Nutrition Practices for Adolescent Eating Disorder Treatment

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Registered Dietitian and Food Service Manager
Objectives

- Define expected body weight and recognize importance of utilizing growth charts when assessing goal weights
- Distinguish between mindful and intuitive eating
- Identify at least two nutrition interventions for patients with eating disorders
OUTLINE

- Review of eating disorder diagnosis
- Role of Dietitian in Eating Disorder Treatment
- Mindful & Intuitive Eating Approach
- Exposure Therapy
- Case Studies
In the United States, 20 million girls and women and 10 million boys and men suffer from a clinically significant ED at some time in their life (Wade, Keski-Rahkonen, & Hudson, 2011).

Approximately 1 person dies as a direct result of an eating disorder every 62 minutes (Eating Disorder Coalition).

Anorexia Nervosa has the highest death rate of any mental illness (Arcelus et al., 2011).

Eating disorders are the 3rd most chronic illness among adolescent girls (Whitaker, 1992).

81% of 10-year-olds are afraid of being fat (Mellin et. al, 1997).

35% of “normal dieters” progress to pathological dieting (Shisslak, Crago, & Estes, 1995).
Eating Disorders

- Anorexia Nervosa (AN)
- Bulimia Nervosa (BN)
- Binge Eating Disorder (BED)
- Avoidant Restrictive Food Intake Disorder (ARFID)
- Other Specified Feeding and Eating Disorder (OSFED)
Levels of Care

- Inpatient
- Residential
- Partial Hospitalization
- Intensive Outpatient
- Outpatient
  - Treatment team
  - Family Based Therapy (FBT)
# Level of Care Guidelines

<table>
<thead>
<tr>
<th>Level 1: Outpatient</th>
<th>Level 2: Intensive Outpatient</th>
<th>Level 3: Partial Hospitalization (Full-Day Outpatient Care)</th>
<th>Level 4: Residential Treatment Center</th>
<th>Level 5: Inpatient Hospitalization</th>
</tr>
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<tbody>
<tr>
<td>Medical status</td>
<td>Medically stable to the extent that more extensive medical monitoring, as defined in levels 4 and 5, is not required</td>
<td>Medically stable to the extent that intravenous fluids, nasogastric tube feedings, or multiple daily laboratory tests are not needed</td>
<td>For adults: Heart rate &lt; 60 bpm; blood pressure &lt; 90/60 mmHg; glucose &lt; 60 mg/dL; potassium &lt; 3 mEq/L; electrolyte imbalance; temperature &lt; 97.0°F; dehydration; hepatic, renal, or cardiovascular organ compromise requiring acute treatment; poorly controlled diabetes. For children and adolescents: Heart rate near 40 bpm, orthostatic blood pressure changes (&gt; 20 bpm increase in heart rate or &gt; 10 mmHg to 20 mmHg drop), blood pressure &lt; 80/50 mmHg, hypokalemia, hypophosphatemia, or hypomagnesemia. Specific plan with high lethality or intent; admission may also be indicated in patient with suicidal ideas or after a suicide attempt or aborted attempt, depending on the presence or absence of other factors modulating suicide risk.</td>
<td>If suicidality is present, inpatient monitoring and treatment may be needed depending on the estimated level of risk. Generally &lt; 85%, acute weight decline with food refusal even if not &lt; 85% of healthy body weight.</td>
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<td>Weight as percentage of healthy body weight</td>
<td>Generally &gt; 85%</td>
<td>Generally &gt; 80%</td>
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<td>Motivation to recover, including cooperation, insight, and ability to control obsessive thoughts</td>
<td>Fair-to-good motivation</td>
<td>Partial motivation; cooperative; patient preoccupied with intrusive repetitive thoughts; 4-6 hours a day</td>
<td>Poor-to-fair motivation; patient preoccupied with intrusive repetitive thoughts; patient cooperative with highly structured treatment</td>
<td>Very poor to poor motivation; patient preoccupied with intrusive repetitive thoughts; patient uncooperative with treatment or cooperative only in highly structured environment</td>
</tr>
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<td>Co-occurring disorders (substance use, depression, anxiety)</td>
<td>Presence of comorbid condition may influence choice of level of care</td>
<td></td>
<td></td>
<td>Any existing psychiatric disorder that would require hospitalization</td>
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<tr>
<td>Structure needed for eating/gaining weight</td>
<td>Self-sufficient</td>
<td>Needs some structure to gain weight</td>
<td>Needs supervision at all meals or will restrict eating</td>
<td>Needs supervision during and after all meals or nasogastric/special feeding modality</td>
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<td>Ability to control compulsive exercising</td>
<td>Can manage compulsive exercising through self-control</td>
<td>Some degree of external structure beyond self-control required to prevent patient from compulsive exercising; rarely a sole indication for increasing the level of care</td>
<td></td>
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<td>Purging behavior (laxatives and diuretics)</td>
<td>Can greatly reduce incidents of purging in an unstructured setting; no significant medical complications, such as electrocardiographic or other abnormalities, suggesting the need for hospitalization</td>
<td>Can ask for and use support from others or use cognitive and behavioral skills to inhibit purging</td>
<td></td>
<td>Needs supervision during and after all meals and in bathrooms; unable to control multiple daily episodes of purging that are severe, persistent, and disabling, despite appropriate trials of outpatient care, even if routine laboratory test results reveal no obvious metabolic abnormalities</td>
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ROLE OF NUTRITION IN EATING DISORDER TREATMENT
Physical Examination

