Expert Guidelines: Role of Psychologist in Assessment and Treatment of Obese Youth

* A publication of FOCUS on a Fitter Future

CHILDREN’S HOSPITAL ASSOCIATION
formerly CHCA, NACHRI and N.A.C.H.

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FOCUS on a Fitter Future is a Children’s Hospital Association FOCUS Group addressing children’s hospitals’ role in combating the epidemic of pediatric obesity. This multidisciplinary group began in 2008 with 15 participating institutions and expanded to 25 in its second cohort. Unique to this group is its inclusion of physicians, dieticians, exercise specialists, psychologists, researchers and executive sponsors from participating hospitals. The group’s goal is to deliver quality, cost effective care and improve service for children and families in the prevention and treatment of pediatric obesity. “Expert Guidelines: Role of Psychologist in Assessment and Treatment of Obese Youth” represents consensus thinking of the Psychology Subcommittee whose membership includes:

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Children’s Hospital Association is grateful for the funding support of the Mattel Children’s Foundation, without which, FOCUS on a Fitter Future would not be possible.
Doctoral level psychologists should be involved in treating obese youth in multidisciplinary specialty care clinics, alongside specialty care physicians, dietitians, and physical therapists, exercise physiologists, and exercise specialists. As outlined below, all new patients should receive assessments with detailed diagnostic interviews and objective measurements. Psychologists should also be involved in as many of the follow-up visits as needed for re-assessments with changes in emotional or behavioral functioning, with new stressful events, or to address medical nonadherence.

Consistent with the literature, it is critical that the multidisciplinary teams include an emphasis on family-based changes rather than focus solely on individual patient change. Furthermore, psychologists, and the clinics in which they work, should focus on changing health-related behaviors, not just weight change. The medical recommendation for youth who have not finished growing is to stabilize weight and allow for gradual height growth to change body mass index (BMI). In addition, clinicians involved in multidisciplinary teams should become familiar with motivational interviewing techniques and utilize collaborative goal planning rather than only prescribing patients’ and their families’ changes. These issues are central to the care of obese patients and should be reviewed periodically to avoid clinic practices drifting away from these important treatment tenets.

Note that the areas outlined below may be assessed by other disciplines involved in the specialty clinic. Psychologists should obtain this information from those assessments and ask patients any additional follow up questions necessary. Communication among all clinicians involved is critical for sharing assessment information, enhancing the accuracy of diagnoses and designing coordinated short-term and long-term treatment goals. Furthermore, we strongly recommend the disciplines shadow each other to be aware of the perspectives and unique contributions of each discipline in the care of the patients and families.

Consistent with the American Psychological Association (APA) Ethical Principles of Psychologists and Code of Conduct, psychologists are reminded to treat patients and their families with appropriate respect and compassion. Psychologists are also encouraged to advocate for a clinic culture that heightens awareness of weight bias inherent in their own actions and in their clinics as well as to take action to reduce or eliminate bias. Similarly, obese patients and their families can have significant socioeconomic and cultural differences, and psychologists should be active in seeking an understanding of these factors of diversity. Treatment recommendations and conclusions drawn from assessment data should also take into account these cultural issues.
Medical History
This section of questions may be asked by a physician as part of a multidisciplinary clinic and/or a separate specialty appointment. If so, reviewing the notes and asking any items not covered in that summary is sufficient.

- Medical conditions, comorbidities
- Weight, height, BMI, BMI percentile
- Weight loss and gain history
- Adherence to other medical treatment
- Medications

Developmental History
- Typical developmental questions (pregnancy, perinatal period, milestones, temperament)
- Developmental delays
- Sensory sensitivities
- Social responsivity/attachment
- Early feeding history (i.e., breastfeeding history, difficulties, reflux)

Genetic Family History
- Medical history of biological family
- Psychiatric history of biological family
- Obesity/bariatric surgery of biological family

Family History
- Family system composition and caregivers involved
- Marital status of parents/caregivers, level of conflict, contact with other parent/caregiver if separated or never married
- Sibling relationship quality
- Parenting styles of all caregivers, disciplinary practices, implications for medical adherence
- Recent or current family stressors
- Child protection involvement
- Physical abuse, sexual abuse, drug/alcohol use or abuse—past or present—neglect, exposure to trauma both acute and complex (i.e., domestic violence, medical trauma)
- Negative reactions from family members related to body image or food intake
- Financial history and food insecurity

