this information to parents.
6) Provide materials, resources and technical assistance needed for successful implementation of healthy weight screening policies.

**AWARENESS AND ACTION IMPACT OBJECTIVE 2:** By December 31, 2015, healthcare providers in the City of Columbus will have additional tools to help educate and/or refer pregnant women and/or children birth to kindergarten to resources that will promote a healthy weight.

**Measure:** Creation and annual updates of a prenatal and early childhood education and community referral tool.

**Target:**

1) A healthy prenatal weight gain referral tool will be created by December 31, 2012 and updated annually.
2) An early childhood healthy weight referral tool will be created by December 31, 2012 and updated annually.

**Evaluation:**

1) The documented creation and annual updates of healthy weight referral tools.

**AWARENESS AND ACTION STRATEGIES:**

1) Identify or develop and distribute a resource for prenatal care providers that includes evidence-based lifestyle recommendations for healthy prenatal weight gain and local, free or low-cost nutrition and physical activity resources provided by not-for-profit entities.
2) Identify or develop and distribute a resource for agencies that provide care and services to children age birth through kindergarten that includes evidence-based lifestyle recommendations for children and local, free or low-cost nutrition and physical activity resources provided by not-for-profit entities.
3) Maintain and expand the *City of Columbus Early Childhood Obesity Coalition* to maintain open communication between referring agencies and resource providers in the community.

## NUTRITION

Pregnant women, infants, and young children have varying nutritional needs due to their unique stages of growth and development. The American Academy of Pediatrics, The American Dietetic Association and the USDA each offer recommendations for healthy food choices. These can be met by limiting added sugars, energy dense foods and sugar sweetened beverages, increasing fruit and vegetable intake, choosing more whole grains and encouraging regular consumption of lower fat milk. Additionally, the American Academy of Pediatrics recommends eating breakfast daily, limiting eating at restaurants (especially fast food) and encouraging family meals as effective nutrition strategies to prevent childhood obesity[17, 21, 22]. The American Academy of Pediatrics also recommends limiting fruit juice consumption as an obesity prevention strategy[23].

The barriers to healthy eating are varied and complex. In some communities, access to healthy foods may be limited by economic and geographical factors. A lack of time may limit a family's ability to make healthier food choices. Cultural norms and perceptions may serve as a barrier. Effective obesity prevention efforts require creating an environment where it is easier for people make healthier food choices and to consume fewer calories while being more physically active.

***The City of Columbus Early Childhood Obesity Prevention Coalition*** encourages all community partners to utilize this plan to provide supportive environments and positive messages that make it easier for pregnant women and young children to eat foods and beverages that support the *USDA Dietary Guidelines* through
1) increased access to healthy foods,
2) policies that increase the availability of healthy foods, and
3) consistent, positive, and culturally sensitive education and messages promoting healthy food choices.

### NUTRITION GOAL:

All pregnant women and children birth to kindergarten in the City of Columbus, especially in the zip codes identified by US Census Data as having the highest obesity rates, will eat more foods and beverages that support the *USDA Dietary Guidelines*.

**Baseline:** Data not available at this time.

**NUTRITION IMPACT OBJECTIVE 1:** By December 31, 2015, pregnant women and children birth to kindergarten will have five new resources for affordable fruits, vegetables, whole grains, quality protein and dairy foods.

**Measure:** The number of new resources for affordable fruits, vegetables, whole grains, quality protein and dairy foods.

**Target:** At least one new affordable, quality food resource for pregnant women and children birth to kindergarten will be introduced each year.

**Evaluation:** Baseline and annually, survey Coalition partners, childcare centers, Worksite Wellness Partners, and City of Columbus to identify programs, services and resources for healthy foods in places where pregnant women and children birth to kindergarten live, learn or receive care. All documentation should include date of implementation.

## NUTRITION RESOURCE STRATEGIES:

1) Increase opportunities for pregnant women and children birth to kindergarten to participate in growing fruits and vegetables through the development of a network of community gardens (e.g. provide /connect resources for the development of gardens at hospitals and clinics that serve pregnant women and children and at early learning centers, etc.).
2) Advocate for the specific needs of pregnant women and children birth to kindergarten in efforts to improve access to healthy foods in underserved neighborhood (e.g. corner store initiatives, mobile food pantries or EBT capable produce vendors located where pregnant women and children birth to kindergarten receive care, learn and play.)

