Feeding & Eating Disorders

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Disclosures

I do not have a relationship or affiliation with a commercial interest or organization that would create a conflict or potential conflict of interest.

DSM V – Types of Eating Disorders

- Anorexia Nervosa
- Bulimia Nervosa
- *Binge Eating Disorder**
- *Avoidant/Restrictive Food Intake Disorder (ARFID)**
- Pica
- Rumination
- Other Specified Eating Disorder

Anorexia Nervosa

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Diagnostic Criteria

A. Restriction of energy intake relative to requirements, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health. Significantly low weight is defined as a weight that is less than minimally normal or, for children and adolescents, less than minimally expected.

B. Intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight.

C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight.

Specify whether:

Restricting type: During the last three months, the individual has not engaged in recurrent episodes of binge eating or purging behavior (i.e. self-induced vomiting, or the misuse of laxatives, diuretics, or enemas). This subtype describes presentations in which weight loss is accomplished primarily through dieting, fasting and/or excessive exercise.

Binge-eating/purging type: During the last three months the individual has engaged in recurrent episodes of binge eating or purging behavior (i.e. self-induced vomiting, or the misuse of laxatives, diuretics, or enemas).

Specify current severity:

Mild: BMI more than 17

Moderate: BMI 16- 16.99

Severe: BMI 15-15.99

Extreme: BMI less than 15

Nature of Anorexia

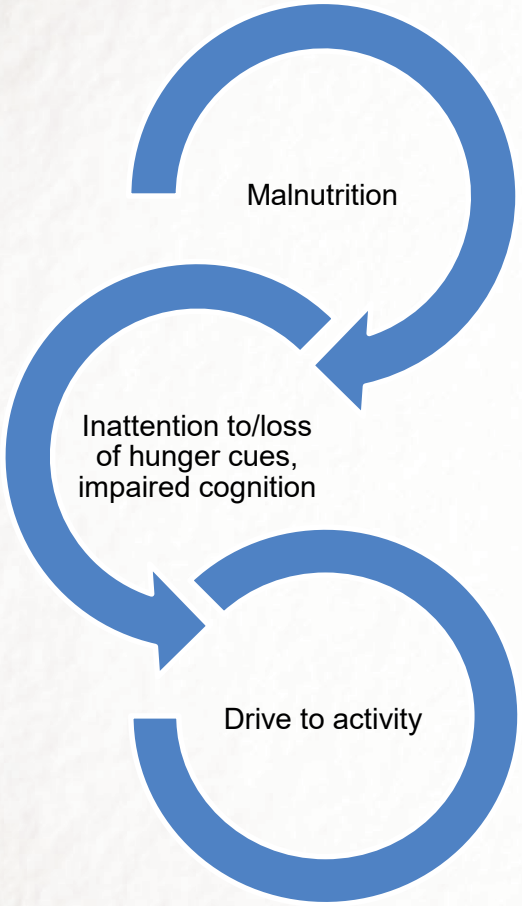
- This is a psychiatric disorder with high medical morbidity, psychological co-morbidity, and the highest mortality rate of all psychological conditions.

- It is defined by disruptions and pathology in behavior, cognition, and emotion. This leads to starvation which alters body composition and functioning.

- Hospitalizations for eating disorders has increased most sharply for children younger than 12 (+119%)

Agency for Healthcare Research and Quality (2009). Eating disorders sending more Americans to the hospital. *AHRQ News and Numbers.* www. Ahrq.gov/news/nn/nn040109

