



NOPREN
Nutrition & Obesity
POLICY RESEARCH & EVALUATION NETWORK

**Healthy
Eating
Research**

Summer Student Series 2021

Getting Started!

- Type your name and institution into the chat box!
- Remember to keep yourself on mute.
- Type your questions into the chat box.



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**Healthy
Eating
Research**

Session 4: Early Childhood

Child and Adult Care Food Program (CACFP): what is it?

- ❑ Subsidizes meals and snacks served to infants and children in participating child care programs
 - ❑ emergency shelters, at-risk afterschool programs; also adults who receive day care in participating facilities.
- ❑ Basic structure: participating facilities serve meals that align with CACFP meal patterns and receive tiered reimbursements for the meals based on children's family income
- ❑ Breakfast, lunch, snack, and supper (but max 3 meals reimbursed per day)



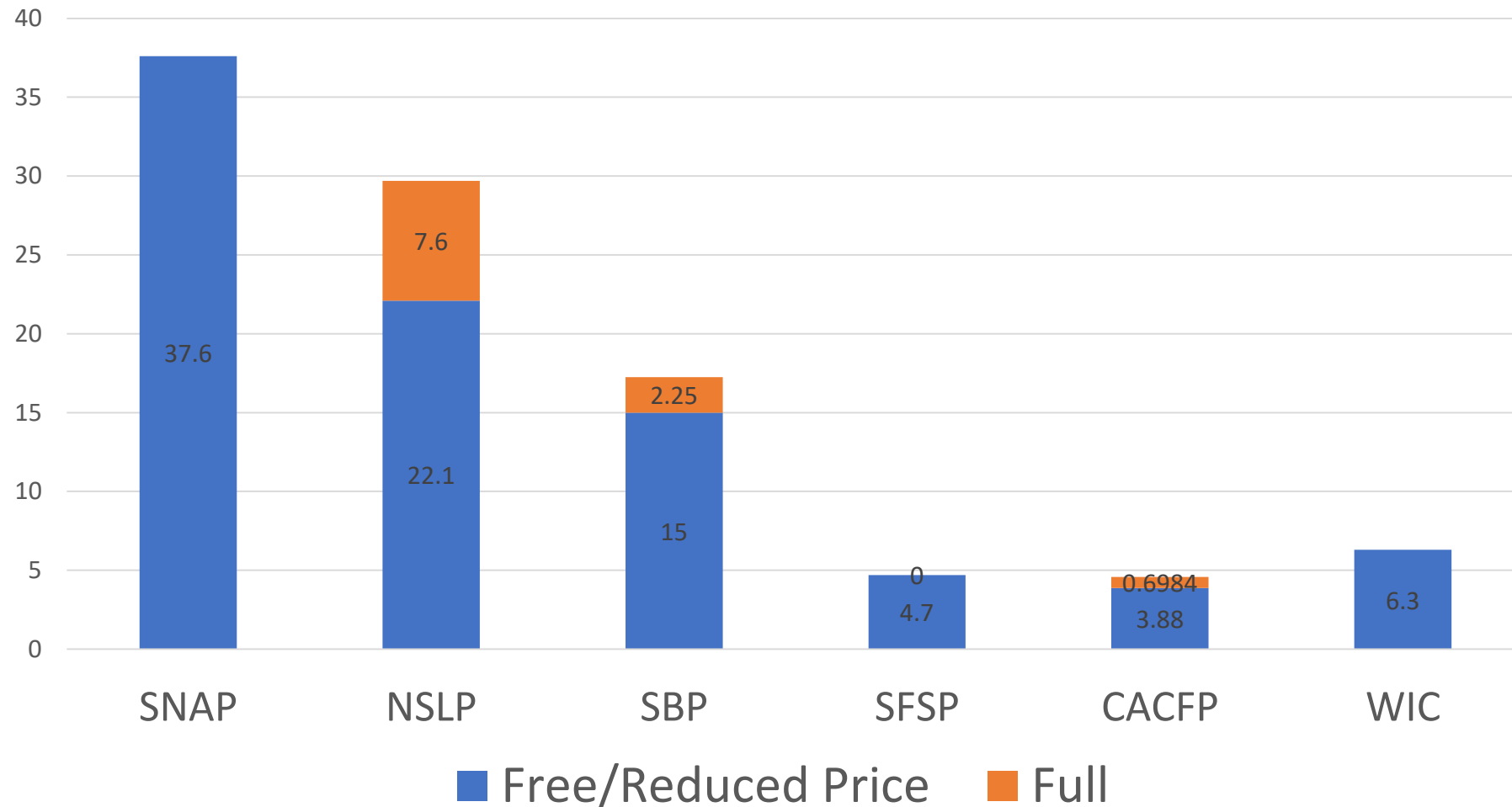
CACFP: brief history

- ❑ Started as a pilot program in 1968 (Special Food Service Program for Children) – focus on low income working mothers for when children not in school
- ❑ 1978 – permanently made Child Care Food Program
- ❑ 1987 – expand to adult care component
- ❑ 1996 – “Personal Responsibility and Work Opportunity Reconciliation Act” – create two-tier reimbursement structure, max reimbursements for 3 meals
- ❑ 2017 – updates to the CACFP meal patterns (from HHFKA) implemented to bring in line with current dietary science

Who participates?

- Eligible : Public or private nonprofit child care centers, outside school hours care centers, Head Start programs, and other institutions that are licensed or approved to provide day care services.
- Family child care homes – all are eligible to participate if licensed/meeting state criteria
- But, only about 19% of 2 yr olds and 61% of 4 yr olds even attend a child care program that is eligible
 - Compare to NSLP – about 95% of children attend a school with NSLP meals available

Participation in major U.S. nutrition programs (millions), Sept 2020





United States Department of Agriculture

Serve Tasty and Healthy Foods in the Child and Adult Care Food Program (CACFP)

Sample Meals for Children Ages 3-5



What is in a Breakfast?

Milk (6 fl. oz. or ¾ cup)
Vegetables, Fruit, or Both (½ cup)
Grains (½ serving)

Optional: Meat/meat alternate may be served in place of the entire grains component up to 3 times per week at breakfast.

½ serving
Whole Grain-Rich
Mini Pancakes



Sample Breakfast



¾ cup
Unflavored
Low-Fat (1%)
or Fat-Free
(Skin) Milk

½ cup
Sliced
Strawberries

¾ cup
Unflavored Low-Fat (1%)
or Fat-Free (Skin) Milk



1 Taco
Made with
1½ oz.
Lean Ground Beef,
¼ cup
Lettuce*, and
¼ cup
Chopped Tomatoes

½ serving
Enriched Flour Tortilla



Sample Lunch/Supper

A second, different vegetable may be served in place of fruit at lunch and supper. In this meal, the 1¼ cup of lettuce and 1/2 cup of tomatoes in the taco meets the vegetable component, and the 1/4 cup of sweet potatoes is used to meet the fruit component.

*See leafy greens, such as lettuce, credit for half the amount served. The 1¼ cup of lettuce in the taco counts as 1/8 cup of vegetable in this meal.

¼ cup
Baked Sweet
Potatoes

What is in a Lunch or Supper?

Milk (6 fl. oz. or ¾ cup)
Meat/Meat Alternate (1½ oz. eq.)
Vegetables (¼ cup)
Fruit (½ cup)
Grains (½ serving)



All grains served must be whole grain-rich or enriched.
Breakfast cereals may also be fortified.
At least one grain served each day must be whole grain-rich.

What is in a Snack?

Pick 2:
Milk (4 fl. oz. or ½ cup)
Meat/Meat Alternate (½ oz. eq.)
Vegetables (½ cup)
Fruit (½ cup)
Grains (½ serving)



½ cup
Apple Slices



½ oz.
Cheddar Cheese

Sample Snack

Offer and make water available all day.

Note: Serving sizes are minimums.

Updated USDA Child and Adult Care Food Program (CACFP) meal patterns must be implemented by October 1, 2017. Learn more about the CACFP meal patterns, including information on ounce equivalents (oz. eq.) and serving sizes at <https://teammnutrition.usda.gov>.



Food and Nutrition Service
FNS-668
August 2017
USDA is an equal opportunity
provider, employer, and lender.

CACFP and children's health



4 percentage point reduction in household food insecurity (Heflin 2015)



Participating programs serve healthier menus (Ritchie 2012; Andreyeva 2018; Gurzo 2020)



Children attending CACFP centers consume fewer sugary drinks, more vegetables, milk (Crepinsek 2004; Korenman 2012; Andreyeva 2018)



Spillover effects – CACFP programs adhere to more nutrition and physical activity best practices (Cotwright 2018; Erinosh 2018; Liu 2016; Williams 2021)

CACFP and the Healthy, Hunger-Free Kids Act of 2010

Updated Child and Adult Meal Patterns



Greater Variety of Vegetables and Fruits

- The combined fruit and vegetable component is now a separate vegetable component and a separate fruit component; and
- Juice is limited to once per day.



More Whole Grains

- At least one serving of grains per day must be whole grain-rich;
- Grain-based desserts no longer count towards the grain component; and
- Ounce equivalents (oz eq) are used to determine the amount of creditable grains (starting October 1, 2019).



More Protein Options

- Meat and meat alternates may be served in place of the entire grains component at breakfast a maximum of three times per week; and
- Tofu counts as a meat alternate.



Age Appropriate Meals

- A new age group to address the needs of older children 13 through 18 years old.