Educational History
- Current grade and school
- Average grades/achievement, subject areas that are easier/harder
- Attendance problems or school refusal
- Behavior problems, suspension/detention rates
- Special education or 504 accommodations, home bound, home schooling, child’s response to accommodations
- Previous testing
- Grade retention
- Accelerated/gifted classes
- Sudden drop in grades
- Involvement in school clubs/organizations
- Organizational, planning, time management skills
- Difficulty completing school work
- Peer victimization as victim or as bully
• Level of participation in class, including gym
• Quality of relationship with teacher(s), discrimination

**Emotional History**
• Depression
• Suicidal ideation/attempt, past or present
• Safety in home, including access to weapons
• Homicidal ideation
• Self-injury, past or present
• Anxiety, including generalized, social, phobia, agoraphobia, obsessive thinking, compulsive behaviors
• Screen for mania, psychosis
• Somatic complaints
• Personal hygiene
• Drug/alcohol use or abuse, past or present
• Self-reported general level of stress

**Body Image**
• Low appearance-related self-esteem
• Frequency of weighing
• Mirror checking/avoidance
• Desired weight versus actual weight discrepancy
• Fears of gaining weight
• Clothing issues, including baggy clothing, tight clothing, discomfort with clothes shopping, bathing suit concerns
• Breast development in males (hirsutism)
• Consistency between perceived body shape and actual
• Notable clothing choices (too tight, too loose), difficulty clothes shopping, bathing suit concerns

**Behavioral History**
• Oppositionality
• Verbal aggression/talking back
• Physical aggression
• Lying
• ADHD—impulsivity level, inattention/concentration, organization, activity level
• Conduct Disorder symptoms or legal involvement

**Social History**
• Activities, interests, hobbies
• Friendships—older/younger preference, frequency of contact, number, withdrawal
• Social skills—difficulty making friends, difficulty maintaining friendships, poor social cue awareness
• Teasing by peers or family members
• Sexuality (if age appropriate)—timing of puberty, dating, interest, sexual orientation/identity, sexual activity, dating issues related to weight, birth control use, and caregiver awareness of these issues

**Psychiatric History**
• Prior diagnoses and age at diagnosis
• Level of treatment—inpatient, residential, wraparound, outpatient, school-based
• Medications, past or present
• Response to treatment, compliance, goals for previous treatment and achievement towards goals
• Attitude towards treatment, including attitude towards medication (i.e., helpful, not effective)

Nutrition
This section of questions may be asked by a dietician as part of a multidisciplinary clinic and/or a separate specialty appointment. If so, reviewing the notes and asking any items not covered in that summary is sufficient.
• Meals with whom, what, where, when (include other family members and their eating patterns)
• Rate of eating out, type of restaurant
• Favorite foods
• Binge eating—grazing, speed eating, feeling guilty or ashamed afterwards, distention or discomfort in abdomen, loss of control, start eating and can’t stop
• Food aversion/food phobia
• Attention to eating
• Eating in response to emotion—anxiety, depression, anger, stress
• Boredom eating
• Nighttime eating syndrome—eating greater than 50% of the food after certain time period (afternoon/evening), eating after everyone is asleep, hoarding food to eat after certain time
• Sneaking food; parenting behavior in response to sneaking
• Hoarding/hiding
• Intensity of appetite
• Purging and other compensatory strategies
• Dieting behaviors
• Skipping meals/fasting
• School meals versus packing lunches
• Food security/family’s access to food
• Family cultural patterns around eating and physical activity, including negative comments to patient about eating
• Poor food choices at school, choices of lunch items, vending machines
• Poor food choices at home—snacks, meal choices, breakfast, drinks
• Poor water/liquid intake
• Poor intake of fruits/vegetables
• Poor fiber intake
• High fat intake
• High caloric intake/portion sizes
• High intake of sugary drinks
• Milk ingested is not skim