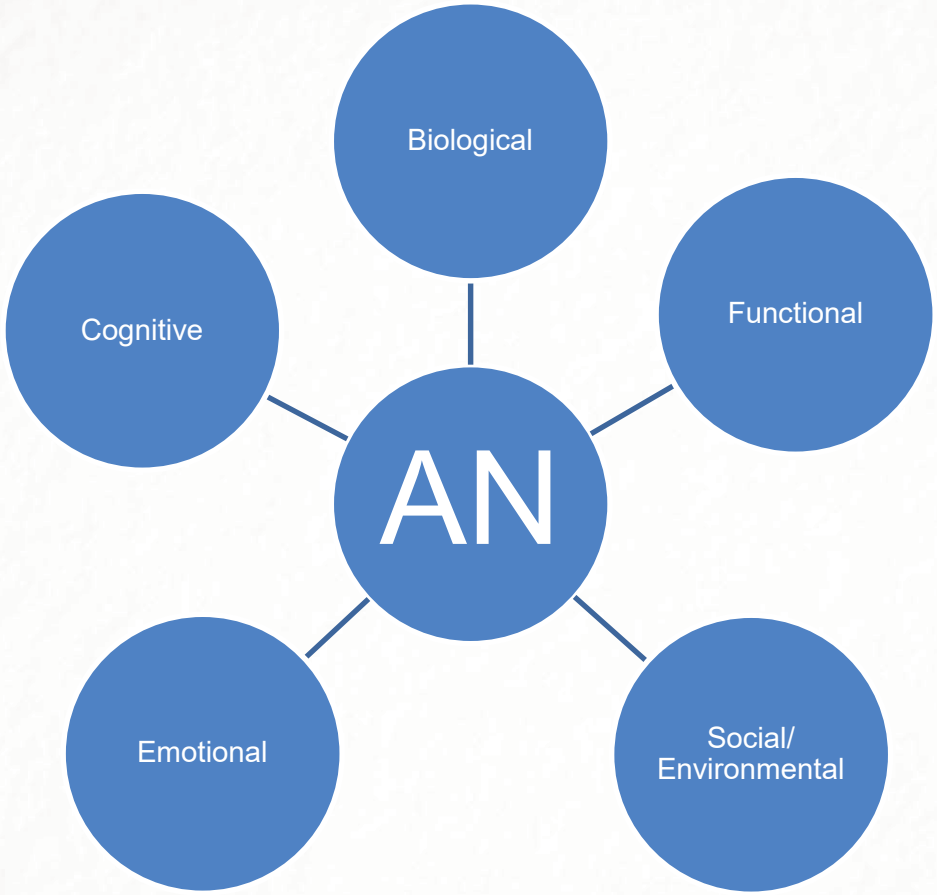
Biological and Physiological Concerns



Medical Exam Findings

- Sinus bradycardia, cardiac arrhythmias
- Orthostatic changes in pulse (>20) or blood pressure (>10 mm Hg)
- Hypothermia
- Cachexia
- Cardiac murmur (1:3 have mitral valve prolapse)
- Dull thinning hair
- Bruising over spine
- Delayed or interrupted puberty
- Atrophic breasts or vaginitis
- Edema of extremities
- Poor perfusion
- Flat or anxious affect

Anorexia – Multifactorial Model



The interaction of these variables leave a child feeling ineffective & vulnerable.

Risk Factors - Multifactorial

- Strong genetic component (estimated heritability 50%) so examining family history for obesity, anorexia, and other eating disorders is important
- Genetic tendency appears to be “activated” at puberty. Girls who feel most negatively about pubertal changes are most at risk (Attie & Brooks-Gunn, 1989).
- Intrapersonal risk factors that are most predictive include: behavioral and cognitive rigidity, perfectionism, harm reduction, response to reward, low novelty seeking.
- fMRI research demonstrates higher temporal and medial PFC activation in those with AN (both active and recovered) and decreased activation of insula and striatum when exposed to sucrose

Risk Factors – Contextual

- Family preoccupation with weight
- Illness, especially GI conditions, like celiac disease, IBD, functional abdominal pain, & T1 diabetes.
- Difficulty discussing problems with parents
- Teasing by peers
- Athletes and performers

Screening (SCOFF test)

