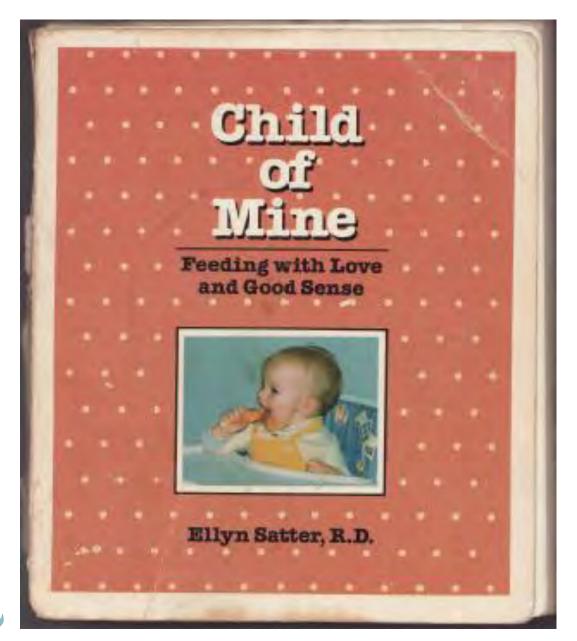
### Eating Competence and Feeding Dynamics: Putting joy into WIC nutrition education

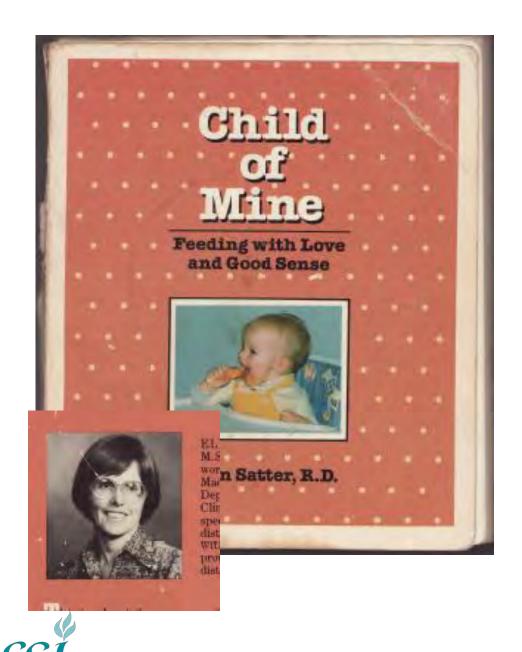
National WIC Association 2014
Nutrition Education and Breastfeeding Conference & Exhibits
September 8 – 10, 2014 Atlanta, GA

Ellyn Satter, MS, RDN, MSSW



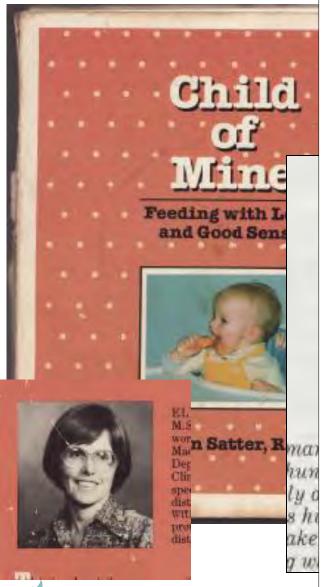












## SECRETS OF FEEDING A HEALTHY FAMILY

HOW TO EAT, HOW TO RAISE GOOD EATERS, HOW TO COOK



#### **ELLYN SATTER**

Author of Child of Mine: Feeding With Love and Good Sense



# Putting joy into WIC nutrition education

Satter Eating Competence Model (ecSatter)

- Research
- Application

Satter Feeding Dynamics Model – fdSatter

- Application
- Research (if we have time)



### ecSatter: Inclusive definition of effective eating attitudes and behaviors

- 1. Eating attitudes
- 2. Food acceptance skills
- 3. Internal regulation skills
- 4. Contextual skills

Satter, E. M. (2007). J Nutr Educ Behav, 39 (suppl), S142-S153.





# ecSatter tested using the validated ecSatter Inventory ecSI 2.0

#### **Scoring**

A = 3

O = 2

S = 1

R = 0

N = 0

EC = 32 and over



#### **ecSI 2.0**

Below are statements about your eating. Think about each one, then choose the best response for you.

	A = Always	O = Often	S = Sometimes		R = Rarely	N = Never		
				A	O	S	R	N
1.	I am relaxed about eat	ing.						
2.	I am comfortable abou	it eating enoug	gh.					
3.	I have regular meals.							
4.	I feel it is okay to eat t	food that I like	<b>e</b> .					
5.	I experiment with new like it.	food and lear	n to					
6.	If the situation demand by eating food I don't							
7.	I eat a wide variety of	foods.						
8.	I am comfortable with food and eating.	my enjoymer	nt of					
9.	I trust myself to eat en	ough for me.						
10.	I eat as much as I am I	nungry for.						
11.	I tune in to food and p eating.	ay attention to	)					
12.	I make time to eat.							
13.	I eat until I feel satisfi	ed.						
14.	I enjoy food and eating	g.						
15.	I consider what is goo eat.	d for me wher	ı I					
16.	I plan for feeding mys	elf.						