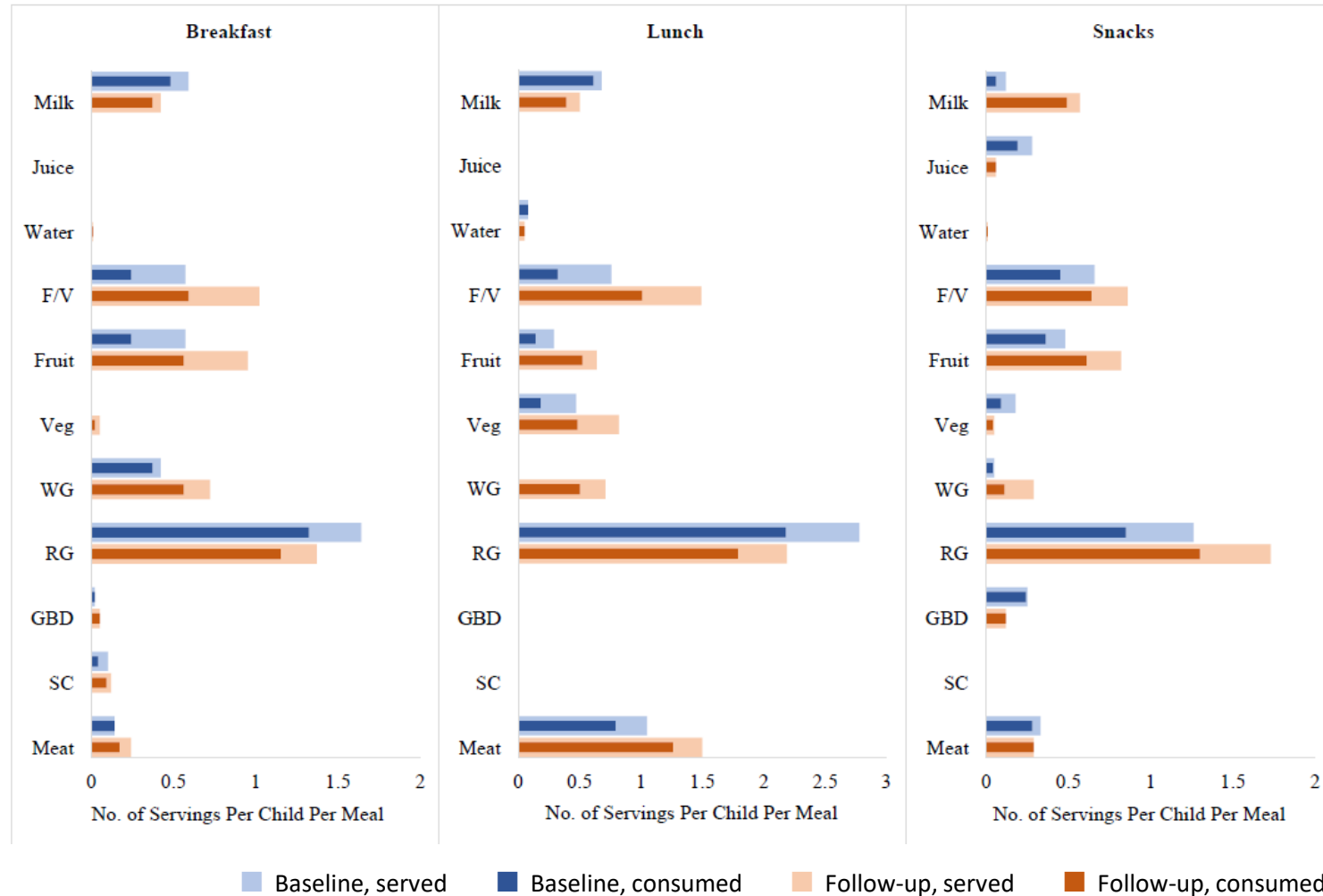
Less Added Sugar

- Yogurt must contain no more than 23 grams of sugar per 6 ounces; and
- Breakfast cereals must contain no more than 6 grams of sugar per dry ounce.

CACFP and the Healthy, Hunger-Free Kids Act of 2010

Kenney et al 2020

Figure 1. CACFP Meal Components: Mean Servings and Means Consumed Per Child Per Meal, Baseline to Follow-Up



Chriqui et al 2020: centers reported improvements in not serving sugary cereals, serving more whole grains

CACFP and unknowns

- Why aren't more child care programs participating?
- What impact does CACFP have on weight and growth?
- What is role of CACFP in health equity?
- Could the impact of recent HHFKA changes be boosted?



Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

Sara Olson, ScM, RDN

Policy Branch Chief

Supplemental Food Programs Division

USDA Food and Nutrition Service



WIC

WIC provides Federal grants to States for:

- Supplemental nutritious foods
- Nutrition education
- Breastfeeding promotion and support
- Screening and referrals to other health, welfare and social services
- Farmers' market benefits



WIC Program Overview

- Federal responsibilities
 - Provide grants to State agencies for food and nutrition services and administration costs
 - Set eligibility guidelines
 - Monitor and oversee State agencies
- State and Local responsibilities
 - Determine eligibility and issue benefits
 - Authorize and monitor vendors (stores)
 - Provide program services



Participant Eligibility



Categorical

- Pregnant women
- Breastfeeding and non-breastfeeding postpartum women
- Infants
- Children up to age five

Income

- Cannot be more than 185% of the Federal poverty income guidelines
- Can be automatically eligible if participates in SNAP, Medicaid, or other Federal or State programs (per State option)

Residential

- Applicant must live in the State in which they apply

Nutrition Risk

- Must have a medical-based or dietary-based condition



How Does WIC Help?

WIC Benefits - Healthy Foods

- Whole-wheat Bread and other Whole Grains
- Milk
- Eggs
- Cheese
- Breakfast Cereal
- Peanut Butter
- Fruits and Vegetables
- Yogurt
- Dried and canned beans/peas
- Canned Fish
- Baby Food
- Infant Cereal
- Juice
- Infant Formula
- Soy-based beverage
- Tofu



WIC Benefits – Healthy Foods



- Cash value vouchers/benefits (\$9, or \$11) for fruits and vegetables for children and women
- Participants may choose from a wide variety of fruits and vegetables
- Fresh, frozen and canned allowed



WIC Benefits – Nutrition Education

- Eat more fruits & vegetables
- Lower saturated fat
- Increase whole grains & fiber
- Drink less sweetened beverages and juice
- Babies are meant to be breastfed



WIC Benefits – Breastfeeding Support



**WIC
BREASTFEEDING
SUPPORT**

LEARN TOGETHER. GROW TOGETHER.

- Receive follow up support through peer counselors
- Can participate in WIC longer
- Receive an enhanced food package if exclusively breastfeeding
- May receive breast pumps, breast shells or other nursing supplements to help support the continuation of breastfeeding



WIC FFCRA & ARPA Funds



- The Families First Coronavirus Response Act of 2020 (FFCRA) provided regulatory and statutory waiver authority plus \$500M in funding through September 30, 2021.
- The American Rescue Plan Act of 2021 (ARPA) provided WIC \$880 million, including:
 - \$490 million for temporary WIC cash-value voucher increase. Implemented via [memo](#) on 3/24/21.
 - **\$390 million for WIC outreach, innovation, and modernization efforts. See [memo](#) dated 3/15.**

COVID-19 Waivers and Flexibilities



- **Physical Presence**

USDA is allowing participants to enroll or re-enroll in WIC without visiting a clinic in-person and postpone height/weight measurements and bloodwork requirements.

- **Remote Benefit Issuance**

USDA is allowing WIC agencies to issue benefits remotely so participants don't have to pick-up their WIC benefits in-person.

- **Food Package Substitutions**

USDA is allowing WIC State agencies to substitute certain food package items when availability is limited.





Thank You!





Research on WIC: An Overview of FNS- Funded Studies

Courtney Paolicelli, DrPH, RDN
USDA Food and Nutrition Service
Office of Policy Support
Special Nutrition Research and Analysis Division

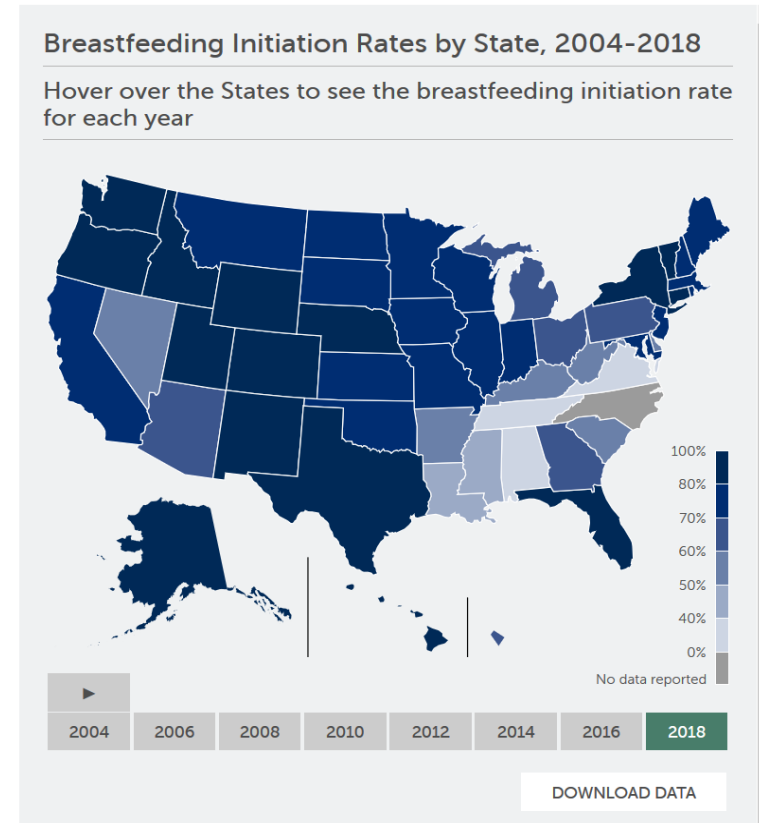
The findings and conclusions in this presentation are solely those of the author(s) and should not be construed to represent any official USDA or U.S. Government determination or policy.



WIC Participant and Program Characteristics Study (WIC PC) 2018

WIC Participant and Program Characteristics Study 2018

- Report redesigned
 - New layout, new data tables
 - Updated analyses
 - New breastfeeding indicators
- National **and** State Agency level information
- Annual trends
- Interactive graphics



FNS Project Officers:
Grant Lovellette (2018) &
Amanda Reat (2020)

WIC Infant and Toddler Feeding Practices Study-2

 **Westat**

**WIC ITFPS-2 Infant Report:
Intention to Breastfeed**

Authors
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Christine Borger, Ph.D.
Suzanne McNutt, M.S., R.D.
Gail Harrison, Ph.D.




