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Eating Disorders Among Athletes

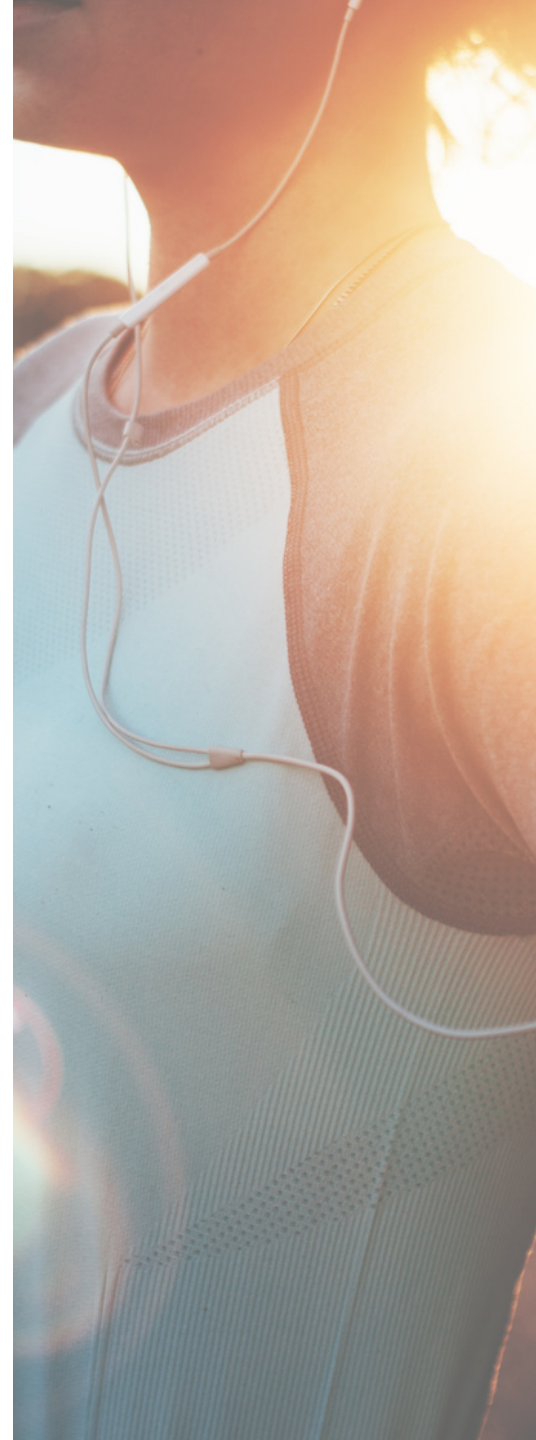
Detection & Referral Guidelines

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EATING DISORDERS AMONG ATHLETES

DETECTION & REFERRAL GUIDELINES

- I. Definition, Prevalence, Etiology
- II. Health Risks, Signs, Symptoms & Early Detection**
- III. Multidisciplinary Assessment
- IV. Managing Resistance & Motivating Recovery



Eating Disorders:

Detection & Referral Guidelines

Part II :

**Risks, Signs, Symptoms &
Early Detection**

Purpose

Eating disorders (EDs) are a serious mental illnesses posing substantial threat to mental and physical health.

Rates of ED's and subclinical disordered eating behaviors (DEBs), continue to increase across the nation and in particular among athletes.

The purpose of this presentation is to provide an overview of approaches used for detection of ED's among athletes and referral for evaluation and/or treatment.

Vital components of effective care for athletes are summarized.

It is hoped that this summary will facilitate effective ED assessment and referral for athletes and thereby reduce related risks and improve athlete well-being.

Eating Disorders Pose Health Risk



Health Risk

Eating disorders threaten physical health, mental well-being, and quality of life and have the highest mortality rate of any mental illness.

(Mitchell & Crow, 2006), (Mitchison, et al., 2013); (Styer, Aldridge, Conviser & Washburn, 2014), (Mehler & Brown, 2015)

It is estimated that one in five deaths among individuals with AN are by suicide.