**Advocate for and support the efforts of community partners to…..**

3) Develop a comprehensive food access plan for the City of Columbus.
4) Increase the number of full-service grocery stores and supermarkets located within the three largest undeserved areas in Columbus.
5) Increase the number of farm market days per 10,000 residents. Increase the number of participating farmers who accept EBT and WIC produce vouchers.

**NUTRITION IMPACT OBJECTIVE 2:** By December 31, 2015, five new food and beverage policies will provide pregnant women and children birth to kindergarten with increased access to food and beverages that support the *USDA Dietary Guidelines*.

**Measure:** The number of new food and beverage policies implemented.

**Target:** Each year, at least one new policy that supports the *USDA Dietary Guidelines* will be implemented.

**Evaluation:** Baseline and annually, survey Coalition partners, childcare centers, Worksite Wellness Partners, and City of Columbus to identify new or enhanced nutrition policies in places where pregnant women and children birth to kindergarten live, learn or receive care. All documentation should include date of implementation.

## NUTRITION POLICY STRATEGIES:

1) Increase the number of foodservice and vending policy(ies) in local government facilities, child care centers, and businesses/organizations that serve pregnant women and children birth to kindergarten to…
    - increase the availability of food and beverages that meet or exceed the *USDA Dietary Guidelines*
    - decrease the cost of food and beverages that meet or exceed the *USDA Dietary Guidelines*
    - limit access to unhealthy foods and beverages
    - increase the cost of unhealthy foods and beverages

2) Through Quality Rating Systems, licensing regulations, technical assistance and/or training, more childcare centers will….
    - provide meal and snack guidelines that meet or exceed the USDA Dietary guidelines for Americans.
    - prohibit the serving of sugar sweetened beverages.
    - limit the amount of 100% fruit juice to four to six ounces per day as recommended by the American Academy of Pediatrics.
    - provide more servings of whole fruit in replacement of 100% fruit juice.
    - require serving lower fat milk (2% or less) to children two and older.

- support healthier food choices for celebrations.
- require healthier food or non-food fundraising activities.
- prohibit the use of food as a reward or withholding of foods as a punishment.

**Advocate for and support the efforts of community partners to…..**

3) promote local government policies offering incentives to new and/or existing food retailers to offer healthier food and beverage choices in underserved areas.
4) promote local government policy(ies) that encourage the production, distribution, or procurement of food from local farms in Columbus.
5) preserve land for growing food.

**NUTRITION IMPACT OBJECTIVE 3:** By December 31, 2015, pregnant women and children birth to kindergarten will be exposed to messages and education that support eating nutrient dense foods and beverages in at least five new places.

**Measure:** Number of new sites displaying messages that encourage foods and beverages that meet or exceed the *USDA Dietary Guidelines* or discourage consumption of low nutrient density foods and beverages.

**Target:** Each year, at least one new site will display messages that encourage foods and beverages that meet or exceed the *USDA Dietary Guidelines* or discourage consumption of low nutrient density foods and beverages.

**Evaluation:** Baseline and annually, survey Coalition partners, childcare centers, Worksite Wellness Partners, and City of Columbus to identify new or enhanced nutrition education and social marketing messages implemented in places where pregnant women and children birth to kindergarten live, learn or receive care. All documentation should include date of implementation.

**NUTRITION EDUCATION STRATEGIES:**

1) Through technical assistance and training, expand existing educational programs and/or social marketing campaigns that promote healthy food and beverages and/or discourage unhealthy choices to include messages targeting pregnant women and children birth to kindergarten.
2) Partner with organizations in Columbus that market/appeal to young children and families (e.g. professional sports clubs, museums, zoo, etc.) to implement a social marketing campaign that promotes healthy foods and beverages and/or discourage unhealthy choices.
3) Encourage child care centers and business/organizations that serve pregnant women and children birth to kindergarten to limit/eliminate the advertising and promotion of low nutrient density foods and beverages.
4) Identify and expand the availability of innovative nutrition education and information delivery systems in places where pregnant women and families with children ages birth to kindergarten live, learn, play and receive care. (e.g. “point of sale” nutrition information or rating systems).

