Acute Food Refusal

Behavioral Health Pavilion

Nationwide Children's — When your child needs a hospital, everything matters.

Center for Clinical Excellence

Medically cleared behavioral health patient with a history of known food/liquid refusal or new food/liquid refusal during current admission

Inclusion and Exclusion Criteria

Definition, Diagnosis, and Differential

Management Tips and Considerations

Dehydration Assessment

Medical Discharge Planning

Stage 1 Food Refusal Management

- Vitals per floor routine
- Monitor I&O
- Mon/Thurs weights – same scale, same outfit, blinded if the patient has a diagnosed eating disorder

Concern for severely restricted food intake ≥24 hours?

No → (return to Stage 1 Food Refusal Management)

Yes

RN should discuss concerns about **medical stability** with Psychiatry who can contact Hospital Pediatrics as needed prior to Stage 4

Stage 2 Food Refusal Management

- Add vitals Q12H
- Add strict I&O
- Add Nutrition consult – calorie counts only when recommended by Nutrition
- Consult Behavioral Support Services (BSS)

Does the patient have **moderate or severe malnutrition** by BMI, weight loss, or decline in BMI per Nutrition?

Yes →

Off Pathway

- Consider Hospital Pediatrics consultation as clinically indicated

No ←

Patient consistently eating ≤25% of meals and snacks ≥48 hours?

No → (return to Stage 2 Food Refusal Management)

Yes

Stage 3 Food Refusal Management

- Add daily orthostatic vitals

Patient consistently eating ≤25% of meals and snacks ≥72 hours?

No → (return to Stage 3 Food Refusal Management)

Yes

Stage 4 Food Refusal Management

- Consult Hospital Pediatrics
- EKG, Chem 10, UA strip for ketones and SG
- Consider IVF bolus if patient is clinically dehydrated
- Consider discussion with Adolescent Medicine if the patient has a diagnosed eating disorder

Is the patient **medically stable**?

Yes →

Hospital Pediatrics will continue to follow the patient and manage medical care

- Consider transfer to Main under Hospital Pediatrics if the patient is consistently eating ≤25% of meals and snacks ≥5 days
- Consider transfer to Main under Hospital Pediatrics if the patient has received IVF bolus x3

No →

Transfer to Main under Hospital Pediatrics

- Discuss transfer and team placement with Adolescent Medicine if the patient has a diagnosed eating disorder

Off Pathway

- Manage as clinically indicated
- Consider **transfer back to the BHP** when meeting appropriate medical stability criteria

Inclusion and Exclusion Criteria

Inclusion criteria:

- Patient in EOS, admitted to YCSU, or admitted to BHP inpatient
- History of food/liquid refusal or new food/liquid refusal with or without a diagnosed eating disorder

Exclusion criteria:

- Ongoing acute or chronic medical causes of inadequate oral intake
- Specific diagnoses more affected by prolonged reduced oral intake:
  - Insulin-dependent diabetes mellitus
  - Genetic metabolic disease
  - Sickle cell disease
  - Congenital heart disease
  - Chronic kidney disease
  - High risk medications (e.g., lithium, tacrolimus)
- **Moderate or severe malnutrition** by BMI, weight loss, or decline in BMI

Return to Algorithm

Definition & Diagnosis

Definition of acute food refusal:
- A disordered eating behavior, with or without an underlying eating disorder, resulting in consumption of ≤25% of energy needs

Diagnostic criteria:
- Refusal to eat all or most foods presented, resulting in failure to meet the child's caloric or nutritional needs

Typical presentation:
- Adolescent patient 11-17 years of age admitted to the hospital in psychiatric crisis, often with a history of disordered eating, and often with ongoing thoughts of self-harm or a desire for secondary gain

