


New Meal Plan Meets Old Feeding Challenges: Practical Ways to Promote Healthy Eating Among Older Infants and Toddlers

M. JANE HEINIG, PHD, IBCLC
UC DAVIS HUMAN LACTATION CENTER

Acknowledgement




Parts of this work has been funded at least in part with Federal funds from the U.S. Department of Agriculture, Food and Nutrition Service. The contents of this publication do not necessarily reflect the view or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

- CA WIC OA Funds 2010-2011
- USDA WIC Special Projects Grant 2011-2014
- Arizona WIC OA Funds 2015-2016
- David and Lucille Packard Foundation

Early Eating Matters

Habits track to middle childhood, adolescence, and adulthood
Eating habits influence health, weight trajectory, immune competence



Skinner 2002, Vereecken 2004, Coulthard 2010

New plan...

- Less juice
- Lower sugar
- Whole grains
- Less fruit
- More vegetables!



Toddler Feeding Challenges

- Ongoing learning about foods and feeding
- Prefer sweets and savory tastes
- Aversion to bitter and sour
- No longer passive recipients of food
- Need to explore and experiment
- Persistent



Daniels 2017, Ventura 2017, Mennella 2011, Kral 2007, Cashdan 1994, Kolb 1984

Getting started



Children learn about foods the same ways they learn about everything else

What do Children Learn about Food?

- Foods they like or dislike
- Foods that are “good for you” or not
- Foods that they will accept
- Recognizing foods based on sensory experiences (taste, smell, texture, appearance)
- Contexts in which foods are eaten (everyday, celebrations)



Paroche et al. 2017

What do Children Learn about Food?

- Origins and preparation of foods
- Names of ingredients and tools for preparation and eating
- How foods are eaten (physical properties and social rules)
- Regulation of food intake
- Post-ingestive consequences



Paroche et al. 2017

How do Children Learn about Food?

1. Familiarization
2. Observation
3. Associative learning
4. Categorization



Paroche et al. 2017

1. Familiarization through Exposure to...

- Tastes of foods (odors)
- Variety of foods
- Variety of food textures
- Differences in foods’ appearance



Paroche et al. 2017

Exposure and Acceptance

- Exposure to novel foods *without* requiring the child to taste the foods results in more rapid acceptance of foods
- Exposure to a greater variety of foods results in increased acceptance of those foods *and* novel foods
- Children learn to expect new foods



Ventura 2017

2. Associative Learning about Foods

- Flavor-flavor learning
 - Pairing known flavors with food (sugar on cereal)
- Flavor-nutrient learning
 - Pairing high density ingredients with food (cheese on vegies or “creamy things taste good”)
- Contamination
 - Association with disliked food (food touching on plate)
- Reward
 - Association between food with praise or benefit



Paroche et al. 2017

3. Observational Learning

Modeling

- Immediate (copying)
- Long-term (routines and norms)

Similarity in preferences in families comes from children's repeated observations



Paroche et al. 2017

4. Categorization of Foods

Food/Non-food

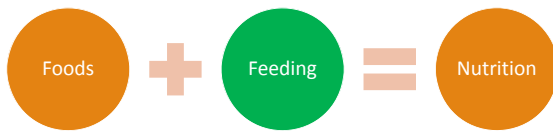
Food domain

- Taxonomic (e.g., fruit)
- Thematic (e.g., chips and salsa)
- Script (e.g., breakfast)
- Evaluative (e.g., healthy or unhealthy, good or bad)



Paroche et al. 2017

Getting started



Children need to learn about when and how foods are eaten

The Goal: Healthy Feeding Relationships



Parents are children's first teachers

Parents' interactions with children can result in positive or negative lessons about food and feeding

Parents may inadvertently start patterns and habits that make feeding relationships more challenging

