

# Oral Health Fact Sheet for Dental Professionals

## Adults with Eating Disorders

*Anorexia nervosa is a syndrome characterized by an excessive fear of becoming overweight, body image disturbance, significant weight loss, refusal to maintain minimal normal weight, and amenorrhea.*

*This disorder occurs most frequently in adolescent females. (ICD 9 code 307.1)*

*Bulimia nervosa is an eating disorder that involves eating massive quantities of food (binge eating) and then eliminating food by inappropriate compensatory methods to prevent weight gain, such as self induced vomiting or strong laxatives. (ICD 9 code 307.51)*

### Prevalence

- Lifetime Prevalence
  - \* Anorexia 0.6%
  - \* Bulimia 1%
- Females : males
  - \* Anorexia 3:1
  - \* Bulimia 3:1

### Manifestations

#### Clinical of anorexia nervosa

- Malnutrition and vitamin deficiencies
- Obsessive and/or self-injurious behaviors
- Abnormal blood counts
- Irregular heart rhythms
- Fatigue, dizziness, or fainting
- Low blood pressure
- Amenorrhea
- Dry skin and brittle nails
- Dehydration
- Bone loss
- Others: increased body hair, thin appearance, constipation

#### Clinical of bulimia nervosa

- Irregular heartbeat
- Dehydration, dry skin
- Fatigue
- Bloating
- Abnormal bowel functioning
- Sores, scars, or calluses on the knuckles or back of hands (Russell's sign)

#### Oral

- Increased risk of dental caries. Many individuals with eating disorders use sweetened beverages and candy for energy and to placate the feeling of hunger.
- Severe dental erosion from vomiting causing sensitivity (predominantly palatal/lingual of anterior teeth) and from brushing and vigorous rinsing immediately following vomiting.
- Increased sensitivity of teeth to temperature.
- Changes in the color, shape, and length of teeth. Teeth can become brittle, translucent, and weak.
- Increased risk of periodontal disease, gingival bleeding, and delayed healing.
- Mucosal lesions caused by direct exposure to acid or frictional trauma from item used to induce vomiting.
- Angular cheilosis.

# Adults with Eating Disorders continued

- Oral burning sensation
- Osteoporosis including alveolar bone loss (anorexia)
- Xerostomia and low resting salivary flow rate; decreased buffering capacity of saliva
- Altered taste sensation
- Sialadenitis, with enlargement of Parotids and minor salivary glands

## Other Potential Disorders/Concerns

- Anxiety
- Depression

## Management

### Medication

SYMPTOM	MEDICATION	SIDE EFFECTS/DRUG INTERACTIONS
Anorexia	<b>SSRIs (Selective Serotonin Reuptake Inhibitor)</b> <i>Fluoxetine (Prozac)</i>	Xerostomia, dysphagia, nausea, anxiety, dizziness, nervousness, headache, sweating, bruxism. Suicidal risk through age 24. Do not prescribe with MAOIs.
	<b>Anti-psychotics</b> <i>Olanzapine (Zyprexa)</i>	Xerostomia, sialorrhoea, dysphagia, stomatitis, gingivitis, tongue edema, glossitis, discolored tongue, dyskinesia, dystonia, angioedema.
	<b>Anti-cholinergic</b> <i>Cyproheptadine (Periactin)</i>	Xerostomia, dry nose and throat, drowsiness, dizziness, nausea, chest congestion, headache, excitement.
Bulimia	<b>SSRIs (Selective Serotonin Reuptake Inhibitor)</b> <i>Fluoxetine (Prozac)</i> <i>Sertraline (Zoloft)</i>	Xerostomia, dysphagia, nausea, anxiety, dizziness, nervousness, headache, sweating, bruxism. Suicidal risk through age 24. Do not prescribe with MAOIs.

## **Behavioral: Discussing eating disorder with patient.**

### **Guidance:**

- The dental professional may be the first to observe signs of an eating disorder. Effective, non-judgmental communication is critical.
- Establish non-threatening communication with the patient to discuss suspicion of eating disorder. Choose an appropriate time (allow sufficient time to discuss concerns) and location (without other patients nearby) to increase comfort of patient.
- Begin slowly and tell the patient about the oral changes that you have noticed. Suggest possible causes of the changes and introduce the possibility of an eating disorder.
- Ask patient questions about eating habits and body image, if patient allows. Be supportive and calm. Consider use of the brief, 5-item SCOFF questionnaire (Hague reference).
- Be aware of resources in the community for referral if patient admits to an eating disorder. Encourage patient to seek professional help.

## **Dental Treatment and Prevention**

- Monitor dental erosion (may not be seen in restrictive anorexia) and mucosal lesions regularly. Be aware that it may take 6 months to 2 years for dental erosion to be visible after self-induced vomiting begins.
- Consider providing patient with custom-made trays with 1.1% neutral fluoride gel, to be used for 5 minutes daily to increase remineralization.
- Minimize use of abrasive materials during dental treatment.
- Plan complex restorative procedures after vomiting cycle has stopped or lost weight is regained.
- Consider treating dentin hypersensitivity with potassium oxalates, strontium chlorate, fluoride varnish, and desensitizing toothpastes.
- Instruct patient not to brush teeth within 1 hour after vomiting, but to rinse mouth with water to reduce acidity and subsequent erosion. Consider rinsing with 0.5% fluoride daily.
- Instruct patient in use of a tongue cleaner after vomiting.
- Educate patient about importance of healthy eating and encourage consumption of non-acidic foods and beverages. Drinking carbonated/acidic drinks with a straw will direct away from teeth.
- Encourage bulimic patient to consume sugarless gum with xylitol to promote salivary flow.
- Encourage palliative measures such as mouthguards, use of buffering agents such as antacids (example Tums) following SIP (self induced purging/vomiting) and using non-acidulated fluorides while encouraging professional help.
- Ask patient for medication updates at each appointment.

### **As needed for patients with xerostomia:**

- Educate on proper oral hygiene (brushing, flossing) and nutrition.
- Recommend brushing teeth with a fluoride containing dentifrice before bedtime. After brushing, apply neutral 1.1% fluoride gel (e.g., Prevident 5000 gel) in trays or by brush for 2 minutes. Instruct patient to spit out excess gel and NOT to rinse with water, eat or drink before going to bed.
- Recommend xylitol mints, lozenges, and/or gum to stimulate saliva production and caries resistance.

**Additional information:** [Special Needs Fact Sheets for Providers and Caregivers](#)

# Adults with Eating Disorders *continued*

## References

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- Hudson JI, Hiripi E, Pope HG, Kessler RC. (2007) The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biol Psychiatry*. 61:348–58.
- [NIH Institute for Eating Disorders](#)
- [National Eating Disorders Association](#)

## Additional Resources

- [NIH Institute for Eating Disorders](#)
- [National Eating Disorders Association](#)
- [Numbers count: Mental Disorders in America](#)
- Free of charge CDE course: [NIDCR CDE](#) (2 CDE hours)