# APPENDIX 1

***AAP Expert Committee Recommendations – Summary Target Behaviors***

Barlow SE, The Expert Committee. Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report. *Pediatrics*. 2007; 120; S164-S192.

**Summary of Target Behaviors:**

1) Limit consumption of sugar-sweetened beverages.

2) Encourage consumption of diets with recommended quantities of fruits and vegetables.

3) Limit television and other screen time. No television viewing before 2 years of age and thereafter no more than 2 hours of television viewing per day by allowing a maximum of 2 hours of screen time per day and removing televisions and other screens from children's primary sleeping area.

4) Eat breakfast daily.

5) Limit eating out at restaurants, particularly fast food restaurants.

6) Encourage family meals in which parents and children eat together.

7) Limit portion size.

8) Eat a diet rich in calcium.

9) Eat a diet high in fiber.

10) Eat a diet with balanced macronutrients (energy from fat, carbohydrates, and protein as recommended by the Dietary Reference Intakes).

11) Encourage exclusive breastfeeding to 6 months of age and maintenance of breastfeeding after introduction of solid food to 12 months of age and beyond consistent with American Academy of Pediatrics recommendations.

12) Promote moderate to vigorous physical activity for at least 60 minutes eat day.

13) Limit consumption of energy-dense foods.

# APPENDIX 2

***2009 Institute of Medicine Weight Gain During Pregnancy - Summary***

**Institute of Medicine Weight Gain During Pregnancy: Reexamining the Guidelines**
*www.iom.edu/pregnancyweightgain*

**New Recommendations for Total and Rate of Weight Gain During Pregnancy, by Prepregnancy BMI**

| Prepregnancy BMI | BMI+ (kg/m2) (WHO) | Total Weight Gain Range (lbs) | Rates of Weight Gain* 2nd and 3rd Trimester (Mean Range in lbs/wk) |
|---|---|---|---|
| Underweight | <18.5 | 28–40 | 1 (1–1.3) |
| Normal weight | 18.5-24.9 | 25–35 | 1 (0.8–1) |
| Overweight | 25.0-29.9 | 15–25 | 0.6 (0.5–0.7) |
| Obese (includes all classes) | ≥30.0 | 11–20 | 0.5 (0.4–0.6) |

*+ To calculate BMI go to www.nhlbisupport.com/bmi/*
*Calculations assume a 0.5–2 kg (1.1–4.4 lbs) weight gain in the first trimester (based on Siega-Riz et al., 1994; Abrams et al., 1995; Carmichael et al., 1997)*

**Recommendations for Action:**

- The Department of Health and Human Services should conduct routine surveillance of weight gain during pregnancy and postpartum weight retention on a nationally representative sample of women and report the results by prepregnancy BMI (including all classes of obesity), age, racial/ethnic group, and socioeconomic status.
- All states should adopt the revised version of the birth certificate, which includes fields for maternal prepregnancy weight, height, weight at delivery, and age at the last measured weight. In addition, all states should strive for 100 percent completion of these fields on birth certificates and collaborate to share data, thereby allowing a complete national picture as well as regional snapshots.
- Federal, state, and local agencies, as well as health care providers, should inform women of the importance of conceiving at a normal BMI, and those who provide health care or related services to women of childbearing age should include preconceptional counseling in their care. A higher proportion of American women should limit their weight gain during pregnancy to the range specified in these guidelines for their prepregnant BMI. The first step in assisting women to gain within these guidelines is letting them know the guidelines exist, which will require educating health care providers as well as the women themselves.
- Federal agencies, private voluntary organizations, and medical and public health organizations should adopt these new guidelines for weight gain during pregnancy and publicize them to their members and also to women of childbearing age.
- Those who provide prenatal care to women should offer them counseling, such as guidance on dietary intake and physical activity that is tailored to their life circumstances.

## REFERENCES


1. Healthy &Fit: A Community Action Plan for Franklin County Children and Families. Osteopathic Heritage Foundations and Children's Hunger Alliance, Columbus, Ohio, 2002. http://www.osteopathicheritage.org/UserUploads/UserDocuments/pdfs/Healthy_and_Fit_Full_Report.PDF
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