- **Vitals signs**: hypotensive, bradycardia, orthostatic hypotension
- **Skin**: Lanugo body hair, hair loss, acne
- **CV**: Cardiac rhythm and peripheral edema
- **Neuro**: Weakness, decreased reflexes
- **Digestive**: Abdominal discomfort, bloating, diarrhea, constipation
- **Endocrine**: Amenorrhea
- **Musculoskeletal**: wasting, swelling in face (chipmunk face)
Goals of Nutrition Therapy

- **Nutrition Stabilization**
  - Weight gain, regulation, and stabilization
  - Improve overall nutrition status
  - Stabilization and improvement of medical complications

- **Normalization of food beliefs and behaviors**
  - Decrease use of food rituals and behaviors
  - Fear food hierarchy
  - Correct misinformation and maladaptive beliefs
  - Increase diet variety
  - Promote mindful and intuitive eating principles
  - Plan and implement exposures (individual and family)
  - Meal planning
Nutrition Stabilization
Weight Goal

- **Assessing goal weight**
  - Expected body weight (EBW)
  - Goals: weight gain, weight stabilization, heal metabolism

- **Educating parents about weight goals**
  - Language
  - Numbers
EXPECTED BODY WEIGHT & GROWTH CHARTS

- Growth charts
  - BMI –for-age
  - Weight-for-age
  - Stature-for-age
- Expected body weight/range (EBW)
  - LeGrange et al., 2012
Energy Needs and Meal Plan

- **Weight gain**
  - Up to 3-4 # Clementine
  - 0.5-1# outpatient IOP

- **Energy Needs**
  - Initial: 1000-1600 kcal
  - Up to 70-100 kcal/kg for weight gain

- **Initial meal plan**
  - Psychological versus physiological readiness

- **Refeeding Syndrome**
Normalization of Food Beliefs
Mindfulness:
- Awareness without judgement or attachment; noticing

Consciousness:
- Discernment

- Judgement is personal; discernment is impersonal
- Discernment is seeing what *is*; judgement is filtering what is through a good / bad duality
- Discernment is noticing the now (*passive*); judgment is drawing a conclusion (*active*)
INTUITIVE EATING

- Eating in response to internal cues of hunger/fullness
- 12 Principles (Tribole and Resch, 2012)
  - Reject Diet Mentality
  - Honor Hunger
  - Make peace with food
  - Challenge the Food Police
  - Feel Your Fullness
  - Discover Satisfaction Factor
  - Cope with Emotions without food
  - Respect your body
  - Exercise
  - Gentle Nutrition
Adapted from Karin Kratina, PhD, RD, LD/N, and Molly Kellogg, RD, LCSW; Choosing “Y”
Research on Mindful and Intuitive Eating

**Mindful Eating**
- Mindfulness based intervention should improvement in dichotomous thinking, body image, and emotional eating among woman with disordered eating (Alberts H.J.E.M. et al., 2012)
- Awareness of hunger/fullness and satiety cues led to increased self-acceptance and diet variety among various eating disorders (Hepworth, 2011)
- A meta-analysis showed evidence supporting mindfulness in the treatment of eating disorders (Wanden-Berghe et al., 2011)

**Intuitive Eating**
- A 2 year study utilizing Intuitive Eating at a residential eating disorder center showed positive treatment outcomes at discharge (Richards et al, 2017)
- Intuitive eating practices promoted healthier weight outcomes including reduction in binge eating and disordered behaviors in young adults (Denny et al., 2013)
- A review of over 20 studies promoting intuitive eating demonstrated improvements in metabolic fitness, body image, psychological distress, unhealthy weight control behaviors (Schaefer et al., 2011)
MINDFUL EATING PRACTICES:

- Hunger / fullness
- Intention setting
- Thought cards
- Silent / focused eating
- Gratitude exercises
- Breathing or containment exercises
- Mindful distraction
OPC HUNGER/FULLNESS SCALE

Appetite and/or cravings can occur between 0 and 5.
Satiety occurs between 6 and 10.