May 2015

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**WIC Infant and Toddler Feeding Practices Study-2:
Second Year Report**

 **Westat** *Improving lives through research™*

WIC Infant and Toddler Feeding Practices Study – 2: Infant Year Report

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**WIC Infant and Toddler Feeding Practices Study-2:
Third Year Report**

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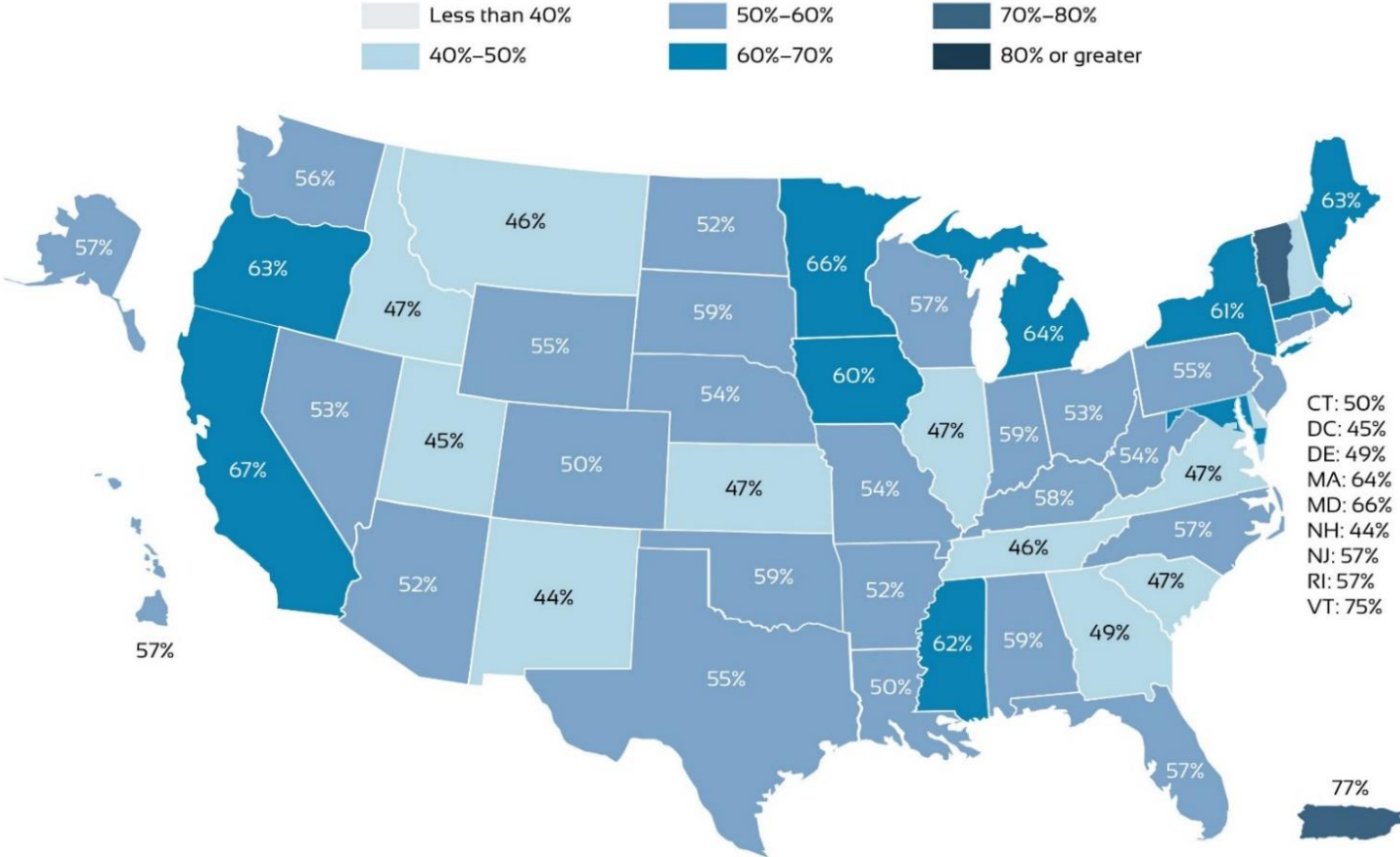


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National- and State-Level Estimates of WIC Eligibility and WIC Program Reach in 2018



FNS Project Officer: Grant Lovellette



Questions?

- FNS OPS website:
<https://www.fns.usda.gov/research-analysis>
- For general information on FNS studies:
FNSstudies@usda.gov
- To request publicly available data:
OPSDataRequests@usda.gov

Responsive Feeding, Child Growth, and Development

Rafael Pérez-Escamilla, PhD
Professor of Public Health

Director, Maternal Child Health Promotion Program



Yale SCHOOL OF PUBLIC HEALTH

July 7, 2021



@rperezescamilla

What is responsive Feeding?

RF refers to ‘feeding practices that encourage the child to eat autonomously and, in response to physiological and developmental needs, which may encourage self-regulation in eating and support cognitive, emotional, and social development’

(adapted from: Pérez-Escamilla, Segura-Pérez, & Hall Moran, 2019)

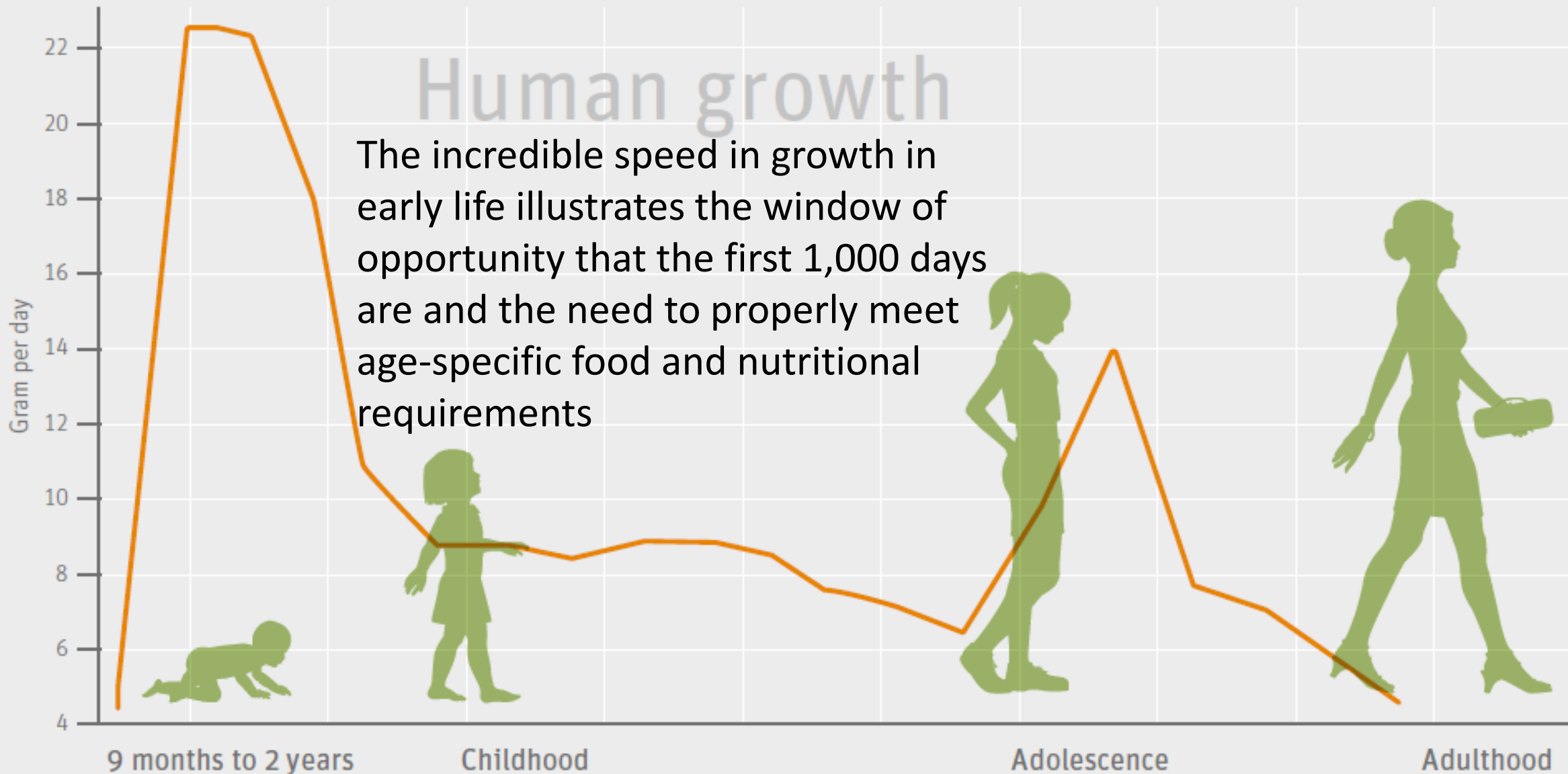


The First 1000 Days: The Foundation for Growth, Health and Brain Development



Human growth

The incredible speed in growth in early life illustrates the window of opportunity that the first 1,000 days are and the need to properly meet age-specific food and nutritional requirements



Maternal health
Maternal nutrition status



The first 1,000 days

a unique window of opportunity to nutritionally support growth in the infant and metabolic health of both mother and infant, to reduce the risk of NCDs later in life

Complementary feeding



Embryo – Placenta development

Lactation



Diet Diversification



Conception



Fetal development



Birth



Infancy (0–12 months)