Consider alternate diagnoses when:
- The patient has signs/symptoms of an acute illness (e.g., fever, abdominal pain, vomiting, diarrhea, dysuria, headache)
- The patient has a chronic illness that may limit food intake and/or appetite (e.g., technology dependence, depression, anxiety, catatonia, psychosis)
- The patient is on medication(s) that may limit food intake and/or appetite
- The patient has a limited/restrictive diet at home (e.g., patients with autism spectrum disorder, patients with ARFID)
- The patient's religious practices may limit food intake (e.g., fasting)
- The patient is developmentally delayed and requires assistance or direction to eat
- The patient is **medically unstable or there are Red Flags**

Differential diagnosis:
- Acute food refusal
- Avoidant restrictive food intake disorder (ARFID)
- Anorexia nervosa
- Bulimia
- Autism spectrum disorder
- Anxiety
- Depression
- Psychosis
- Catatonia
- Oppositional defiant disorder (ODD)
- Conduct disorder

Return to Algorithm

Abbreviations

- BHP - Behavioral Health Pavilion
- EOS - Extended Observation Suite
- YCSU - Youth Crisis Stabilization Unit

Return to Algorithm

Pediatric Malnutrition

Indicators for Pediatric Malnutrition: 2 years – 18 years

Indicator	Mild	Moderate	Severe
BMI for Age Z-score	-1 to -1.9	-2 to -2.9	-3 or less
Height Z-score	-	-	-3 or less
MUAC Z-score (up to 5y, WHO)	-1 to -1.9	-2 to -2.9	-3 or less
Weight Loss	5% usual body weight	7.5% usual body weight	10% usual body weight
Decline in BMI Z-score	Decline of 1 Z-score	Decline of 2 Z-scores	Decline of 3 Z-scores
Inadequate Nutrient Intake	51-75% of energy/protein needs	26-50% of energy/protein needs	≤ 25% of energy/protein needs

Reference: CDC, excluding Mid-Upper Arm Circumference (MUAC)

Return to Algorithm

Medical Stability

Medical Instability Criteria

These criteria should be utilized in conjunction with clinical expertise when making decisions regarding medical stability / instability

Abnormal vitals:

- Sustained HR <45 on 2 consecutive Q12H vital checks
- Sustained manual systolic BP <90 on 2 consecutive Q12H vital checks
- Manual orthostatic hypotension with >20mmHg systolic drop or >10mmHg diastolic drop
  - Must check blood pressure and heart rate after lying supine x5 minutes, after standing x1 minute, and after standing x3 minutes

Abnormal electrolytes:

- Potassium <3mmol/L
- Phosphorus <2.5mmol/L

Abnormal EKG:

- Prolonged QTc >475msec
- 2nd or 3rd degree heart block

Red Flags

- Fever
- Moderate to severe dehydration
- Chronic malnutrition
- Significant weight loss
- Abnormal physical exam
- Altered mental status

Return to Algorithm

Dehydration Assessment

Clinical Dehydration Criteria

Signs and Symptoms	Degree of Dehydration		
	None or Mild	Moderate	Severe
General Condition	<5%	5 - <10%	≥10%
Infants	Thirsty; alert; restless	Lethargic or drowsy	Limp; cold, cyanotic extremities; may be comatose
Children	Thirsty; alert; restless	Alert; postural dizziness	Apprehensive; cold, cyanotic extremities; muscle cramps
Quality of radial pulse	Normal	Thready or weak	Feeble or impalpable
Quality of respiration	Normal	Deep	Deep and rapid
Skin elasticity	Pinch retracts immediately	Pinch retracts slowly	Pinch retracts very slowly (>2 sec)
Eyes	Normal	Sunken	Very sunken
Tears	Present	Absent	Absent
Mucous membranes	Moist	Dry	Very Dry
Urine output (by report of parent)	Normal	Reduced	None passed in many hours

Adapted from Gorelick MH, Shaw KN, Murphy KO. Validity and Reliability of Clinical Signs in the Diagnosis of Dehydration in Children. *Pediatrics*. 1995;99(5):1-6.