© Copyright 2011 by Ellyn Satter. May be used in educational and clinical settings for adult evaluation (≥18 years). For research usage, follow the approval process outlined here: <a href="http://ellynsatterinstitute.org/res/ecsi.php">http://ellynsatterinstitute.org/res/ecsi.php</a> For more information, see Journal of Nutrition Education & Behavior 2007 Volume 39 supplement.

### Eating attitudes

- 1. I am relaxed about eating.
- 2. I am comfortable about eating enough.
- 14. I enjoy food and eating.
  - 8. I am comfortable with my enjoyment of food and eating.
  - 4. I feel it is okay to eat food that I like.



#### Food acceptance

- 5. I experiment with new food and learn to like it.
- 6. If the situation demands, I can "make do" by eating food I don't much care for.
- 7. I eat a wide variety of foods.



### Food regulation

- 9. I trust myself to eat enough for me.
- 10. I eat as much as I am hungry for.
- 13. I eat until I feel satisfied.



### Contextual skills Timing, attention, food management

- 11. I tune in to food and pay attention to eating.
- 12. I make time to eat.
  - 3. I have regular meals.
- 15. I consider what is good for me when I eat.
- 16. I plan for feeding myself.



# Evidence-base of ecSatter

Barbara Lohse, PhD, RD, LDN Department of Nutritional Sciences The Pennsylvania State University

www.needscenter.org





### **Eating Competence:** Operational Definition

An intra-individual approach to eating and food-related attitudes and behaviors that entrains positive biopsychosocial outcomes

Satter E. J Nutr Educ Behav 2007, 39(Suppl 5):142–153.





# 23 Studies Sample Characteristics

Gender		
<ul><li>Male</li></ul>	1	
<ul><li>Female</li></ul>	9	
<ul><li>Both</li></ul>	13	
Participant Age		
<ul><li>College Student</li></ul>	5	
<ul><li>Elderly</li></ul>	1	
<ul><li>General</li></ul>	17	
Targeted Income		
<ul><li>Low-income</li></ul>	9	
<ul><li>All incomes</li><li>14</li></ul>		
Health Status		
<ul><li>No chronic dx</li></ul>	20	
<ul><li>Chronic dx</li></ul>	3	
101		

Children's Age		
<ul><li>Preschool</li></ul>	4	
■ Flementary Age	2	
Diementary rige	<b>L</b>	
<ul><li>General</li></ul>	17	
Location		
<ul><li>Pennsylvania</li></ul>	12	
<ul><li>Colorado</li></ul>	1	
<ul><li>New Mexico</li></ul>	1	
<ul><li>California</li></ul>	1	
<ul><li>Utah</li></ul>	1	
<ul><li>Ohio</li></ul>	1	
<ul><li>USA</li></ul>	5	
<ul><li>Spain</li></ul>	1	





#### Parameters Examined

- Physical Activity
- Cardiovascular Risk
- Dietary Intake
- Sleep Behavior
- BMI
- Parenting Behaviors

- Eating Behaviors
- Food Security
- Demographics
  - Age
  - Gender
- Intervention Outcomes





#### Painting a picture of Eating Competence: A science and an art



### Physical Activity



Eating competent persons more frequently see themselves as being physically active

EC persons have higher VO<sub>2</sub> max









Age, by itself, does not appear to be associated with eating competence.





#### Gender



Males: Higher EC scores than females. Do best on eating attitudes

Females: Have lower EC scores than males. Do best on <u>contextual</u>, worst on <u>eating</u> <u>attitudes</u>







Cross-sectional data: Having ≥8 hours sleep per night associated with greater EC







#### EC parents:

- Have reliable mealtime structure
- Show self-efficacy for serving fruits and vegetables
- Have more fruits and vegetables available in the home







EC has been associated with biomarkers of reduced cardiovascular disease risk, but not consistently. Additional research is needed.

Suggest providing the Satter Eating Competence Inventory in clinically related studies and including the survey in NHANES.







#### High EC BMI ≤ non-EC, EC have better body image

- Some studies: EC have lower BMI than non EC, self report or measured
- In other studies, EC persons have no higher BMI than non EC
- EC college students had higher weight satisfaction & lower desire to lose weight, regardless of BMI





### Diet Quality



#### EC show (+) nutrition/food management

- Less likely to be in Pre-Action Stages of Change
- Enjoy cooking more often
- Spend more time cooking
- Have stronger food resource management skills: shopping from a list, budgeting, reading labels





### Diet Quality



#### EC diet nutritionally superior to non-EC

- Low-income EC women consume more of most vitamins & minerals, have ↑ HEI scores (patterns reflect Dietary Guidelines), ate ↑ F&V and ↓ fat
- Low-income EC adults twice as likely to choose more healthy/low-fat foods as not-EC
- Higher EC college students see themselves as having better diet quality





#### Updated source of research:

http://www.needscenter.org/sattereating-competence-model-ecsatter/

The point of the ecSatter research?

You can achieve nutrition and wellness goals by focusing on Eating Competence.