Physical Activity
This section of questions may be asked by a physical therapist or other exercise specialist as part of a multidisciplinary clinic and/or a separate specialty appointment. If so, reviewing the notes and asking any items not covered in that summary is sufficient.
• Activity with whom, what, when, where
• Percentage moderate to vigorous (i.e., sweating, hard to talk)
• Attitude towards activity
• Organized sports/teams
• Occupational labor (e.g., lawn mowing, moving furniture)
• Sedentary behaviors—screen time (including TV, computer, video games, texting), excessive reading/drawing
• Physical Education/gym class available, participation
• Neighborhood safety
• Amount of free play time (for younger children)

Sleep
• Sleep hygiene—bedtime routine, naps, TV in bedroom, location of sleep, temperature in room, light/sound while sleeping
• Sleep onset/duration: school nights, weekend nights and summer vacation nights
• Parasomnias—night terrors, nightmares, sleep talking, sleep walking
• Initial, middle, terminal insomnia
• Sleep phase problems
• Restlessness, including restless leg
• Snoring/gasping while sleeping, sleep apnea/compliance with CPAP/BiPAP (positive airway pressure) machine

Motivation/Readiness to Change
• Caregiver(s) versus child motivation/readiness to change eating patterns
• Caregiver(s) versus child motivation/readiness to change physical activity
• Who decided child should seek weight management services (child, parent, physician, other) and why
• Past efforts at weight loss and what aspects made them effective/ineffective
• Patient/caregiver perception of what will be the most challenging change to make and why
• Patient/caregiver perception of the easiest change to make and why
• Any perceived barriers/concerns to being successful with becoming healthier
• Level of confidence in ability to make changes for patient/caregiver
• Expectations for weight
• Family members reactions to changes made or recommended

There are two ways to approach diagnosis and billing for obesity-related mental health/behavioral health services by psychologists: mental health CPT (current procedural terminology) codes and health and behavior CPT codes.

Psychiatric Disorder Model (Mental Health CPT codes)
One way to approach diagnosis and billing is through assessment and intervention from a traditional psychiatric perspective. Under this model, patients are assessed for psychiatric disorders as listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Treatment takes the presence of psychiatric disorder into consideration, and billing is conducted using mental health CPT codes under DSM-IV diagnoses, drawing on the patient’s mental health insurance. CPT codes may include 90801 (initial evaluation), 90806 (individual therapy 50 – 60 minutes), 90804 (brief therapy), 90847 (family therapy), 90853 (group therapy), 90846 (family therapy without patient present). Commonly diagnosed disorders in the obese population are adjustment disorders, depressive disorders, anxiety disorders, eating disorders, and behavioral disorders. Within this model, the treatment plan should consider the severity of the psychological disorder and the interplay between the disorder and obesity. For example, if the patient presents with severe mood and behavioral dysregulation and his/her obesity is conceptualized as fairly independent of mood and behavior, the practitioner may consider first treating the psychological disorder to achieve mood and behavior stabilization before focusing on nutrition and physical activity behaviors. If the patient’s obesity impacts or is impacted by psychological disorder, then the treatment plan should focus on health behavior change. For example, if the etiology of
Depressive symptoms is partially due to social rejection and poor self-esteem related to obesity, or depressive symptoms include anhedonia, loss of energy, and appetite disturbance causing poor health behaviors that exacerbate obesity, health behavior change would be an integral part of the treatment plan.

A challenge with this approach presents when the patient does not meet criteria for a psychiatric disorder, but the patient’s difficulty with health behavior is affecting his or her obesity. Under the model described above, many psychologists choose to use DSM diagnosis 316—psychological factors affecting a medical condition. Criteria include both the presence of a medical diagnosis and the presence of psychological factors affecting the medical condition in at least one way (see DSM-IV). The diagnosis allows for psychological factors to range from an Axis I disorder to the presence of psychiatric symptoms to maladaptive health behaviors (e.g., poor diet and exercise). In the case of obesity, the diagnosis of 316 can frequently be rationalized due to the presence of poor health behaviors in many patients.