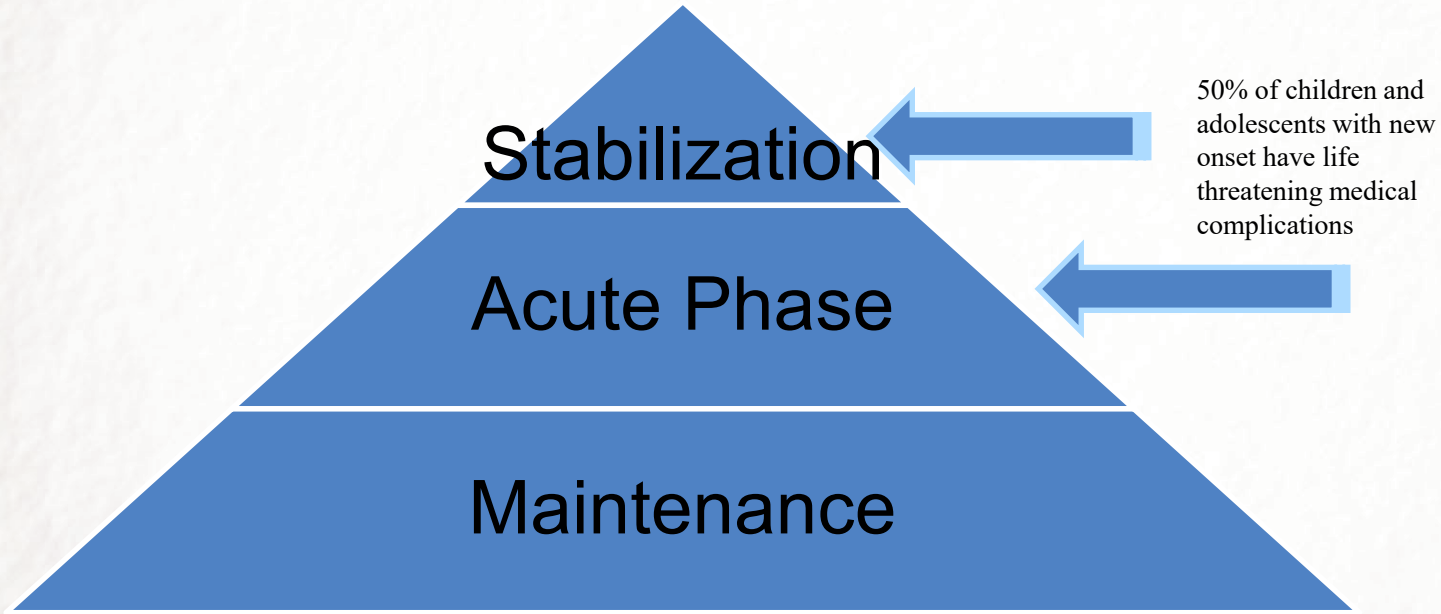
1. Do you make yourself **S**ick because you feel uncomfortably full?
2. Do you worry you have lost **C**ontrol over how much you eat?
3. Have you recently lost **O**ver 6.3 kg or 14 lb. in a 3 month period?
4. Do you believe yourself to be **F**at when others say you are too thin?
5. Would you say that **F**ood dominates your life?

Differential Diagnosis

- Gastrointestinal disorder
- Chronic infections
- Endocrine disorders (thyroid, T1D, Addison disease, hypopituitarism
- Other psychiatric disorders (OCD, substance abuse)
- Others: CNS lesions or malignancies, other cancers, SMAS (more commonly a consequence than cause of severe weight loss)

*Remember comorbidities are common. Still treat eating disordered behavior!

Triage and Treatment



Treatment

Interprofessional and multimodal – Usually MD, psychologist, and dietician

RCTs are limited. Dropout rates are high, though lower for children and adolescents. Youngsters also have greater likelihood of successful intervention.

Predictors of good outcome:

1. Early intervention (within first six months)
2. Early and aggressive weight restoration
3. Family involvement and better general psychological functioning