#### EC: Positive & Relaxed Relationship

- Between yourself, your eating, and your weight
- Between you and food
- Between parent and child around food and feeding

Nutrition educator: "Enjoy food and integrate it into your life in a pleasurable way"



#### EC: Positive & Relaxed Relationship

Between you, the WIC nutrition educator, and your participants

Ohio: "We got started wondering, 'Why are we talking at people? Why are we handing out materials?' Addressing feeding and eating changed everything. In groups, moms talked with us and each other and helped each other out."

Maine about EC meals lesson: They felt good about how they were doing. They hadn't been getting much recognition or support.

#### Eating: What do people [truly] want?

- To eat food they enjoy
- To eat enough
- To enjoy eating with other people
- To feel good about it
- To feel positive and effective with respect to feeding their children

Supported by biopsychosocial drives



#### Biopsychosocial drives

- Hunger and the drive to survive
- Appetite and the need for pleasure
- Social reward of sharing food
- Biological propensity to maintain preferred and stable body weight
- The drive to nurture

Satter, E. M. (2007). J Nutr Educ Behav, 39 (suppl), S142-S153.



#### ecSatter practices nutritional judo

Permission: Gratifies desires rather than trying to resist them

Discipline: Gives a positive and supportive context for gratifying desires



#### **GEM NO. 447**

#### **Hierarchy of Food Needs**

Ellyn Satter, MS, RD, LCSW, BCD\* Ellyn Satter Associates, Madison, Wisconsin

(J Nutr Educ Behav. 2007;39:S187-S188)

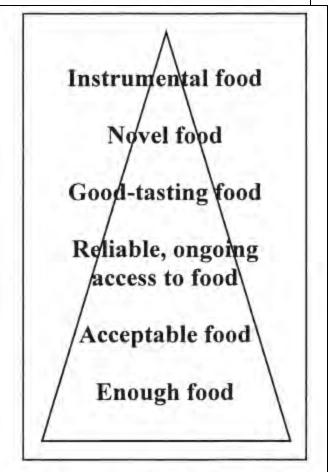
\*Corresponding author: Ellyn Satter, MS, RD, LCSW, BCD, Ellyn Satter Associates, 4226

#### APPLYING MASLOW TO SATTER

As illustrated in the Figure, Satte Hierarchy of Food Needs appl Maslow's principles to *food mana ment* drives or motivators and rar them in order of basic importance



Satter EM. *J Nutr Educ Behav*. 2007;39:S187-188.







### Applying ecSatter



# Consider administering ecSI before session

- Guide education
- Focus discussion on eating
- Increase participant, educator satisfaction

#### **ecSI 2.0**

Below are statements about your eating. Think about each one, then choose the best response for you.

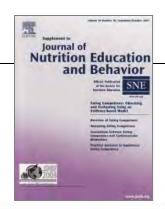
A = Always	O = Often	S = Sometimes	R = Rarely	N = Nev	er	
		A	0	s	R	N
I am relaxed about ea	ating.					
2. I am comfortable abo	out eating enou	gh. 🗆				
3. I have regular meals.						
4. I feel it is okay to eat	food that I like	e. 🗆				
5. I experiment with ne- like it.	w food and lear	rn to				
<ol><li>If the situation demands by eating food I don'</li></ol>						
7. I eat a wide variety o	f foods.					
I am comfortable wit food and eating.	h my enjoymer	nt of				
9. I trust myself to eat e	nough for me.					
10. I eat as much as I am	hungry for.					
11. I tune in to food and eating.	pay attention to	D				
12. I make time to eat.						
13. I eat until I feel satisf	fied.					
14. I enjoy food and eatin	ng.					
15. I consider what is goe eat.	od for me when	n I				
16. I plan for feeding my	rself.					

<sup>©</sup> Copyright 2011 by Ellyn Satter. May be used in educational and clinical settings for adult evaluation (≥18 years). For research usage, follow the approval process outlined here: <a href="http://ellynsatterinstitute.org/res/ecsi.php">http://ellynsatterinstitute.org/res/ecsi.php</a> For more information, see Journal of Nutrition Education & Behavior 2007 Volume 39 supplement.



#### **GEM NO. 448**

## Eating Competence: Nutrition Education with the Satter Eating Competence Model



Ellyn Satter, MS, RD, LCSW, BCD\* Ellyn Satter Associates, Madison, Wisconsin

(1 Nutr Educ Behav. 2007:39:S189-S194)

\*Corresponding author: Ellyn Satter, MS, RD, LCSW, BCD, Ellyn Satter Associates, 4226 Mandan Crescent, Madison, WI 53711; Phone: (608) 271-7976; Fax: (866) 724-1631; E-mail: info@ellynsatter.com doi: 10.1016/j.jneb.2007.04.177

tion: education, anticipatory guidance, and early problem solving. The level of the intervention is dictated not by the level of complexity of the problem, but by the level of services that can be delivered.

#### **EATING ATTITUDES**

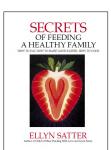
The primary attitudinal goal with ec-Satter is to establish and maintain positive and flexible attitudes about But far more importantly, your regard will contribute toward participants' sense of effectiveness and self-regard. Seeing themselves as being capable can help set them free to be creative and resourceful in finding their own solutions.