**Integrated Model (Health and Behavior CPT Codes)**

Another way to approach assessment and intervention is to consider mental health/behavioral health as an integral part of comprehensive treatment for a medical disorder. Under this model, patients are assessed for their behavioral health needs; treatment integrates an understanding of social emotional needs regardless of mental health disorder; and billing is conducted using health and behavior CPT codes drawing from the patient’s medical insurance dollars and using the patient’s medical diagnosis rather than mental health diagnosis. These codes were initially proposed by the APA in 1998 and approved by the American Medical Association for inclusion in the CPT system in 2002. This model allows psychologists to address challenges associated with a medical illness, without labeling the patient as having a psychiatric disorder. The codes cannot be used to treat a psychiatric disorder only. The codes are used along with the patient’s medical diagnosis according to the ICD-9 (International Classification of Diseases, Ninth Revision) diagnosed by the physician. When a child has multiple medical diagnoses, the code is used for the primary medical condition that resulted in the need for behavioral health services. Health and behavior codes are used in 15 minute increments. The codes, associated service, and estimated Medicare reimbursement rate are included below (note that private insurance reimbursement rates may vary). Medicaid reimbursement varies by state; some state Medicaid programs do not reimburse health and behavior codes; some do recognize the codes and use Medicare reimbursement rates; some reimburse but have created their own (usually lower) rates; and some list rates but do not actually reimburse those codes.

<table>
<thead>
<tr>
<th>Code</th>
<th>Service</th>
<th>Approximate Medicare Reimbursement</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>15 minute (1 unit)</td>
</tr>
<tr>
<td>96150</td>
<td>Assessment—initial</td>
<td>$22*</td>
</tr>
<tr>
<td>96151</td>
<td>Re-assessment</td>
<td>$21</td>
</tr>
<tr>
<td>96152</td>
<td>Intervention—individual</td>
<td>$20</td>
</tr>
<tr>
<td>96153</td>
<td>Intervention—group (per person)</td>
<td>$5 (per pt)</td>
</tr>
<tr>
<td>96154</td>
<td>Intervention—family w/patient</td>
<td>$20</td>
</tr>
<tr>
<td>96155</td>
<td>Intervention—family w/o patient</td>
<td>$22</td>
</tr>
</tbody>
</table>
Ideal Model
Ideally, psychologists working in multidisciplinary obesity programs can integrate their understanding and assessment of both psychological and health-related issues and base billing practices on results of the assessment using either mental health or health and behavior codes depending on diagnostic formulation. This approach is illustrated in an algorithm included in the appendix. Note: This algorithm is from the FOCUS on a Fitter Future II Treatment Committee.

Challenges with Health and Behavior Codes
The major challenge with the use of health and behavior codes is actual reimbursement by Medicaid and private insurance carriers. Although all Medicare carriers now cover the codes, Medicaid varies by state with few state Medicaid programs covering. Many private insurers do not cover them. In 2005, APA reported 18 private insurance carriers covering the codes, including 5 Blue Cross Blue Shield state programs. This requires individual states and institutions to engage in negotiations and advocacy efforts with Medicaid and private insurance companies, including engagement from the APA practice directorate, administrative and clinical leaders from institutions, and presentation of data. Many institutions negotiate with individual insurance companies and begin by sending a letter explaining the codes (contact APA for sample letters). Further, actual reimbursement rates differ between states, insurance companies, and between health and behavior codes and mental health codes. In the state of Texas, for example, the health and behavior reimbursement rates as listed by Medicare are comparable to Medicaid and most private insurance reimbursement rates for the same service (e.g., assessment, individual therapy, family therapy); however, the state’s Medicaid program and most private insurance plans do not reimburse health and behavior codes. This challenge makes it difficult to use mental health and health and behavior codes as they are intended (e.g., mental health codes when psychiatric disorder is the focus of treatment, and health and behavior codes when treating the psychosocial needs associated with a medical condition).