(Arcelus, Mitchell, & Wales, 2011)

Medical Risks - Malnutrition

Malnutrition is a serious medical condition that requires urgent attention.

Malnutrition can occur in individuals engaging in disordered eating behaviors, regardless of weight status.

Individuals with ongoing restrictive eating, binge eating, purging or other ED behaviors require immediate intervention.

Medical Risks - Vomiting

Head & Neck

Erosion of tooth enamel

Dental cavities

Gum disease

Chronic sore throat

Difficulty swallowing

Swollen parotid glands

Inflammation of the salivary glands

General

Dehydration; light-headedness

Bloating and abdominal pain

Stomach and esophagus distention

Pancreatitis: Nausea, vomiting,
abdominal pain

Syrup of Ipecac poisoning

Aspiration of vomit: pneumonia,
lung infection or death

Medical Risks -

Compensatory Behaviors

Diuretic Use

Electrolyte Imbalance

Dehydration

Rebound edema: water retention

Swelling of hands and feet

Low Energy Intake

Muscle mass loss

Menstrual dysfunction

Bone density loss

Fatigue, poor concentration

Injury and Illness

Prolonged recovery process

Laxative Use

Electrolyte imbalance

Stomach cramping and discomfort

Chronic constipation

Dysfunctional bowel syndrome

Constipation

Impaction

Deficiency of fat, protein and calcium

Gastrointestinal bleeding

Rebound edema when laxatives are discontinued

Medical Risks - Vomiting

Head & Neck

- Dental cavities
- Gum disease
- Chronic sore throat
- Difficulty swallowing
- Swollen parotid glands
- Salivary gland inflammation
- Erosion of tooth enamel

General

- Dehydration: light-headedness
- Bloating and abdominal pain
- Stomach & esophagus distention
- Pancreatitis: Nausea, vomiting, abdominal pain
- Syrup of Ipecac poisoning
- Aspiration of vomit: pneumonia, lung infection or death

Signs & Symptoms



Signs & Symptoms- Anorexia

Restricted nutrition and hydration may be associated with one or more of the following:

- Weight Loss > 15 %
- Weight Fluctuation
- Bradycardia
- Hypotension
- Hypothermia
- Caratonemia
- Edema
- Amenorrhea
- Stress Fractures
- Electrolyte Abnormalities

Signs & Symptoms- Bulimia

Signs & Symptoms of Bulimia

Normal or overweight

Hypertensive

Swollen Parotid Glands

Dental Erosions

Edema

Esophagitis

Electrolyte Imbalance

Sore Throat

Kidney damage

Signs & Symptoms- Mood

Mood status is unique for each individual and may fluctuate throughout the course of the illness and recovery.

The following may be observed or reported:

Depression

Anxiety

Low Self-Esteem

Low Energy

Irritability

Absence of Negative Affect

Atypical Mood Fluctuation

Little or No Mood Fluctuation

Low Confidence



Signs & Symptoms- Cognitive

HEALTHY THOUGHTS

- “I eat to fuel my body for training and racing.
- I watch what I eat but I am comfortable eating more when I am hungry or my training intensity increases.
- I eat in preparation of training and eat to recover from training as well.

UN-HEALTHY THOUGHTS

- “Limiting my food consumption will lower my weight and improve my race time.”
- “Even though I know that food is necessary fuel, eating more makes me worried.”
- “I worry that I will feel out of control if I eat more often.”

Signs & Symptoms - Behavioral

May include one or more of the following:

Preoccupation with Calories, Food or Weight

Frequent Weighing

Comments about others Weight, Shape or Eating

Comparing Body or Appearance with Others

Discomfort Eating with Others

Increasing Number of Eating Rules

Secretive Eating Patterns

Use of Diet Pills, Laxatives, Teas, Weight Loss

Risky Use of other Medication

Signs & Symptoms - Sport

Signs and symptoms are unique to each individual and may vary over time:

Weakness

Loss of Muscle Mass

Slow Recovery Time Post Exertion

Higher Incidence of Injury

Performance Plateau or Decline

Conditioning Plateau or Decline

Less Satisfaction in Sport Participation

Inconsistent Sport Performance

Signs & Symptoms - Training

Does your body shape and size relate to your motivation to train as an athlete?