#### Enhance the Dignity and Importance of Eating

Subjective observations indicate that

Satter EM. Part 1, "How to Eat," in Secrets of Feeding a Healthy Family





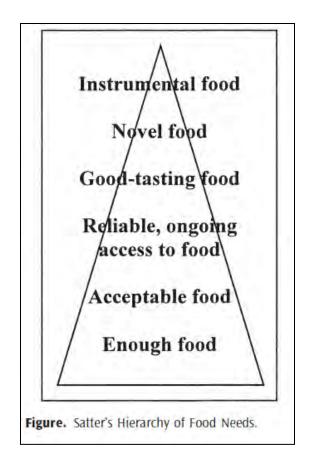
# ecSI: Contextual skills Timing, attention, food management

- 11. I tune in to food and pay attention to eating.
- 12. I make time to eat.
  - 3. I have regular meals.
- 15. I consider what is good for me when I eat.
- 16. I plan for feeding myself.



http://bit.ly/1ciOGSu

- A shared value
- Get the meal habit





- 1. Don't have meals and don't want them ("I know I should, but . . .")
- 2. Don't have meals and want them
- 3. Have meals but don't eat "right"
- 4. Plan and have regular meals



 Don't have meals? Don't want them? Keep in mind that we aren't talking about a fancy meal where you cook everything. We are talking about structure. A meal is when you all sit down together and share the same food.



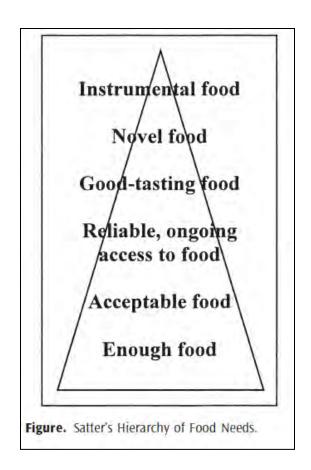
1. Don't mind t where about togeth 2. Get the meal habit. To get started with family meals, change the *how* first. Think about the *what* later—lots later. Make meals your idea, at more or less set times. Don't just offer meals when somebody wants something to eat. Eat what you are eating now, just have it at regular meal- and snack-times. Make meals you enjoy, with food that fills you up. That will let you forget about food until the next time to eat.<sup>2</sup>

Use snacks to support mealtime. Children and grown-ups need to come to meals hungry and ready to eat, but not so hungry they can't wait. Have snacks at set times about halfway between meals. Don't let family members have food or drinks between times—except for water.

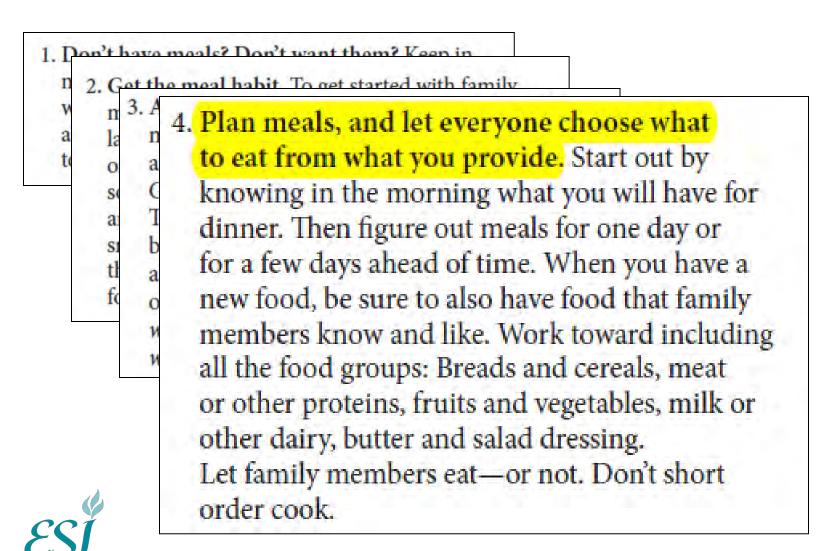


- 1. Don't have meals? Don't want them? Keep in
  - where 2. **Get the meal habit.** To get started with family meals, change the *how* first. Think about the *what* 
    - 3. Add on, don't take away. Once you have the meal habit, you may get tired of the same foods all the time. Add on to what you are eating now. Go slowly, and make only one change at a time. To calm down family members who get upset by anything new, tell them they don't have to eat anything they don't want to. Maintain a division of responsibility. You do the what, when and where of feeding, they do the how much and whether of eating.3









- 1. Don't have meals and don't want them ("I know I should, but . . .")
- 2. Don't have meals and want them
- 3. Have meals but don't eat "right"
- 4. Plan and have regular meals



## Nutrition and food selection Wait to be asked (you *will* be asked)



#### ALWAYS BLESS THE FOOD

- Show nutritional value of their food
- Do menu planning with their food
- Cook with their food
- Teach food safety

"Getting caught in the rules is the antithesis of being a competent eater."