Group and Family Treatment
When youth with complex medical conditions such as obesity and its comorbid conditions are treated, parent training and parent consultation is often needed and would be most beneficial without the patient present. An example is: When a pediatric psychologist works to coach parents in behavioral principles with a disruptive child, the ideal treatment plan includes at least some sessions without the child present. A CPT code for this model of therapy exists under both mental health and health and behavior CPT codes, but family therapy without the patient present is rarely covered by insurance companies. In fact, although Medicare has reimbursement rates listed for 96155, that code is not reimbursed in practice. Group intervention represents another challenge; many obesity group interventions are multidisciplinary in nature and are not focused on psychiatric diagnoses. Thus, mental health CPT codes for group would be inappropriate. Health and behavior codes represent a mechanism for billing for these multidisciplinary groups; however, a psychologist must be in a lead role as the codes do not cover licensed social workers, dieticians, or exercise physiologists.

Resources with further information on health and behavior codes follow:

- APA PowerPoint presentation on Health and Behavior Codes: [http://flash1r.apa.org/apapractice/hbcodes/player.html](http://flash1r.apa.org/apapractice/hbcodes/player.html)
- APA practice directorate’s Government Relations Office: (202)336-5889
In addition to playing an integral role in the assessment and treatment plan design, psychologists also play a strong role in provision of the treatment. A complete listing of all the treatment options that could be provided is beyond the scope of this paper. However, summarized below are many of the common treatment options that we provide to obese youth and their families. These recommendations are organized with 1) a list of recommendations made almost universally, 2) recommendations commonly given to patients in different developmental stages, and 3) additional recommendations if patients have a comorbid maladaptive health-related behavior or condition. These recommendations are additive, therefore patients could potentially be given general recommendations, plus whatever is commonly given to patients in their age group, and any additional recommendations based on comorbid issues or conditions noted in the assessment.

As always, the psychologist may choose to give only a few recommendations at each visit (to avoid overwhelming the patient) or a comprehensive list, based on the structure of the program and the goals of the individual patient/family. All treatment plans should be individually tailored to the patient’s unique needs and circumstances. The information below is to be used as a guide for consideration. It is important to note that the recommendations noted below that overlap with another discipline (for instance, screen time or increase in fruit/vegetable consumption) are not designed to replace that discipline’s recommendations. Instead, the psychologists often help write the behavioral plan that will facilitate success in achieving that goal.

**Recommendations for Most Patients**

**Specific recommendations for patients**

1. Use of a hunger scale (a patient-friendly scale to assist in determining level of hunger at any given time, typically 10-point scale with faces reflecting different levels of hunger/discomfort) and awareness of hunger versus boredom or emotional eating
2. Provide education about metabolism and factors affecting metabolic rate such as the negative effects of skipping breakfast
3. Review the importance of sleep hygiene and impact on hunger, fatigue, health, and behavior
   a. sleep in cool (68 degrees F), dark, quiet environment
   b. no eating 1 – 2 hours prior to bed
   c. no caffeine 6 – 8 hours prior to bedtime
   d. no electronics for 30 minutes prior to bed or turned on in the room while sleeping
   e. consistent bedtime, consistent wake time
   f. no pets in bed or in the bedroom while sleeping
   g. use the bed only for sleeping
   h. consistent bedtime routine for 30 – 60 minutes with low lights, low movement, low stimulation
   i. consider relaxation training
   j. no naps unless developmentally appropriate
   k. developmentally appropriate sleep duration
4. Review the impact of teasing/bullying on patient; provide education on school policies related to bullying; support caregivers in making changes in the home and school environment to reduce or eliminate teasing/bullying
5. Recommend eating slowly, shaping toward appropriate portion sizes
6. Recommend need for 5 small meals/snacks a day, shaping toward that goal
7. Recommend leaving the table after normal portion size/meal size and wait 20 minutes before second servings (only of fruits/vegetables); review delay in satiation communicated to the brain
8. Review benefits of regular exercise, shaping toward moderate/vigorous exercise
9. Recommend reduced screen time and other sedentary behaviors, working toward fewer than 2 hours a day
10. Recommend reduced caffeine intake to less than 1 8-oz serving a day, to avoid diminishment of hunger signals
11. Recommend increasing variety of fruits/vegetables through tasting opportunities, pairing with liked foods (dips), repeated presentations, shaping serving size over time, caregiver modeling
12. Provide psychotherapy to address coping with chronic illness, functional impairment, body image
13. Consider self-monitoring or caregiver monitoring (daily food or exercise log)
14. Consider using pedometer to log steps
15. Review pros/cons of packing lunch versus eating school lunch
16. Recommend only zero-calorie drinks with the exception of skim or 1% milk
17. Recommend working toward reducing fast food intake to only twice a week or less
18. Discuss healthy snack options and how to reinforce choosing those over unhealthy options

