

Healthy Lifestyles Subcommittee: Expert Webinar

Cancer Risk Reduction Committee (CRRC)

Co-Chairs: Lt. Governor Bethany Hall-Long and Dr. Karyl Rattay,
Director of the Delaware Division of Public Health

March 31, 2020

Agenda

1. Speaker Introduction
2. Sara Benjamin-Neelon, PhD, JD
Associate Professor, Department of Health, Behavior, and Society
Director, Lerner Center for Public Health Promotion
Johns Hopkins Bloomberg School of Public Health
+ Evidence-Based Approaches
+ Feedback on Subcommittee Policy Ideas
3. William Dietz, MD, PhD
Chair, Sumner M. Redstone Center
Milken Institute School of Public Health
The George Washington University
+ Evidence-Based Approaches
+ Feedback on Subcommittee Policy Ideas
4. Question & Answer
5. Closing

Evidence-Based Approaches

Sara Benjamin-Neelon, PhD, JD

Associate Professor, Department of Health, Behavior, and Society
Director, Lerner Center for Public Health Promotion
Johns Hopkins Bloomberg School of Public Health

Delaware Healthy Lifestyles Subcommittee Webinar 2

Sara Benjamin-Neelon, PhD, JD, MPH, RD

Associate Professor

Helaine and Sid Lerner Professor in Public Health Promotion

March 31, 2020



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Early care and education (ECE) and obesity

- Research mixed on associations between ECE attendance and obesity
- Some evidence that associations stronger and more consistent for:
 - Higher SES children^{1,2}
 - Infants & earlier entry into child care³

¹Alberdi G, McNamara AE, Lindsay KL, et al. The association between childcare and risk of childhood overweight and obesity in children aged 5 years and under: A systematic review. *European journal of pediatrics*. 2016;175(10):1277-1294.

²Benjamin Neelon SE, Schou Andersen C, Schmidt Morgen C, et al. Early child care and obesity at 12 months of age in the Danish National Birth Cohort. *International Journal of Obesity*. 2015;39(1):33-38.

³Costa S, Adams J, Gonzalez-Nahm S, Benjamin Neelon SE. Childcare in Infancy and Later Obesity: a Narrative Review of Longitudinal Studies. *Current Pediatrics Reports*. 2017;5(3):118-131.



Delaware ECE regulations*

Strong regulations on:

- Screen time for infants and toddlers
- Physical activity for toddlers & preschoolers
- Infant feeding
- Child feeding

Can improve regulations on:

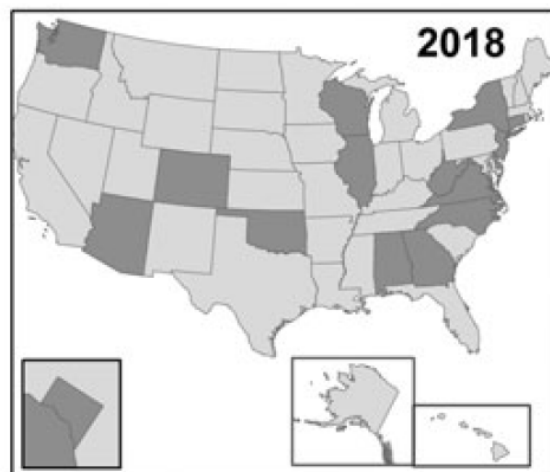
- Physical activity for infants
- Infant feeding
- Sugar-sweetened beverages & juice
- Cultural foods

*Current as of May 2019



State regulations on infant physical activity in ECE

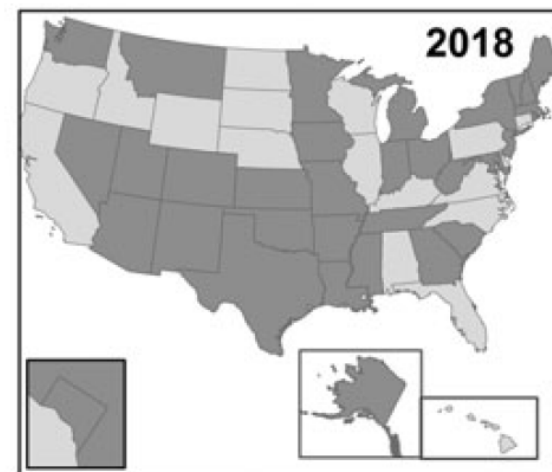
Child Care Centers



**Provide daily tummy time
for infants less than
6 months**



**Use cribs, car seats,
and highchairs for
their primary purpose**



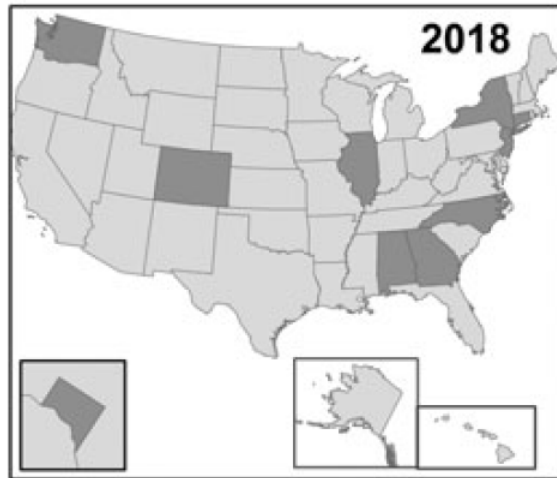
**Limit use of restrictive
equipment for holding
infants while awake**



