

Healthy mouth in Diabetes

If you have diabetes, elevated blood sugar levels can damage many parts of your body and your mouth is no exception. Diabetes increases your risk of cavities, gum disease and tooth loss, dry mouth, and a variety of infections.

Conversely, poor oral health can make your diabetes more difficult to control. Infections may cause your blood sugar to rise and require more insulin to keep it under control.

Improve your chances of keeping sound teeth and a healthy mouth be aware of potential oral complications, keep your teeth and gums clean and maintain good control of your diabetes.

Tooth and gum damage: Diabetes can take steady toll

Day in and day out, high blood sugar caused by diabetes can contribute to accumulating damage to your gums and teeth, which may cause tooth loss. Here is how it happens.

Plaque: How diabetes feeds this cavity-causing menace

An invisible film of bacteria, saliva and food particles (dental plaque) normally covers teeth. The bacteria feed on the sugars and starches in the foods and beverages you consume and produce acids that damage the hard enamel coating of your teeth.

High blood sugar levels in diabetes give the bacteria a greater supply of food, allowing them to produce even more acid. The damage from this acid increases the possibility of tooth decay (cavities).

Gum disease: From irritation to tooth loss

Plaque can cause other problems, too. If you do not remove it from your teeth with regular brushing and flossing, it hardens under your gumline into a substance called tartar.

Tartar irritates the gums, causing a condition called gingivitis. This makes the gums tender, swollen and red, and they may bleed when you brush your teeth. Fortunately, your dentist can prevent or treat gingivitis by removing tartar during a professional dental cleaning.

However, untreated gingivitis can lead to a more serious condition in which bacteria infect your gums and the bones around your teeth (periodontitis). This can cause your gums to pull away from your teeth and your teeth to loosen and even fall out.

Gingivitis and periodontitis are the most common oral complications of diabetes. If you have type-II diabetes, you are three times more likely to develop gum disease than is someone who does not have diabetes. Diabetes lowers your body's resistance to infections and slows your ability to heal.

Prevent problems: Tips for healthy teeth

Clean your teeth regularly and see your dentist at least every six months to prevent gum disease and other oral diabetes complications.

To clean your teeth properly, brush them at least twice a day plus preferably after each meal and snack and floss daily. Follow these other tips also --

- Use a soft-bristled brush. It is gentler on the gums.
- Place your brush at an angle against your teeth, and use short back-and-forth motions to clean your teeth. Also clean the inside and chewing surfaces of the teeth and your tongue.
- Replace your brush every three months.

- When you floss, gently ease the floss between your teeth. Then pull the ends of the floss against the front and back surface of a tooth so that the floss forms a "C" as it wraps around the tooth. Gently pull the floss from the gumline to the top of the tooth to scrape off plaque. Remember to

floss the backs of your teeth and to expose fresh floss between your fingers as you progress through your teeth.

In addition to regular care and dental appointments, call your dentist if you develop any of the following signs and symptoms of gum disease:

- Red, tender, swollen gums
- Gums that bleed when you brush them, even if they are not sore



- Gums that are pulling away from your teeth; you may notice that your teeth seem longer
- Pus around your teeth and gums when you press on the gums
- A continual bad taste in your mouth
- Loose teeth
- Changes in the way your top and bottom teeth touch, or changes in the feel of your dentures

Diabetes and the rest of your mouth

Your teeth and gums are not the only parts of your mouth at risk. The following problems also can occur and while you might not be able to totally prevent them, you can minimise the trouble they cause you.

Dry mouth

Dry mouth (Xerostomia) occurs when your salivary glands do not function properly, leaving insufficient saliva in your mouth to keep it moist. The dryness can contrib-

ute to cavities and gum disease, because saliva helps wash away the bacteria that contributes to these conditions.

Dry mouth also causes tissues in your mouth to become inflamed and sore. You may find that chewing, tasting and swallowing are difficult. If this reduces your interest in eating, it can make controlling your diabetes more challenging, since you may not eat properly and keep your

blood sugar in control.

Burning mouth syndrome

If you have this condition, you may feel severe burning and pain in your mouth even though you do not see any problems in your mouth that could be causing it.

Dry mouth or candidiasis can cause burning mouth syndrome, so treating these conditions can alleviate the symptoms. Medications also may be prescribed to relieve the pain.

Oral surgery and diabetes: A delicate mix

If you need oral surgery, know that diabetes particularly if your blood sugar is poorly controlled can complicate such surgery. Diabetes can slow healing and increase your risk of infection.