Toddlerhood



2 years

The experience-expectant, experience-dependent human brain

36 weeks
gestation

Newborn

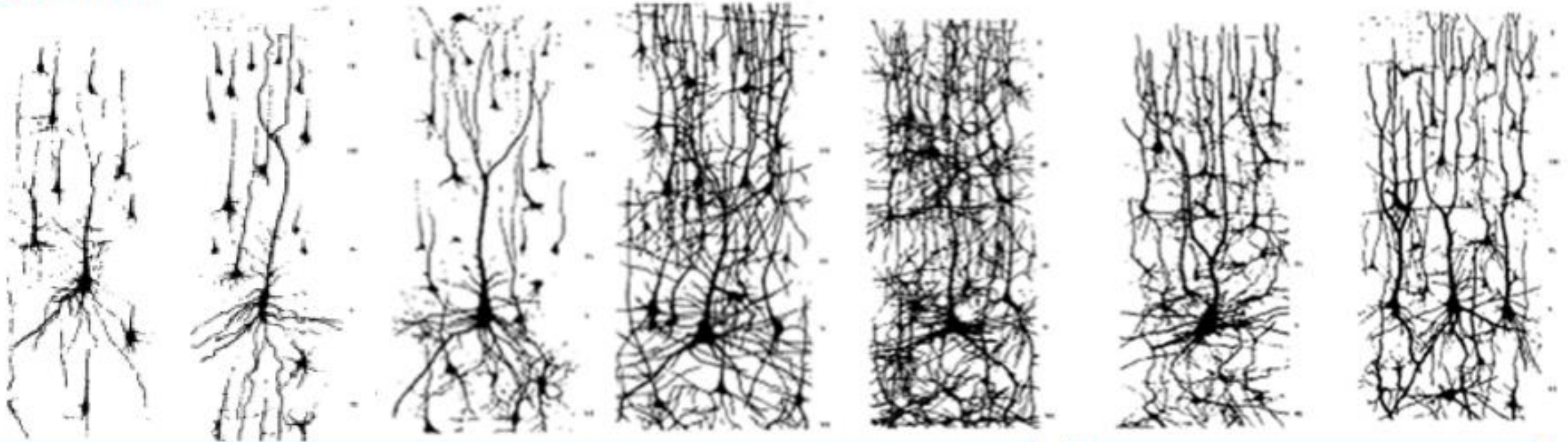
3 months

6 months

2 years

4 years

6 years



Synapse formation

Synapse pruning

THE LANCET

Rafael Pérez-Escamilla, PhD (*Yale School of Public Health*)
on behalf of the Series Steering Committee and co-authors

Advancing Early Childhood Development: from Science to Scale

Department of Pediatrics
Yale School of Medicine
October 31, 2018



Nurturing Care

Nurturing care should envelop children since beginning of life

- **Comprises all essential elements for a child to grow physically, mentally and socially**

- Health Care
- **Nutrition**
- **Responsive Caregiving**
- Protection and Security
- Opportunities to learn and discover



Requires stable environments where children receive love and stimulation responsive to their developmental stages

Nurturing Care Global Framework

Nurturing Care FOR EARLY CHILDHOOD DEVELOPMENT

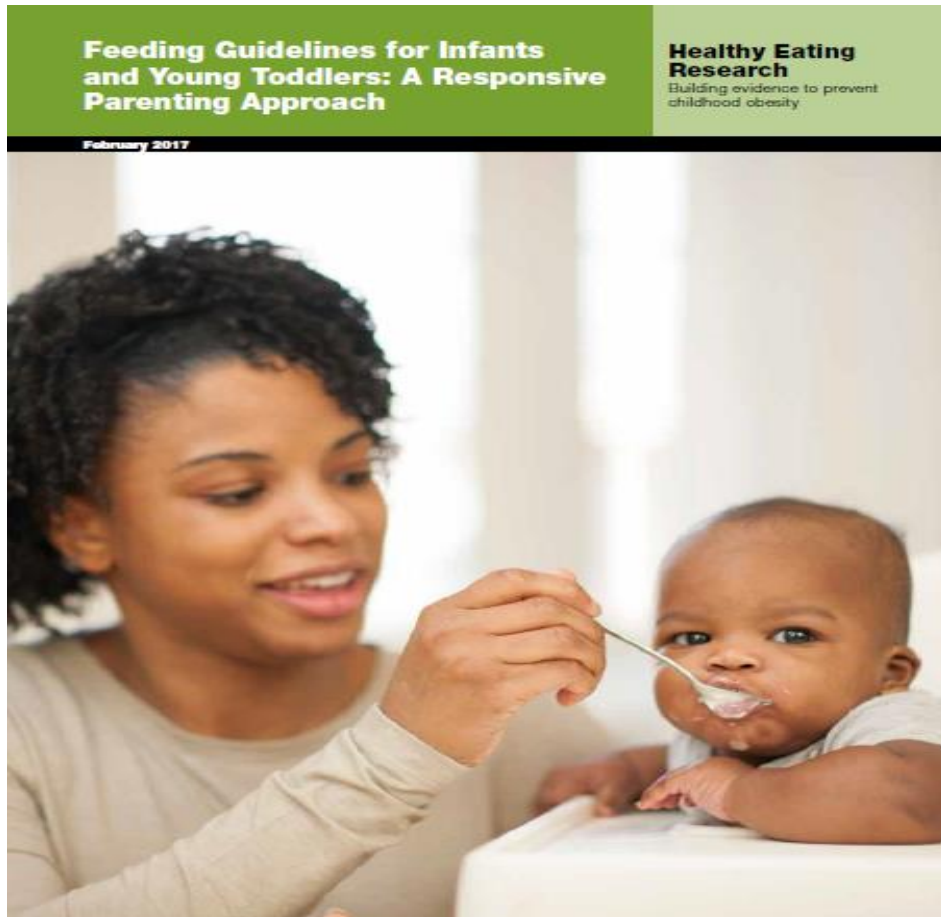
A FRAMEWORK FOR HELPING CHILDREN **SURVIVE** AND
THRIVE TO **TRANSFORM** HEALTH AND HUMAN POTENTIAL



- Developed by UNICEF, the World Bank and other partners with input from countries worldwide
- Launched at the World Health Assembly, May 18, 2018 in Geneva, Switzerland
- Crucial for attaining the Sustainable Development Goals (SDGs)
- Based on the Lancet Early Childhood Development Series published in 2016
- Provides an action roadmap to implement evidence-based policies and deliver services to support parents, families, and other caregivers with the provision of nurturing care to young children in their communities



Responsive feeding: Key for nurturing care



<http://healthyeatingresearch.org/research/feeding-guidelines-for-infants-and-young-toddlers-a-responsive-parenting-approach/>

Feeding Guidelines for Infants and Young Toddlers

A Responsive Parenting Approach

Rafael Pérez-Escamilla, PhD
Sofia Segura-Pérez, MS, RD
Megan Lott, MPH, RD

Nutrition Today 2017;52:223-231

Responsive parenting is a caregiving style expected to foster the development of self-regulation and promote optimal cognitive, social, and emotional development from the beginning of life. Critical dimensions of responsive parenting include feeding, sleeping, soothing, and play/physical activity; all are highly interconnected with each other. Responsive parenting interventions have been shown to have a beneficial impact on child feeding behaviors and weight outcomes. An expert panel convened by Healthy Eating Research, a national program of the Robert Wood Johnson Foundation, developed evidence-based guidelines for feeding infants and toddlers during the first 2 years of life. These responsive feeding guidelines were developed after an evidence-based consensus methodology. The guidelines address the periods of gestation, birth to 6 months, more than 6 months to 1 year, and more than 1 to 2 years. Fundamental principles of the guidelines include hunger and satiety cues, developmental milestones that indicate readiness for introduction of solids, and responsive approaches to repeatedly expose the young child to a variety of healthy foods and age-appropriate textures in the context of a stable and predictable nurturing environment. *Nutr Today.* 2017;52(5):223–231

Expert Panel Leadership

Panel Conveners:

Mary Story, PhD, RD
Director, Healthy Eating Research
Professor, Global Health and Community and
Family Medicine
Associate Director of Education and Training
Duke Global Health Institute

Megan Lott, MPH, RDN
Senior Associate of Policy and Research,
Healthy Eating Research
Duke Global Health Institute

Panel Chair:

Rafael Perez-Escamilla, PhD, MS
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Director, Global Health Concentration
Director, Office of Public Health Practice
Yale School of Public Health

Sofia Segura-Perez, MS, RD (Panel Co-Chair)
Associate Unit Director, Community Nutrition
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Hispanic Health Council

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Vivien Needham
Program Assistant, Healthy Eating Research
Duke Global Health Institute

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Shari Barkin, MD, MSHS
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Katrina Holt, MPH, MS, RD, FAND
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Massachusetts General Hospital for Children

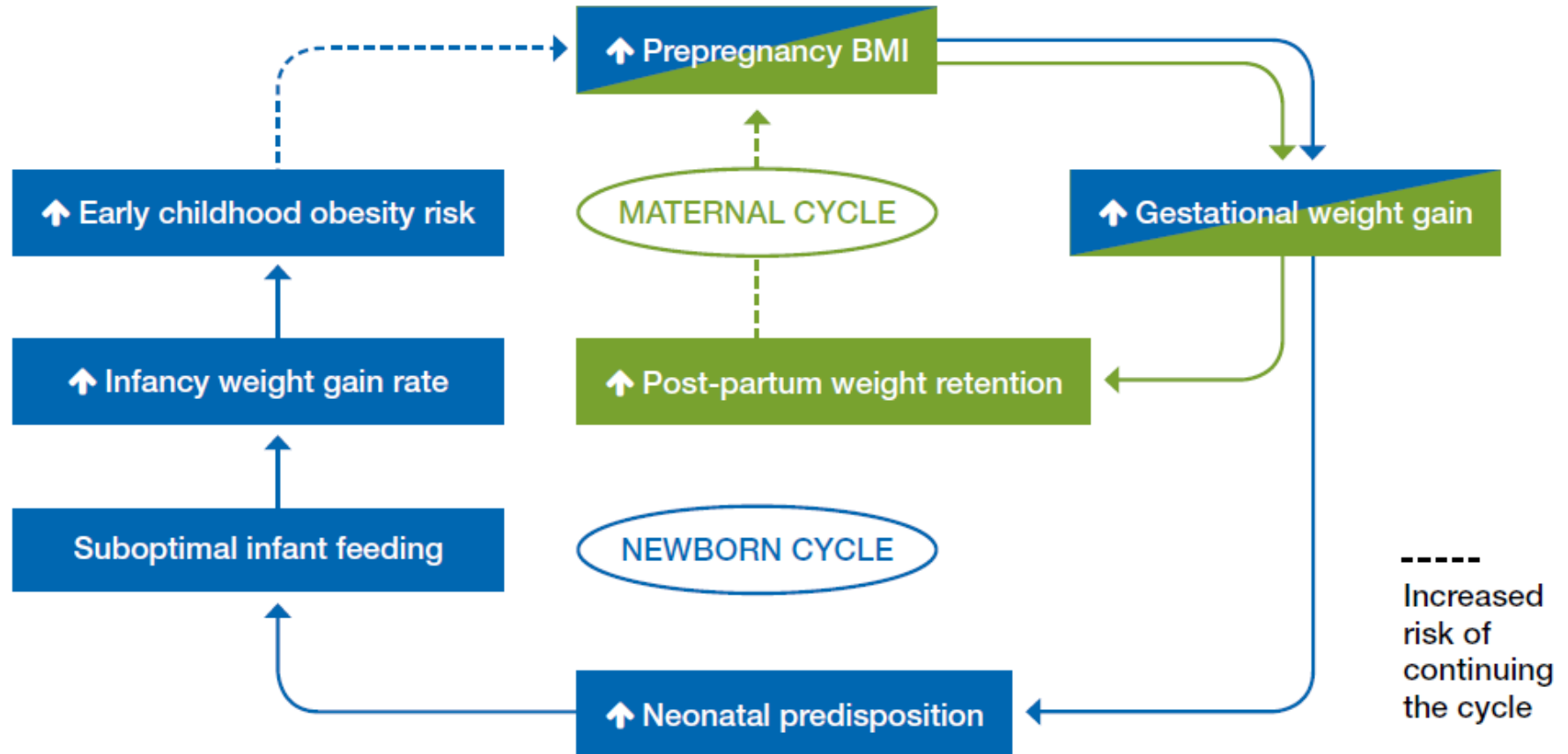
Shannon Whaley, PhD
Public Health Foundation Enterprises WIC Program