Benjamin-Neelon SE, Neelon B, Pearce J, Grossman E, Gonzalez-Nahm S, Slining M, Duffey K, Frost N. State regulations promoting infant physical activity in early care and education. *Childhood Obesity*. 2018;14(6):368-374.

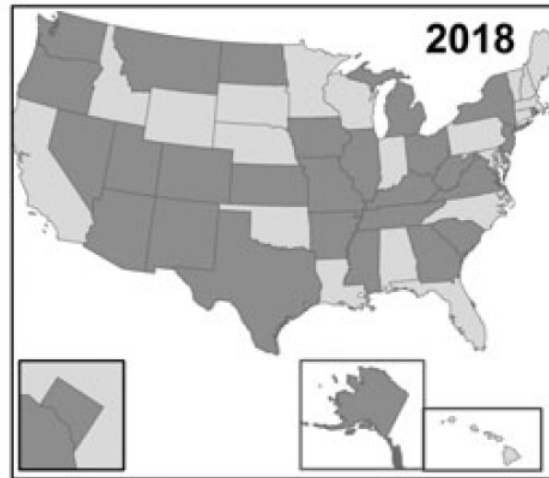
State regulations on infant physical activity in ECE

Family Child Care Homes

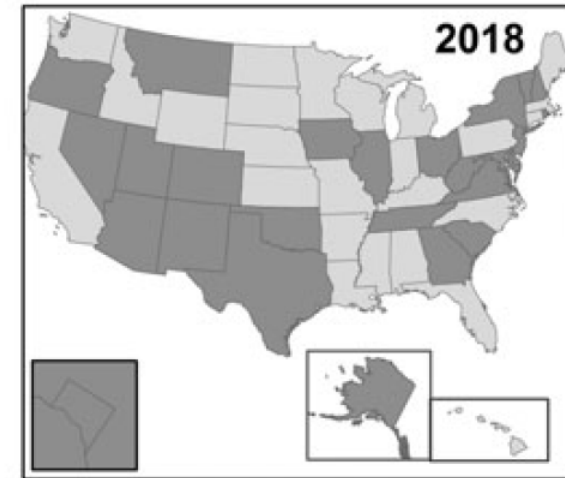


**Provide daily tummy time
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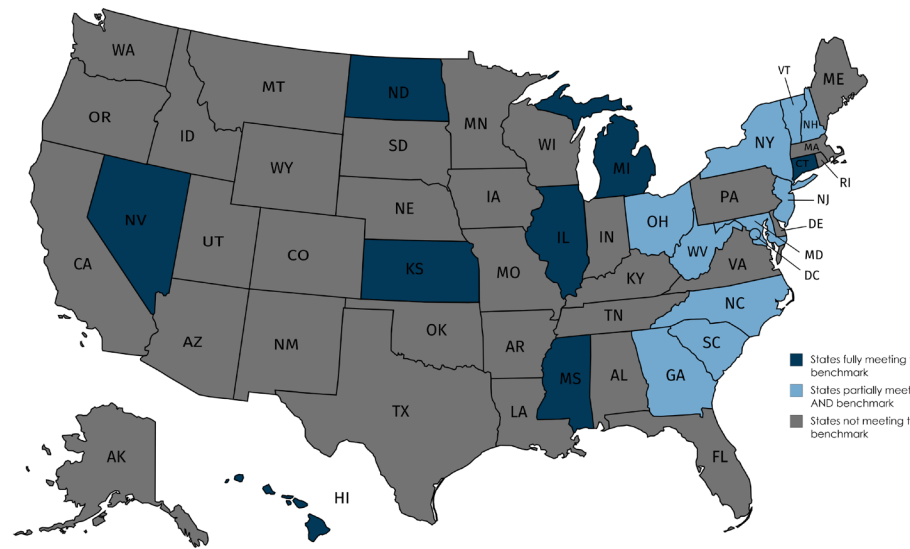


**Limit use of restrictive
equipment for holding
infants while awake**

Center regulation for Delaware missing in homes: “Provid[e] opportunities for large muscle activities appropriate to the infant’s developmental level, such as supervised tummy times for a few minutes, while the infant is awake”