Your blood sugar levels also may be harder to control after oral surgery. The levels may fluctuate as a result of the stress of the surgery itself or because you are unable to eat your normal foods due to discomfort.

By taking extra care to keep your blood sugar levels under control before and after the surgery, you can help reduce the risk of such complications. Your dentist also may need to work closely with your doctor to minimise possible complications.

If you need oral surgery, follow

the recommendations:

- **Remind your dentist that you have diabetes.** Also, discuss any problems you have with infections or with controlling your blood sugar.

- **Eat before your dental visit.** The best time for dental work is when your blood sugar is in a normal range, which allows for better healing. If your blood sugar level is out of control when you have a dental surgery scheduled, you may need to postpone the procedure until it is in control.

- **Take your usual medications.** Your dentist should consult with your doctor about whether you need to adjust your diabetes medications or take an antibiotic to prevent infection before dental surgery. Unless your dentist or doctor tells you to change your medication schedule, continue taking your medications.

- **Plan out your eating needs before surgery.** If you are having any dental work done that may leave your mouth sore, plan to eat soft or liquid foods that will allow you to eat without pain and control your blood sugar levels.

- **Wait until your blood sugar is under control.** It is best to have surgery when your blood sugar levels are within your goal range. If your dental needs are urgent and your blood sugar is poorly controlled, talk to your dentist and doctor about receiving dental treatments in a hospital or other setting where more medical professionals can keep better tabs on your recovery after surgery.

If you have diabetes, you likely know the need to take certain precautions to keep your body working properly. To enjoy better oral health which in turn can help keep your blood sugar in check also treat your teeth with extra care and see your dentist regularly.

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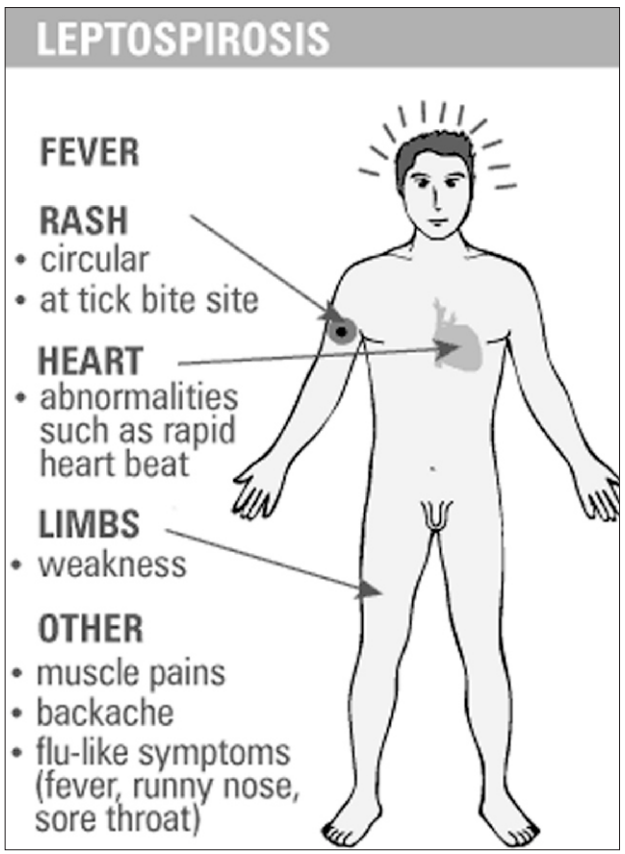
Source: <http://www.mayoclinic.com>

HEALTH AND SCIENCE BU

Leptospirosis as a cause of Febrile illness requiring hospitalisation

In 2000, the ICDDR,B established surveillance at two major Dhaka hospitals to identify patients with dengue. Evaluation of serum from enrolled patients during 2001 with negative laboratory tests for dengue revealed that leptospirosis is an important cause of serious febrile illness in the urban settings. Compared with patients with dengue, patients with leptospirosis were poorer socioeconomic status and had higher fever on presentation. The mortality rate among patients with leptospirosis was 5 percent.

Source: ICDDR,B



Fish oil supplements lower Lupus symptoms

Dietary supplements of fish oil may be helpful to people with lupus. Copper supplements, however, make no difference, according to results of a new study.

Fish oil and copper have shown beneficial effects in rat studies of lupus, Dr Aubrey L. Bell, of Musgrave Park Hospital in Belfast, Northern Ireland, and colleagues explain in the Journal of Rheumatology.