Specific recommendations for caregivers
1. Teach management of health-related behaviors including using Premack principle and reinforcement to increase frequencies of desired health-related behaviors, using distraction, alternate behaviors, and negative reinforcement to reduce frequencies of undesired health-related behaviors
2. Teach anger control strategies, positive coaching techniques
3. Specifically discuss alternative reward options rather than using food as a reward
4. Discuss the importance of showing love, nurturance, caregiving in a way that does not involve food provision
5. Recommend family-based treatment, in which all family members eat healthier foods, exercise regularly, and provide a supportive and validating atmosphere such that caregivers avoid negative comments about the patient’s eating habits or body
6. Recommend targeting family-based weight loss and/or improving health-related behaviors of all family members
7. Discuss caregiver role as positive coach in all the patient recommendations above
8. Review meal planning, budgeting for healthy foods
9. Recommend parents not purchase foods that their child typically overeats
10. Recommend parents have a consistent time when the kitchen is “closed” and eating stops in the evening
11. Recommend eating together as a family at a table without distractions, problem-solve barriers to this plan
12. Discuss how to develop a positive family culture regarding eating
13. Review importance of routine and its impact on healthy habit development

Toddlers Through Preschool

Specific recommendations for caregivers
1. Recommend 4 oz max of juice for this age child and work toward eliminating sugared beverages
2. Discuss how to transition from bottle to cup by age 12 months
3. Recommend no eating or drinking at night (except water) to protect teeth from cavities and reduce perception of hunger at night and promote sleep quality; recommend shaping and behavioral techniques over time to achieve this goal if needed
4. Recommend active play with dancing strongly encouraged and high activity levels normative
5. Recommend working toward no screen time under age 2 and less than two hours for preschoolers
6. Discuss overfeeding practices if present
7. Recommend capitalizing on absence of food preferences early in life, trying new foods, presenting wide variety of foods
8. Recommend capitalizing less on a tendency to be influenced by environmental cues
(e.g., go with self-regulation, internal hunger and satiety cues) at this age

9. Recommend whole family physical activity with caregiver modeling of physical activity

10. Recommend using behavioral techniques to work toward child sleeping independently

11. Recommend individual treatment with a strong level of caregiver participation; consider adding a group, multidisciplinary, multicomponent treatment although efficacy studies are limited for this age group

School Age

Specific recommendations

1. Strongly consider group multidisciplinary, multicomponent treatment with caregiver participation, and the following behavioral strategies:
   
   a. Caregiver monitoring of food and activities (with child involvement increasing as child matures)
   b. Positive reinforcement (not food) by caregivers and teachers
   c. Stimulus control
   d. Problem solving
   e. Preplanning
   f. Consider targeting caregiver weight change as well
   g. Length of treatment—no evidence but 6 months is most common

2. Recommend attempts to prevent decline in sports participation that happens after 13; attention to sports options for K – Grade 5 children, quality of coaching, and with particular attention to pre-adolescent girls

3. Recommend active play as a good option for this age group

4. Recommendations to increase physical activity:
   
   a. Immediate and genuine praise for effort rather than outcome
   b. Teach and practice skills
   c. Promote self-efficacy
   d. Promote caregiver involvement
   e. Link physical activity to peer and/or family involvement rather than solo

2. Address not eating breakfast at home and at school; discuss impact on metabolism; utilize shaping procedures if needed to increase intake at those times

3. Facilitate building positive body image

Adolescents

Specific recommendations

1. As in school-age population, strongly consider group multicomponent intervention including caregiver participation (either simultaneous with the teens or parallel); no consensus regarding length, but 14 – 16 weeks is most common

2. Consider adding peer-enhanced intervention (group challenging activities such as ropes course, mazes) to standard CBT (cognitive behavioral therapy) for greater effect