Satter EM. Chapter 13, "Choosing food," in Secrets of Feeding a Healthy Family

• Emphasize realistic strategies for getting fruits and vegetables



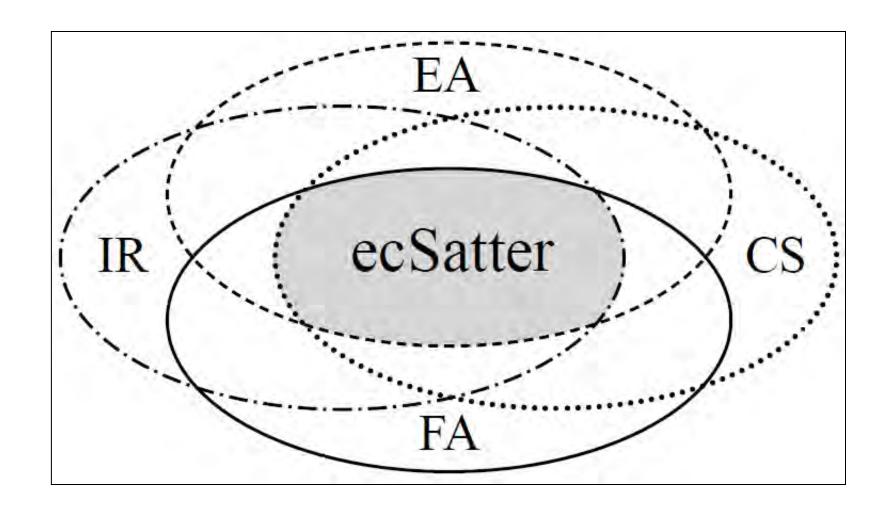
## Avoid negativity

Messages may decode as "don't eat so much, don't eat the food you like"

- Teaching what to eat
- Teaching *how much* to eat
- Using indirect meals of control, e.g. "eating mindfully"

Ask: "why am I doing this?" If it is to "get" them to eat certain amounts or types of food, it is conventional approach







### ecSatter practices nutritional judo

Permission: Gratifies desires rather than trying to resist them

Discipline: Gives a positive and supportive context for gratifying desires





#### The Joy of Eating: Being a Competent Eater

Eating Competence is being positive, comfortable, and flexible with eating as well as matter-of-fact and reliable about getting enough to eat of enjoyable food. Even though they don't worry about what and how much to eat, competent eaters do better nutritionally, are more active, sleep better, and have better lab tests. They are more self-aware and self-accepting, not only with food, but in all ways. To be a competent eater, be relaxed, self-trusting, and joyful about eating, and take good care of yourself with food.

**Feed yourself faithfully.** Reassure yourself you will be fed. Structure is the supportive framework for taking care of yourself with food.

- Take time to eat.
- Develop a meal and snack routine that works for you.
- Include foods you truly enjoy. Throw away your lists of food-to-eat and food-to-avoid.
- Make eating times pleasant. Relax. Pay attention. Take your time.
- Experiment with new food when you get ready; take it slowly.

**Give yourself permission to eat.** Reassure yourself: "It's all right to eat. I just need to sit down and enjoy."

- Eat what you want. Your body needs variety and your soul needs pleasure.
- Eat as much as you want. Your body knows how much it needs to eat.
- Go to meals and snacks hungry (not starved) and eat until you truly feel like stopping.
- Pay attention to your food. Taste it! Enjoy it!
- Eat it if it tastes good; don't if doesn't!



The point of the ecSatter research?

You can achieve nutrition and wellness goals by focusing on Eating Competence.



# Use EC education to Address WIC Risk Factors

- Poor diet
- Low hemoglobin
- Overweight
- Underweight



# Will EC send eating out of control? Cause 1 weight?

#### The research says no

- EC people do better nutritionally, are more active, sleep better, and have better medical and lab tests
- Emerging evidence says they also do better with feeding their children



# Instead, being EC creates order and sustainability

#### Supports fundamental processes

- Not having to eat certain foods turns them into enjoyable foods to eat for pleasure.
- Being able to eat "forbidden" foods turns them into ordinary foods to eat in ordinary ways
- Large portion sizes don't dictate how much to eat; getting full does



# fdSatter: The Satter Feeding Dynamics Model (fdSatter)



#### fdSatter

Build children's eating competence by following Satter's Division of Responsibility in Feeding.

- Eating attitudes
- Food regulation and growth
- Food acceptance
- Mealtime behavior



#### Best practice childhood feeding model

- Academy of Nutrition and Dietetics
- American Academy of Pediatrics
- USDA related core messages
  - WIC: Cert inappropriate feeding practices
  - Child Care Food Program
  - Head Start



#### FD: Positive & Relaxed Relationship

- Between you and the parent around feeding the child
- Between parent and child around food and feeding



# Satter Division of Responsibility in Feeding (sDOR)

#### Infant

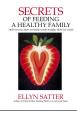
• Parent: What

• Child: *How much* 

Satter EM. The feeding relationship, JADA 86:352, 1986

Satter EM. Part 2, "The Feeding Relationship" in *Secrets of Feeding a Healthy Family* 







# Satter Division of Responsibility in Feeding (sDOR)

#### Transitional child

- Parent/feeding
  - Still and always responsible for what
  - Becoming responsible for when and where
- Child/eating
  - How much
  - Whether

Satter EM. The feeding relationship, JADA 86:352, 1986

Satter EM. Part 2, "The Feeding Relationship" in *Secrets of Feeding a Healthy Family* 



# Satter Division of Responsibility in Feeding (sDOR)

#### Toddler through adolescent

- Parent: What, when, where of feeding
- Child: *How much, whether* of *eating*

Satter EM. The feeding relationship, JADA 86:352, 1986

Satter EM. Part 2, "The Feeding Relationship" in *Secrets of Feeding a Healthy Family* 