Treatment Guidelines

RCTs, practice guidelines, emerging treatments

Goals

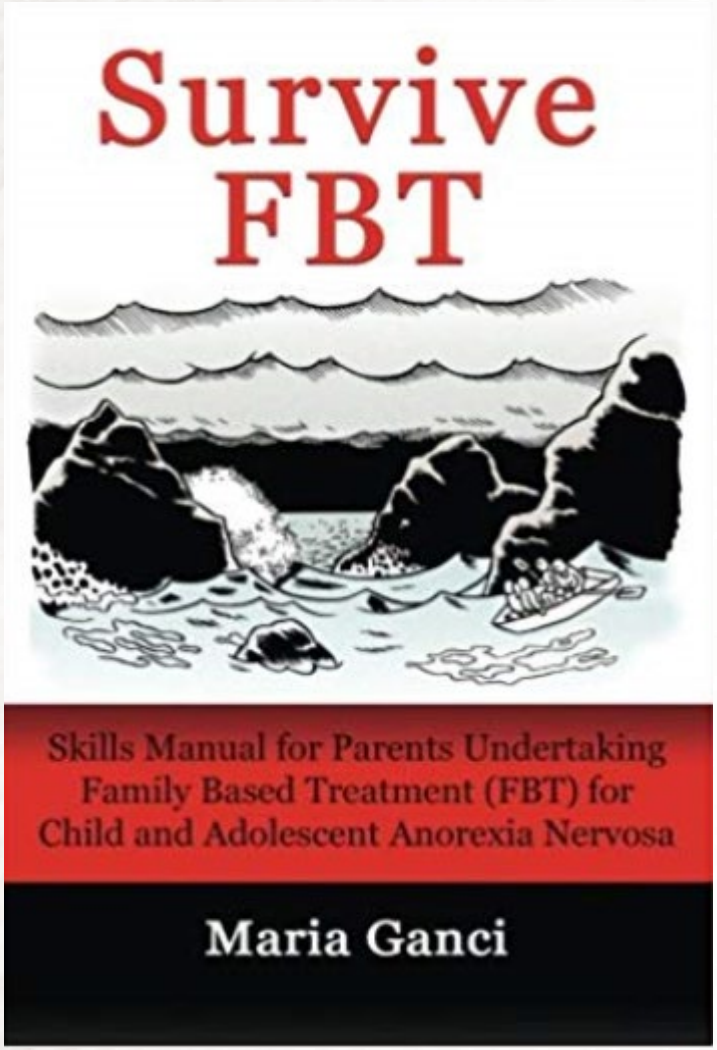
- Nutritional Rehabilitation, Psychological Rehabilitation
  - Restore weight
  - Normalize eating patterns and behavior
  - Normal perceptions of hunger and satiety
  - Correct biological and psychological sequelae of malnutrition
  - Build or restore a sense of self outside the ED
- Somatic Intervention

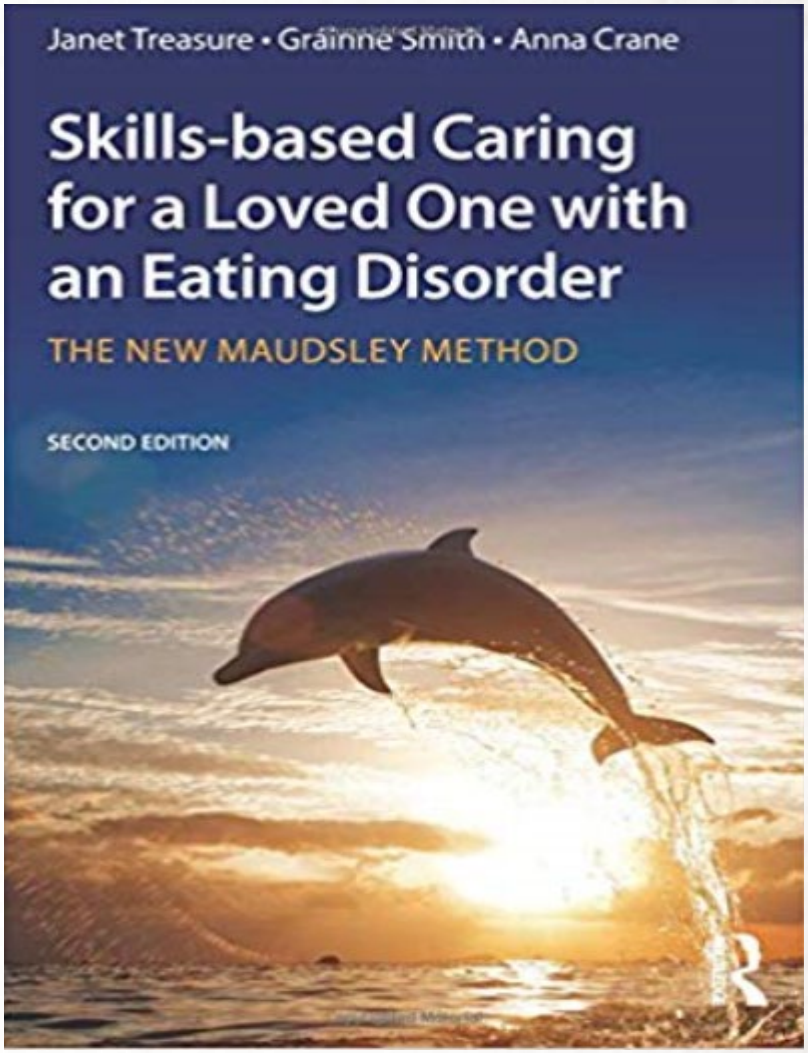
Treatment – Evidence Base for Outpatient Tx