3. Recommend support for gradually increasing autonomy in health behaviors and increased responsibility for diet and physical activity while maintaining caregiver monitoring, education, and involvement

4. Watch for and address a decline in participation in sports after age 13

5. Problem solving to increase time available for physical activity and to address self-perception and self-efficacy

6. For boys and girls—assess and treat negative body image and appearance-related self-esteem issues that increase in prevalence in adolescence

7. Recommend caregiver support and involvement in physical activity, including providing transportation and encouragement
8. Consider technology-facilitated (Internet, texting, phone apps) behavioral intervention options

9. Review and emphasize sleep issues noted in general section above (Developmentally, adolescents need more sleep than younger patients but tend to get less resulting in greater sleep debt. Further, adolescents are prone to sleep phase problems that require behavioral intervention.)

10. Recommend increased patient involvement in planning for meals/snacks and physical activity including planning for eating in peer/social situations

11. Address particular issue of skipping meals: Why are they skipping?; What are the effects on metabolism?; How to increase ability to tolerate eating early in the morning?

12. Consider peer support interventions

**Specific Maladaptive Health-related Behavioral Patterns or Comorbid Conditions**

**Binge eating/overeating/grazing**

1. Consider cognitive behavioral therapy: Identify, challenge, and replace negative thoughts related to binging; improve recognition of internal emotional states, recognition of physiological cues of distress, problem solving high risk situations, coping strategies for emotions that trigger binging, impulse control, and emotion regulation skill enhancement

2. Consider interpersonal psychotherapy, which addresses social deficits purported to lead to and be a consequence of obesity and which teaches communication and interpersonal problem solving

3. Consider dialectical behavior therapy, which addresses emotion dysregulation and treats binge eating as high risk behavior that can be addressed with interpersonal and emotion regulation skill building and mindfulness and teaches family to become more validating

4. Develop a regular eating schedule approximately every three hours

5. Consider referral for psychotropic medication evaluation

6. Discuss caregiver role remaining neutral and non-judgmental when binging is discovered and provide support for the urges to binge

**Boredom eating**

1. Help child to become better at distinguishing between boredom and hunger

2. Keep schedule busy with activities

3. Emphasize use of hunger scale with this population

4. Help child develop a list of fun, favorite activities to reduce boredom and post it on the refrigerator and/or cabinet. Label the list: “If bored but not hungry, do this.”

**Emotional eating**

1. Understand emotional eating and the impact of emotions on hunger perception, impulsivity

2. Identify negative emotions and determine the reasons for the emotions; cognitive behavioral techniques are particularly helpful here; teach child to express his/her feelings in an appropriate way (such as talking, writing, drawing, music)

3. Encourage child to seek social support when feeling negative emotions

4. Caregivers understand patient’s need for social support and facilitate

5. Caregiver support of child, validating the emotion and empathy

6. Engage in a pleasurable activity when feeling stressed

7. Stress management techniques including relaxation training

8. Partake in physical activity to help decrease stress and improve mood
Nighttime eating syndrome
1. Distribute calorie consumption evenly throughout the day
2. Develop a regular eating schedule in which child eats every 3 hours without skipping meals and with steady intake, spaced evenly throughout the day
3. Emphasize sleep recommendations noted in general section above
4. Teach self-soothing and relaxation strategies to assist with falling back asleep rather than getting up to eat
5. Consult medical provider if medication side effects may be contributing
6. Consider referral to pediatric sleep program for a polysomnogram if patient appears to be eating while sleep walking (no awareness/recollection, occurs typically in the first one or two sleep cycles)

Hoarding/hiding food
1. Educate caregivers on neutral, problem-solving response to discovery of food hiding
2. Emphasize caregiver positive attitude toward eating behaviors to reduce potential reasons for hiding.
3. Develop a family culture of shared food, normalize the need for occasional treats, and develop positive responses to appropriate splurging
4. All foods stored in the kitchen and eating by all family members should be non-secretive.
5. Discuss child’s access to money and opportunities to buy food without supervision
6. Assess reason for food insecurity and develop a plan to address and reassure that food access will be stable (e.g., economic, family member eating all of the favorite foods)
7. Learn response prevention strategies to counter hoarding compulsions

