Multidisciplinary Approach to Eating Disorders

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Phoenix Children's

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No one involved in the planning or presentation of this activity has any relevant financial relationships with a commercial interest to disclose.

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Types of Eating Disorders

- Anorexia nervosa (AN) - Restricted caloric intake relative to energy requirements, leading to significantly low body weight for age, sex, projected growth, and physical health
- Bulimia nervosa (BN) – Repeated episodes of binge eating and repeated use of compensatory behaviors to prevent weight gain
- Binge-eating disorder (BED) – Recurrent episodes of binge eating
- Avoidant restrictive food intake disorder (ARFID) – Disrupted eating pattern due to lack of interest in eating, avoidance based on sensory aspects of food or concern for an aversive event related to eating
- Pica – Compulsive eating of non-food items that can lead to health problems
- Rumination – Repeated regurgitation of food not due to a medical or mental condition
- Other specified feeding or eating disorders (OSFED)

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Eating Disorders

- Eating disorders are serious, potentially life-threatening illnesses affecting individuals throughout their life span, with a particular impact on both the physical and psychological development of children and adolescents
- One in seven men and one in five women experiences an eating disorder by age 40, and in 95% of those cases, the disorder begins by age 25
- Anorexia Nervosa is the number one fatal mental illness in young people
  - For young adults and adolescents, Anorexia Nervosa and other eating disorders can increase the odds of suicide by up to 32 times
  - About one-third of deaths in AN are due to heart problems and one-fifth to suicide

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Medical evaluation and management of Eating Disorders

- Goals:
  - Identify concerning growth patterns
  - Identify concerning behaviors
  - Initial medical management
  - Identify when to refer for higher levels of care

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Look at the Growth Chart!

- When to be concerned:
  - Falling off the growth curve
  - Flat BMI curve

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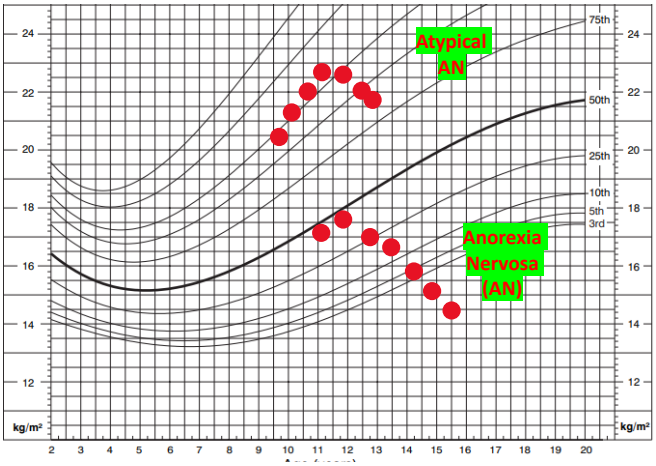
Concern: falling off BMI curve



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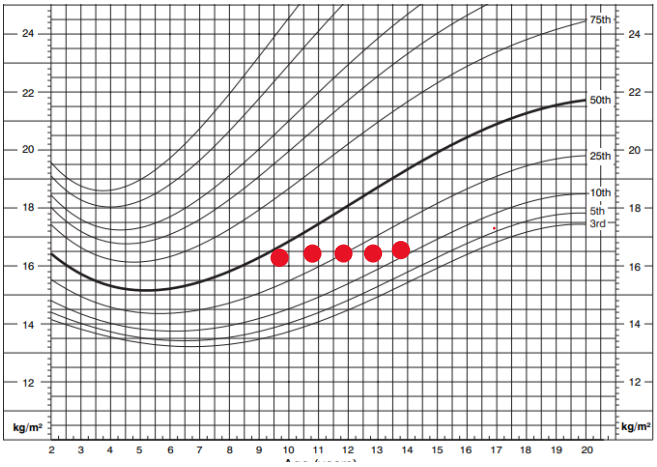
Concern: flat BMI curve



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Weight Suppression predicts illness severity

- Weight suppression = (Highest historical weight – Weight at presentation) / Highest historical weight
  - Patient 1 (AN): 16 y/o who weighed 125 lbs 1 year ago, 85 lbs at today's visit
    - 32% suppressed
  - Patient 2 (AAN): 16 y/o who weighed 250 lbs 1 year ago, 120 lbs at today's visit
    - 52% suppressed
- Patients with greater weight suppression have shown worse ED psychopathology among other factors [Lavender 2015; Berner 2013]

