Medical, Sensory, and Emotional/Behavioral Contributions to the Diagnosis and Treatment of Avoidant Restrictive Food Intake Disorder

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Objectives

- Define feeding disorder
- Discuss the roles of different team members in a multidisciplinary team approach to diagnosing and treating feeding problems
- Describe treatment approaches related to feeding problems

Commonly used Terminology

- Feeding Disorder
- Picky eaters
- Avoidant Restrictive Food Intake Disorder (ARFID)
- Food Selectivity

Avoidant Restrictive Food Intake Disorder: ARFID

ARFID is a feeding problem that is associated with a lack of interest in eating or food, avoidance based on the sensory characteristics of food, or concern about aversive consequences of eating.

There is no evidence of a disturbance in the way in which one's body weight or shape is experienced.

Avoidant Restrictive Food Intake Disorder: ARFID

People with ARFID do not meet appropriate nutritional and/or energy needs. It is associated with one (or more) of the following:

1. Significant weight loss
2. Significant nutritional deficiency.
3. Dependence on enteral feeding or oral nutritional supplements.
4. Marked interference with social functioning

Feeding Disorder

According to the American Academy of Pediatrics a Feeding Disorder is defined as:

- Any condition in which a child has an inability or difficulty eating or drinking sufficient quantities to maintain optimal nutritional status, regardless of cause
- Growth may be unaffected
- Between 3%-10% of children are affected

Picky Eaters-typically not seen for treatment

- Tends to be transient
- Common phase of development with preschool children
- Usually diminishes at age 6 years

Cano,Tiemeier, Van Hoeken,Tharner,Jaddoe,Hofman,Verhulst,Hoek 2014

- Children tend to be normal weight Norris, Spettige Katzman 2016
- Prevalence peaks between 2-6 years Norris, Spettige Katzman 2016

Food Selectivity

- Defined as:
  - Food refusal resulting in a diet inappropriate for age
  - Limited food repertoire resulting in poor nutritional content
  - Limited food repertoire resulting in interference with the child's social adjustment
  - High frequency of single food intake Bandini, Anderson, Curtin, Cermak, Evans, Scampini, Maslin, Must 2010
  - Elimination of two or more food groups
  - Associated with increased parental stress Cano,Tiemeier, Van Hoeken,Tharner,Jaddoe,Hofman,Verhulst,Hoek 2014

Common Feeding Problems

- Low calories consumed
- Delayed oral motor skills
- Swallowing difficulties
- Mealtime tantrums
- Tube dependence
- Excessive mealtime duration

Common Feeding Problems

"Not just a picky eater"

- Food selectivity by texture
- Food selectivity by brand
- Food selectivity by appearance
- Refusal to eat the family meal
- Refusal to accept novel foods
- Rigid mealtime routines
- Elimination of previously accepted foods

Factors they may contribute to food selectivity

Medical : Allergies, Intolerance, GI issues, etc.
Reinforcement of atypical eating patterns
Sensory responses
Anxiety/phobia

Feeding Difficulties

Few feeding problems have a single etiology.

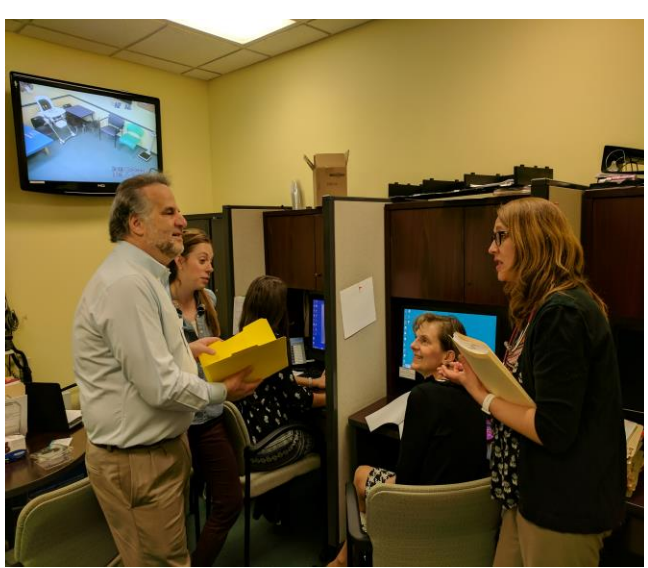
Most arise from a combined medical, oral motor, sensory, and behavioral etiologies.