Do you feel a change in mood or energy when your training plan is interrupted for any reason?

Do you choose training over social events or other important life activities?



Signs & Symptoms - Beliefs

Thin will improve my performance.

Thin makes me feel powerful.

I will be happy at a lower weight.

I will be more successful at a lower weight.

I won't like myself if I feel fat.

All of the above are erroneous beliefs.



Signs & Symptoms - Psychosocial

Desire more Control

Struggling to Cope

Feeling Overwhelmed

Dichotomous Thinking

Feelings of Emptiness

Quest for Perfection

Desire for Attention

Tendency toward obsessive focus

Difficulty Accepting Imperfection

Need for Distraction

Difficulty Recognizing Feelings

Dichotomous Thinking

Difficulty Experiencing Feelings

Difficulty Expressing Feelings

Difficulty Asking for Help

Difficulty Connecting in

Relationships

One or more of the factors above may be evident and change during
the course of recovery.

Figure 1.

Signs and Symptoms of Eating Disorders

GENERAL

- Marked weight loss, gain, or fluctuation
- Change in growth curve (child & teen)
- Cold intolerance
- Weakness and/or Fatigue
- Pre-syncope &/or Syncope
- Hot flashes, sweating episodes

ORAL & DENTAL

- Oral Trauma/laceration
- Perimylolysis (Teeth Decalcification)
- Parotid gland enlargement

ENDOCRINE

- Amenorrhea or oligomenorrhea
- Low sex drive/ Infertility
- Stress fractures/ Low bone density

NEUROPSYCHIATRIC

- Obsessive/Compulsive behaviors
- Poor concentration or Memory loss
- Insomnia
- Self-harm
- Suicidal thoughts, plans or attempts
- Seizures
- Depressive/Anxious

CARDIORESPIATORY

- Chest pain or palpitations
- Orthostatic tachycardia/hypotension
- Dyspnea
- Edema

GASTROINTESTINAL

- Epigastric discomfort
- Abdominal bloating
- Early satiety
- Gastroesophageal reflux
- Hematemesis
- Hemorrhoids & rectal prolapse
- Constipation

DERMATOLOGIC

- Lanugo hair
- Hair loss
- Carotene derma
- Russell' sign (*calluses/scars on the back of the hand*)s
- Poor wound healing
- Dry brittle hair and nails

Figure 2.

Factors Indicating Need for ED Evaluation

Significant weight change

Sudden change in eating behaviors (ie. vegetarian, vegan, gluten free, lactose free, elimination of certain foods or food groups, or binge eating.)

Sudden change in exercise patterns, excessive or compulsive exercise or extreme physical training

Body image disturbance, desire to lose weight, or extreme dieting behavior regardless of weight

Source: Academy of Eating Disorders: Guide to Medical Care, 2017

Figure 2. (continued)

Factors Indicating Need for ED Evaluation

Abdominal complaints in the context of weight loss behaviors

Electrolyte abnormalities without identified medical cause (hypokalemia, hypochloremia, elevated bicarbonate)

Hypoglycemia, Bradycardia, Amenorrhea or Menstrual Irregularities

Unexplained Infertility

Detection Referral Guidelines



Factors Requiring ED Evaluation

Type I Diabetes Mellitus with poor glucose control or recurrent diabetic ketoacidosis with or without weight loss.

Use of compensatory behaviors after eating such as; self-induced vomiting, laxative use/abuse, dieting, fasting or excessive exercise to influence weight.

Inappropriate use of appetite suppressants, caffeine, diuretics, laxatives, enemas, ipecac, artificial sweeteners, sugar-free-gum, prescription medications that affect weight (ie., insulin, thyroid medications, psychostimulants or street drugs, etc.) or nutritional supplements marketed for weight loss.