#### sDOR

#### Parents take leadership with feeding

- Choose and prepare <del>healthy</del> food
- Have regular meals and snacks
- Make eating time pleasant
- Provide mastery expectations
- Accept and support children's growth



#### **sDOR**

#### Parents give children autonomy with eating

- Children will eat
- They know how much to eat
- They will eat a variety
- They will grow predictably
- They will mature with eating



## Teach the division of responsibility (



- Emphasize structure
  - Family meals
  - Structured, sit-down snacks
- Teach the division of responsibility
  - Parents do the what, when and where of feeding
  - Children do the how much and whether of eating
- Adjust parents' expectations
  - Positive eating attitudes and behaviors
  - Not eating certain foods and/or certain amounts
- Repeat

#### Curriculum





#### Satter Division of Responsibility in Feeding<sup>i</sup> Parent-centered, Interactive Curriculum:

Using (mostly free) resources from http://ellynsatterinstitute.org/

#### TITLE THAT SPARKS PARENT INTEREST

Division of responsibility

Emphasize meals → Mastering family meals

Conversation starter: How is feeding going?

Conversation starter: Waiting room video

How are things going with Mastering Family Meals, sDOR

Kids won't eat → Sit-down snacks

1

How are things going with Mastering Family Meals, sDOR

Kids won't behave → Avoid pressure

1

How are things going with Mastering Family Meals, sDOR

Kids still won't eat → Raise a healthy child who is a joy to feed

How are things going with Mastering Family Meals, sDOR
Stage-related feeding questions → Child feeding ages and stages

How are things going with Mastering Family Meals, sDOR Feeding problems → Childhood feeding problems

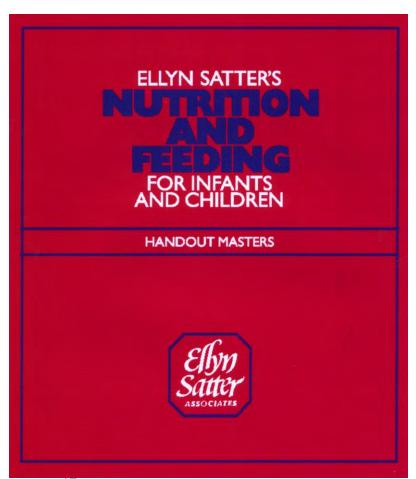
How are things going with Mastering Family Meals, sDOR Problems with growth → Children's eating and growth

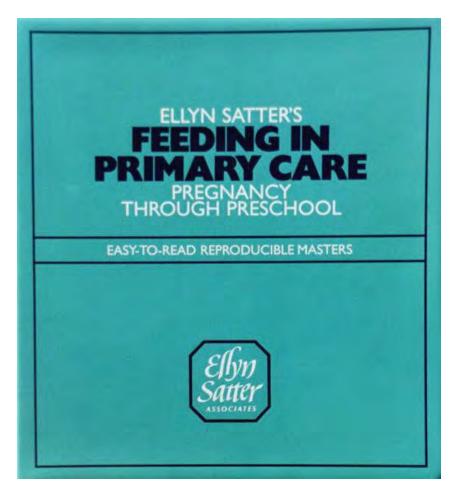
Repeat Repeat

<sup>&</sup>lt;sup>1</sup> To be confident of your understanding of the division of responsibility in feeding as well as to apply and do problem solving with it, consider completing the Child of Mine Continuing Education Program.

Consider Feeding with Love and Good Sense, Solving Childhood Feeding Problems, Raising a Healthy Child who is a Joy to Feed, or Your Picky Eater. It could also be Preventing Child Obesity, but that title doesn't "sell" well.

## Handout packages

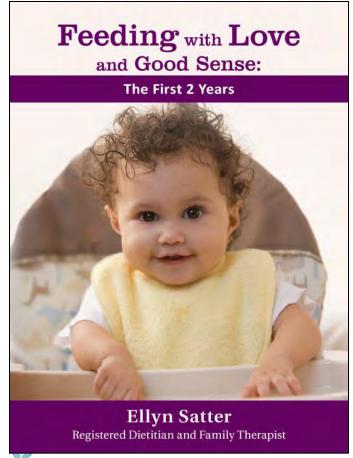


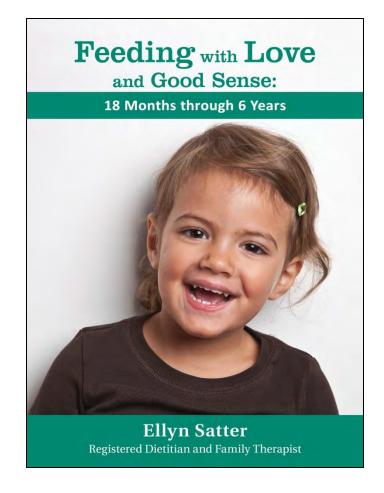




## Training and collaboration

#### Booklets







## Observing sDOR

Ellyn Satter's
Feeding with Love
and Good Sense II
Parent Teaching
Package

# FLLYN SATTER'S FEEDING WITH LOVE AND GOOD SENSE II PARENT TEACHING PACKAGE





DVD Ellyn Satter's Feeding with Love and Good Sense II DVD (Group)

CD #1 PowerPoint Parent Lecture • CD #2 Parent Teacher's Guide





## Most parents do not follow sDOR

Ellyn Satter's Feeding with Love and Good Sen The Preschooler

≥85%\* of parents

pressure children to

eat

High %of children

have feeding

problems









\*Orrell-Valente 2007; Sherry 2004





http://youtu.be/vymlV7Pi5yM





http://youtu.be/Ngl36x-wG9s





http://youtu.be/a4Eh10X2TQk

## Agendas don't work

- What
- How much



Children who get the message they are too fat feel flawed in every way—not smart, not physically capable, and not worthy.

