MIT: Department of Athletics, Physical Education, and Recreation
Dental Hygiene – What you need to know about your teeth and oral health

Why should I practice good oral care?
• It improves overall health: plaque build-up on teeth is associated with arterial plaque and heart disease.
• By brushing and flossing you will prevent tooth decay and periodontal (gum) disease, this helps prevent your teeth from falling out and it will save you money by avoiding costly dental procedures.
• It shortens time spent with your dentist and hygienist, making your appointment brief and more pleasant.
• It helps prevent bad breath; brushing and flossing rids the mouth of the bacteria that cause bad breath.
• It helps keep teeth white by preventing staining from food, drinks, and tobacco.
• It makes it possible for your teeth to last a lifetime!

What is plaque, and how does it affect my mouth?
• Plaque is a sticky film made up of bacteria that covers teeth. After eating, the bacteria release acids that attack tooth enamel. Enamel is a highly mineralized substance that thinly covers the visible part of teeth. It is the hardest substance in the human body. Prolonged attacks can cause the enamel to break down, and will eventually result in tooth decay.
• If plaque is not removed thoroughly during daily brushing and flossing, it will harden into tartar/calculus.
• Many of the foods you eat cause the bacteria in your mouth to produce acids. Foods high in sugar (i.e. candy and cookies) are not the only culprits; starches (i.e. bread, crackers, and cereal) also cause acids to form.

What is tooth decay?
• Tooth decay is caused by the destruction of enamel.
• Decay occurs when foods containing carbohydrates (either sugars or starches) are consumed frequently and then left on the teeth.
• Bacteria living in the mouth thrive on these foods, producing acid as a result of digestion. This acid reduces the pH of the mouth and slowly breaks down the enamel.
• As the enamel weakens, the sticky plaque, made up of bacteria, has an easier time breaking down the teeth causing decay. This acid can attack teeth for up to 30 minutes.

What kind of toothbrush, toothpaste, and floss should I use?
• Use a soft, nylon, round ended bristle tooth brush that has the ADA seal of approval; the size and shape of the brush should fit your mouth, allowing you to reach all areas of your mouth easily. The soft bristles ensure that you will be cleaning your teeth without damaging your gums.
  o Replace your toothbrush every three to four months, or sooner if the bristles fray.
  o A worn toothbrush will not clean your teeth appropriately.
• Use ADA-accepted fluoride toothpaste. Find a toothpaste with a flavor you like, this will make brushing your teeth more enjoyable.
• There are many types of dental floss: waxed floss, un-waxed floss, glide tape, and more; choose the type of floss that you are the most comfortable with. All ADA approved flosses will clean between your teeth.
What is the proper technique for brushing and flossing?

- Brush your teeth twice a day using the modified Bass technique:
  - Place your toothbrush at a 45-degree angle against the gums moving the brush gently back and forth (see image on the right)
  - Brush your tongue and the inside of your cheeks to remove bacteria and freshen your breath

- Bacteria linger between teeth where a toothbrush can’t reach. Flossing removes plaque and food particles from between the teeth and under the gum line and is essential for preventing gum disease
  - Guide the floss between your teeth using a gentle rubbing motion. Never snap the floss into the gums.
  - Gently rub the side of the tooth, moving the floss away from the gum with up and down motions
  - Repeat this method on the rest of your teeth. Don't forget the back side of your last tooth
  - Floss your teeth at least once a day whenever it is convenient. If any time is convenient, then floss before you brush your teeth, before going to bed.

How can diet and eating habits impact oral health?

- The foods you choose to eat, and how often you eat them, affect your general health and that of your teeth and gums.
- Many dentists are concerned that their patients are consuming record numbers of sugar-filled sodas, fruit drinks, and other non-nutritious snacks that affect their teeth. These foods can take a serious toll on teeth.
- If you eat frequently throughout the day, your teeth are exposed to acid for a prolonged period of time, try to give your teeth a break by taking some time between meals and snacks (approximately 3 hours).
- Be sure to drink a lot of water. Water and saliva help keep your teeth clean between brushes.
- Foods that contain sugars of any kind contribute to tooth decay. To help control the amount of sugar you consume, read food labels and choose foods and beverages that are low in added sugars. Added sugars often are present in soft drinks, candy, cookies, and pastries.
- If your diet lacks certain nutrients, it may be more difficult for tissues in your mouth to resist infection. Although poor nutrition does not cause gum disease directly, many researchers believe that the disease progresses faster and could be more severe in people with nutrient-poor diets.

What should I do to properly care for my teeth and mouth?

1. Brush your teeth twice a day with a fluoride toothpaste that has the ADA Seal of Acceptance
2. Clean between your teeth daily with floss
3. Visit your dentist regularly. Your dentist can help prevent problems from occurring and treat those that do occur; make an appointment at MIT Medical Dental Service by calling (671) 253-1501.
4. Avoid tobacco products due to their damaging effects on teeth and gums (not to mention your lungs).
5. Eat a balanced diet by getting a variety of foods. Choose foods from each of the five major food groups:
   - 1) Grain products: (breads, cereals and rice), 2) fruits, 3) vegetables, 4) proteins: (meat, poultry, fish, and beans/legumes), and 5) dairy products or dairy substitutes.
6. If you choose to snack, choose nutritious foods, such as fruit, cheese, raw vegetables, plain yogurt, etc.

References:
The American Dental Association, http://www.ada.org/
- The ADA is the professional association of dentists committed to the public’s oral health, ethics, science and professional advancement; leading a unified profession through initiatives in advocacy, education, research and the development of standards.