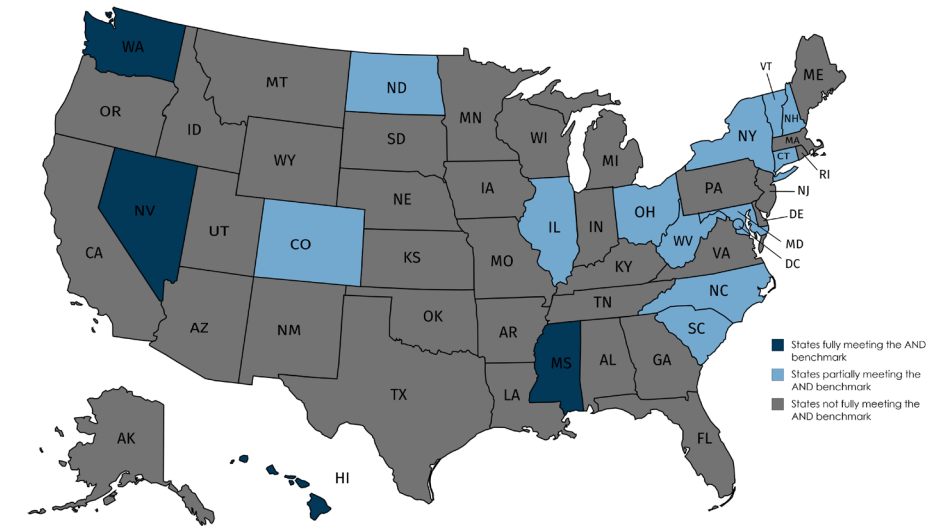
State regulations on supporting & respecting children's cultural and religious food preferences in ECE

Child Care Centers



Created with mapchart.net ©

Family Child Care Homes



Created with mapchart.net ©

Ayers Looby A, Frost N, Gonzalez-Nahm S, Grossman ER, Ralston Aoki J, Benjamin-Neelon SE. State regulations to support children's cultural and religious food preferences in early care and education. *Maternal and Child Health Journal*. 2019; 24(2),121-126.



Example regulations in ECE

Regulations had to require foods reflecting children's culture, ethnicity, religion, rather than accommodating parent requests

- Nevada: “[c]ultural and ethnic foods which are appropriate for children must be considered in planning meals.”
Nev. Admin. Code § 432A.380
- Mississippi: “[f]oods shall be provided in quantities and meal patterns that balance energy and nutrients with children's ... cultural and ethnic differences in food habits.”
Miss. Code R. § 15-16-1:3.13.2









Inequities in US breastfeeding rates

	Any Breastfeeding (%)	Exclusive Breastfeeding 3 Months (%)	Exclusive Breastfeeding 6 Months (%)
Overall	83.8	47.5	25.4
Race			
White	86.6	52.9	29.1
Black	74.0	39.1	20.7
Federal poverty level			
<100% (lower income)	74.5	36.4	17.1
100-199%	81.6	46.3	23.9
200-399%	87.9	54.9	31.8
400-599%	90.5	52.5	29.5
≥600% (higher income)	93.5	56.8	31.0

National Immunization Survey, 2016



Breastfeeding policies

-  Breastfeeding in public
-  Breastfeeding in the workplace
-  Maternity leave
-  Discrimination with respect to breastfeeding status
-  Breastfeeding practices in hospitals
-  Breastfeeding practices in ECE



State breastfeeding policies*

Policies	States	Total
Breastfeeding in public	All states and the District of Columbia	51 (100%)
Breastfeeding in the workplace	AR, CA, CO, CT, DC, GA, HI, IL, IN, ME, MN, MS, MT, NM, NY, ND, NV, OK, OR, RI, TN, TX, UT, VT, WA	25 (49%)
Maternity leave	Paid: CA, RI, NJ, NY, DC Unpaid: CT, HI, ME, TN, MN, OR, VT, WI	13 (25%)
Discrimination with respect to breastfeeding status	CA, CO, DC, HI, LA, MS, NV, NH, RI, UT, VA, WA	12 (23%)
Hospital infant feeding	CA, FL, IL, MO, MS, WA	6 (12%)
Child care breastfeeding regulations	AL, AZ, AR, CA, CO, DE, DC, FL, GA, IL, IN, KS, LA, MD, MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NY, NC, ND, OH, OK, OR, PA, RI, SC, TN, TX, VT, VA, WV, WI, WY	40 (78%)

*Current through November 2018



Promoting equity in policy: State examples

Oregon statute §329.841 (2017)

Plan to reduce disparities in education for African American children

- Acknowledges historical roots of existing disparities.
- Includes development of an advisory board consisting of community members and other stakeholders.
- Targets interventions and funding to support African American students.

Mississippi House Bill 146 (proposed 2018)

- Provides a statewide assessment.
- Requires identification of measurable outcomes to assess disparities.
- Requires community-based organizations and partnerships throughout planning process.