Studies

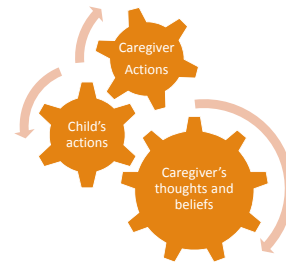
UC Davis Toddler Study

Triggers of Overfeeding for Older Infants and Toddlers

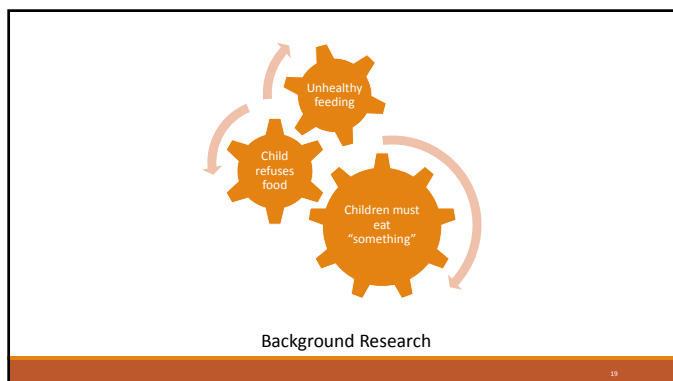
- USDA Special Project Grants
- Arizona WIC

Baby Behavior in Child Care

- David and Lucille Packard Foundation

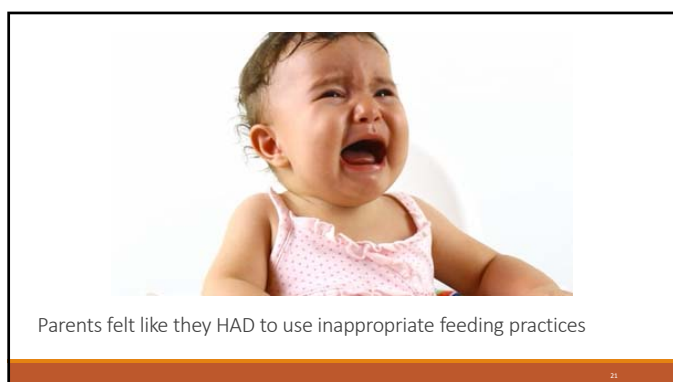


Background Research



Reasons for Inappropriate Feeding

- Reaction to food refusal
- Controlling unwanted behavior
- Expressing love or comfort
- Controlling crying
- Attempts to prolong sleep





Coping with Stress

- If people believe there is a solution –
 - Problem Management**
 - Seek information
 - Identify solutions
 - Attempt and evaluate solutions
- If people don't believe there is a solution –
 - Emotional Regulation**
 - Reinterpret goals
 - Disengage, detach
 - Denial
 - Anger, aggression

Glanz J Occup Med 1992; 34: 1071-8.

How can child care providers help?



Model the possible

“And the mom’s like, I’m so glad that she eats for you. She actually did not eat, like baby food, with her at all, until she came to me.”



Baby Behavior in Child Care – MS in preparation

Create a Team Atmosphere

"We need to work [with parents]. Especially between parents, children, and provider. We like, you know, we need to work like a team."



"If you don't have that parental support at home, it's not going to change."

Baby Behavior in Child Care – MS in preparation

25

Promote consistency (even on weekends)

"When they come back from the weekend, on Mondays, it's always hard. When they come back from a vacation, it takes me at least one week to get them back on the routine."

You don't plan a lot for Monday. You've just got to get them re-civilized. And that's just the nature of when parents don't have their kids all day long, and they have SO much to do over the weekends."



Baby Behavior in Child Care – MS in preparation

26

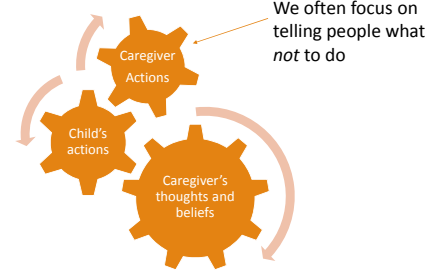
Find ways to reduce parents' stress about food...

"I think it's stressful because the parent comes ... 'So how did he eat today? What did he eat?' And it's 'no, he didn't eat his chicken today.' Next day, 'So how did he eat today?' 'No, he didn't eat his chicken today.' You know? So, you have that parent in the back of your head, asking you every day, how their child is eating, because he's not eating at home either."



