Early Childhood Obesity Prevention Summit II
The Role of Childcare Settings

Convened by:

Saint Luke's Foundation

Invest in Children Cuyahoga County

MT. SINAI HEALTH CARE FOUNDATION

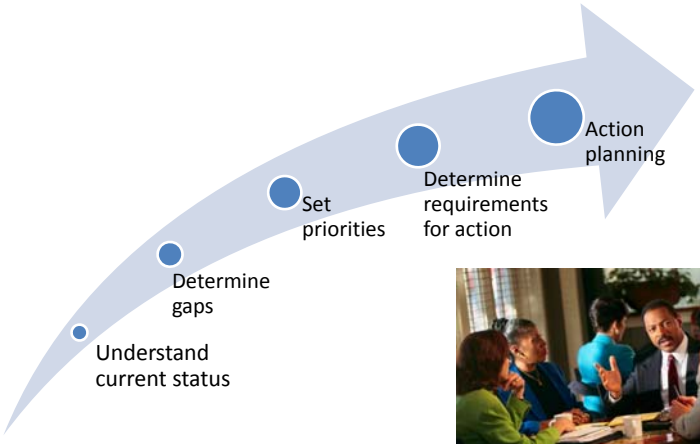
Collaborating Partners: Case Western Reserve University School of Medicine, Invest In Children, Starting Point, Cuyahoga County Board of Health, Cleveland Department of Public Health, Cleveland Children's Museum

Summit Goals

Collaborate on opportunities to enhance childcare environment re: early childhood obesity

- National
- State
- Local

Breakout Goals



White Paper

Opportunities

- Infant Feeding
- Food Service
- Physical Activity
- Screen Time
- Caregiver Involvement
- Family Engagement

Strategies

- Policy
- Needs Assessment
- Training
- Technical Assistance
- Voluntary Standards/Ratings
- Incentives
- Monitoring

Ohio Standards vs. Model: Nutrition

OHIO MEETS MODEL STANDARD

Children older than two years are served reduced fat milk (skim or 1%) [a]

Clean, sanitary drinking water is available for children to serve themselves throughout the day [a]

Child care providers do not use food as a reward or punishment [a]

OHIO PARTLY MEETS MODEL STANDARD

Sugar sweetened beverages are not served at child care facilities [a]

Nutrition education is offered to child care providers at least one time per year [a]

At least one child care provider sits with the children at the table and eats the same meal and snacks [a]

Facilities develop, at least one month in advance, written menus showing all foods to be served during that month and made available to parents [b]

OHIO DOES NOT ADDRESS MODEL STANDARD

Foods high in saturated or trans fat, sugar, or salt are served less than one time per week or not served [a]

Juice is limited to a total of 4-6 oz. or less per day for children over one year of age [a]

Nutrition education is offered to children at least three times per year [a]

Providers encourage, but do not force, children to eat [a]

The facility serves food for children according to a written plan developed by a qualified Nutritionist/ Registered Dietitian [b]

Children are offered food at intervals at least two hours apart and not more than three hours apart unless the child is asleep [b]

Providers discuss the breastfed infant's feeding patterns with the parents/guardians [b]

Providers promote and discuss new foods considered for serving with the parents [b]

Providers ensure that children do not eat when standing, walking, running, playing, lying down, watching TV, playing on the computer, or riding in vehicles [b]

Ohio Standards vs. Model: PA/Screen

OHIO MEETS MODEL STANDARD

Children with special needs are provided with active play while other children are physically active [a]

Shaded area provided during outdoor play [a]

OHIO PARTLY MEETS MODEL STANDARD

Require 60 minutes of physical activity per day, a combination of both teacher-led and free play [a]

Children are provided outdoor active play time at least two times per day [a]

OHIO DOES NOT ADDRESS MODEL STANDARD

Television, video, and computer time are limited to one hour per day maximum [a]

Child care providers do not withhold active play time as punishment [a]

Physical activity education is offered to child care providers at least one time per year [a]

At least one provider joins children in active play at least one time per day [a]

Children are not seated for periods longer than 30 minutes except when sleeping or eating [a]

Physical activity education is offered to children at least three times per year [a]