Thank you

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Feedback on Subcommittee Policy Ideas

- + Increase access to Early Childhood Education and Pre-K.
- + Provide technical assistance to Early Childhood Education Centers specific to nutrition, physical activity, and screen time (DOE, DPH, other partners).
- + Develop policy prohibiting sugary/sweetened beverages and noncaloric sweeteners in Early Childhood Education.
- + Develop physical activity guidelines for Early Childhood Education.
- + Promote breastfeeding opportunities and education through WIC peers and lactation consultants.
- + Develop unified breastfeeding policy.
- + Provide healthy lifestyle supports to WIC caregivers themselves.
- + Expand WIC retailer criteria.

Evidence-Based Approaches

William Dietz, MD, PhD

Chair, Sumner M. Redstone Center

Milken Institute School of Public Health

The George Washington University



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WASHINGTON, DC

What Do We Know about Healthy Lifestyles?

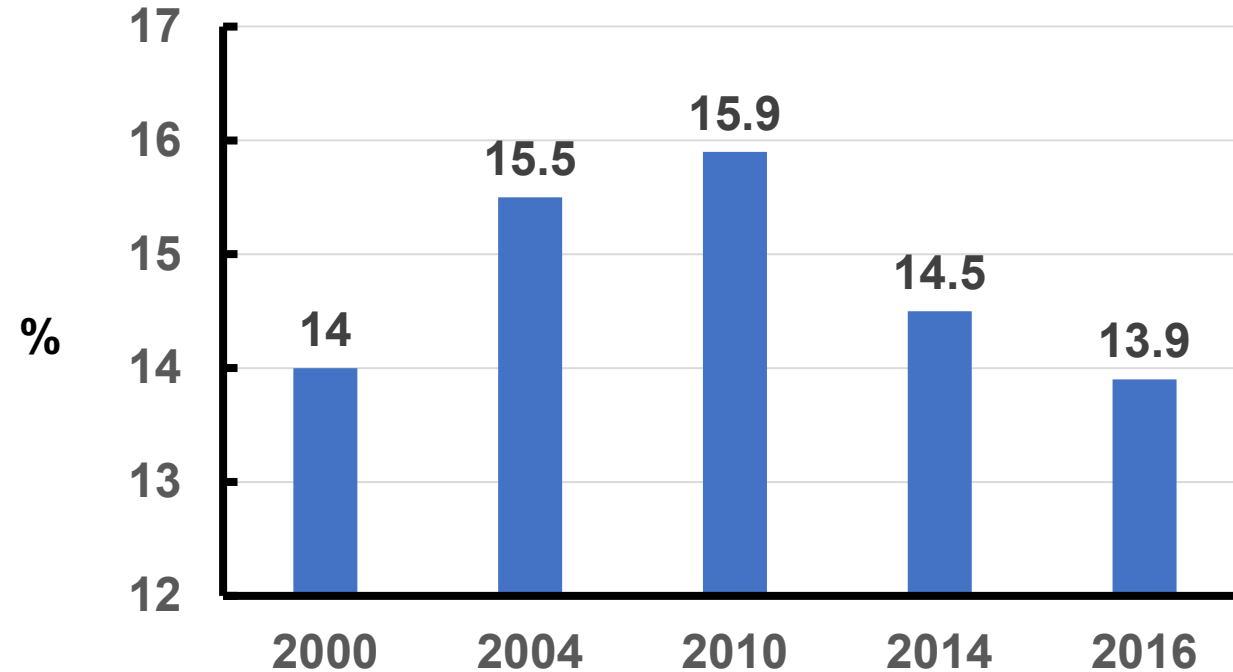
William H. Dietz MD, PhD
George Washington University