They tend to diet, gain weight, and weigh more than they would otherwise.







## Agendas don't work

- What
- How much

To what extent do feeding distortions reflect parents' own deficits in eating competence?



### Raise a healthy child who is a joy to feed

#### Outcome

- Focus on how the child feels and behaves around food
- *Not* on what and how much the child eats.

http://bit.ly/18F4fbx



## Use sDOR to Address WIC Risk Factors

- Poor diet
- Low hemoglobin
- Overweight
- Underweight



## Basis for fdSatter, sDOR

- Biopsychosocial principles: Energy regulation, growth, genetics, child development
- Clinical experience:
  - Observation and history
  - What goes wrong, what works to correct it, what doesn't
- Research manipulating feeding: Pressure doesn't work: restriction doesn't work
  - Food acceptance
  - Food regulation



# Testing Satter Feeding Dynamics Inventory fdSI

Barbara Lohse, PhD, RD, LDN Department of Nutritional Sciences The Pennsylvania State University

www.needscenter.org





## Satter Feeding Dynamics Inventory (fdSI)

Measures the degree to which . . .

- Parent takes leadership with feeding
- Parent gives child autonomy with eating



# Evolution of fdSI Items

Lohse, Satter & Arnold Child Obesity. 2014; 10:153-168

## Cognitive interviewing

Arriving at a shared understanding of meaning

- Respondents score an item
- Explain responses, discuss thoughts, feelings and ideas, suggest other wording
- Consonant items retained
- Dissonant items revised or discarded



## Phases of fdSI Item Development

Childhood Obesity 2014;10(2):153-168.

#### **Foundational Phase**

#### Oct-Dec 2009

- 38 items
  - 20 Parent Leadership18 Child Autonomy
- Cognitive interviews (n=4)
   with low-income women
- Revised response options

#### Jan-Apr 2010

- Cognitive interviews (n=9)
   with low-income women
- Survey completion

Questions 1-19 (n=78)

Questions 20-38 (n=85)

Removed 13 items
 Revised 10 items

Added 2 items

#### **Refinement Phase**

#### May-Sept 2010

- 27 items
- 14 Parent Leadership13 Child Autonomy
- Cognitive interviews (n=23)
   with low-income women
- Removed 14 items Revised 6 items

Added 2 items

#### **Transitional Phase**

#### Oct 2010-Jan 2011

- 27 items
  - 14 Parent Leadership13 Child Autonomy
- Cognitive interviews (n=20)
   with middle-income women
- Survey Completion (n=132)
- Removed 14 items
   Revised 9 items
   Added 3 items

#### **Assurance Phase**

#### March 2012

- 16 items
  - 8 Parent Leadership
    8 Child Autonomy
- Cognitive interviews (n=5)
  with middle-income women
  Cognitive interviews (n=9)
  with low-income women
- Removed 1 item
   Revised 2 items

#### **Launching Phase**

#### May-June 2012

- 15 items
  - 7 Parent Leadership 8 Child Autonomy
- Cognitive interviews (n=10)
   with low-income women
- Very few discrepancies
   No changes