The facility is required to have written policy on potential barriers to physical activity participation such as required clothing [b]

Require that facilities limit the use of equipment such as strollers, swings, and bouncer seats/chairs for holding infants while they are awake [c]

Providers promote age-appropriate sleep durations among children by creating environments that ensure restful sleep [c]

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KEYNOTE PANEL

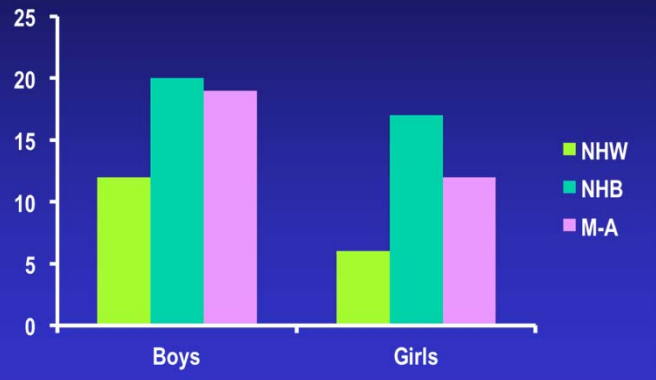
Start Smart: Addressing Early Childhood Obesity Prevention

- **William Dietz, MD, Nutrition, Physical Activity, and Obesity Expert**
- **Billie Osborne Fears, Starting Point**
- **Sarah Messiah, Ph.D, MPH, American Heart Association**

Challenges and Opportunities in Addressing Early Childhood Obesity Prevention

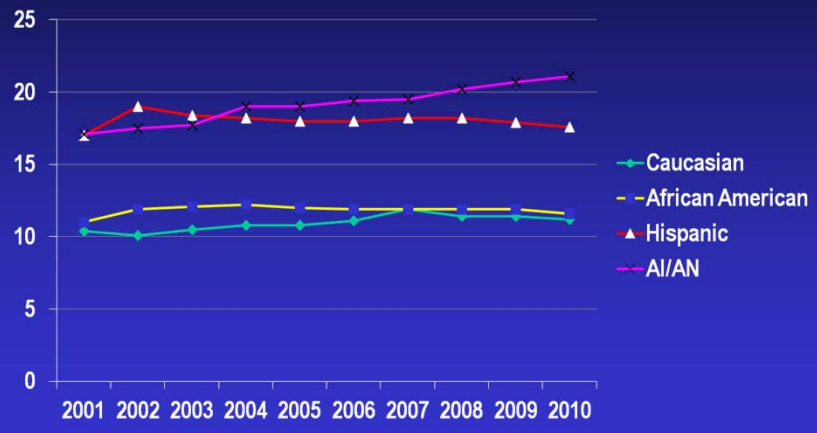
William H. Dietz, MD, PhD
Former Director
Division of Nutrition, Physical Activity, and Obesity
Centers for Disease Control and Prevention

Prevalence of Obesity in 2-5 year old Children – 1999-2000 NHANES



Ogden CL, et al. JAMA 2012; 307:483

Obesity Trends in Children < 5yo Pediatric Nutrition Surveillance System



Declines in Obesity Prevalence

Location	Ages	Baseline	FU	% Change
Philadelphia	K - 12	2006-7	2009-10	- 4.7%
New York City	K – 8	2006-7	2010-11	- 5.5%
Mississippi	K – 5*	2005	2011*	- 13.3%
California	G 5-9	2005**	2010**	- 1.1%
West Virginia	K	2010-11	2011-12	- 3.9%

*Spring; **CA Fitness Test

Robert Wood Johnson Issue Brief, September 2012

Energy Deficits Necessary to Achieve the HP 2010 (Prevalence = 5%) by 2020

Age	Deficit
2-5 yo	33 Kcal/d
6-11 yo	149 Kcal/d
12-19 yo	177 Kcal/d

Wang YC et al. Am J Prev Med 2012; 42:437

Concerns Raised by the Feeding Infants and Toddlers Study

- 45% of 12-23.9 mo children and 78% of 24-47.9 mo children have sodium intakes above the UL
- 75% of children have excessive saturated fat intakes
- Approximately 30% of children consumed no vegetables on the survey day, and 20% - 30% children consumed no fruit
- Approximately 30% of children are consuming pre-sweetened cereals
- High caloric density foods are frequently consumed as snacks
- 27% of 12-23 mo children consumed a sugar drink daily