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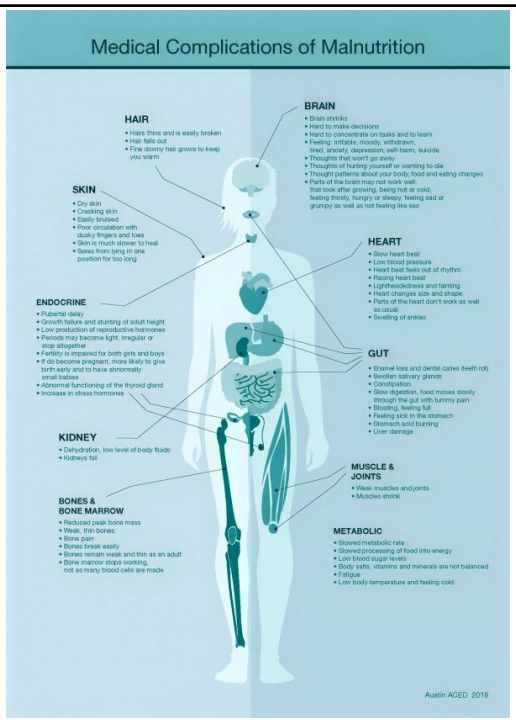
Medical Evaluation



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Medical Evaluation

- Height and weight (in a gown)
- Vitals including orthostatics
  - Increase in HR > 20 bpm upon standing OR
  - Decrease in BP (> 20 mmHg sysotlic or > 10 mmHg diastolic)
- History and Physical Exam
- Careful review of growth charts
- EKG
  - Sinus bradycardia, prolonged QTc, arrhythmia
- Laboratory Evaluation

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Laboratory Evaluation

- CMP, Mag, Phos
  - Electrolyte disturbances
  - Hypoglycemia
  - Alkalosis with purging
  - AKI
  - Transaminitis
- CBC
  - Iron deficiency anemia
  - Bone marrow suppression
    - Leukopenia, neutropenia

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Laboratory Evaluation

- Urine sample
  - Specific gravity, UDS, hcg
- Lipid Panel
- Nutrition labs
  - Vitamin D, Zinc
- Thyroid labs
  - Euthyroid-sick pattern
  - T3 low, TSH/FT4 normal or low
- Celiac panel
  - TTG/IgA

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Patient A

- 17 y/o F who presented from PCP's office for severe AN
  - Weight was 125-130 lbs 18 months ago
  - Admission weight 57 lbs
    - Weight suppression: 56%
  - Physical exam findings:
    - Bradycardia, orthostatic hypotension
    - Fatigue, difficulty concentrating, lanugo, hair loss, dry skin, amenorrhea, cold, epigastric pain

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01-25-23 22:10	Comp Metabolic Panel		
Sodium		140	[134-143 mmol/L]
Potassium		4.0	[3.6-5.2 mmol/L]
	Slight hemolysis, result may be falsely increased.		
Chloride		104	[98-108 mmol/L]
CO2		29	[17-31 mmol/L]
Anion Gap		7	[4-16 mmol/L]
Glucose		59 ↓	[70-120 mg/dL]
Blood Urea Nitrogen		10	[5-25 mg/dl]
Creatinine		0.47	[0.1-1.1 mg/dL]
BUN/Creatinine Ratio		21	[10-28 RATIO]
Calcium		10.1	[8.7-10.2 mg/dL]
Protein Total		7.0	[6.4-8.2 gm/dL]
Albumin Serum		4.6	[3.5-5.2 g/dL]
Globulin		2.4	[1.4-4.6 g/dL]
A/G Ratio		1.9	[0.8-2.5 RATIO]
Bilirubin Total		1.2 ↑	[<0.8 mg/dL]
AST/ SGOT		220 ↑	[15-37 U/L]
	Slight hemolysis, result may be falsely increased.		
ALT/ SGPT		629 ↑	[30-65 U/L]
Alkaline Phosphatase		89	[50-136 U/L]
	PCH Main Clinical Lab,1919 E.Thomas Rd., Phoenix,AZ 85016 602 933 1280		

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01-25-23 22:10	CBC and Differential		
WBC Count		3.8 ↓	[4.5-13.0 K/uL]
RBC Count		3.07 ↓	[4.10-5.10 M/uL]
Hemoglobin		10.4 ↓	[12.0-16.0 gm/dL]
Hematocrit		29.4 ↓	[36.0-46.0 %]
MCV		96	[78-102 fL]
MCH		33.9	[25.0-35.0 pg]
MCHC		35.4	[31.0-37.0 %]
RDW		13.1	[11.0-15.0 %]
Platelet Count		205	[140-450 K/uL]
MPV		10.1	[7.5-11.5 fL]
Differential Type	AUTOMATED		
Neutrophils		38	[%]
Lymphocytes		55	[%]
Monocytes		5	[%]
Eosinophils		1	[%]
Basophils		1	[%]
Nucleated RBCs		0	[0 /100]
Absolute Neutrophils		1.4 ↓	[1.8-8.0 K/uL]
Absolute Lymphocytes		2.1	[1.2-5.8 K/uL]
Absolute Monocytes		0.2	[0.0-0.8 K/uL]
Absolute Eosinophils		0.0	[0.0-0.5 K/uL]
Absolute Basophils		0.0	[0.0-0.1 K/uL]