Why These Guidelines?

- **Early life feeding behaviors play a central role in establishing food preferences**
- **Prevalence of unhealthy eating patterns and weight outcomes among U.S. infants and toddlers**
- **Previous comprehensive guidelines were dated**

Obesity Prevention Needs to Start Even Before the Offspring is Conceived

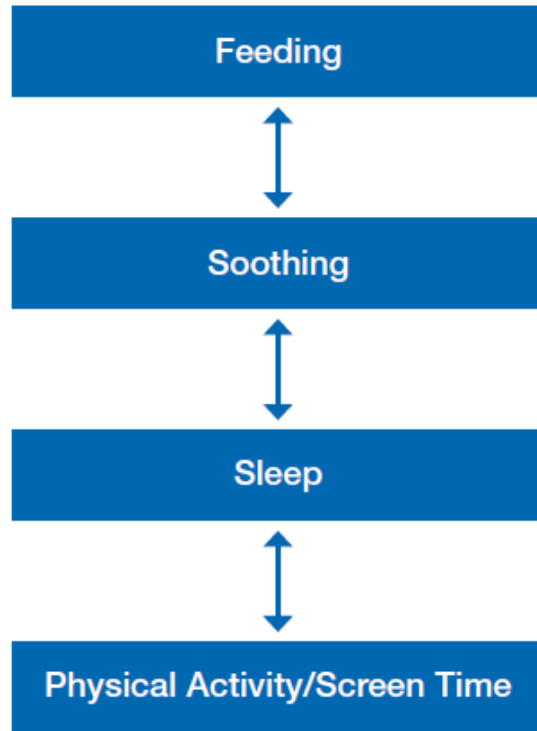
Figure 1. Maternal-child life-course obesity framework



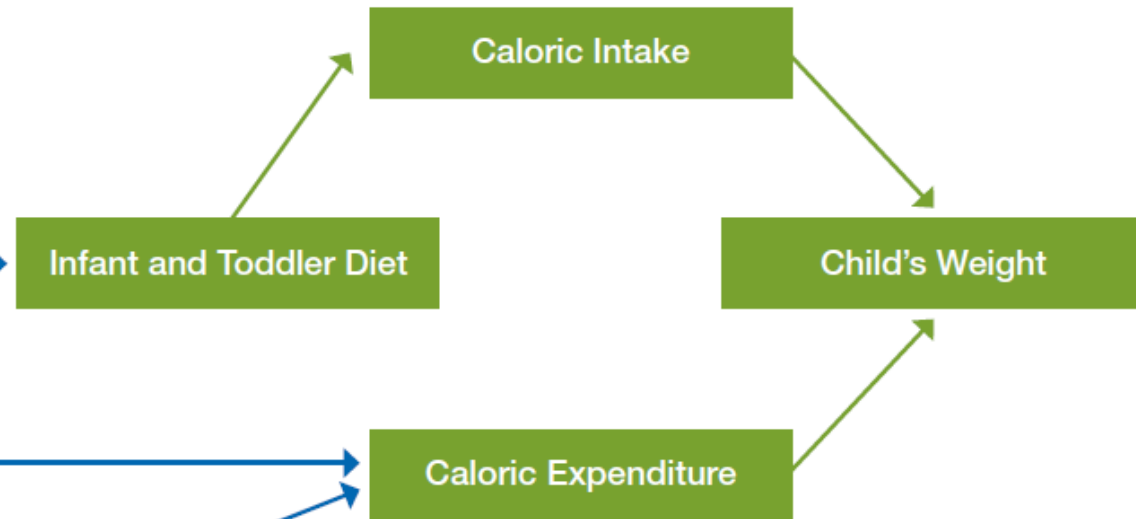
Note: From “Early life nutrition disparities: Where the problem begins?” by R. Pérez-Escamilla and O. Bermudez, 2012, *Adv Nutr*, 3, p. 72.¹³ Reprinted with permission from author.

Responsive Parenting Framework

RESPONSIVE PARENTING DIMENSIONS



OUTCOMES FOR INFANTS AND CHILDREN



Note: Original figure developed by authors of this report.

Responsive Feeding Key Dimensions

RF is a multidirectional process grounded upon the following three steps:

- 1) the child signals hunger and satiety through motor actions, facial expressions, or vocalizations;
- 2) the caregiver recognizes the cues and responds promptly in a manner that is emotionally supportive, contingent on the signal, and developmentally appropriate; and
- 3) the child experiences a predictable response to signals.



Learning to eat: birth to age 2 y¹⁻⁴

Am J Clin Nutr 2014;99(suppl):723S–8S

Leann L Birch and Allison E Doub



Familiarization

- Repeatedly offer healthy foods such as vegetables to young children

Associative learning

- Food preferences develop based on the context and psycho-emotional atmosphere in which it's offered

Observation learning

- Children may also establish food preferences by observing what their caregivers eat

Responsive Parenting/Feeding Works!

• **Responsive Parenting/Feeding Randomized Control Trials**

- SLIMTIME (Paul et al. 2011) - [U.S.](#)
- INSIGHT (Savage et al. 2016, Paul et al. 2016) – [U.S.](#)
- NOURISH (Daniels et al. 2012, 2015) - [Australia](#)
- Healthy Beginnings (Wen et al. 2012) - [Australia](#)
- Prevention of Overweight in Infancy (Fangupo et al. 2015) – [New Zealand](#)

Responsive Parenting/Feeding Works!

- The RCTs indicate that teaching parents to correctly interpret infant hunger and satiety cues is key for allowing the child to learn to self-regulate food intake properly.
 - Anticipatory guidance
- Also important for caregivers to understand the sleeping patterns of infants and how rapidly they evolve during the first year of life.

Responsive Parenting/Feeding Works!

- RCTs consistently emphasized the importance of allowing the infant and toddler to participate in family meals, and to avoid distractions during meal times.
 - Meal times should be a pleasant experience with plenty of verbal and non-verbal interactions between the caregiver and the child.

Responsive Parenting/Feeding Works!

- Responsive parenting/feeding trials that included soothing and/or sleeping components were successful at improving sleeping patterns and feeding behaviors, especially at night.
- Trials highlight the need to respond to infant crying and distress with feedings only when the infant is hungry.
 - They also discourage the use of food as a reward as this will condition the infant to expect to be fed when waking up or in distress even when not hungry.

Ontogeny of taste preferences: basic biology and implications for health¹⁻⁵

Am J Clin Nutr 2014;99(suppl):704S-11S

Julie A Mennella



- Flavors passed from mother to fetus through amniotic fluid
- Flavors passed from mother to infant through breast milk
- Breastfed babies accept more easily fruits and vegetables than children who were formula fed.
 - However, formula fed infants can end up accepting food low in sugar, salt and bitter tasting if the mothers are advised on repeatedly exposing the infants to them
 - Promoting the consumption of complementary foods low in salt and sugar is likely to have a positive influence on dietary choices, growth and weight outcomes later on in life

Infancy and the toddlerhood periods represent major sensitive periods for the development of food preferences

Responsive Feeding Guidelines: English and Spanish

<http://healthyeatingresearch.org/research/feeding-guidelines-for-infants-and-young-toddlers-a-responsive-parenting-approach/>




Yale University



Feeding Guidelines for Infants and Young Toddlers: A Responsive Parenting Approach

Healthy Eating Research
Building evidence to prevent childhood obesity

February 2017



Guías de alimentación para niñas y niños menores de dos años: Un enfoque de crianza perceptiva

Investigación en Alimentación Saludable
Prevención de obesidad infantil basada en evidencia

Febrero 2017



DGA Dietary Guidelines for Americans
2020 - 2025



Make Every Bite Count With the Dietary Guidelines



DietaryGuidelines.gov

Supporting Healthy Eating

Parents, guardians, and caregivers play an important role in nutrition during this life stage because infants and toddlers are fully reliant on them for their needs. In addition to “what” to feed children, “how” to feed young children also is critical. As noted above, repeated exposure to foods can increase acceptance of new foods. Another important concept is **responsive feeding**, a feeding style that emphasizes recognizing and responding to the hunger or fullness cues of an infant or young child (see “**Responsive Feeding**”).

Responsive Feeding

Responsive feeding is a term used to describe a feeding style that emphasizes recognizing and responding to the hunger or fullness cues of an infant or young child. Responsive feeding helps young children learn how to self-regulate their intake.

See **Table 2-2** for some examples of signs a child may show for hunger and fullness when he or she is a newborn through age 5 months, and signs a child may start to show between age 6 through 23 months.