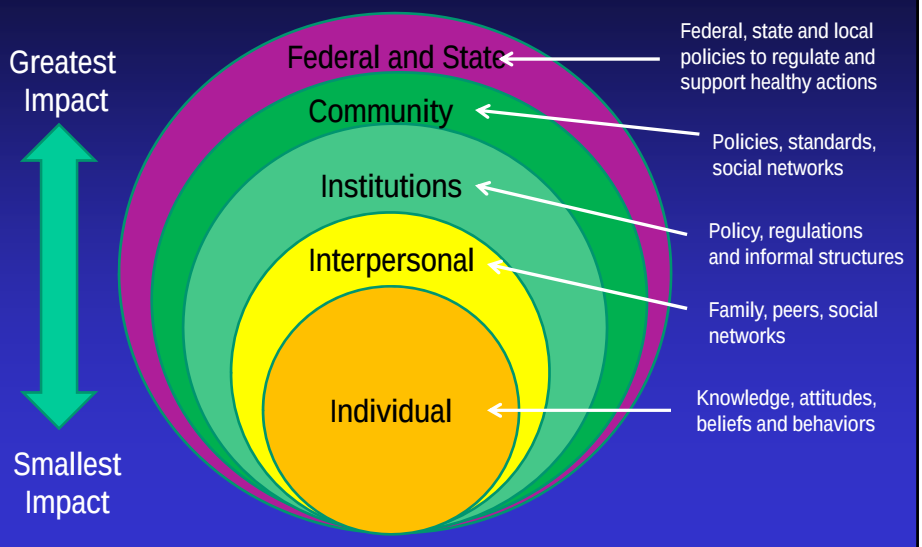
Factors that Influence Food Consumption in Young Children

1. Encouraging food consumption of an item results in lower consumption
2. Restricting access to a food increases its desirability
3. Repeated exposure to a food increases the likelihood of its consumption
4. Larger portion sizes increase consumption in older but not younger children
5. Parental consumption of a food increases the likelihood that a child will consume it
6. Limiting serving of main dish increases consumption of other foods

Let's Move Child Care Challenge

Physical activity: 1-2h/d, outside play when possible
Screen time: None for <2yo; 30'/w during child care
Food: Fruits or vegetables at every meal, no fried foods, family style
Beverages: Water access at meals and throughout day; no sugar drinks; for ≥ 3yo, LF or NF milk; limit juice to 4-6 oz 100% juice/d
Infant feeding: Support breastfeeding for mothers who want to continue during the child care day

Social Ecological Model



Community Strategies

Increase access to healthy and affordable food
Help people recognize and make healthy food and beverage choices
Support policies and programs that promote breastfeeding
Encourage community design that supports physical activity
Facilitate access to safe and affordable places for physical activity – Parks and Rec

Important Considerations

- Policy provides guidelines for behavior. Not all policy is legislative, regulatory, or a result of litigation
- Evidence – RCTs are not necessarily the gold standard
- Stealth interventions
- Measurements are essential to make the case and track progress; weight change requires time

Key Process Strategies

Multi-component with local repackaging
Multi-sectoral - focus on settings with specific objectives
Evidence base – build academic and community bridges
Create public awareness of risks and benefits
Find co-benefits of obesity prevention and control
Assess dose of interventions
(Reach X Strength = Dose)

Resources

www.activeschoolsasap.org
www.childobesity180.org/ourintiatives/out-of-school-time/
www.healthychildren.org/growinghealthy
Healthy worksites and hospitals (under quick resources)
www.cdc.gov/hwi
Recommended Community Strategies and Measurements to Prevent Obesity – MMWR 2009;58:RR-7
www.theweightofthenation.hbo.com
cche.org/pubs/CCHE-publication-CommunityHealthInitiatives_DoseGuide.pdf
www.altarum.org/files/pub_resources/QRIS-report-22Feb12-FIN.pdf