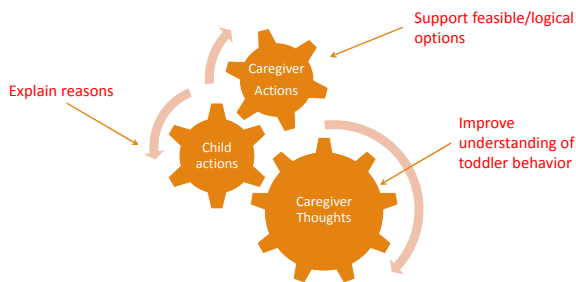
Baby Behavior in Child Care – MS in preparation

27



Background Research

28



Breaking the Cycle

29

Let's Talk about Toddlers



30

6 Big Changes for Older Babies and Toddlers

- Grow more slowly
- Need to practice using their fingers
- Get better at remembering things
- Start to use scripts to predict things
- "Ask" their caregivers to help them learn
- Need to practice their new motor skills



31

Helping Parents Worried about Food Refusal

32

Reasons for Food Refusal



Slower growth leads to variable appetite

Ask caregivers to help them learn about food (with all their senses)



33

Reasons for Food Refusal

Toddlers must practice fine and gross motor skills



Better memory for preferred foods (need multiple positive exposures)



34

Reasons for Food Refusal

Scripts aren't being followed



Learning from caregivers: Mom's face says "food is bad"

35

Toddlers Learn By Looking at Faces

- What (and who) is safe
- What (and who) is scary



36

Toddlers' cues are bigger, louder...but they are still cues

Toddlers will do everything they can to let caregivers know what they want, and what they don't want, to eat.




Parents who are tired or stressed may give in...



"Picky Eaters" Label



Helping Parents Understand Scripts



I learn about daily activities in my life.

I learn about people's "jobs" in my life.


Between 1-3 years, I may not like "script changes."



Parents are Directors!

Routines Help Toddlers and Caregivers

- Routines put caregivers in charge of toddlers' scripts
- Caregivers can use routines when they want their babies to be calm
 - Going out, car seat, meals, bedtime
- Routines help toddlers go to sleep and stay asleep



Creating or Changing Scripts

- Caregivers can use routines to create or change scripts
- To make scripts, parents must follow patterns consistently over time
- To change scripts parents should **start with big changes** in a routine so the child can't recognize (and expect) an old pattern



43



Communicating without Conflict

44

Asks about things they see and hear/ use your knowledge to explain (show them you know about their baby)



Answer Their Questions
(Don't overload them with too much information)

45



Share Realistic Options
(What can they do?)

47

For example....

Theo's dad doesn't like sweet potatoes but he knows that they are very good for Theo who just turned 1 year old. He wants to know how you get Theo to eat so much better than he can.

You: When you're feeding him, have you noticed that Joey will sometimes stare at your face? Does he turn his head or try to push the spoon away?

Joey's Dad: Yes, he does both those things.

You: Joey is learning so much about food. He looks at your face because he relies on you to help him know what foods are good and which are not. If you look like you don't like his food, he may not eat it either. Also at his age, he is going to want to use his fingers to feed himself. You might try offering some cut up pieces of sweet potato that he can feed himself. It's messy but so important to help him do that.

48


Baby Behavior in Childcare Settings



Funded by the David and Lucille Packard Foundation

Resources from the Project

- Videos**
 - Intended to be the primary message delivery method
 - Videos ranged from 3 to 6 minutes in length
 - Provider and parent videos
- Handouts**
 - Supplement, reinforce video messages
 - Provider and parent handouts
 - Single- or double-sided
- Posters**
 - For provider to display in childcare
 - Could use as talking point to spark conversation




Resources from the Project

Social media messages (weeks 1-6)

- 4-5 Text messages and 1 Facebook post
- Focused on practical application of concepts

Activities (weeks 7-10)

- Color wheel
- My morning routine maze
- It makes me happy when...
- "Look how I've grown" coloring book




Baby Behavior in Childcare Settings



Stay tuned for resources!!!!

Top Tips for Food Refusal from Providers

- Offer a variety of foods every day
- Modeling, acting excited about food
- Discourage negative comments at the table
- Cutting food into fun shapes
- Involve kids in food prep
- Family style meals
- Taster clubs
- Put good eaters next to selective eaters



For More Information

Dr. Jane Heinig
 UC Davis Human Lactation Center

- lactation@ucdavis.edu
- 530-754-5364
- Website: <http://lactation.ucdavis.edu>
- Blog: www.secretsofbabybehavior.com

Thank you!!