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Patient B

- 16 y/o transgender male with a history of several years of AN, admitted for a recent
  - October 2022 42 kg
  - Admitted in March of 2023 weighing 33 kg
- Endorsed restricting but denied purging or the use of laxatives
  - Labs don't lie

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03-01-23 17:00	Comp Metabolic Panel	
Sodium	132 ↓	[134-143 mmol/L]
Potassium	2.6 ↓	[3.6-5.2 mmol/L]
Slight hemolysis, result may be falsely increased.		
Chloride	85 ↓	[98-108 mmol/L]
CO2	35 ↑	[17-31 mmol/L]
Anion Gap	12	[4-16 mmol/L]
Glucose	80	[70-120 mg/dL]
Blood Urea Nitrogen	22	[5-25 mg/dl]
Creatinine	1.31 ↑	[0.1-1.1 mg/dL]
BUN/Creatinine Ratio	17	[10-28 RATIO]
Calcium	9.9	[8.7-10.2 mg/dL]
Protein Total	7.5	[6.4-8.2 gm/dL]
Albumin Serum	4.1	[3.5-5.2 g/dL]
Globulin	3.4	[1.4-4.6 g/dL]
A/G Ratio	1.2	[0.8-2.5 RATIO]
Bilirubin Total	0.8 ↑	[<0.8 mg/dL]
AST/ SGOT	31	[15-37 U/L]
Slight hemolysis, result may be falsely increased.		
ALT/ SGPT	68 ↑	[30-65 U/L]
Alkaline Phosphatase	71	[50-136 U/L]

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Psychopharmacology: Evidence is Minimal

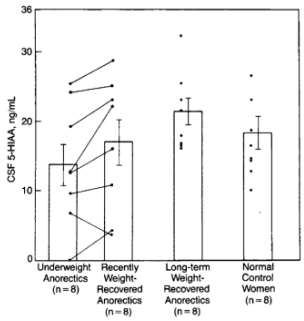

Fig 2.—Mean (±SEM) concentrations of 5-hydroxyindoleacetic acid (5-HIAA) in CSF for each group of anorectics and normal controls.

Abnormalities in CNS Monoamine Metabolism in Anorexia Nervosa

Walter H. Kaye, MD; Michael H. Ebert, MD; Michael Raleigh, PhD; C. Raymond Lake, MD

• Patients with anorexia nervosa have disturbances of mood, appetite, and neuroendocrine function. Central nervous system monoamine pathways modulate these systems, and alterations in function of these systems may occur in anorexia nervosa. Because monoamine metabolism can be influenced by nutritional intake, we studied anorectics before and at intervals after correction of weight loss. Underweight anorectics had a 30% decrease in CSF homovanillic acid level and a 20% decrease in CSF 5-hydroxyindoleacetic acid concentra-

Underweight patients with anorexia nervosa appear to have decreased excretion of urinary metabolites of norepinephrine (NE),[5,19-22] dopamine (DA),[20,22] and serotonin (5-HT).[22] Because some fraction of urinary monoamine metabolites is derived from the CNS, the existing data suggest that underweight anorectics may have disturbances in central monoamine metabolism. Such disturbances in anorexia nervosa have been postulated by a number of investigators.[16,23-25]

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Psychopharmacology: Evidence is Minimal

- Food is the best treatment
- Typically, do not start serotonergic medications until around 85% target goal weight
- Fluoxetine is FDA approved for BN
  - Improves binge/purge frequency even in absence of mood disorder

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Indications supporting hospitalization

Table 4
Indications supporting hospitalization in an adolescent with an eating disorder

One or more of the following justify hospitalization
1. ≤75% Median body mass index for age and sex
2. Dehydration
3. Electrolyte disturbance (hypokalemia, hyponatremia, hypophosphatemia)
4. EKG abnormalities (e.g., prolonged QTc or severe bradycardia)
5. Physiological instability
   - Severe bradycardia (heart rate <50 beats/min daytime; <45 beats/min at night)
   - Hypotension (<90/45 mm Hg)
   - Hypothermia (body temperature <96°F, 35.6°C)
   - Orthostatic increase in pulse (>20 beats/min) or decrease in blood pressure (>20 mm Hg systolic or >10 mm Hg diastolic)
6. Arrested growth and development
7. Failure of outpatient treatment
8. Acute food refusal
9. Uncontrollable bingeing and purging
10. Acute medical complications of malnutrition (e.g., syncope, seizures, cardiac failure, pancreatitis, and so forth)
11. Comorbid psychiatric or medical condition that prohibits or limits appropriate outpatient treatment (e.g., severe depression, suicidal ideation, obsessive compulsive disorder, type 1 diabetes mellitus)

EKG = Electrocardiogram; QTc = Corrected QT interval.