Detection & Referral

Athletes with EDs may be dangerously, medically, compromised despite the following factors:

The number of signs and symptoms observed and reported may be few.

Blood tests or laboratory results may appear normal.

The athlete may report that they feel “fine”.

A decrement in athletic performance may not be detected.

The athlete may be confident that they can manage any difficulties themselves.

Reminders

Individuals with Eds: 1) may not recognize the seriousness of their illness, 2) may be ambivalent about changing their eating, 3) reluctant to change their training regimen, and 3) hesitate to accept help.

All instances of precipitous weight loss or gain should be investigated since rapid weight fluctuations can be a potential marker of an ED or pose other risk for the athlete's health and safety.

In children and adolescents, any failure to gain expected weight and height, or delayed or interrupted pubertal development, should be evaluated.

Early Detection & Referral

Early detection and referral is essential in order to:

Minimize medical and emotional risk.

Reduce disruption in athletic performance and academic functioning.

Prompt referral to formal ED assessment.

Begin treatment as soon as possible to facilitate optimal recovery.

(If indicated)

Provide services only within your permitted scope of practice.

Non-clinically trained and non-licensed practitioners should report observations and refer to professionals having a license and expertise in ED.

Early Detection

Consider referral for ED evaluation if any of the following signs are observed:

Noticeable weight change; loss, gain or fluctuation.

Sudden changes in eating behaviors like vegetarianism/veganism, gluten-free, lactose free, elimination of certain foods or food groups, eating only “healthy” foods, or uncontrolled binge eating, etc.

Sudden changes in exercise patterns, excessive exercise or involvement in extreme physical training.

Factors Impeding ED Detection

Athletes, sport personnel and some medical care professionals may have little formal training in recognizing eating disorder signs and symptoms.

(Torres-McGehee et al., 2012)

Signs of malnutrition may not always be obvious and are not always indicated by body weight or shape.

Athletes who are at low, normal or high weights may have EDs.

Athletes of any weight may be malnourished and engaging in unhealthy weight control practices.

Factors Impeding ED Detection

Behaviors such as purging are not easily observed or recognized as problematic by the athlete or athletic personnel.

(McCallum et al., 2006)

Malnutrition and related risks can occur in individuals who engage in DEBs, regardless of weight status.

ED signs, such as outside sport training and restriction of nutritional intake to reduce body weight, may be normalized within the sport culture.

(Markser, 2011)

Hoping that symptoms will remit untreated delays assessment and treatment.

Fear of a change in sport participation, reduces ED detection and delays referral for treatment.

When to Evaluate?

Consider ED evaluation if any of the following are present:

Body image disturbance and the desire to lose weight.

Extreme dieting behavior regardless of weight, such as exercising while wearing plastic, use of diet products or restriction of fluids, etc.

Abdominal or intestinal discomfort, pain or complaints.

Electrolyte abnormalities without an identified medical cause especially hypokalemia, hypochloremia or elevated CO₂.

Questions to Consider

Regarding Training Volume and Intensity:

Do you practice active recovery and/or take complete rest days?

Do you complete workouts in addition to your prescribed training?

Do you ever add mileage, sets, or reps to a prescribed workout?

Do you ever feel pressure to push harder than advised?

Further evaluation is indicated when positively endorsing one or more of the items noted above.

Early Detection and Treatment Preserves Health

Be reminded that there is little risk in referring to soon.

There is little risk in confirming good health and ruling out ED behaviors.

The time and expense in detection and referral is well worth preserving the athlete's health.

Early identification of any mental health issues and referral to appropriate support and treatment, preserves health and assists in rapid return to sport.

YOU CAN MAKE A DIFFERENCE



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Figures

Figure 1. Signs and Symptoms of Eating Disorders,
Academy of Eating Disorders: Guide to Medical Care, 2017.

Figure 2. Factors Indicating Need for ED Evaluation,
Academy of Eating Disorders: Guide to Medical Care, 2017

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Part II

Risks, Signs, Symptoms & Early Detection

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