

SATTER FEEDING DYNAMICS MODEL OF CHILD OVERWEIGHT¹

EVIDENCE BASIS

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Many of today's children are getting too heavy. This is clearly indicated by population-wide surveys showing increasing percentages of children whose BMI plots in excess of diagnostic cutoff percentiles. Those trends indicate that environmental influences are disrupting children's ability to regulate energy balance and grow consistently.

1. *Perspective*: The feeding dynamics model of child overweight is competency-based. It is grounded on well-supported evidence that children have a powerful and resilient ability to maintain energy balance and grow in a predictable fashion, *provided* the feeding relationship is appropriate.

Evidence: Satter, Ellyn, *Your Child's Weight: Helping Without Harming*
Chapter 2: "Feed and parent in the best way" 16 references
Chapter 10: "Understand your child's growth." 14 references
Appendix C: "Children and food regulation, the research." 15 references

Satter, Ellyn, *Child of Mine; Feeding with Love and Good Sense*
Chapter 2: "Children know how to eat and grow" 17 references

2. *Definition*: The feeding dynamics definition of child overweight is not high weight *per se*, but weight *acceleration*: Abnormal upward weight divergence for the *individual* child. The child is compared only to *himself*, not to statistical cutoff points established for the purpose of population-wide evaluation.

Evidence: Satter, Ellyn, *Your Child's Weight: Helping Without Harming*
Chapter 10: "Understand your child's growth." 14 references

3. *Exploring causation*: The feeding dynamics model considers parenting, the feeding relationship and child development. In identifying causes of weight acceleration, the feeding dynamics question is:
 - a. *Not*, how do we get this child to lose weight?
 - b. *But rather*, what is happening in this child's environment to undermine his considerable ability to regulate energy balance and grow predictably?

¹ For more information, see Ellyn Satter's *Your Child's Weight: Helping Without Harming*, Kelcy Press, Madison, WI. 2005. For references and further information, see www.ellynsatter.com

Evidence: As evidenced by standard growth charts, it is normal for children to grow in a predictable fashion. If they do not, something is the matter. That *something* can be identified and remedied.

4. *Typical causes:* Clinically and from an examination of the research literature, it emerges that there are four typical causes, alone or in combination, for weight acceleration:
 - a. Misinterpretation of normal growth.
 - b. Restrained feeding and circumstances that mimic restrained feeding.
 - c. Poor feeding practices.
 - d. Stress.

Evidence: “Why do children gain too much weight?”

[http://www.ellynsatter.com/\\$spindb.query.memo.kelcyview.51.8](http://www.ellynsatter.com/$spindb.query.memo.kelcyview.51.8)

5. *Prevention:* Preventing weight acceleration mandates supporting normal growth and development *and* avoiding disruptive influences by:
 - a. Optimizing feeding from birth.
 - b. Maintaining a division of responsibility in feeding throughout the growing-up years.
 - c. Maintaining a division of responsibility in *activity* throughout the growing-up years.
 - d. Supporting parents in accepting consistent weight. This intervention is particularly urgent for the child whose longitudinal pattern of weight, weight-for-height or BMI is at or above levels defined as “overweight” or “at risk of overweight.”

Evidence:

Satter, Ellyn, *Your Child’s Weight: Helping Without Harming*

Chapter 2: “Feed and parent in the best way” 16 references

Chapter 10: “Understand your child’s growth.” 14 references

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Chapter 2: “Children know how to eat and grow”

6. *Treatment:* Treatment of child overweight from a feeding dynamics perspective involves:
 - a. Careful assessment *of the individual child* to identify causes of weight acceleration.
 - b. Constructing a treatment plan to correct those causes, focusing on optimizing feeding and optimizing activity.
 - c. Accepting the principle that the child’s weight must be allowed to establish its own level in response to optimizing eating and activity.
 - d. Follow-up with parents to establish a division of responsibility in feeding, with particular attention to discontinuing restrained feeding.

- e. Permitting the child's own capability with energy and growth regulation to neutralize weight acceleration. Depending on the child's metabolic patterns, this weight trajectory may consistently follow or parallel² a particular growth percentile or level off to rejoin a lower percentile.
- f. Supporting parents during their transition to the *trust* from the *control* approach to feeding.

EVIDENCE THAT THE FEEDING DYNAMICS APPROACH “WORKS”

Generally people asking for “evidence” that the feeding dynamics model “works” are thinking in conventional terms. They want figures illustrating that positive feeding dynamics produces weight loss or maintenance of weight below a certain percentile on BMI charts.

Defined weight outcome is absolutely contradictory to the feeding dynamics model. Instead, the feeding dynamics model “works” if it stabilizes growth. That is, it produces consistent, constitutionally based growth of the *individual* child. From the standpoint of prevention, evidence that the feeding dynamics model works is that a child's weight trajectory follows or parallels a particular growth percentile. If a child's weight has been accelerating, evidence of positive outcome is neutralization of that weight acceleration.

Evidence that feeding dynamics used in both prevention and treatment stabilizes growth has been accumulated clinically. Research evidence exists in the negative: Children with early feeding problems and those who fail to achieve developmental tasks with eating tend to have distorted growth.

RESEARCH HYPOTHESES

The step that remains is didactic testing, both epidemiological and in controlled clinical interventions. The hypotheses for testing would be:

- Optimum feeding supports consistent growth, defined as tracking along the child's own growth percentile.
- Distorted feeding correlates with dysregulated growth: Either accelerating above or faltering below the child's own growth percentile
- Optimizing feeding corrects growth dysregulation

To do that testing, we require simple tools for assessing feeding dynamics that have been tested for reliability and validity. Two questionnaires, *Feeding Your Baby* and *Feeding Your Child*, are in the development and testing process.

Assessing weight trajectory: It is also essential to note that weight dysregulation—and restoration of optimum growth—can only be assessed by tracking the child's longitudinal growth patterns. Arbitrary cutoff points and single growth points taken out of context are useless for testing the feeding dynamics approach.

² If the weight is above the 97th percentile, growth stability can be assessed by converting weight or BMI to Z-scores. A consistently growing child will have a consistent Z-score.