Position paper / Journal of Adolescent Health 56 (2015) 121e125

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Indications supporting hospitalization

- Some modifications:
  - Orthostasis
    - Many hospitals have adopted an increase in HR of 30-40 bpm
  - Weight
    - <75% expected body weight or ongoing weight loss despite intensive management
  - Acute food refusal
    - Severe and/or prolonged food refusal (48 hours)

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Typical Inpatient Hospitalization

- Goal is nutritional rehabilitation + medical stabilization
- Family buy in before hospitalization is key!
- Structured
  - 3 meals, 3 snacks that need to be finished within a certain time
  - If food is not eaten, a supplement is given
  - If the patient refuses the supplement by mouth, a NG tube is placed
- Monitored
  - Most hospitals place restrictions on cell phone use, computers
  - Sitter present

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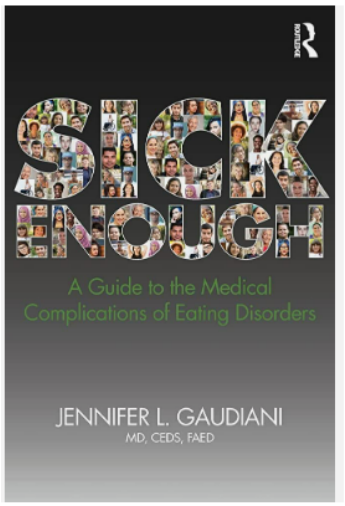

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Nutrition for Eating Disorders

GOALS

- Be able to look for growth changes that may be concerning for disordered eating
- Understand what is assessed in an outpatient nutrition appointment
- Be able to know what vitamin labs may be pertinent to follow if your patient has disordered eating
- Know the resources for finding a dietitian
- Understand what to expect from a nutrition standpoint if you are admitting a patient to the hospital for an eating disorder

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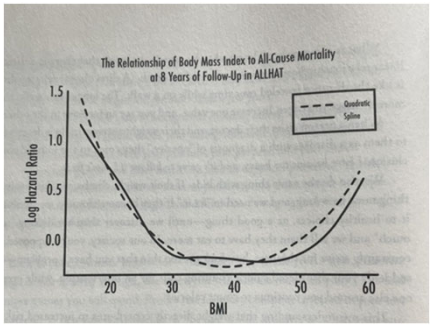
Nutrition Assessment Growth Chart

- Look at weight history and growth
  - Weight change is important
  - Period of weight change
  - Pediatric malnutrition criteria diagnosed based on weight loss regardless of where they are on the growth chart
    - >5% weight loss is mild malnutrition
    - >7.5% weight loss is moderate malnutrition
    - >10% weight loss is severe malnutrition
- The lower the BMI higher risk of mortality
  - More risk for complications

*Single Data Points	Mild	Moderate	Severe
Weight-for-height z score	-1 to -1.9	-2 to -2.9	-3 or lower
BMI-for-age z score	-1 to -1.9	-2 to -2.9	-3 or lower
Mid-upper arm circumference	-1 to -1.9	-2 to -2.9	-3 or lower
Length or height for age z score	n/a	n/a	-3 or lower



This is noted for all-cause mortality, indicating lower BMI is higher risk for mortality

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Nutrition Assessment Growth Chart

- Disordered eating does not always present as…
  - "low on the growth curve"
  - Less than 6% of people with eating disorders are medically diagnosed as "underweight."
    - https://anad.org/eating-disorders-statistics/
- Weight stigma

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Initial Nutrition Assessment

Questions: understanding their diet and movement history. Open ended questions

- **Tell me what a meal looks like for you?**
  a. Limiting food groups?
  b. Portion sizes?
  c. How many meals vs. Snack per day?
  d. Location of Meals? (Home vs. school)
  e. Tell me about foods you have always disliked since you were young?
  f. Do you have food allergies?
     - Do you have religious or cultural dietary restriction?
- **What do you drink for fluids, how much?**
  a. Do you drink Caffeine?
  b. Do you drink milk- what kind?
  c. Hot tea?
- **Are you involved in sports? Do you exercise?**
  a. Tell me about your exercise routine.
  b. How many times per week, how long, with whom?

