

# **DOWN SYNDROME and DENTAL HEALTH**

## **HOW DOES DOWN SYNDROME AFFECT DENTAL HEALTH?**

1. Most severe oral effect of Down Syndrome is the increased risk of gum disease. Patients with Down Syndrome have a weakened immune system and are more vulnerable to oral diseases caused by bacteria. Many patients with Down Syndrome lose their teeth due to gum disease before they even reach adulthood.
2. Xerostomia (dry mouth) is a condition that occurs when there is not enough saliva to hydrate the oral tissues. In Down Syndrome patients it is usually caused by mouth breathing. Mouth breathing is common in Down Syndrome because patients often have difficulty breathing because of smaller nasal passages and a large protruding tongue. Often present is a fissured/cracked tongue, lips, and other oral tissues.
3. Increase in sticky plaque and hard bacterial deposits due to dry mouth and decreased dexterity with tooth brushing and flossing.
4. Patients often have misaligned teeth or missing teeth and a large overbite.
5. Patients may break out more often with sores and ulcers in the mouth.

## **SUGGESTIONS FOR THOSE CARING FOR CHILDREN WITH DOWN SYNDROME**

1. It is very important to make sure that oral bacteria in the form of plaque (the white sticky film that builds up on teeth near the gum line) be removed regularly. This should be done by thoroughly brushing all surfaces of the teeth with a toothbrush and toothpaste. Many patients with Down Syndrome can brush on their own, but may need some assistance. Since many children with Down Syndrome have a strong gag reflex, it may be easiest to use a very small toothbrush with a tiny head. Flossing should be done as well, if possible (see section on flossing for technique and various aids).
2. A mouthwash that kills bacteria is really helpful in reducing infections in the mouth. The best choices are antibacterial mouth rinses that are alcohol free (alcohol can dry the oral tissues, and worsen dry mouth problems). Some children with Down Syndrome have difficulty swallowing and might not be able to rinse with mouthwash, in which case you can dip a toothbrush in mouthwash and rub the bristles along the gums.
3. Try to keep oral tissues moist. Children Down Syndrome should drink water regularly (if they have access to a clean source). Sugarless chewing gum is a great way to stimulate saliva flow.

4. There are several kinds of oral gels that can be applied with a cotton swab to lessen discomfort from dry cracking tissues and tongue.
5. It is also really important to make sure that children with Down Syndrome do not regularly eat sugary and/or sticky foods such as honey, raisins, or other similar foods that will stick to the teeth. Since there may not be enough saliva present to loosen food debris, cavities may develop much more quickly in children with Down Syndrome.

### **OTHER RESOURCES**

Most of this information was collected from various dental websites and textbooks including the NIDCR (National Institute of Dental and Craniofacial Research).  
<http://www.nidcr.nih.gov/OralHealth/Topics/DevelopmentalDisabilities/PracticalOralCarePeopleDownSyndrome.htm>