To investigate any clinical effects of fish oils and/or copper, the researchers studied 52 lupus patients. The participants were randomly assigned to take various combinations of fish oil capsules and extra copper -- both, one or the other, or none -- for 24 weeks.

Those given fish oil supplements took three capsules a day of MaxEPA -- "roughly equivalent to two oily fish-based meals per week."

The researchers measured disease activity using a scale called the revised Systemic Lupus Activity Measure (SLAM-R).

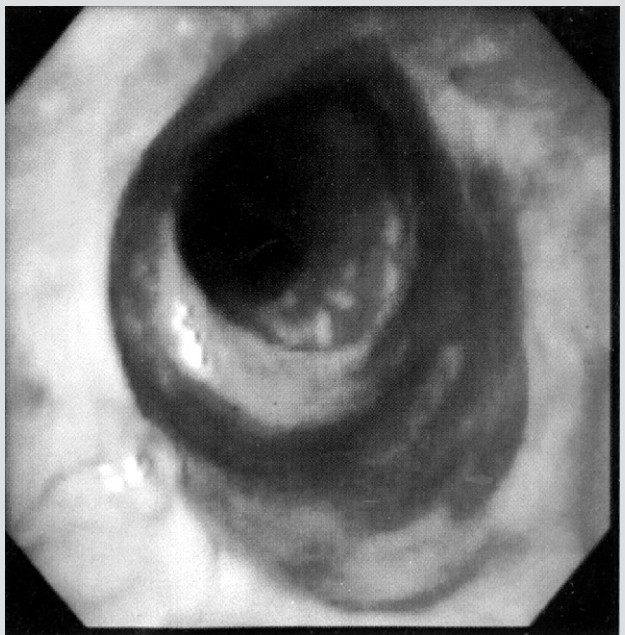
Compared to patients given inactive placebo capsules, those taking fish oil experienced a significant decline in SLAM-R score from 6.12 to 4.69 points at the end of the trial, Bell and colleagues report.

"Supplementation with copper showed a rise in SLAM-R score of less than 1 unit after 12 weeks," which wasn't statistically significant and reverted to normal by the end of the study.

All patients who received an active supplement reported feeling better than those who were given a placebo, the team found.

Source: Journal of Rheumatology, August 2004.

Replacement of tracheal defect!



A view through the bronchoscope one month after the replacement of a tracheal defect with artificial trachea in a dog. The artificial trachea has viable mucosa made by a tissue-engineering technique using skin cells. Briefly, skin cells from an abdominal wall skin patch were separated, cultured for 4 weeks and then seeded onto an absorbable scaffold to construct a lining mucosa. The lining mucosa was then mounted onto the nonabsorbable, trachea shaped framework. The mucosa-lined framework was wrapped with greater omentum from the same dog and placed in the peritoneal cavity for one week to promote new vessel formation for the mucosa. Complete surgical resection and replacement of a thoracic tracheal segment (5 cm in length, just above the carina) were then performed using the prosthesis.

Courtesy: The Journal of Thoracic and Cardiovascular Surgery July 2004.

Malaria: General information

STAR HEALTH DESK

Malaria is a serious, sometimes fatal, disease caused by a parasite. There are four kinds of malaria that can infect humans: *Plasmodium falciparum*, *P. vivax*, *P. ovale*, and *P. malariae*.

How do you get malaria?

Humans get malaria from the bite of a malaria-infected mosquito. When a mosquito bites an infected person, it ingests microscopic malaria parasites found in the person's blood. The malaria parasite must grow in the mosquito for a week or more before infection can be passed to another person. If, after a week, the mosquito then bites another person, the parasites go from the mosquito's mouth into the person's blood. The parasites then travel to the person's liver, enter the liver's cells, grow and multiply. During this time when the parasites are in the liver, the person has not yet felt sick. The parasites leave the liver and enter red blood cells; this may take as little as 8 days or as many as several months. Once inside the red blood cells, the parasites grow and multiply. The red blood cells

burst, freeing the parasites to attack other red blood cells. Toxins from the parasite are also released into the blood, making the person feel sick. If a mosquito bites this person while the parasites are in his or her blood, it will ingest the tiny parasites. After a week or more, the mosquito can infect another person. A few cases of malaria result from blood transfusions.

What are the signs and symptoms of malaria?