Rehabilitative approach incorporating interdisciplinary care

Effective treatment is dependent upon effective team functioning

Evaluation and Treatment

- **Feeding Clinic-**
  - Interdisciplinary team
- **Outpatient**
  - Specialty Clinics-GI, pulmonary, ENT, Nutrition
  - Weekly OT,SLP, psychology or combined behavioral and oral motor treatment sessions
  - Home and school visits
- **Feeding Group**
  - 12 weeks
  - Psychology/SLP/OT
  - Parents/children
  - Food selectivity group
- **Feeding Day Program**
  - 6 weeks/ Monday-Friday
  - Three treatment meals per day
  - Interdisciplinary team



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Medical Management:
Physicians, Nurse practitioners, Nurses, Dentists

- Provide care to patients with known or suspected medical problems that may interfere with feeding.
- Evaluate the need for diagnostic testing to ensure patients are able to consume solids and liquids safely.
- Assess for food allergies and other medical barriers for the safe consumption of foods.
- Collaborate with dietitian to manage diet, monitor weight, and provide ongoing education regarding nutrition.
- Prescribe and adjust medications as needed to treat medical conditions of the gastrointestinal tract.
- Provide families with ongoing communication and education regarding patient's condition and recommended treatments.

Nutritional Management:
Dietitians

- Monitor nutritional status for obesity, overweight, and malnutrition
- Focus on micronutrients such as calcium, vitamin D, iron, vitamin C, and Zinc
- Monitor calorie intake by analyzing three day food records
- Monitor rate of weight gain or loss
- Provide nutritional education to families regarding age appropriate portion sizes, reading food labels, growth charts, GT schedules and GT recipes
- Monitor nutrition support (tube feedings)
- Manage allergy menus/dietary restriction menus
- Providing education to team regarding current nutritional topics

Community Resources

Social Work

- Provides support to the families
- Assess for risks to the patient
- Financial support through grants for medical necessities
- Education and support of the program
- Assistance utilizing community resources
- Aid families with connecting to community programs to reduce food insecurities, energy deficiencies, housing needs, and transportation hardships

Therapy Management
OT/SLP/PT

-Evaluate oral motor skills

-Evaluate pharyngeal function (VFSS/FEES)

-Evaluate the need for adaptive equipment

-Promote self feeding skills

-Expand variety of foods

-Evaluate motor planning, assess posture and sensory motor impairments related to feeding

Oral Motor Skills

Oral phase:

-chewing skills
-lateral transfer skills

Pharyngeal phase:

-frequent coughing
-frequent respiratory illness
-effortful swallow

Preferred texture

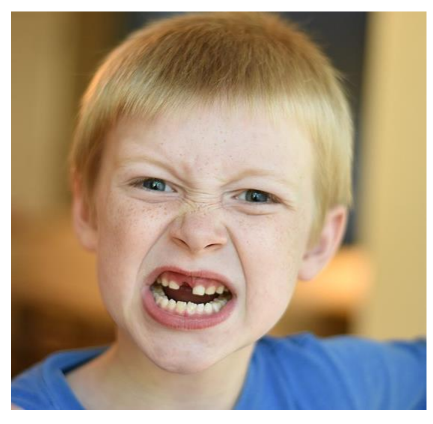
-pureed/smooth: (yogurt/pudding/baby foods)
-crunchy: (crackers/chips/snack foods)
-soft solids: (pasta/bread/cheese/table foods)

Behavioral Management
Psychologists

- Identify factors that influence food acceptance and food refusal behaviors
- Reduce mealtime-related anxiety
- Increase motivation to eat and comply with mealtime requests
- Decrease disruptive mealtime behaviors
- Educate caregivers on behavioral management techniques

Development of Food Selectivity

Two differing ideas regarding how food selectivity develops



Product of Non-compliant/ Disruptive Mealtime Behaviors

(LaRue et. al., 2011)

Product of Phobic responses to Novel foods

(Tanner & Andreone, 2015)

Non-compliant/Disruptive Mealtime Behaviors

The heart wants what it wants, and…

Non-compliant/Disruptive Mealtime Behaviors

…doesn't want what it doesn't want!

Non-compliant/Disruptive Mealtime Behaviors

Operant Conditioning

	Add something to environment	Subtract Something from environment
Increase frequency of target behavior	Positive Reinforcement	Negative Reinforcement
Decrease frequency of target behavior	Positive Punishment	Negative Punishment

Non-compliant/Disruptive Mealtime Behaviors

Caregivers positively reinforce disruptive behaviors by offering preferred foods.

Children negatively reinforce parent’s behavior by having tantrums until parents give in.

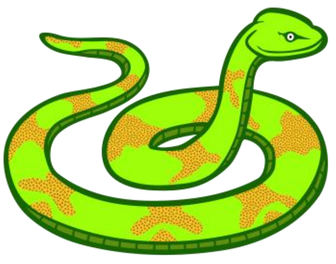
Non-compliant/Disruptive Mealtime Behaviors