EARLY CHILDHOOD OBESITY PREVENTION SUMMIT II: THE ROLE OF CHILDCARE SETTINGS

OHIO'S RESPONSE AND FUTURE OPPORTUNITIES

Billie Osborne-Fears
January 29, 2013

OHIO'S RACE TO THE TOP EARLY LEARNING CHALLENGE GRANT

- Increasing Kindergarten Readiness for High-Needs Children
  - Comprehensive Definition of Kindergarten Readiness: Cognitive, Social/Emotional, Approaches Toward Learning, and Physical Well-Being
- Increase Access
- Improve Quality
- Report Results

OHIO'S GOALS FOR RESULTS

- 1,300 already funded settings rated as high quality
- 37,000 additional high needs children in these highly rated programs
- Closing kindergarten readiness gap by 5% for high needs children
- By 2020, Ohio will only purchase services in high quality settings (3 or 4 or 5 Star Rated)

Strategies

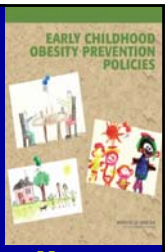
- **Increase Access:**
  - License family child care providers who receive public funding
  - Require participation in the state's TQRIS for licensed, public funded programs (Step Up to Quality/SUTQ)
  - Test incentives for high quality programs to serve more high needs children
  - Test incentives for parents of high needs children to choose high quality programs

Strategies continued

- **Increase Quality:**
  - Continue tiered reimbursement system that pays for performance
  - Create and deliver training on new comprehensive content and program quality standards
  - Provide scholarships to support CDAs and coursework to promote the attainment of a degree (T.E.A.C.H.)
  - Availability of Health Promotion Consultants and Early Childhood Mental Health Consultants

OPPORTUNITIES TO PREVENT EARLY CHILDHOOD OBESITY

- **Ohio's Early Learning and Development Standards.**
  - Physical Well-Being and Motor Development Standard addresses motor skills, health and physical activity practices that are essential for children's overall development.
- **SUTQ Draft Program Standards Domains**
  - Learning and Development – Identify and use of comprehensive curriculum/child screening tools that are developmentally appropriate.
  - Family & Community Partnerships – provide opportunities to engage parents in their child's health and development.



Early Childhood Obesity Prevention Policy Recommendations

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Obesity Trends Among Preschool-Age Children: Their Implications for Future Health of the Nation

Children who were overweight (>85th percentile) 1 time during the preschool period were >5 times as likely to be overweight at age 12 years

-27% are overweight
-10% are morbidly obese

Nader et al, 2006
Ogden, CL et al., JAMA 2012

Healthy Inside-Healthy Outside (2006-2008, pilot phase)

Purpose; development and implementation of a childcare center-based obesity prevention program in inner-city Miami-Dade County (total of 13 centers, 309 children, 60% Hispanic, 30% non-Hispanic black)

Goals

1. Take children off the overweight growth trajectory (maintain healthy weight) by instilling healthier dietary and physical activity habits

2. Test multiple obesity prevention strategies at both the childcare center and family level to determine efficacy and sustainability

Intervention

Center modifications

1. Environmental modifications
   - Water = main beverage (juice 1x a week)
   - 1% milk only
   - Increase FRESH produce intake (replace canned)
   - Remove simple carbohydrate snacks
   - >60 minutes physical activity per day
   - TV time < 30 minutes per day
2. Staff training
3. Weekly curriculum/ technical assistance

Intervention

Family-based component: designed to reinforce policies and environmental changes within the centers

1. Monthly parent dinners- how to read a food label, the food guide pyramid, portion sizes
2. Newsletters-recipes for healthy snacks, “Food for Thought”
3. At-home activities

– 6 month intervention
– Linguistically, culturally, and developmentally appropriate

Control group- 2 visits from Injury Free Mobile Van

Outcomes

- 97% of normal weight children stayed normal weight; 6 children moved from the obese to the overweight BMI percentile group
- As parents carried out the intervention at home, BMI significantly decreased among participating children
- decrease in child’s BMI was significantly correlated with parent’s satisfaction with project dinners and monthly newsletters