It is important to listen to the child’s hunger and fullness cues to build healthy eating habits during this critical age. If parents, guardians, or caregivers have questions or concerns, a conversation with a healthcare provider will be helpful.

For more information on signs a child is hungry or full, see: [cdc.gov/nutrition/infantandtoddlernutrition/mealtime/signs-your-child-is-hungry-or-full.html](https://www.cdc.gov/nutrition/infantandtoddlernutrition/mealtime/signs-your-child-is-hungry-or-full.html). More information on infant development skills, hunger and satiety cues, and typical daily portion sizes is available at [wicworks.fns.usda.gov/sites/default/files/media/document/Infant_Nutrition_and_Feeding_Guide.pdf](https://www.wicworks.fns.usda.gov/sites/default/files/media/document/Infant_Nutrition_and_Feeding_Guide.pdf).

Table 2-2

Signs a Child is Hungry or Full

Birth Through Age 5 Months	
<p>A child may be hungry if he or she:</p> <ul style="list-style-type: none"> • Puts hands to mouth. • Turns head toward breast or bottle. • Puckers, smacks, or licks lips. • Has clenched hands. 	<p>A child may be full if he or she:</p> <ul style="list-style-type: none"> • Closes mouth. • Turns head away from breast or bottle. • Relaxes hands.
Age 6 Through 23 Months	
<p>A child may be hungry if he or she:</p> <ul style="list-style-type: none"> • Reaches for or points to food. • Opens his or her mouth when offered a spoon or food. • Gets excited when he or she sees food. • Uses hand motions or makes sounds to let you know he or she is still hungry. 	<p>A child may be full if he or she:</p> <ul style="list-style-type: none"> • Pushes food away. • Closes his or her mouth when food is offered. • Turns his or her head away from food. • Uses hand motions or makes sounds to let you know he or she is still full.



UNICEF
PROGRAMMING
GUIDANCE

Improving Young Children's Diets During the Complementary Feeding Period



NUTRITION GUIDANCE SERIES

unicef
for every child

Source:
https://mcusercontent.com/fb1d9aabd6c823bef179830e9/files/12900ea7-e695-4822-9cf9-857f99d82b6a/UNICEF_Programming_Guidance_Complementary_Feeding_2020_Portrait_FINAL.pdf

A measurement scale to assess responsive feeding among Cambodian young children

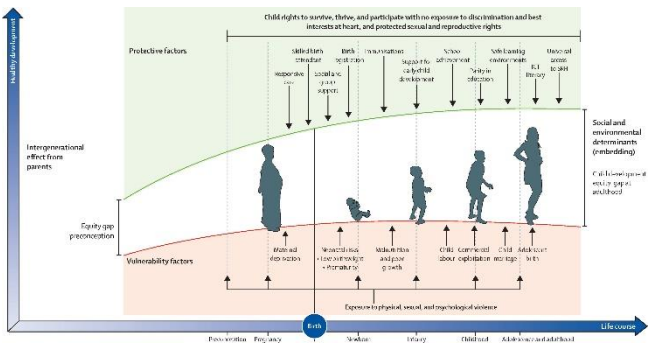
Ndèye S. Sall¹ | France Bégin² | Jérémie B. Dupuis³ | Jimmy Bourque⁴ |
Lylia Menasria¹ | Barbara Main⁵ | Lenin Vong⁶ | Vannary Hun⁷ |
David Raminashvili⁷ | Chhorvann Chea⁸ | Lucie Chiasson⁹ | Sonia Blaney¹

TABLE 5 Responsive and active feeding measurement final scale

Construct	Indicator
Responsive feeding	2.Caregiver serves child first 3.Child eats with caregiver and family members 4.Food is served to child on his own plate 5. Spoon or other utensils is used to feed the child 15. When child is eating, the caregiver spends time: <ul style="list-style-type: none"> - Eating - Taking care of other family members - Selling foods - Doing household tasks - Taking care of child
Active feeding	9.Caregiver talks to the child, verbally encourage him to eat <u>If yes, caregiver uses:</u> <ul style="list-style-type: none"> - Positive wordings - Negative wordings 10.Caregiver encourages the child when he is eating well 11.Caregiver motivates the child to eat more using gestures/ games or by demonstrating to him how to eat



A future for the world's children? A WHO-UNICEF-Lancet Commission Lancet (2020)



@rperezescamilla

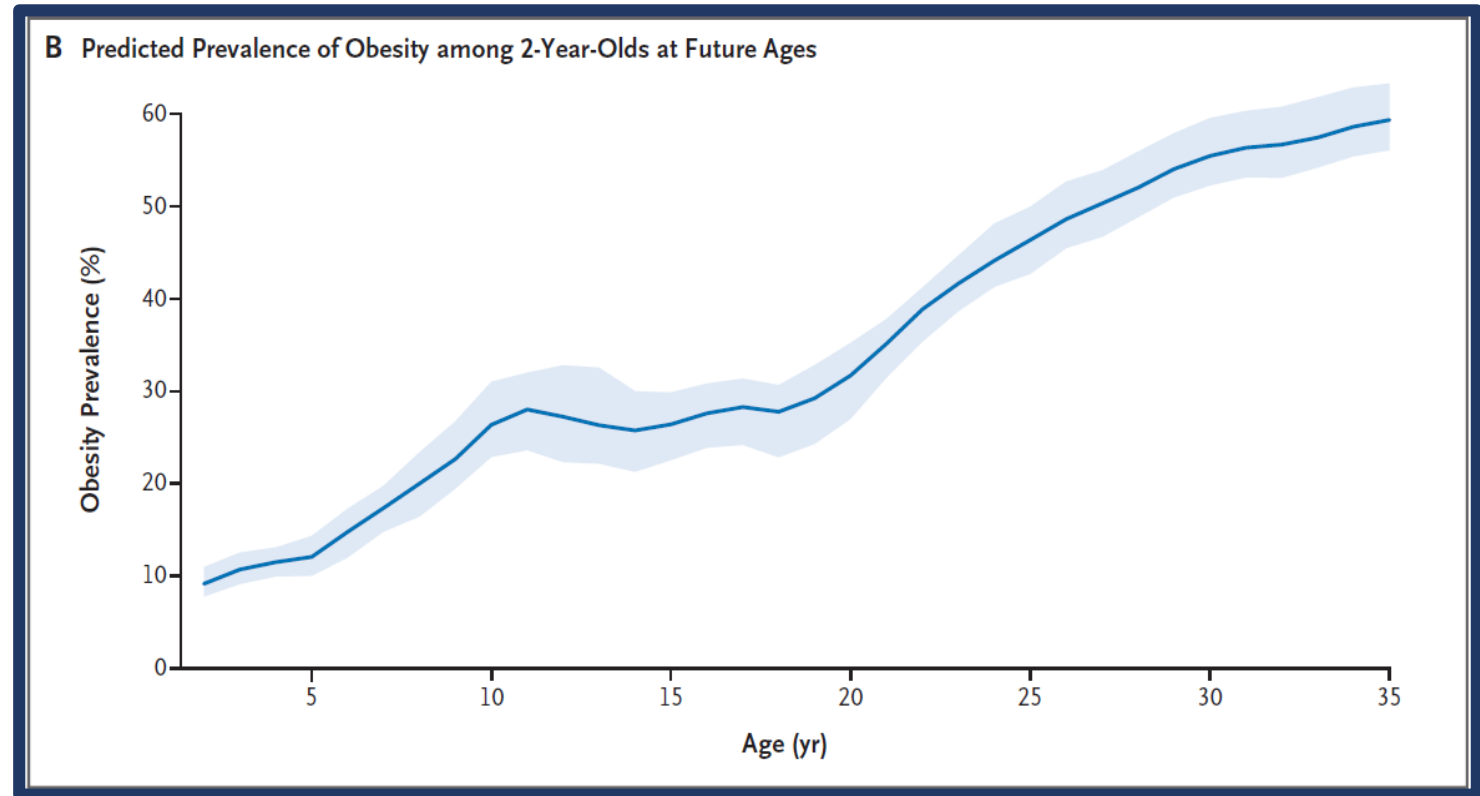
About Me



- Nurse by training; spent 9 years at the bedside as a pediatric nurse
- Received Masters degrees in Public Health and Nursing from Emory University
- Started at CDC as an Epidemic Intelligence Service (EIS) officer
- Spent the last 10 years in the Division of Nutrition, Physical Activity and Obesity focusing on the prevention and treatment of childhood obesity
- Work with CDC funded recipients and other key ECE partners to help improve nutrition, physical activity, breastfeeding support and reduce screen time in Early Care and Education programs

Without Intervention, Over Half of Today's Children Will Have Obesity as Young Adults

- **A modeling study using BMI trajectories for youth shows that, by 2050, the majority of today's children, 57.3% will have obesity by age 35 if our society doesn't take immediate actions.**



Triple Approaches for ECE setting

- Implement and integrate nutrition, physical activity, breastfeeding, and screentime **standards and supports** into statewide ECE **systems**
- Improve ECE **facility level** **policies, practices, and environments** related to nutrition, breastfeeding support, physical activity and screen time
- Implement **provider** **best practices** related to nutrition, physical activity, breastfeeding support and screentime
 - ❑ CDC's framework for TA Strategies for States & Communities called the Spectrum of Opportunities