Milken Institute School
of Public Health

THE GEORGE WASHINGTON UNIVERSITY

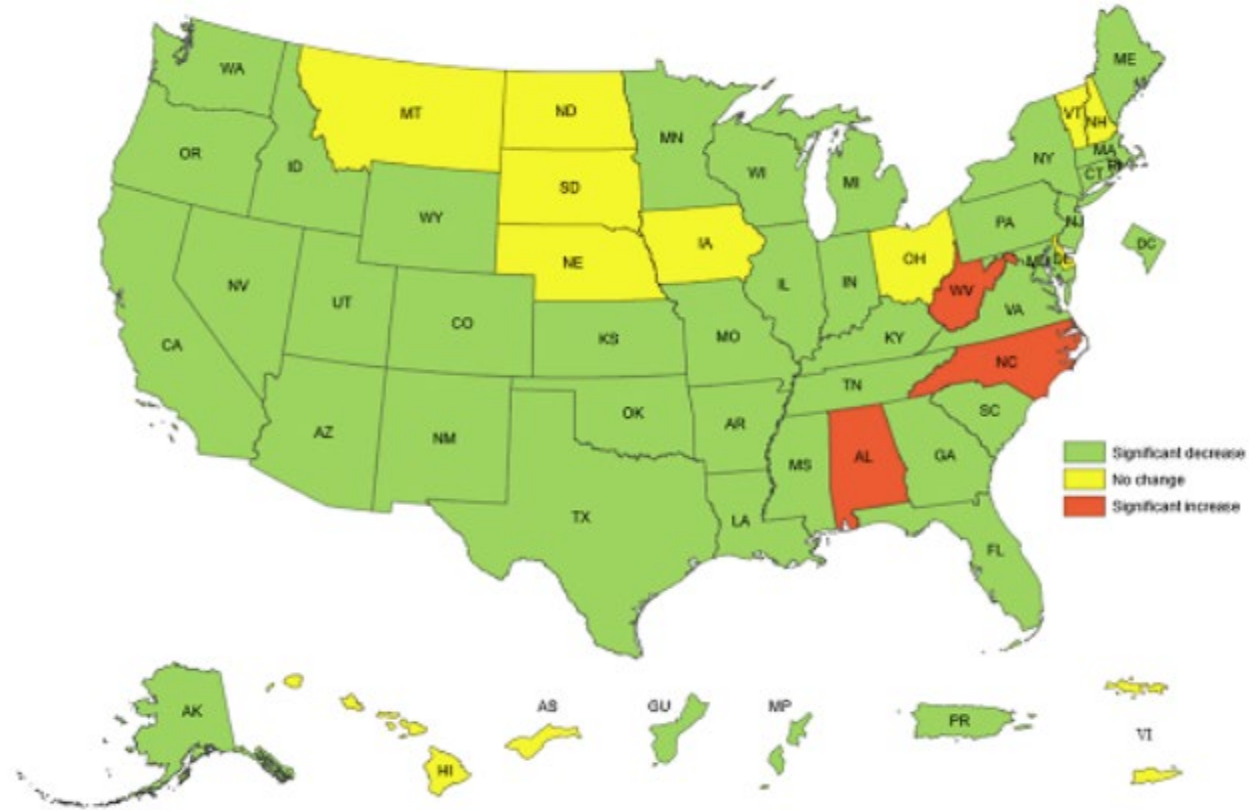
Sumner M. Redstone
Global Center for
Prevention & Wellness

Obesity Prevalence in 2-4 yo WIC Participants 2000 - 2016



Pan L et al. MMWR 2016; 65:1256
Pan L et al. MMWR 2019; 68:1057

Changes in State Prevalence of Obesity in 2-4 yo WIC children 2010-2016





Multicenter Trials of Pediatric Obesity Prevention

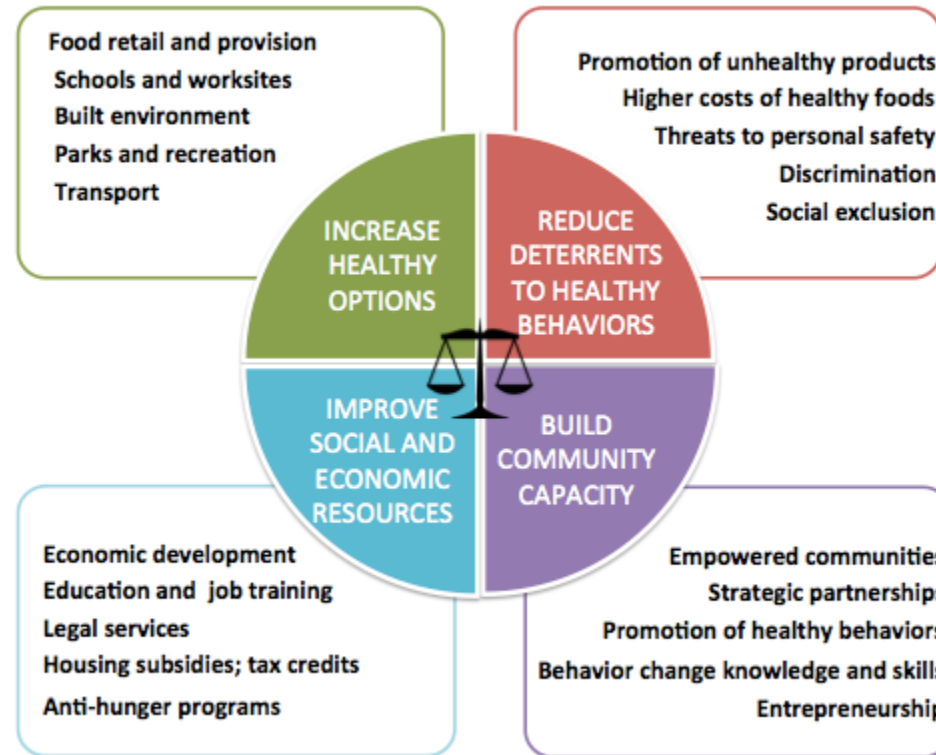
Girls Health Enrichment Multi-site Studies (GEMS)

- Two year intervention
- 8-10 yo low income African American girls

Childhood Obesity Prevention and Treatment Research Consortium (COPTR)