Intervention	Evidence	Recommendation
FBT (Family based)	*** 5 RCTs	Good first line treatment
AFT (Adolescent focused)	** 2 RCTs	Reasonable treatment option
Atypical antipsychotics	** 1 RCT Case study series	Evidence suggests no benefit
Other family therapy	* Case series	Possible treatment option
CBT	* 1 RCT	Possible treatment option
Nutritional Counseling	* 2 RTC adults; 0 in adolescents	Little evidence suggests little benefit
Antidepressants	0 No RTC	Unknown utility

Physician's Role

- Surveillance
- Weigh in
- Check hr and bp
- Reinforce therapy message
- Set activity restrictions
- Monitor for refeeding syndrome
- Care and support





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ARFID

NEWS 06/18/2015 03:02 EDT | Updated 06/17/2016 05:59 EDT

Pediatricians urged to be on the lookout for eating disorder among young kids

The condition can impede the growth and development of children who suffer from it. And some may require tube feeding in order to be able to make gains in weight and height, says Dr. Debra Katzman, co-founder of the eating disorder program at Toronto's Hospital for Sick Children.

The condition is called avoidant-restrictive food intake disorder. People who suffer from it may eschew foods with too much texture or refuse to eat all but a few foods. The disordered eating patterns can lead to other health problems.

"If you're only eating ice cream for breakfast, lunch and dinner, the chances of you having for instance a normal hemoglobin" — red blood cell count — "are probably low," Katzman said.

63% Pediatricians were unfamiliar with diagnosis

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Diagnostic Criteria

Persistent failure to meet appropriate nutritional or energy needs associated with

- Significant weight loss or failure to grow
- Significant nutritional deficiency
- Dependence on enteral feeding or nutritional supplements
- Marked interference with psychosocial functioning
- Not *solely* due to medical or psychological condition

*Historically referred to as “selective eating” or “extreme picky eating”

Prevalence

Up to 25% of typically developing children have pediatric feeding problems; An estimated 5% have ARFID.

Up to 80% of children with disabilities experience feeding problems

- Higher among those with comorbid developmental and medical disorders

Feeding and Eating as a complex process

- CNS & PNS
- Oropharyngeal mechanism
- Cardiopulmonary system
- GI tract
- Craniofacial and musculoskeletal system
- Parent-child dyad

- *Consequently family may be referred to a number of different specialists for treatment which may be fragmented

Pediatric Literature

(Fischer, Luiselli, & Dove, 2015; Lukens & Silverman, 2014)

Food refusal

- Insufficient quantity for weight maintenance or growth

Food selectivity

- Often based on texture, temperature, or taste
- 5 or fewer foods, or all liquids

Disruptive behaviors incompatible with eating

New WHO Proposed Diagnosis – Pediatric Feeding Disorder

1. Impaired oral intake that is not age or developmentally appropriate (insufficient to meet nutritional or hydration requirements).
2. Associated with medical, nutritional, feeding skill, and/or psychosocial dysfunction.
3. In the absence of body image disturbances.
4. Disability results from impairment in function due to interactions with personal and environmental factors – activity limitation, participation restrictions

