

# Helping Patients Understand the Importance of Oral Health Before and During Pregnancy

**P**regnancy is one of the happiest times in a woman's life. Because of the highly specialized growth and development of the fetus, pregnancy is also a critically important time. During this period of time it is crucial that a pregnant woman do everything she can to prevent exposure of the developing fetus to harmful substances and diseases. There are many things such as maternal substance abuse, high blood pressure, and diabetes that may cause complications of pregnancy.

Inflammation from infection is also associated with preterm delivery of low birth weight (LBW) infants. One of the infections that may cause inflammation throughout a pregnant woman's body is infection from the mouth. Now there

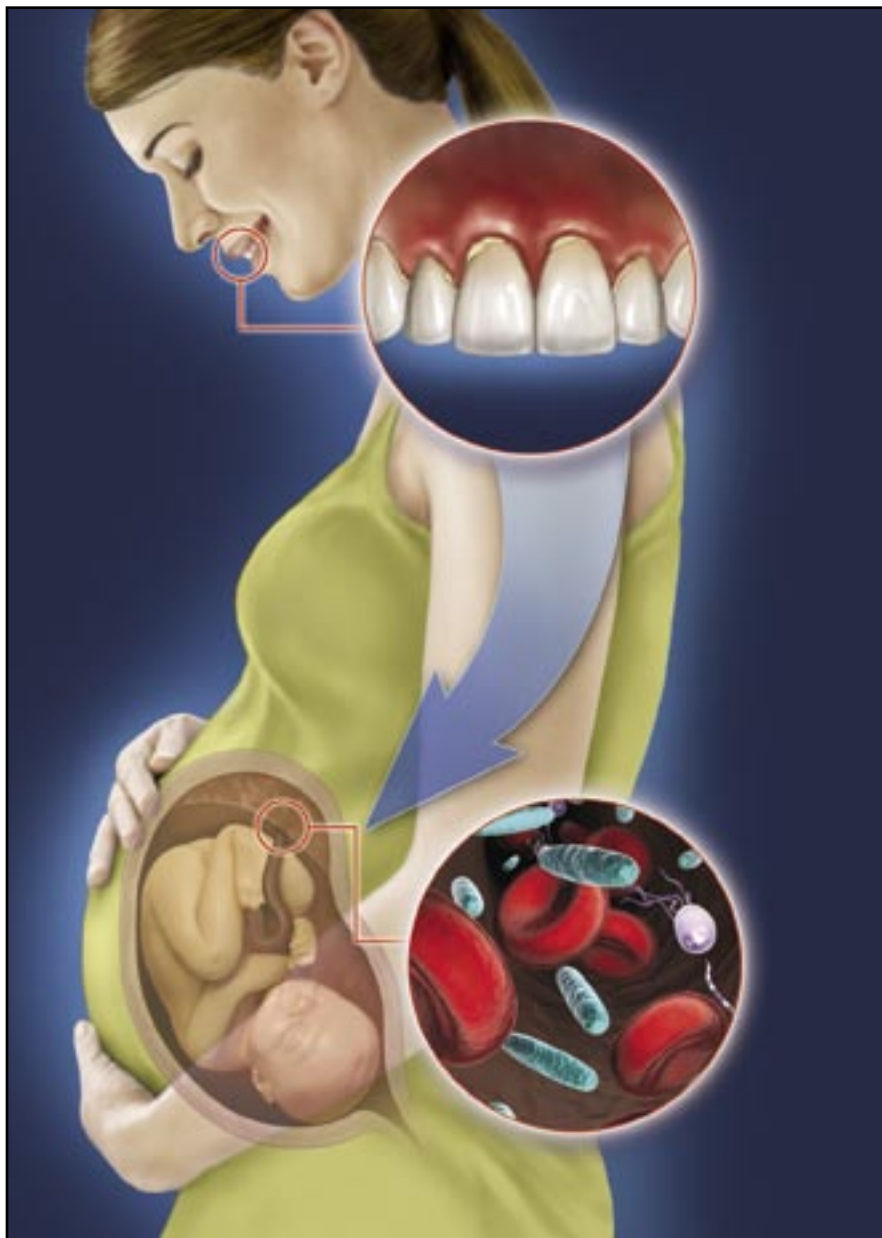
are new research findings that suggest gum disease may cause inflammation that puts an expectant mother at risk for complications of pregnancy possibly leading to preterm birth (PTB) of a low weight infant. Additionally, there is increasing evidence that certain of our body's chemicals associated with inflammation may play a role in early rupture of the amniotic sac. It is estimated that roughly 15% of the women who deliver premature babies have microorganisms from gum infections that have migrated to the amniotic fluid.