[IV Fluid Therapy Clinical Pathway]

[Return to Algorithm]

BHP Transfer

- Patients transferred to Main for medical stabilization can be transferred back to the BHP once they are deemed medically stable by their primary medical team and in conjunction with the Psychiatry CL team at Main

- If oral intake improved during medical stabilization at Main, the patient should re-enter the pathway at the **Stage 1 Food Refusal Management**

- If oral intake did not improve during medical stabilization at Main, the patient may still be appropriate for transfer back to the BHP after further multi-disciplinary discussion and planning with their primary medical team, Hospital Pediatrics at the BHP, the Psychiatry CL team at Main, and Psychiatry at the BHP

Return to Algorithm

Escalation of Care

Stage 1 Food Refusal Management

- Vitals per floor routine
- Monitor I&O
- Mon/Thurs weights – same scale, same outfit, blinded if the patient has a diagnosed eating disorder
- Utilize “Management Tips and Considerations”

Stage 2 Food Refusal Management

- Vitals Q12H
- Strict I&O
- Nutrition consult – calorie counts only when recommended by Nutrition
- Consult Behavioral Support Services (BSS)
- Mon/Thurs weights – same scale, same outfit, blinded if the patient has a diagnosed eating disorder
- Utilize “Management Tips and Considerations”

Stage 3 Food Refusal Management

- Daily orthostatic vitals
- Vitals Q12H while awake
- Strict I&O
- Nutrition consult
- Mon/Thurs weights – same scale, same outfit, blinded if the patient has a diagnosed eating disorder
- Utilize “Management Tips and Considerations”

Stage 4 Food Refusal Management

- Consult Hospital Pediatrics
- EKG, Chem 10, UA strip for ketones and SG
- Consider IVF bolus if patient is clinically dehydrated
- Consider discussion with Adolescent Medicine if the patient has a diagnosed eating disorder
- Utilize “Management Tips and Considerations”

Return to Algorithm

Management Tips and Considerations

These are some strategies to help patients increase their food/liquid intake.

This is not an exhaustive list of strategies and every strategy may not be useful for every patient.
This list is intended as a guide for providers and staff as they develop and implement each patient's unique care plan.

If a patient has reached Stage 2, please refer to the behavioral plan outlined by the Behavioral Support Specialists (BSS) for patient-specific recommendations.

General guidelines
Patients should order 3 meals (1 entrée and 2 sides) and 3 snacks every day

- If the patient does not order food, the nurse should order food for the patient
- Food should remain in the patient's room for at least 30 minutes before being removed

Consider and address factors that may contribute to food refusal:

- Limited diet due to developmental/behavioral factors
- Food likes and dislikes
- Anxiety when eating around others
- Religious fasting
- Low appetite related to underlying mood disorder
- Need for control during hospitalization (e.g., coping mechanism)
- Secondary gain

Recommendations for nurses and mental health specialists:

- Do NOT focus on the lack of food/liquid intake.
- Do NOT threaten consequences or punishment for poor food/liquid intake as this may induce oppositional reactions.
- Do NOT talk about weight or BMI numbers with patients.
- Get to know the patient and discover what may be different about food and eating in the hospital versus when not in the hospital (e.g., type of food, eating schedule).
- Identify any food preferences so that those are ordered/available.
- Talk with caregivers to see if they can help us find ways to better support the patient with food and eating.
- Some patients may find it easier to eat with others, while some patients may have worsening anxiety and decreased food/liquid intake when eating with others. Try to identify patient preferences and triggers.
    - Consider a constant attendant during meals for some patients.
    - Consider group meals for some patients.
    - Consider allowing some patients to eat alone in their room.
- Consider a reward system to incentivize increased food/liquid intake.
- If encouraging increased food/liquid intake, set small and specific goals to make eating seem more manageable.
    - Don't simply ask patients to "eat/drink more" but be specific.