Treatment

Medical

Nutritional

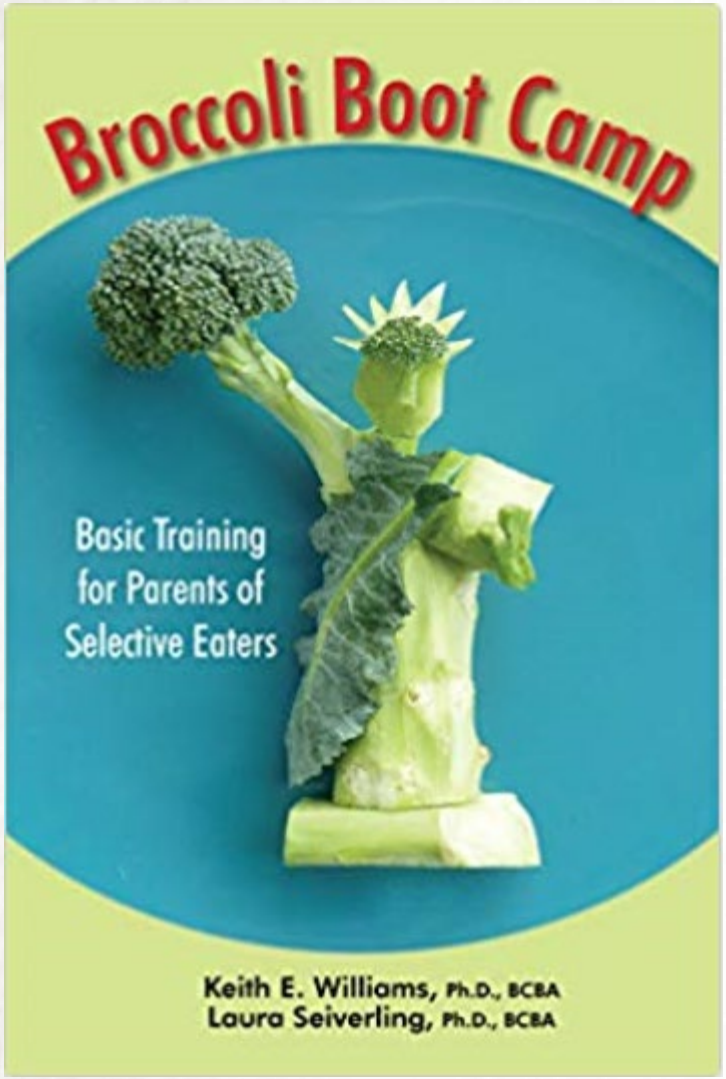
Feeding Skills

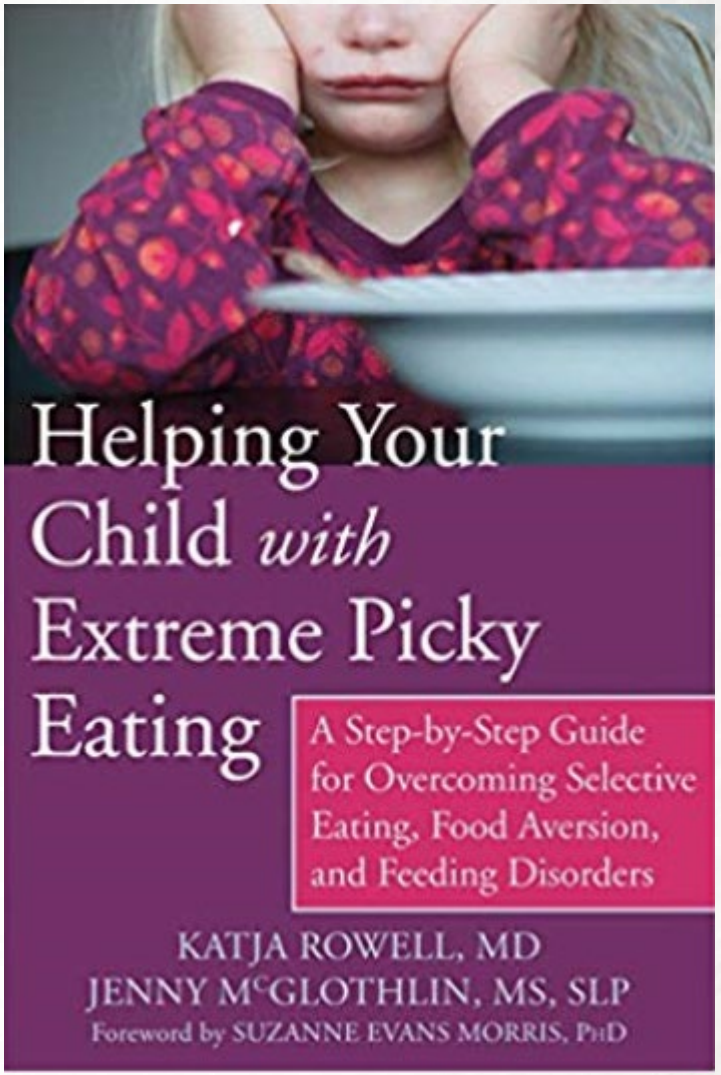
Psychosocial

Behavioral Interventions

- Antecedent events (high probability sequences)
- Contingencies
- Systematic desensitization
- Escape extinction
- Positive reinforcement

Positive reinforcement and escape extinction have greatest effect together





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