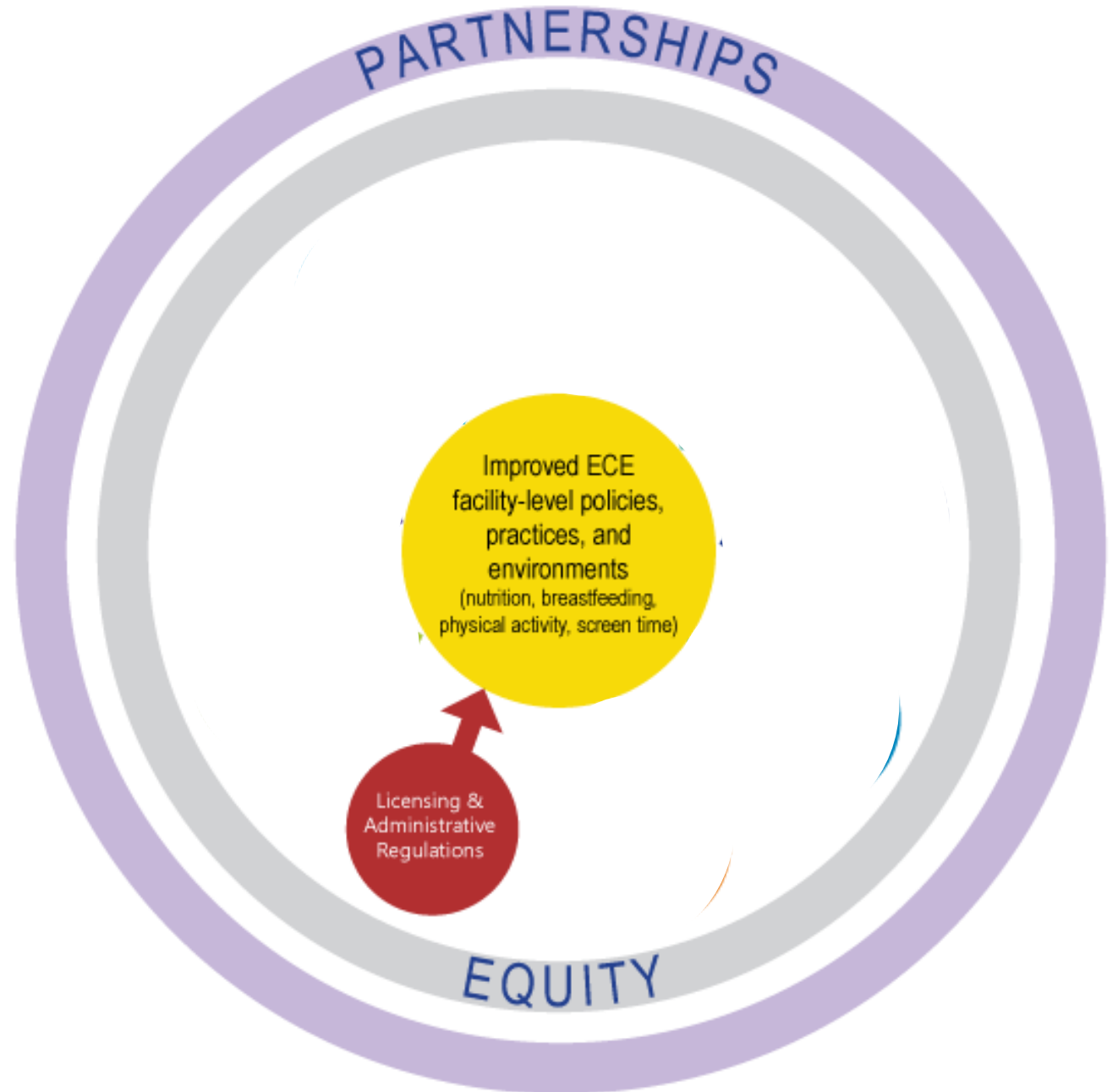
The Spectrum of Opportunities Framework 2.0



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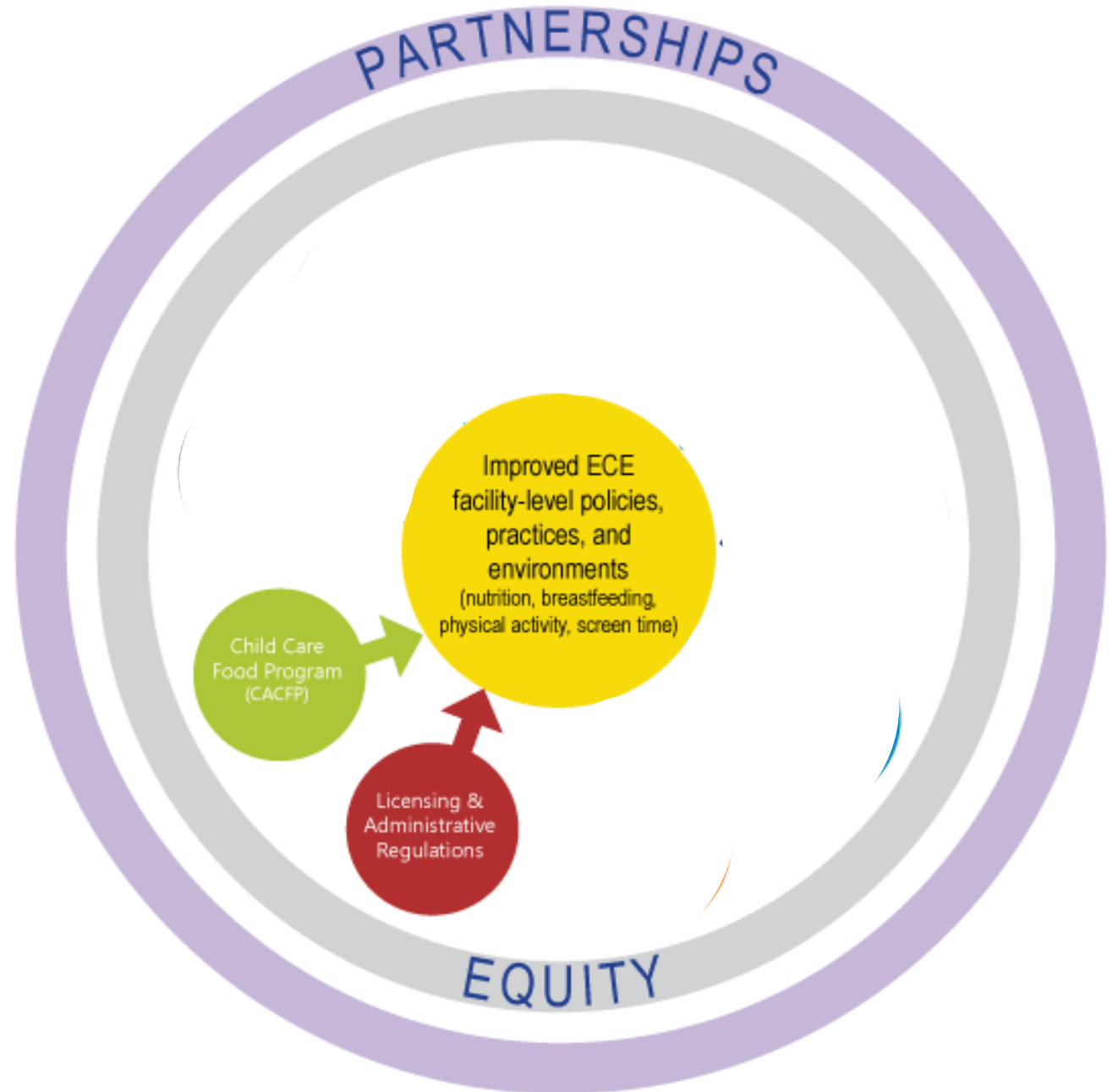
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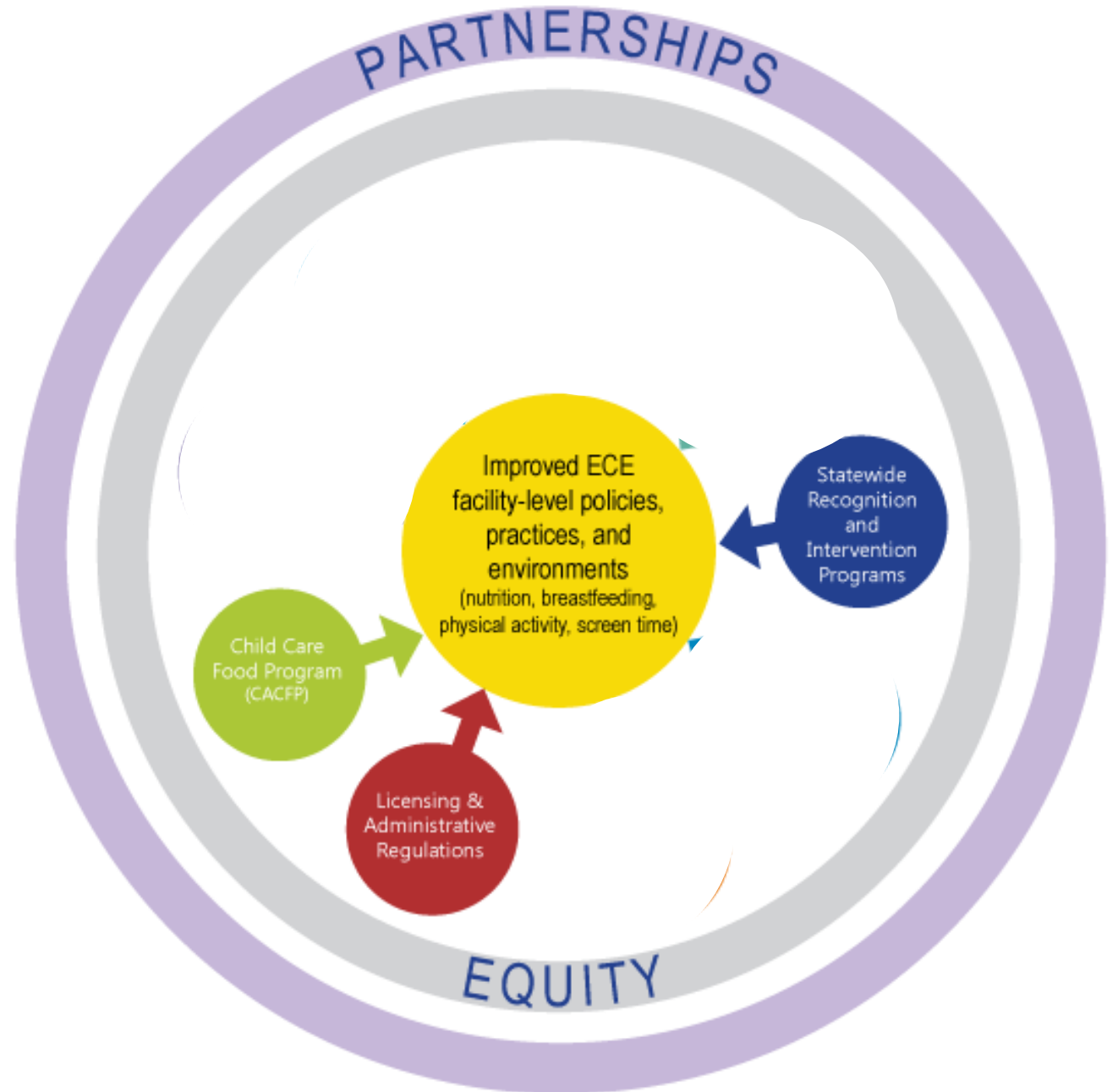
The Spectrum of Opportunities Framework 2.0