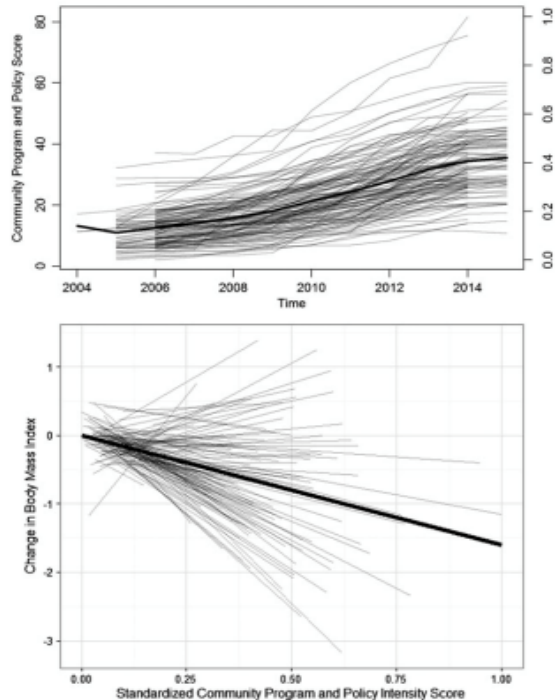
- Three year intervention
- Low-income African American or Hispanic children
- Preschool (2-5 years) or middle school (11.6 yo)

Obesity Prevention Health Equity Framework



Kumanyika S. National Academy of Medicine Perspective 1-18-2017

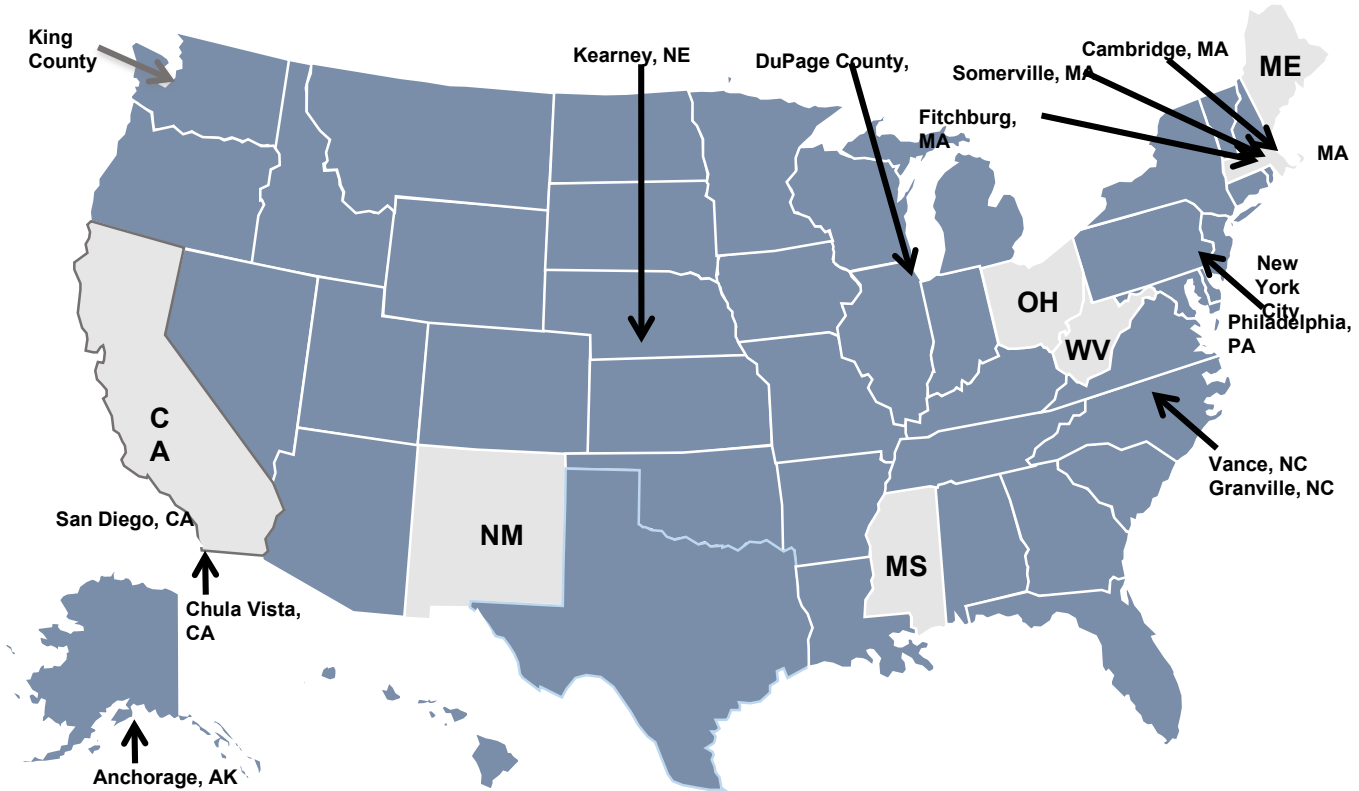
Effects of Community Programs and Policies on Childhood Obesity