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Meal Planning Outpatient

- Not always necessary to start a meal plan immediately, depends on the severity
  - Usually **start with a 3-day diet recall**
  - This helps understand what goals need to be set
- In certain situations, a meal plan may be warranted immediately
  - Younger <12 years I'd consider starting 1000-1250 kcals/day,
  - Older kids would need to comply with a minimum meal plan of 1500 kcals/day to start
  - **Use an exchange system for meal planning**
- Usually, will use an **oral nutrition supplement** if unable to meet calorie needs with food.
  - Use a concentrated formula with less volume usually such as Boost Plus
- **Clear Step scale** to help know if gaining weight
  - It's a blinded weights and the weight will get downloaded into an app
- **Healthy App**
  - Visual app that can be shared with dietitian
  - Modern food diary

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Meal Plan Example ~2000 kcals/day

- **Goal for entire day**:
- **Grains:** 7 servings of grains
- **Fruits**: 3 servings of fruit
- **Vegetables**: 4 servings of vegetables
- **Dairy/dairy alternatives**: 16oz daily
- **Protein**: 10 servings
- **Fat:** 5 servings
- **Fluid Needs:** 61 ounces/day (1840mL)
- **Supplement meal recommendations:**
- If eats less than 50% of the meal, provide 1 carton (240ml) Boost Plus/Ensure
- If eats less than 75% of the meal, provide ½ carton (120ml) Boost Plus/Ensure
- If eats over 75% the meal, no need to supplement
- **For snacks:**
- If eats less than 50% of the snack, please give ½ carton (120ml) of Boost Plus
- If eats greater than 50% of the snack, no need to supplement

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Addressing Common Problems

- **Gastroparesis**
  - Very Common problem – severity should be discussed medical provider
- Helpful things from nutrition standpoint..
  - **liquid calories at the start**
  - Many patient with disorder eating only want to eat 3 meals to get it over with, explaining to them 3 meals and snacks are better
    - **Smaller quantities spread all throughout the day**
- Low fiber acutely (4-6 weeks)
- Although lower fat foods can limit discomfort, it is more important is this population to focus on lower fiber and liquid calories instead of fat restriction
- Feeding the body and weight restoration will recover this over time

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Nutrition Assessment Vitamins/Minerals

- **Vitamin D check**
  - If < 30 provide 50,000 IU wafer 1 x per week, and re-check in six weeks
  - Long standing concerns for eating disorder can consider DEXA Scan
- Zinc Supplementation: Outpatient 10-15 mg zinc gluconate lozenges (1-2 months)
- Start on 2 mg/kg (choose 50 mg or 100 mg tablet) of Thiamin as increasing calories
  - Usually recommend on the inpatient side when initially re-feeding
- Vegetarians consider B12 check and iron panel
- **Start daily multi-vitamin**
  - Prenatal with folic acid

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Find A Dietitian

- Can be challenging in an outpatient setting
- Understanding many are private pay
  - Searching for the right fit
- EDRDPRO
- IAEDP member search for dietitians in your area
- Many therapists that treat eating disorders have dietitians they work with and may have recommendations as well if the patient already has a therapist

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Nutrition Inpatient What to Expect

- **Caloric needs and how to increase/Refeeding Syndrome**
- Aggressive caloric feeding (1500 kcals/day) on day of admission has shown to have shorter hospital stays
  - Consider 1000 kcals/day start for younger pre-teens
  - It is not necessary to provide electrolyte replacements on initiation of enteral feeding. We recommend to just follow lab values and replace electrolytes as needed.
- Estimated energy needs for weight restoration at this facility use the Schofield equation.
  - Schofield: IBW x 1.2-1.3 + 500 kcals/day for weight restoration
- If no weight restoration is needed can, the dietitian will base estimated energy needs on Schofield x 1.2-1.3 using current height and weight.
- The dietitian will increase calories by 250-300 kcals/day based on electrolyte stability.
  - Can hold increase for 24 hours if labs are not stable.
- Looking to see restoration weight gain wanting 50-100 gm/day total 1-2 kg per week depending on age
  - This is different form outpatient (only expected 0.5-1 kg per week)
- X 3 days with no weight gain – increase 250 kcals/day

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Nutrition Inpatient
What to Expect

- RD will send pre-set menus of 3 meals and 3 snacks, RD takes food preferences.
  - Times are standardized 800, 1000, 1200, 1400, 1700, 1900
  - Patient is to eat the foods provided in allotted time (30 minutes)
    - if not eaten patient will drink the supplemented amount of Boost Plus.
  - If patient does not like foods, that is why the Boost is offered.
  - If patient does not drink the Boost – an NG tube will be placed, and Boost will be provided this way.
    - Place NG after first refusal of a meal. The medical team will discontinue to the NG after the patient has eaten 100% of their calories by mouth (without the use of NG) x 48 hours. Keep NG in after two unsuccessful removals.

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Nutrition Inpatient
Enteral Vs. Parenteral Nutrition

- Oral/enteral feeding is the preferred first line treatment for a patient with an eating disorder.
  - Parenteral nutrition is not indicated as first line nutrition for a patient with an eating disorder
- Enteral tube feeding should be used when oral feeding is refused or inadequate.
- Parenteral nutrition should only be used if the patient has a medical condition requiring bowel rest (perforation, obstruction, chronic intestinal disease, etc.)
- Parenteral nutrition in the eating disorder patient has increased complication risk compared to oral feeding.
- Gastroparesis and/or presumed villous atrophy is not an indicator for parenteral nutrition.