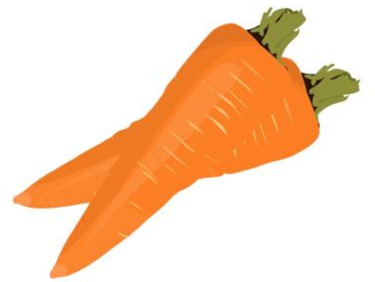
Treatment – Escape Extinction

Non-compliant/Disruptive Mealtime Behaviors

Treatment – Escape Extinction often paired with positive reinforcement

Phobic Response to Novel Foods



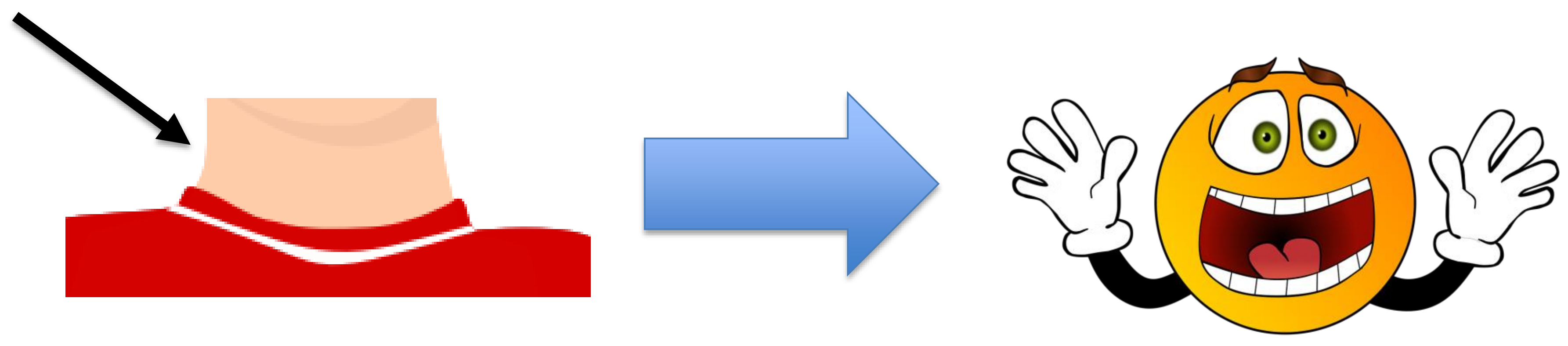


Intensity of avoidant and emotional responding to novel foods resembles specific phobia

(Wolitzky-Taylor et al., 2007)

Phobic Response to Novel Foods

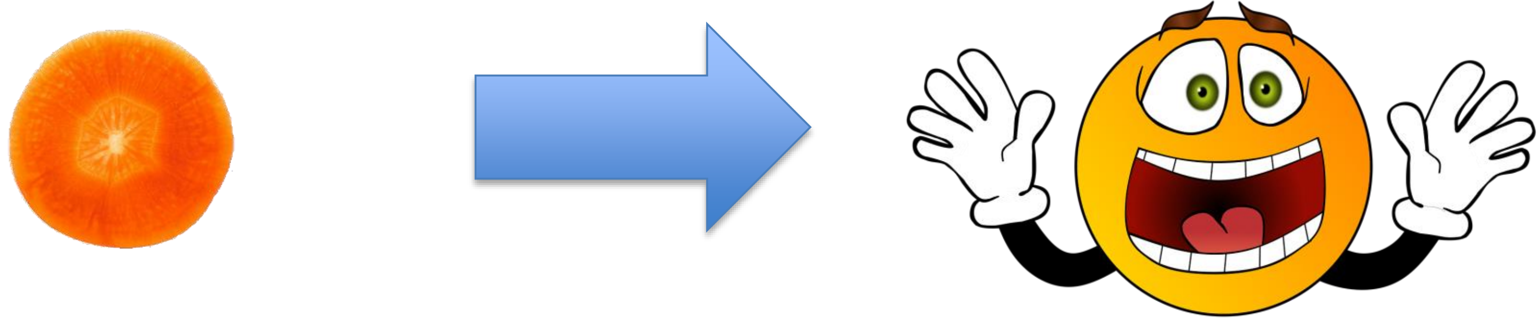
Classical Conditioning



Choking (or another painful/threatening situation) is naturally associated with fear.

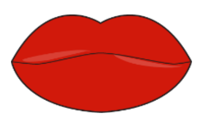
Phobic Response to Novel Foods

Classical Conditioning



Classical Conditioning → novel foods are then associated with the fearful experience.

Phobic Response to Novel Foods



Fear Hierarchy

Treatment – Systematic Desensitization (Exposure Therapy)

Phobic Response to Novel Foods

Fear Hierarchy

Treatment – Systematic Desensitization (Exposure Therapy)

Phobic Response to Novel Foods

Counter-conditioning aversive responding to novel foods.

Treatment – Systematic Desensitization (Exposure Therapy)

What reinforcement to use?

- Social attention
- Small toys
- Toys with pieces for turn taking (puzzles, memory cards, board games)
- Screen time
- Escape to end the meal
- Preferred food
- Stickers charts
- In the meal reward vs end of the meal reward
- Distraction vs contingent use of toys
- Charting progress

In Closing

- A team approach is best when diagnosing and treating ARFID.
- Fear and avoidant behaviors are often both present in individuals with ARFID.
- Treatment should be guided by the presentation of the problem.

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