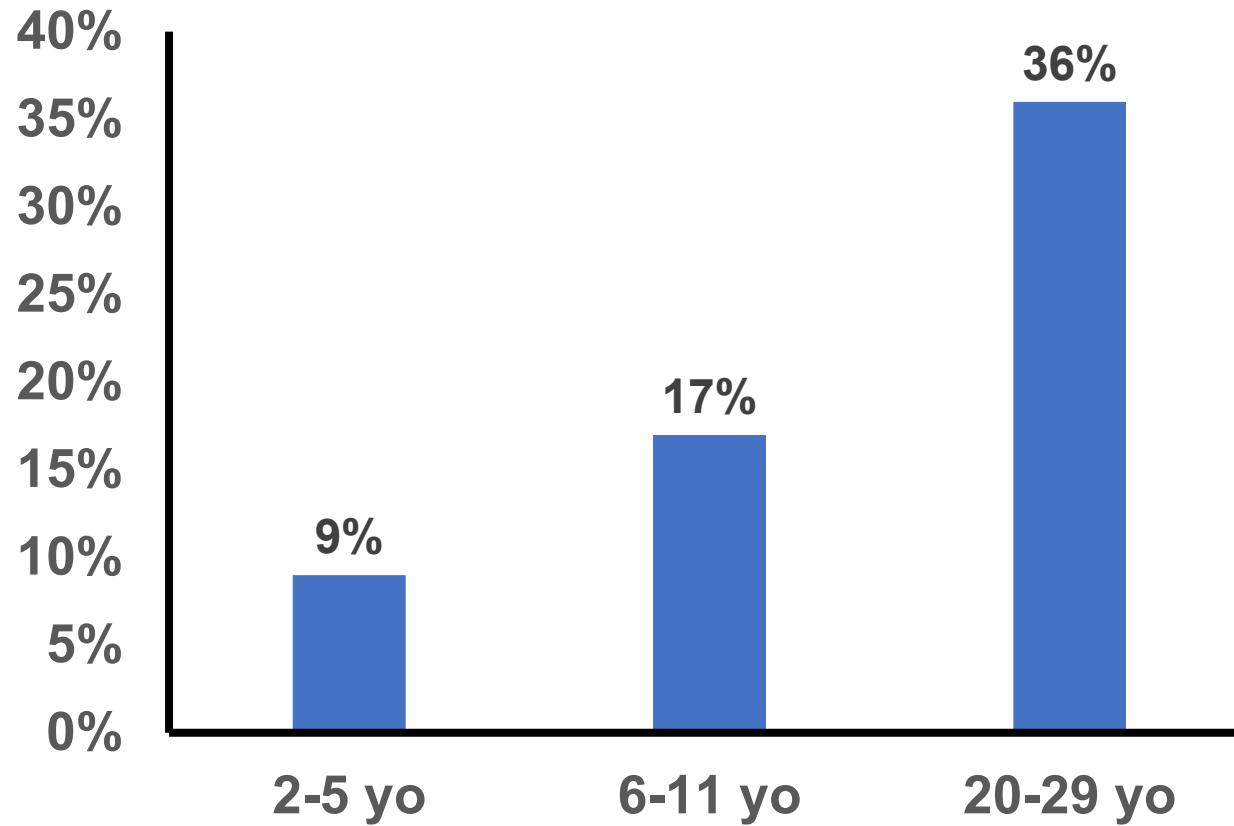
Significant relationships seen in families with incomes \geq \$50k but not in communities with high % African Americans or Hispanics, nor in African American or Hispanic children regardless of their community

Strauss WJ et al. *Pediatric Obesity* 2018; 13 (Suppl 1):82

States and Communities Reporting Decreases in the Prevalence of Childhood Obesity



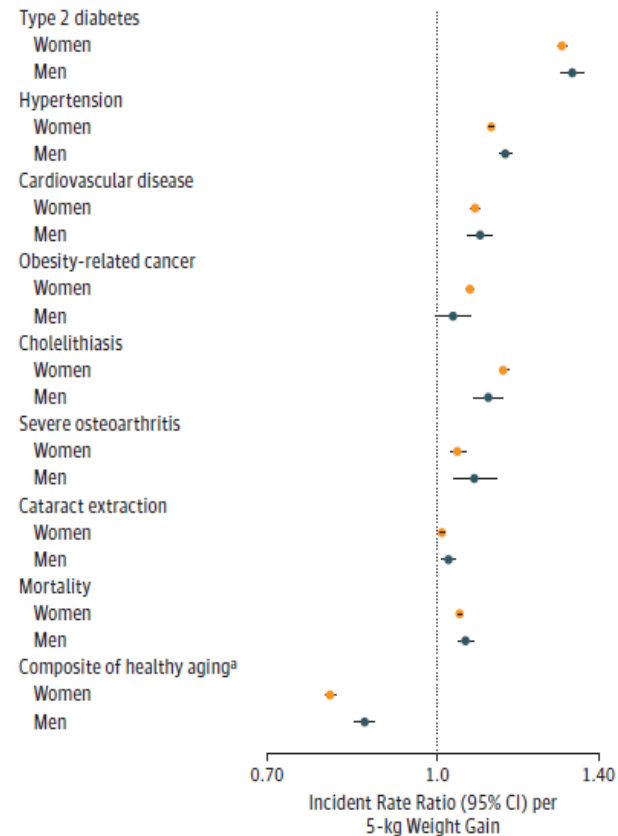
Prevalence of Obesity in Selected Age Groups: NHANES 2011-2014