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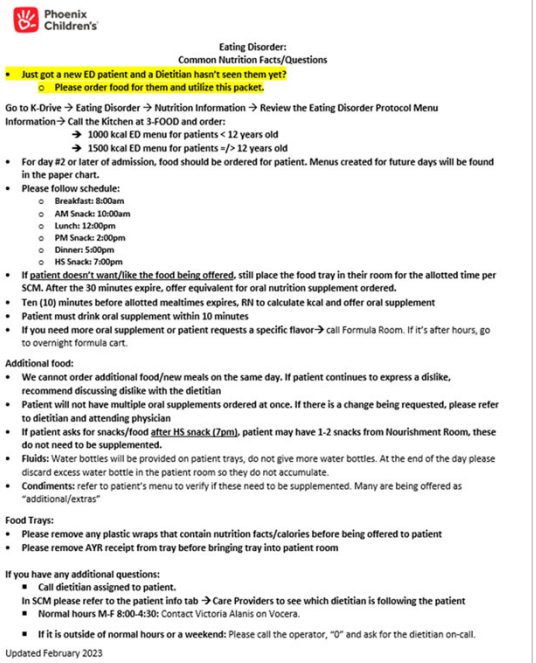
Meals and Snacks in the Hospital

- Nursing plays a large role in execution of our protocolized meals and snacks in the hospital.
- Currently working on expanding education via a required virtual learning module.



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Eating Disorder:
Common Nutrition Facts/Questions

- **Just got a new ED patient and a Dietitian hasn't seen them yet?**
  - **Please order food for them and utilize this packet.**

Go to K-Drive → Eating Disorder → Nutrition Information → Review the Eating Disorder Protocol Menu Information→ Call the Kitchen at 3-FOOD and order:
- **→ 1000 kcal ED menu for patients < 12 years old**
- **→ 1500 kcal ED menu for patients =/> 12 years old**

- **For day #2 or later of admission, food should be ordered for patient. Menus created for future days will be found in the paper chart.**
- **Please follow schedule:**
  - **Breakfast: 8:00am**
  - **AM Snack: 10:00am**
  - **Lunch: 12:00pm**
  - **PM Snack: 2:00pm**
  - **Dinner: 5:00pm**
  - **HS Snack: 7:00pm**
- **If patient doesn't want/like the food being offered, still place the food tray in their room for the allotted time per SCM. After the 30 minutes expire, offer equivalent for oral nutrition supplement ordered.**
- **Ten (10) minutes before allotted mealtimes expires, RN to calculate kcal and offer oral supplement**
- **Patient must drink oral supplement within 10 minutes**
- **If you need more oral supplement or patient requests a specific flavor→** call Formula Room. If it's after hours, go to overnight formula cart.

Additional food:
- **We cannot order additional food/new meals on the same day. If patient continues to express a dislike, recommend discussing dislike with the dietitian**
- **Patient will not have multiple oral supplements ordered at once. If there is a change being requested, please refer to dietitian and attending physician**
- **If patient asks for snacks/food after HS snack (7pm), patient may have 1-2 snacks from Nourishment Room, these do not need to be supplemented.**
- **Fluids:** Water bottles will be provided on patient trays, do not give more water bottles. At the end of the day please discard excess water bottle in the patient room so they do not accumulate.
- **Condiments:** refer to patient's menu to verify if these need to be supplemented. Many are being offered as "additional/extras"

Food Trays:
- **Please remove any plastic wraps that contain nutrition facts/calories before being offered to patient**
- **Please remove AYR receipt from tray before bringing tray into patient room**

If you have any additional questions:
- **Call dietitian assigned to patient.**
  In SCM please refer to the patient info tab →Care Providers to see which dietitian is following the patient
- **Normal hours M-F 8:00-4:30:** Contact Victoria Alanis on Vocera.
- **If it is outside of normal hours or a weekend:** Please call the operator, "0" and ask for the dietitian on-call.

Updated February 2023

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Meals and Snacks in the Hospital

- **Dietitian considerations**
  - RD can consider food fears and limit those at first
  - RD may ask about triggering foods for patient and may try to limit them, but do not make promises that these foods will not be on their plate.
  - No eliminating food groups.
  - Most Eating disorder facilities will provide milk. (Inclusion of all food groups) This can be eased into but would not provide almond milk as an alternative because it has minimal protein.
    - Lactaid, cow's milk, or soy milk totaling 16 oz/day at goal or 2 yogurts per day.
  - **No caffeine** (caffeine is a diuretic and can also suppress appetite)
  - Patients can have hot tea if approved by the interdisciplinary team, but it may not contain caffeine.
    - Example: Many patients like peppermint or chamomile tea
    - Limit to two times per day and will need to be kept in the nourishment room on the floor with a patient label.
  - **No chewing gum** as this is also used as an appetite suppressant
  - **Vegetarian is okay if it is for religious/beliefs or longstanding history predating the eating disorder -and/or they provide enough food options that allows you to meet their needs without giving them meat**.