0: EMPTY
1: EXTREME HUNGER
2: STRONG HUNGER
3: HUNGRY
4: SENSE SPACE IN STOMACH
5: TRANSITIONAL
6: SENSE FOOD IN STOMACH
7: SUBTLE FULLNESS
8: FULL
9: EXTREME FULLNESS
10: PAINFULLY FULL
CLEMENTINE HUNGER/FULLNESS SCALE

1. EXTREME
2. STRONG
3. GENTLE
4. SHIFTING
5. SOLID
6. EXTREME

hunger

1. FOGGY THINKING / IRRITABLE / NUMB
2. STRONG THOUGHTS OF FOOD / URGENCY TO EAT
3. RENEWED INTEREST IN FOOD
4. STARTING TO FEEL HUNGER OR FULLNESS
5. SATISFIED / DECREASED DESIRE TO CONTINUE EATING
6. PHYSICAL DISCOMFORT

fullness
Every meal is an opportunity for exposure

- Pre/post meal processing
- Menu - All foods fit
- Food choices
- Normalized eating experiences
  - Brunch
  - Packed lunches
  - Pizza night
  - Desserts
  - Movie nights
- Lunch outing
- Developmental appropriate independence with food
- Family meals
EXPOSURES AND MINDFUL EATING

Graph showing the relationship between exposures and mindfulness/cohesiveness during eating. The graph indicates that as exposures increase, mindfulness/cohesiveness decreases, and vice versa. The graph is labeled with axes: Exposures on the x-axis and Shame/Anxiety/Dissociation on the y-axis, with Mindfulness/Cohesiveness labeled as "Intactness" while eating.
Stabilization
- Staff plated, 100% completion
- Begin to recognize and tolerate visual portions and resulting physical sensations

Legalization
- Include sides and desserts as desired, when ready
- Practice ordering varied items from snack list
- Corrective experiences with food

Introduction of Autonomy
- Entering goal weight range
- Begin self-portioning & regulating challenges with feedback
- Measured/reverse portion temporarily

Increased Autonomy
- Self-portion all meals and snacks
- Decrease to little or no feedback
- Participate in family meals
- Relapse Prevention
Integrating the Family

- Exploring family food philosophy and meal routines
- Training family members on mindful eating practices
- Family meal exposures
  - On-site/Off-site
    - Supported
    - Unsupported
Case Study

- 16 y F 2 year hx of symptoms
- Admit wt: 78.8 BMI 14.4
- ED behaviors: restriction of intake, wt manipulation, compulsive/compensatory exercise, small bites, cutting food
- Fear foods:
- Treatment Hx- 2 residential treatment centers, 1 PHP premature discharge to begin school
- Immediately begins losing weight at step down
Case Study

- 15 y F  Dx:?
- Admit wt: 234 BMI: 40.4
- ED behaviors: binging daily
- Binge foods: mozzarella sticks, cake, cookies
- History of dieting since age 8
- Nutrition goal: Cessation of eating disorder behaviors

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<tr>
<th>Time</th>
<th>Dietary Intake at Clementine</th>
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<tbody>
<tr>
<td>Breakfast</td>
<td>Waffles with syrup, Chocolate milk, Banana</td>
</tr>
<tr>
<td>Morning snack</td>
<td>Coffee ice cream</td>
</tr>
<tr>
<td>Lunch</td>
<td>Sausage Strata</td>
</tr>
<tr>
<td>Afternoon snack</td>
<td>Banana and Nutella</td>
</tr>
<tr>
<td>Dinner</td>
<td>Chili served with guacamole and sour cream, Cornbread, Cupcake</td>
</tr>
<tr>
<td>Evening snack</td>
<td>Banana and Peanut butter</td>
</tr>
</tbody>
</table>
## Discharge Lab Values

<table>
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<th>Labs</th>
<th>Admission</th>
<th>Discharge</th>
<th>Change</th>
</tr>
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<tbody>
<tr>
<td>Total Cholesterol</td>
<td>196</td>
<td>154</td>
<td>42</td>
</tr>
<tr>
<td>LDL</td>
<td>123</td>
<td>89</td>
<td>34</td>
</tr>
<tr>
<td>Non-HDL</td>
<td>144</td>
<td>109</td>
<td>35</td>
</tr>
<tr>
<td>Fasting Insulin</td>
<td>15.2</td>
<td>13.3</td>
<td>1.9</td>
</tr>
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“She doesn’t look sick”

“You have an eating disorder? But you are not that skinny.”

“She is in athlete that is why she has a low heart rate”

“You are starting to gain some weight. Watch what you eat”

“Your vitals are stable”

“She can be vegan and recover”

“They over challenge with food in treatment so that it is easier when you go home”

“Wow, you must have lost a bunch of weight” - as pinching clients shoulders

“Your diet is too anti-inflammatory right now” said while client is in treatment”

“Cut back on dessert”

“You eat so healthy”
Review

- Recognize signs and symptoms of disordered eating
- Provide referrals
- Multidisciplinary treatment team
- Current research and diet trends
- Be aware of your own biases
Questions?
Resources

- National Eating Disorder Association
- International Association of Eating Disorder Professionals (IAEDP)
  - CEDRD, CEDS, CEDRN, CEDCAT
- Academy for Eating Disorders (AED)
- Academy of Nutrition and Dietetics DPG
  - SCAN & BHN
For more information:

Ages: 13-17
www.clementineprograms.com

Ages: 18 & up
www.oliverpyattcenters.com
References