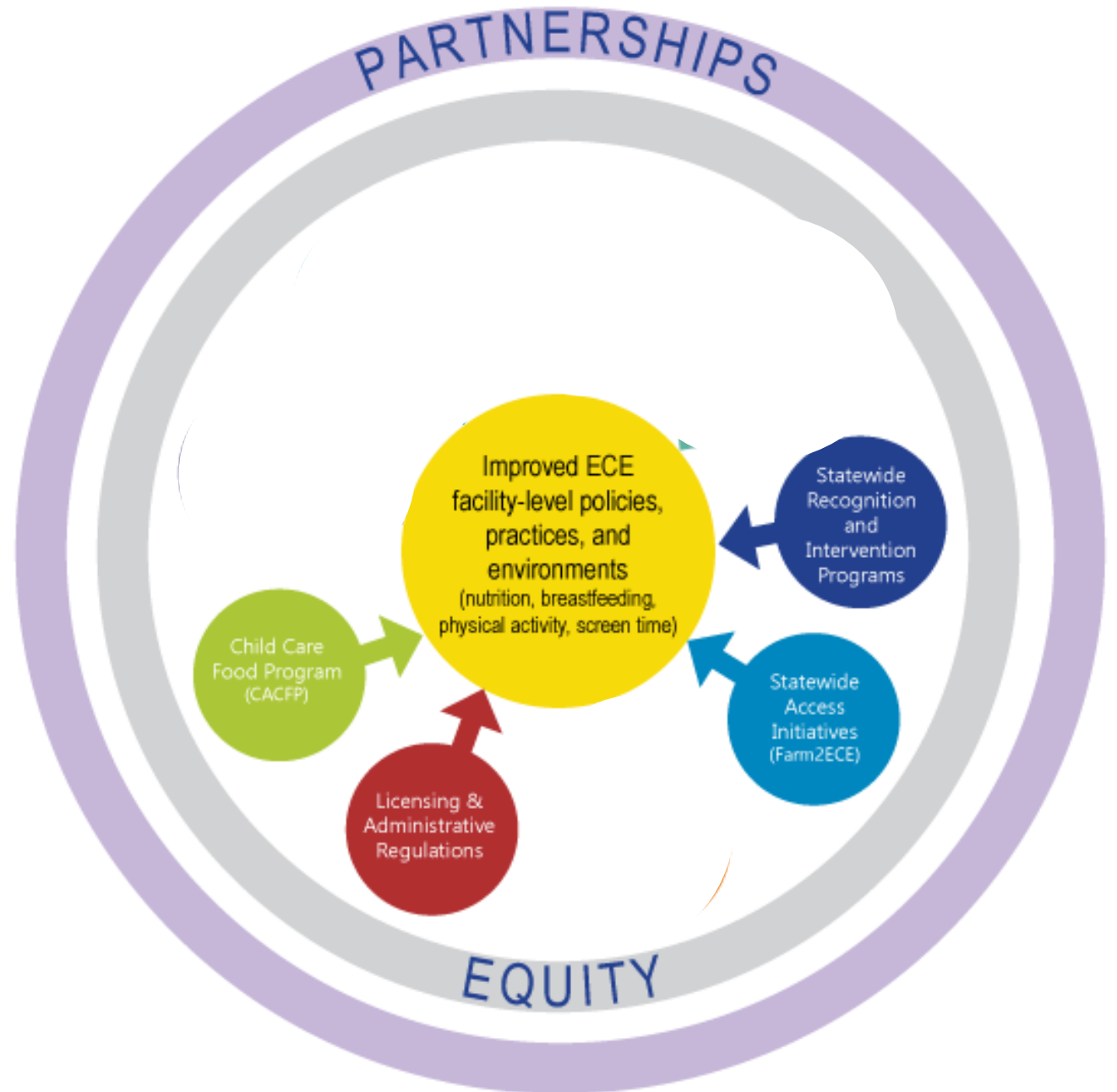
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The Spectrum of Opportunities Framework 2.0





The Spectrum of Opportunities Framework 2.0



Key Components of DNPAO's ECE Portfolio

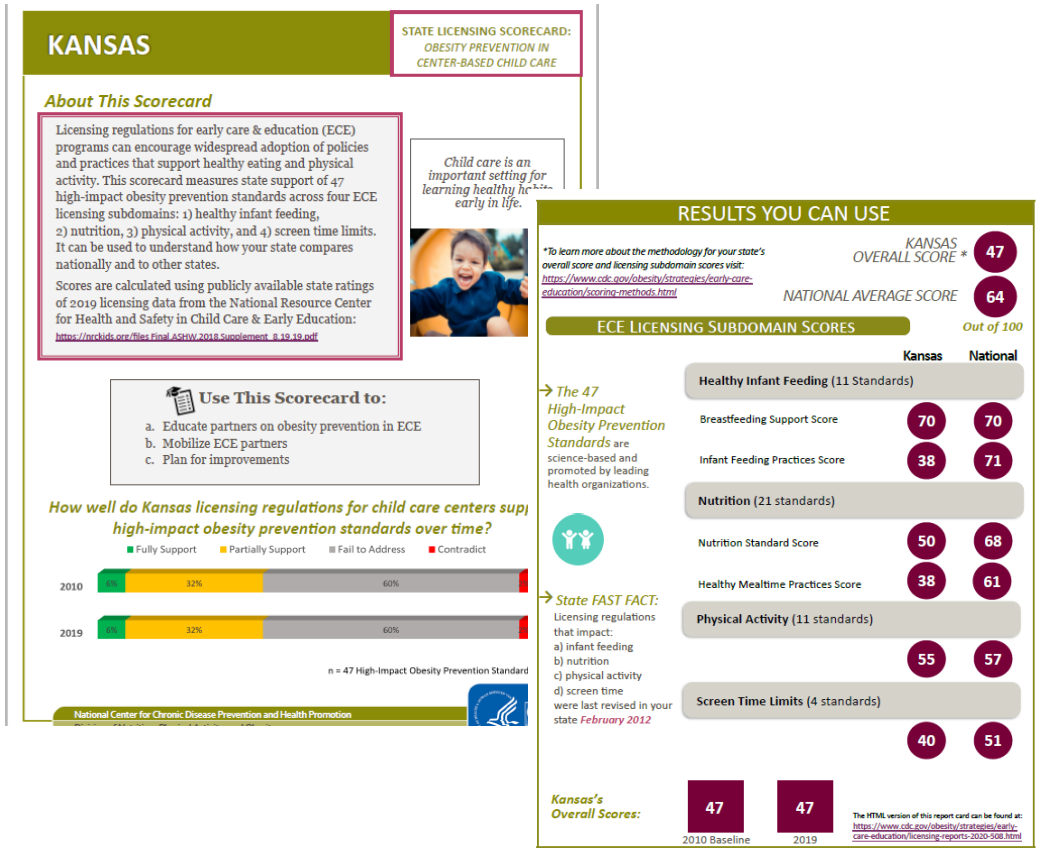
- **Support CDC funded recipients at state and local level**
 - Providing 1:1 TA, networking calls, newsblast with research highlights, create TA documents
- **Support additional CDC funded work through cooperative agreements**
 - Nemours Health System
 - ❑ TAPS – Technical Assistance Program for system-level change (11 states)
 - ❑ PALS – TA and Training Network for Physical Activity (~7 states)
 - Association of State Public Health Nutritionists with National Farm to School Network
 - ❑ FIG – Farm to ECE Implementation Grants (10 states and DC)
 - ❑ CABBAGE – Capacity Building Grant (3 localities)

Key Components of DNPAO ECE Portfolio

- **Help secure SMEs/support for our recipients**
 - Physical Activity SME, GIS mapping, using data
- **Help advance ECE Surveillance and Research**
 - Pilot (4 states) – CSAW, COVID related questions, ECE State Licensing Scorecards
- **Supporting CDC COVID-19 Response**
- **Partnership building**
 - Engaged with CDC agency-wide ECE Interest Group
 - Federal Engagement with ACF (Head Start, Office of Child Care), USDA (CACFP and Farm to Summer/Farm to CACFP)
 - Research and Evaluation Networks like NOPREN/HER

1 piece of advice – make sure you take your research and translate it for real people

ECE Licensing Report Cards + Trends Paper



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A Healthy Start: National Trends in Child Care Regulations and Uptake of Obesity Prevention Standards (2010–2018)

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Seung Hee Lee, PhD,¹ Kelly Hall, MPH,² Nora Geary, MSW, MPH,³ and Deborah A. Galuska, PhD¹

Abstract

Background: Obesity remains a significant public health issue in the United States. Each week, millions of infants and children are cared for in early care and education (ECE) programs, making it an important setting for building healthy habits. Since 2010, 39 states promulgated licensing regulations impacting infant feeding, nutrition, physical activity, or screen time practices. We assessed trends in ECE regulations across all 50 states and the District of Columbia (D.C.) and hypothesized that states included more obesity prevention standards over time.

Methods: We analyzed published ratings of state licensing regulations (2010–2018) and describe trends in uptake of 47 high-impact standards derived from Caring for Our Children’s, Preventing Childhood Obesity special collection. National trends are described by (1) care type (Centers, Large Care Homes, and Small Care Homes); (2) state and U.S. region; and (3) most and least supported standards.

Results: Center regulations included the most obesity prevention standards (~13% in 2010 vs. ~29% in 2018) compared with other care types, and infant feeding and nutrition standards were most often included, while physical activity and screen time were least supported. Some states saw significant improvements in uptake, with six states and D.C. having a 30%-point increase 2010–2018.

<https://www.cdc.gov/obesity/strategies/early-care-education/state-scorecards.html>

Thank you!

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