To reduce the risk of delivering a LBW or preterm infant, it is important to:

- Recognize the impact hormonal changes have on expectant mothers' susceptibility to oral infections
- Understand how oral infections may affect the developing fetus
- Maintain good oral hygiene before and during pregnancy

## *What effects do changes in hormones have on changes in the oral tissues of pregnant women?*

There are several different hormones that rise and fall during pregnancy, such as a rise in the amount of progesterone levels. Starting in the second or third month of pregnancy, approximately 50% of women experience gum inflammation called "pregnancy gingivitis". This is partly related to the increased amount of



progesterone circulating throughout the body and can become a more serious problem if good oral hygiene is not maintained. During pregnancy, gum tissue is more sensitive to the plaque that accumulates on teeth. When this happens, gums may appear red and puffy, and may bleed more easily. Pregnancy gingivitis usually subsides after the baby is born. The important thing to remember is that regardless of hormone levels, pregnancy gingivitis is caused by the expectant mother's immune response to the bacterial plaque that accumulates from poor oral hygiene. During puberty, certain stages in the menstrual cycle, and with the use of oral contraceptives, hormonal changes can also cause women to be more sensitive to this bacterial plaque. Regular dental check-ups and good oral hygiene are the best ways to prevent oral infections and any potential risk to the developing fetus.

### ***Why is it so important to maintain oral health during a woman's childbearing years?***

The mouth should not be thought of as isolated from the rest of the body; it is part of the whole body system. Now that dentists and obstetricians recognize that there might be a link between inflammation in the body and premature birth, the goal is to eliminate all oral inflammation before and during pregnancy. When patients do not brush and floss regularly, microbial plaque and calculus build up on the teeth and cause an early gum infection called gingivitis. If left untreated, gingivitis may lead to a more serious gum disease called periodontitis, which involves the loss of the bone that supports the teeth and eventually the loss of teeth. It is estimated that 75% of the adult population has some level of gum disease, so it is fairly widespread.

Researchers once thought that it was only periodontitis that put expectant mothers at greater risk for PTB, but more recent evidence suggests that even slight inflammation of the gums may increase risk for complications of pregnancy. When infection from gum disease occurs, bacteria and their toxins, along with by-products of the local area of inflammation, circulate and may cause inflammation throughout the whole body. This explains why poor oral hygiene and lack of dental care may have a significant impact on overall health, and especially so in expectant mothers who are more sensitive to bacterial

challenge. It is important to remember that infection and inflammation may cause preterm delivery, which puts the developing fetus at risk. Babies born prematurely often experience a lifetime of serious problems such as asthma, low IQ, cerebral palsy, and poor motor skills. For this reason, maintaining oral health before and during pregnancy is one of the keys to healthy development of the fetus and something women of childbearing years should take very seriously.

### ***What are the signs of gum disease?***

- Gums that bleed easily
- Red, swollen, or tender gums
- Gums that have pulled away from your teeth
- Persistent bad breath
- Pus between the teeth and gums
- A change in the way your teeth fit together
- Gum abscesses/boils
- Persistent food impactions between your teeth

### ***What can women do to eliminate the risk of pregnancy complications from oral infections and provide the best environment for the developing fetus?***

- Stop smoking today.
- Eat a nutritious, well-balanced diet.
- Avoid a sedentary lifestyle.
- Get regular dental and medical check-ups.
- Brush your teeth at least twice each day and floss regularly.
- Tell your dentist or dental hygienist if you are pregnant or thinking of becoming pregnant.
- If you are already pregnant, ask your dentist or dental hygienist and obstetrician to work together to coordinate the best possible care.
- Disregard the myth that women should not seek dental care during pregnancy. If you have any apprehension about seeking treatment, the use of medications, or getting x-rays during pregnancy, discuss your concerns with your dentist, dental hygienist or obstetrician.

### ***Additional Resources:***

- American Dental Association: [www.ada.org](http://www.ada.org)
- American Academy of Periodontology: [www.perio.org](http://www.perio.org)
- Mayo Clinic Tools for Healthier Lives: [www.mayoclinic.com](http://www.mayoclinic.com)
- Centers for Disease Control and Prevention: [www.cdc.gov](http://www.cdc.gov)