Ogden CL et al. NCHS Data Brief #219, November 2015

Effects of Weight Gain in Young Adults

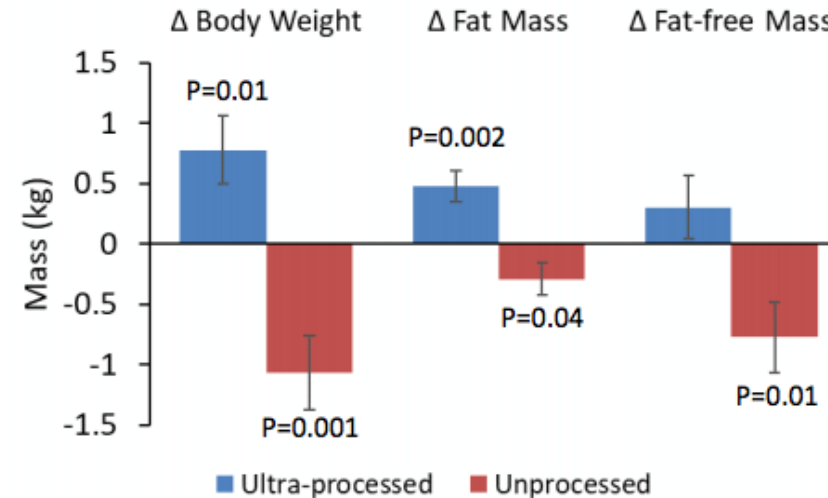
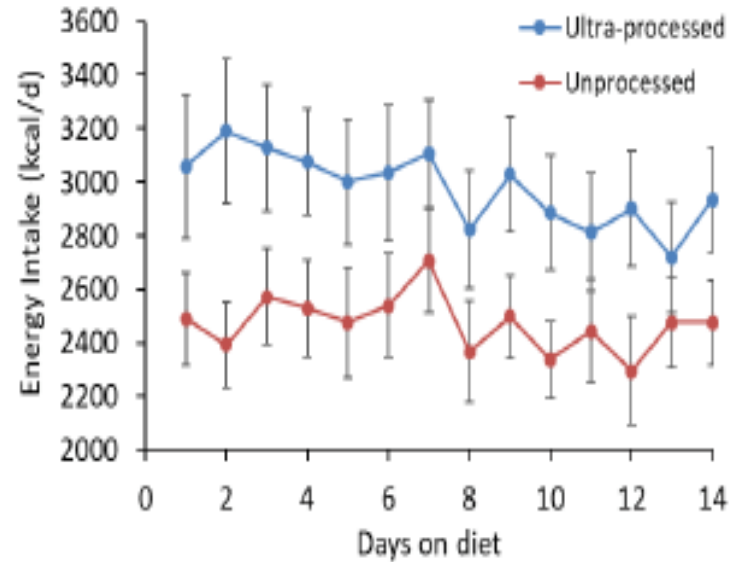
Figure 2. Associations of Weight Gain From Early to Middle Adulthood With Risk of Individual Health Outcomes



In the meta-analysis of data from women and men, each 5 kg weight gain was associated with

- 30% higher risk of type 2 diabetes,
- 14% higher risk of hypertension
- 8% higher risk of cardiovascular disease
- 6% higher risk of obesity-related cancer
- 5% higher risk of deaths in never-smokers
- 17% lower likelihood of achieving healthy aging in later life

Effects of a Fourteen Day Crossover Study of Diets Consisting of Either Processed or Unprocessed Food



Hall K et al. Cell Metabolism 2019; 30:1-11



Strategies to Prioritize Nutrition, Physical Activity and Obesity Interventions

Effect size

Energy gap

Population reach and impact

Cost and cost-effectiveness

Time required for impact

Feasibility

Dietz WH and Gortmaker SL. Am J Prev Med 2016: 51:e145

Feedback on Subcommittee Policy Ideas

- + Increase technical assistance related to physical activity and nutrition in schools to support wellness committees.
- + Strengthen policies around Fitnessgram implementation
- + Develop and implement after-school nutrition and physical activity policies.
- + Formally set school nutrition standards to the 2013 USDA model (before standards were relaxed).
- + Teacher and staff wellness programs in schools

Questions...