- **Water Intake**

- The fluid goal for this patient population is 1x maintenance fluids unless otherwise specified.
- If the patient is not drinking enough, NG is preferred over IV placement
- Water bottles are provided on the patient trays and nurses are not to give additional water bottles
- It is important to monitor for excessive water intake > 2x maintenance fluids. If this is occurring patient may need to have fluids specifically limited.

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Discharge Nutrition

- If going back into the outpatient setting
  - Set up with a dietitian (have an appt set)
- Work on a meal plan prior to discharge
  - Usually work on exchanges and helping them build meals
  - Will provider recommendations for a supplement and send to insurance for possible coverage

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Interested in Learning More? Nutrition Resources

- **Sick Enough: A Guide to the Medical Complications of Eating Disorders**
  - Author: Jennifer L. Gaudiani MD, CEDS, FAED
- **Anti-Diet**
  - Author: Christy Harrison MPH, RD
- **How to Raise an Intuitive Eater**
  - Authors: Sumner Brooks MPH, RD and Amee Severson MPP-D RD
- **How to Nourish Your Child Through an Eating Disorder**
  - Author: Casey Crosbie RD CSSD and Wendy Sterling MS, RD, CSSD
- **Nutrition Counseling in the Treatment of Eating Disorders**
  - Author: Marcia Herrin EdD, MPH, RDN, LD, CD, FAED and Maria Larkin

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Eating Disorders: The Psychology

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Goals

- Eating disorders in the context of the COVID pandemic
- Assessment of an eating disorder
- Treatment levels of Care

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Eating Disorders & the COVID-19 pandemic

- Increase in the incidence of eating disorder behaviors and diagnoses in the community
- Increase in the severity of symptoms associated with the eating disorder
- Increase in the complexity with (mental health) comorbidities
- Increase in demand for treatment services

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Why there was an increase in Eating disorders during the pandemic?

The pandemic may have promoted disordered eating behaviors among susceptible individuals.

- Closing of schools, colleges and work from home;
- Activity levels changed;
- Focus on food;
- Delays in outpatient care.

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Patients with Eating Disorders seen in the Pediatric Hospital Setting

- The most typical diagnoses are:
  - Anorexia Nervosa (AN)
  - Avoidant Restrictive Food Intake Disorder (ARFID)
  - Other Specified Feeding or eating disorder (OSFED)
- Binge Eating Disorder and Bulimia Nervosa present less often to pediatric hospitals.

A patient does not need to be underweight to have an eating disorder

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Other Eating Disorder *Presentations*

- Other presentations to be aware of:
  - Atypical anorexia – symptoms of AN but weight is above or within the normal range
  - Orthorexia - excessive preoccupation with eating healthy food
  - Diabulimia – purposeful restriction of insulin to lose weight
  - Feeding problems associated with ASD
  - Eating impacted by gender dysphoria in transgender patients

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Signs that your patient may have an Eating Disorder

- Changes in what, when, and how much they eat
- PO refusal
- Being restrictive or regimented about their eating
- Unusual weight fluctuations
- Expressing unhappiness with their body or their weight
- Exercising much more than usual
- Spending a lot of time in the bathroom.

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What to ask your patient regarding an Eating Disorder?

- Start off by asking questions about diet and exercise (and weight loss/gain)
- Ask about:
  - Vomiting (unintentional and intentional/purging)
  - Use of laxatives
  - Use of dietary supplements including appetite suppressants

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Questionnaires

- Eating disorder Screen for Primary care (ESP) – contains questions about eating patterns and previous ED episodes;
- Eating Disorders Assessment for DSM-5 (EDA-5) – contains questions based on the DSM-5 diagnosis criteria;
- Child Eating Disorder Examination (ChEDE) – containing 28 questions to assess diagnostic criteria for BED and BN;
- Bright Futures Questionnaires – a more extensive questionnaire from the AAP containing questions about eating patterns and body image;
- SCOFF questionnaire – containing five short questions about eating and its impact on life.

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Evidence-Based Treatment for Youth EDs

- Family-Based Treatment (initially puts caregivers in charge of nutrition)
- Cognitive-Behavioral Therapy (with family involvement when appropriate)
- Dialectical Behavior Therapy
- Estimate 6-12 months of outpatient therapy