Food aversion
1. Consider a multidisciplinary feeding evaluation
2. Promote understanding the steps to eating
3. Provide opportunities for child to interact with and gain exposure to non-preferred foods (assist with cooking; handle foods with bare fingers via chopping, mixing, throwing in trash; tolerate on plate; smell foods; tasting parties with no push to eat more than one taste; pairing with favorite foods)
4. Repeated exposure to new foods
5. Reward child for trying new foods
6. Model trying new foods and eating a healthy range of foods
7. Talk about how foods are the same as and different from familiar foods
8. Prepare one meal for everyone in the family instead of cooking different foods for different people

Developmental Delays
1. Educate families about higher prevalence rates of obesity across diagnostic categories
2. Promote an understanding of hyperphagia and appropriate caregiver responses to repeated requests for food
3. Promote understanding of possible impaired metabolism
4. Increased risk for sleep apnea (central and obstructive) suggests increased need for repeated assessment of breathing issues during sleep and heightened need for appropriate sleep hygiene
5. Children with disabilities have a much higher rate of physical inactivity than children without disabilities; discuss possible lower muscle tone and gross/fine motor impairments and impact on physical activity; discuss metabolism and addressing tone or gross/fine motor skills delays
6. Discuss social isolation of children with disabilities that limits active play as well as success in sports or peer-related physical activity; consider specialized physical therapy
7. Discuss behavioral management and problem-solving of texture sensitivities and/or
obsessions
8. Assess overfeeding after initial period of poor growth; if present, promote awareness of parental feeding patterns and normalize
9. Discuss impact of common behavioral issues (impulsivity, resistance to authority in general, lower insight if cognitively impaired) on behavioral planning
10. Discuss possibility of using food to quiet behaviorally challenging children and recommend alternative behavioral strategies
11. Consider referral to feeding programs if needed
12. Discuss behavioral reinforcement for social interactions as they naturally increase active play
13. Advocate for increased access to structured activities

**Functionally impairing mood, depressive, or anxiety disorder**
1. Refer to expert guidelines for major mental health disorders; for example, the APA has published guidelines on some common mental health disorders: http://psychiatryonline.org/guidelines.aspx
2. If a mental health disorder is diagnosed, provide evidence-based treatment if available, or refer to general mental health provider
3. Ensure coordination of care if pediatric psychologist and general child mental health provider are both working with a child on issues in their specific specialties
4. Consider whether obesity treatment should be halted temporarily until mood disorder, depression, or anxiety is better controlled (e.g., assess readiness for change related to obesity; would treating the mental health issues first make obesity treatment more successful)
5. Educate on exercise effect on mood; monitor exercise and mood

Doctoral level psychologists should be involved in the multidisciplinary specialty care clinics assessing obese youth, alongside specialty care physicians, dietitians, physical therapists/exercise physiologists/exercise specialists. Key issues of assessment were highlighted, and the role of the psychologist in the assessment process within a multidisciplinary team was carefully defined. Further, our expert committee sought to better define the role of a psychologist in the treatment process as well as create commonly accepted treatment guidelines. Included is a discussion regarding the development of a cooperative team atmosphere with sharing of information and team-based goal setting is critical. Psychologists are also encouraged to advocate for a clinic culture that heightens awareness of weight bias inherent in their own actions and in their clinics, as well as to take action to reduce or eliminate them. Similarly, obese patients and their families can have significant socioeconomic and cultural differences. Psychologists should be active in seeking an understanding of these factors of diversity and their impact on assessment data and individualized treatment plans. In summary, it is our hope that these expert-consensus guidelines will assist psychologists who are or will be working with obese youth in a multidisciplinary specialty care setting.

This publication may be reprinted in part or entirely with acknowledgement to the Children’s Hospital Association, “Expert Guidelines: Role of Psychologist in Assessment and Treatment of Obese Youth” Copies of this publication are available at www.childrenshospitals.net/obesity or by contacting Karen Seaver Hill, director, child advocacy, at 703-684-1355 or khill@nachri.org.

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