Recommendations for physicians and APPs:

- If there is concern for purging or undisclosed fluid intake, consider turning off the water to the shower and toilet.
- Do NOT threaten consequences or punishment for poor food/liquid intake. It may, however, be helpful to discuss future nutritional interventions (e.g., NG tube) for some patients.

Interventions that may be recommended by Nutrition consult: (only implement in discussion with nutritionist)

- Oral nutrition supplements (such as Ensure or Pediasure) may be provided for unfinished meals and snacks – 1 supplement if <75% of the meal/snack is completed and 2 supplements if <50% of the meal/snack is completed.
- Calorie counts – helpful to quantify intake and are most accurate/useful when looking at 3-day averages. While outside food should not be prohibited, outside foods cannot be accounted for in calorie counts.

Return to Algorithm

Medical Discharge

Medical discharge criteria:

- Medically stable
- Adequately hydrated on clinical exam
- Adequate follow-up in place for outpatient monitoring of nutrition

Medical discharge planning:

- All patients should have follow-up with their primary care provider (PCP) following hospitalization if/when nutrition concerns are identified
  - If the patient does not have a PCP, they can establish care with general Adolescent Medicine
  - If the patient requires more intensive medical monitoring of inadequate nutritional intake than their PCP can manage or if their PCP requires support, consider follow-up in the Adolescent Medicine Balanced Energy and Nutrition Clinic
- Patients with diagnosed eating disorders, concern for new eating disorders, or concern for medical complications of disordered eating may need follow-up in the Behavioral Health Eating Disorders Program or the Adolescent Medicine Balanced Energy and Nutrition Clinic
- For patients entering residential eating disorder programs, medical monitoring and/or medical follow-up will need to be arranged if there is a lengthy gap in time between discharge from the hospital and entrance into the program
- Discuss with caregiver(s) any nutrition concerns and/or supports that were helpful for the patient while they were in the hospital
- Consider documenting in the discharge instructions a "nutritional prescription" for 3 meals and 2-3 snacks per day as necessary intake for a growing and developing adolescent
- Consider prescriptions for nutritional supplements (Ensure or Pediasure) to support nutrition at home
- Ensure the patient’s PCP is aware of any nutritional concerns from hospitalization, abnormal lab work, and follow-up recommendations

Return to Algorithm

Quality Metrics

Pathway goals:

- Early recognition of poor PO intake at the BHP
- Standardization of evaluation and management of patients with acute food/liquid refusal at the BHP

Metrics:

- Process:
  - Order set utilization among Psychiatry staff when poor PO intake is discovered
  - Order set utilization among Hospital Pediatrics staff when acute food/liquid refusal is determined
- Outcome:
  - Decreased number of unnecessary transfers to a higher level of care for nutritional needs
  - Decreased LOS
  - Decreased unnecessary testing and monitoring
- Balancing:
  - Incidence of medically unstable patient, due to food/fluid refusal, admitted to the BHP
  - Rate of inpatient transfer to a higher level of care from BHP to NCH Main
  - Amount of unnecessary tests preformed

Return to Algorithm

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Return to Algorithm

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Clinical Pathway Development

This clinical pathway was developed using the process described in the NCH Clinical Pathway Development Manual Version 6, 2022. Clinical Pathways at Nationwide Children's Hospital (NCH) are standards which provide general guidance to clinicians. Patient choice, clinician judgment, and other relevant factors in diagnosing and treating patients remain central to the selection of diagnostic tests and therapy. The ordering provider assumes all risks associates with care decisions. NCH assumes no responsibility for any adverse consequences, errors, or omissions that may arise from the use or reliance on these guidelines. NCH's clinical pathways are reviewed periodically for consistency with new evidence; however, new developments may not be represented, and NCH makes no guarantees, representations, or warranties with respect to the information provided in this clinical pathway.

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Return to Algorithm