USDA-Funded Healthy Caregivers-Healthy Children Project (2010-2013)

Purpose: Test the Effect of a Preschool-Based Obesity Prevention Intervention Child Weight and Health and Wellness Behaviors

-Based on our pilot work, a key component to this study is the teacher and parent as a "nutritional gatekeeper" or positive role model

Methods and Approaches

- Intervention (RCT, 28 Centers, 1200 children) at childcare centers:
  - Child wellness curriculum
  - Menu changes
  - Parent/teach role modeling curriculum with EFNEP
- Control group childcare centers
  - Safety curriculum
- Data collected at beginning & end of school year
  - Child BMI
  - Nutrition intake at home and at centers
  - Physical activity at home and at centers
  - Parent, teacher surveys

Outcomes-Parents

1. At 6-months follow-up, parents in the intervention centers were significantly more likely to eat vegetables versus control parents (p= 0.002).

2. Non-Hispanic white intervention parents were significantly more likely to serve fruit as snacks (p=0.05) and a home cooked/family meal (p=0.02) than their control group counterparts at follow up.

Communities Putting Prevention to Work (CPPW) Miami Dade (2010-2012)

- Total of 1,369 needs assessments of child care centers and child care family programs conducted to determine the level of assistance needed regarding adopting healthier practices related to nutrition, physical activity and screen time in the centers.

- Over 1000 Child Care Centers and Child Care Family Programs (3000 employees) have been trained in the areas of nutrition, physical activity and screen time standards.

- Consulting Registered Dietitians assisted 634 childcare facilities participated and had their menus revised to include healthier items.

- Consulting Registered Dietitians developed nine nutritional handouts which were all available in English and Spanish.

Lessons Learned

Challenge	Solution
Staff participation	•Center Director buy-in •staff buy-in (own weight loss program) •compensation for participation •shift during midpoint when teachers attitudes began to change •Relationship and mutual respect for entire center staff
Family Engagement	•Meal preparation nights at convenient time for parents •Follow up at drop off and pick up to see if they received the newsletters •Ask parents if child has mentioned healthy eating and activity at home •Multilingual staff that can speak parent's first language •Be prepared to give nutrition information

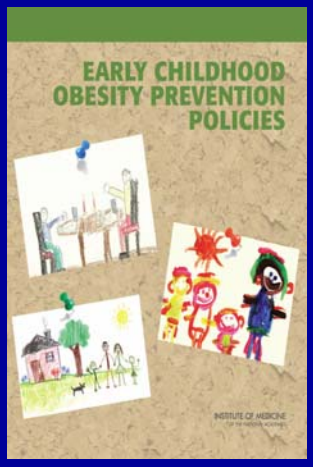
Lessons Learned

Challenge	Solution
Time constraints	•Lessons shorter 20 mins •Incorporate nutrition information throughout other activities (counting, colors)
Refusal to try new foods	•Continued exposure •Play with food •Cut differently, cooked differently, added with another vegetable •Sauces
Some lessons were difficult for children	•Lesson Plans were developed for teachers to creatively modify the activities in order to make them age-appropriate
Caterer / Food Vendor not following through on menu changes	•Weekly checks with the teachers •Assisted Center Director with phone calls •Dietician assistance

Major Areas Addressed:

1. Assessing Risk for Obesity
2. Physical Activity
3. Healthy Eating
4. Screen Time

All recommendations based on evidence to date



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Key Strategies Moving Forward

•Keep parents engaged (and administrators and teachers!)

•Keep the health messages simple, but emphasize their importance to healthy growth and development

•Develop nutrition and physical activity/health and wellness curriculum for early childhood teacher trainees

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Concluding Remarks:

William Dietz, MD, Nutrition, Physical Activity, and Obesity Expert

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BREAKOUT SESSIONS

- **Farm to Childcare (Music Room)**
- **Using Wellness Policies to Enhance Quality and Engagement (Ted's Place)**
- **Take 60 with Physical Activity (Drama Room)**
- **Childcare Director Focus Group (Conf Room)**

(meet back in Ted's Place for Lunch and Lessons Learned: Informing Future Action Agenda)