Symptoms of malaria include fever and flu-like illness, including shaking chills, headache, muscle aches, and tiredness. Nausea, vomiting, and diarrhea may also occur. Malaria may cause anemia and jaundice (yellow coloring of the skin and eyes) because of the loss of red blood cells. Infection with one type of malaria, *Plasmodium falciparum*, if not promptly treated, may cause kidney failure, seizures, mental confusion, coma, and death.

How soon will a person feel sick after being bitten by an infected mosquito?

For most people, symptoms begin 10 days to 4 weeks after infection, although a person may feel ill as

early as 8 days or up to 1 year later. Two kinds of malaria, *P. vivax* and *P. ovale*, can relapse; some parasites can rest in the liver for several months up to 4 years after a person is bitten by an infected mosquito. When these parasites come out of hibernation and begin invading red blood cells, the person will become sick.

How is malaria diagnosed?

Malaria is diagnosed by looking for the parasites in a drop of blood. Blood will be put onto a microscope slide and stained so that the parasites will be visible under a microscope.

Any traveler who becomes ill with a fever or flu-like illness while traveling and up to 1 year after returning home should immediately seek professional medical care. You should tell your doctor that you have been traveling in a malaria-risk area.

Who is at risk for malaria?

Persons living in and travelers to, any area of the world where malaria is transmitted may become infected.

What is the treatment

for malaria?

Malaria can be cured with prescription drugs. The type of drugs and length of treatment depend on which kind of malaria is diagnosed, where the patient was infected, the age of the patient and how severely ill the patient was at start of treatment.

How can malaria and other travel-related illnesses be prevented?

- Visit your physician 4-6 weeks before foreign travel for any necessary vaccinations and a prescription for an antimalarial drug.
- Take your antimalarial drug exactly on schedule without missing doses.

- Prevent mosquito and other insect bites. Use insect repellent on exposed skin and flying insect spray in the room where you sleep.

- Wear long pants and long-sleeved shirts, especially from dusk to dawn. This is the time when mosquitoes that spread malaria bite.

- Sleep under a mosquito bednet that has been dipped in permethrin insecticide if you are not living in screened or air-conditioned housing.

10 Essential health tips

1. Move more

Make it a daily challenge to find ways to move your body. Climb stairs if given a choice between that and escalators or elevators. Walk your dog; chase your kids; toss balls with friends, mow the lawn. Anything that moves your limbs is not only a fitness tool, it is a stress buster. Think 'move' in small increments of time. It does not have to be an hour in the gym. But that is great when you are up to it.

2. Cut fat

Avoid the obvious such as fried foods, burgers and other fatty meats. Dairy products such as

cheese, cottage cheese, milk and cream should be eaten in low fat versions. Nuts and sandwich meats, mayonnaise, margarine, butter and sauces should be eaten in limited amounts. Most are available in lower fat versions such as substitute butter, fat free cheeses and mayonnaise.

3. Quit smoking

Smoking is obviously injurious to health and to our economy. There are too many complications of smoking and there are lots of public awareness programmes. But still the number of smokers is alarmingly high.

4. Reduce stress

Easier said than done, stress busters come in many forms. Some techniques recommended by experts are to think positive thoughts. Spend 30 minutes a day doing something you like. (i.e., read a good book; visit a friend; listen to soothing music; watch a funny movie.) Count to ten before losing your temper or getting aggravated. Avoid difficult people when possible.

5. Protect yourself from pollution

If you cannot live in a smog-free environment, at least avoid

smoke-filled rooms, high traffic areas, breathing in highway fumes and exercising near busy thoroughfares. Exercise outside when the smog rating is low. Plant lots of shrubbery in your yard. It is a good pollution and dirt from the street deterrent.

6. Wear your seat belt

Statistics show that seat belts add to longevity and help alleviate potential injuries in car crashes.

7. Floss your teeth

Recent studies make a direct connection between longevity and teeth flossing. Nobody knows exactly why.

Perhaps it is because people who floss tend to be more health conscious than people who don't?

8. Avoid excessive drinking

While recent studies show a glass of wine or one drink a day (two for men) can help protect against heart disease, more than that can cause other health problems such as liver and kidney disease and cancer.

9. Keep a positive mental outlook

There is a definitive connection between living well and healthfully and having a cheerful out-

look on life. Thought for the day: You cannot be unhappy when you are smiling or singing.

10. Choose your parents well

The link between genetics and health is a powerful one. But just because one or both of your parents died young in ill health does not mean you cannot counteract the genetic pool handed you.

Courtesy: <http://www.health-fitness-tips.com>