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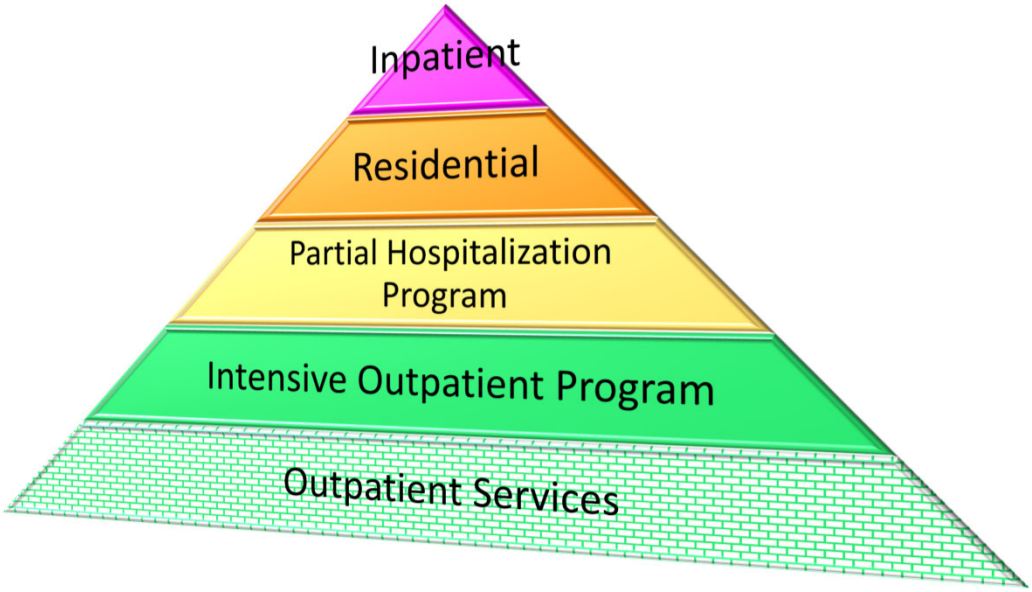
Eating Disorder Treatment Levels of Care



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Residential Treatment

- Patient stays at the "residence" and receives treatment daily
- Multidisciplinary team of providers
- Components of the program typically include:
  - Individual therapy
  - Group therapy
  - Nutrition counseling and education
  - Meal exposure therapy
  - May also include:
    - Expressive Arts
    - Animal Assisted therapy

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Partial Hospitalization Programs

- Therapeutic Day Treatment Program
  - Patient goes during the day and returns home at night
  - Example: M – F, 9 am – 3 pm
- Benefits include:
  - Meal exposures
  - Medication Management
  - Evidence-based therapy (FBT, CBT, DBT)
  - Holistic therapies
  - *Patient can remain "local" and return home in the evening*

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Intensive Outpatient Programs

- Outpatient – Patient remains at home
- Intensive – Several hours of therapy, several days per week
  - For example: M, T, Th – from 4:30 – 7:30 pm
- Services included typically are:
  - Group therapy
  - Meal exposures
  - Access to mental health therapist, dietician and weight checks

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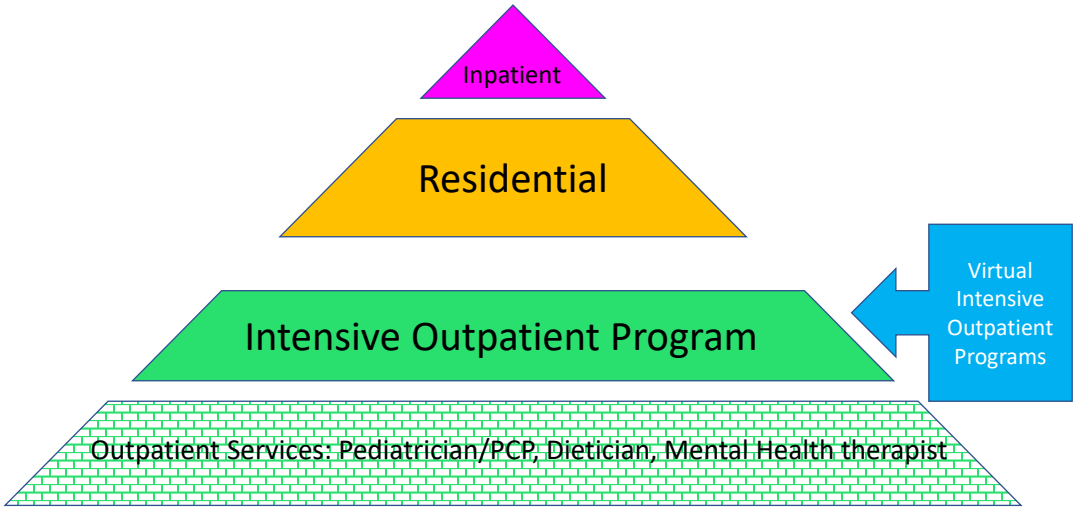
Current ED Levels of Care (in Arizona)



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How do I find out more/resources

- International Association of Eating Disorder Professionals
  - http://www.iaedp.com/
- National Eating Disorder Association
  - https://www.nationaleatingdisorders.org/
- Eating Recovery Center
  - https://www.eatingrecoverycenter.com/
- Psychology Today
  - https://psychologytoday.com/

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