#### Derived from Satter's Work Foundational Phase 38 items Revisions- 10 items (Tested in Refinement Phase) . I offer my child meals at about the same times everyday. . In between meal and snack time, I let my child have drinks other than water Removed 13 items (Some examples are juice, milk, soda, Kool-Aid or sweet tea). · I want my child to eat everything on his/her plate. · I want my child to taste everything that is prepared for a meal. . To get my child to eat healthy foods, I reward, bribe, or do other things. Added 2 items Between meals, I let my child eat whenever s/he feels like eating. . I make something special for my child when s/he won't eat. • If I think my child hasn't had enough, I try to get him or her to eat a few more bites. . If I think my child has eaten enough, I try to get him or her to stop. · Between meals, I offer my child snacks at about the same times every day. 27 items Refinement Phase Revisions - 7 items (Tested in Transitional Phase) Removed 2 items · In between meal and snack time, I let my child have drinks other than water (Some examples of these between-times drinks are juice, milk, soda, Kool-Aid or sweet tea). · I try to make my child taste everything that is prepared for a meal. Added 2 items · I eat meals with my child when I am home at mealtime. • To get my child to eat healthy foods, I do things such as say the food tastes good or is healthy, remind, insist, or give a reward. · I decide what foods to buy. · I feel my child is too picky. Removed 14 items · Between meals I offer my child at about the same times everyday. I feel good about my child's eating. · I worry that my child eats too much. · Between meals I let my child eat whenever s/he feels like eating. · I worry that my child is too fat. Transitional Phase · I enjoy family mealtimes. · I worry that my child is too thin. · I know when my child eats. Revisions - 9 items (Tested in Assurance Phase) · I worry that my child eats too little. · I try to make my child eat everything on his/her plate. I know what my child eats. . Het my child eat whenever s/he feels like eating. · When I am with my child, I decide what my child is offered to eat. · I have to do something to get my child to eat new foods. I feel my child's weights are good. · When I am home at mealtimes, I sit down and eat with my child. I feel that family meals are important. · I decide what foods to buy based on what my child eats. I feel my child is too picky. · I let my child eat until s/he gets full. · I feel my child behaves well at mealtime. · I am comfortable with providing meals for my family. Added 3 items • I let my child have drinks (other than water) whenever s/he wants them. I struggle to get my child to eat. · We have leftovers after meals. I let my child feed him/herself. • When I am at home I offer my child snacks at about the same time. 16 items Assurance Phase Removed 1 item Revisions- 2 items (Tested in Launching Phase) · I have to do something to get my child to eat new foods · I let my child eat until s/he stops eating and doesn't want more. · We have food leftover after meals. 15 items Launching Phase My family has meals at about the same times every day.<sup>1</sup> · I decide what foods to buy based on what my child eats. \* • I try to make my child taste everything that is prepared for a meal.<sup>2</sup> I let my child feed him/herself. • I try to make my child eat everything on his or her plate. \* • I let my child eat until s/he stops eating and doesn't want more. · I let my child eat whenever s/he feels like eating. \* I am comfortable with providing meals for my family. • If I think my child hasn't had enough, I try to get him/her to eat a few I make something special for my child when s/he won't eat.2 \* more bites.2 \* • I let my child have drinks (other than water) whenever s/he wants them. \* • When I am home at mealtimes, I sit down and eat with my child. We have food leftover after meals. · I struggle to get my child to eat. \* • When I am home, I offer my child snacks at about the same times. <sup>1</sup> Item was carried through from Foundational Phase \* Item is reverse-scored. <sup>2</sup> Item was carried through from Refinement Phase

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Parent Leadership Items ineffective to pin down gatekeeper role; didn't pin down parent attitudes about meals.	Rationale
I know when/what my child eats.	Non-discriminating. Most answer Always.
When I am with my child, I decide what my child is offered to eat.	Opened up considerations of other people and places in the responses.
I enjoy family mealtimes.	Most answered <i>Always</i> , then complained of child's negative mealtime behavior.
I feel that family meals are important.	Most answer Always.



Child Autonomy Items were too indirect to measure parent interference with child autonomy.	Rationale
I worry that my child: eats too much is too fat is too thin eats too little / eats too much	Non-discriminating. Most answer <i>Never</i> .
I feel my child's weights are good	Non-discriminating. Most answer <i>Always</i>
I feel my child is too picky.	Non-discriminating. Most answer <i>Sometimes</i> .
I feel good about my child's eating.	Non-discriminating; Parents thought in terms of what child eats. Tested food acceptance, not feeding.



- My family has meals at about the same times every day.
- I try to make my child taste everything that is prepared for a meal.\*
- I try to make my child eat everything on his/her plate.\*
- I let my child eat whenever s/he feels like eating.\*
- If I think my child hasn't had enough, I try to get him/her to eat a few more bites.\*

- When I am home at mealtimes, I sit down and eat with my child.
- I struggle to get my child to eat.\*
- When I am home, I offer my child snacks at about the same times.
- I decide what foods to buy based on what my child eats.\*
- I let my child feed him/herself.

- I let my child eat until s/he stops eating and doesn't want more.
- I am comfortable with providing meals for my family.
- I make something special for my child when s/he won't eat.\*
- I let my child have drinks (other than water) whenever s/he wants them.\*
- We have food leftover after meals.

#### Structure: When

My family has meals at about the same times every day.

I let my child eat whenever s/he feels like eating. \*

When I am home, I offer my child snacks at about the same times.

#### **Structure: What**

I make something special for my child when s/he won't eat.\*

I let my child have drinks (other than water) whenever s/he wants them.\*

I decide what foods to buy based on what my child eats.\*

#### Autonomy: How much & whether

I try to make my child eat everything on her/his plate. \*

If I think my child hasn't had enough, I try to get him or her to eat a few more bites.\*

I let my child feed him/herself.

#### **Overall Social Climate**

I struggle to get my child to eat.\*

I am comfortable with providing meals for my family

When I am home at mealtimes, I sit down and eat with my child.



### What comes next?

- Validating fdSI with video
- Correlating with
  - Parents' nutritional status
  - Parents' eating competence



## fdSI validation, then usage

#### Guide education

- Focus discussion on feeding
- Increase parent, educator satisfaction
- Support data-gathering. Do high fdSI scores correlate with better outcomes?
- Children's consistent growth?
- Children's nutritional status?



# While you wait: Use ecSI right now

Achieve nutrition and wellness goals by focusing on Eating Competence

- Parents need to know how to feed themselves to feed their children
- Parents who feed themselves well feed their children well



## When the joy goes out of eating, nutrition suffers

Ellyn Satter, Secrets of Feeding a Healthy Family

