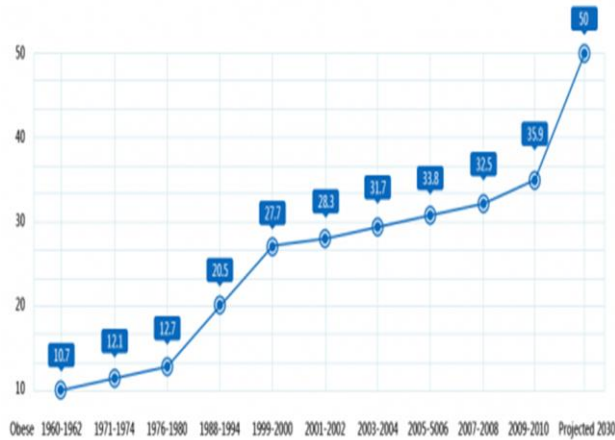
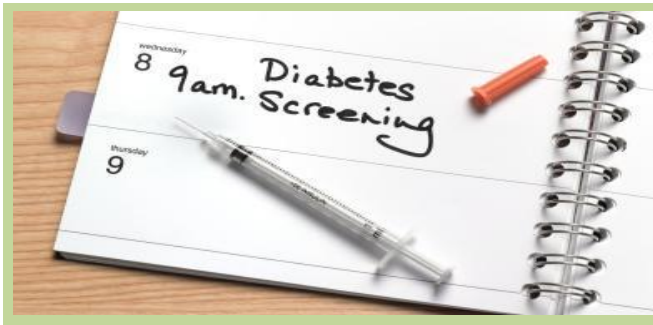


## Prevalence of Obesity Among U.S. Adults Aged 20-74



Derived from NHANES data ([http://www.cdc.gov/nchs/data/hestat/obesity\\_adult\\_09\\_10/obesity\\_adult\\_09\\_10.html#table1](http://www.cdc.gov/nchs/data/hestat/obesity_adult_09_10/obesity_adult_09_10.html#table1))



## References

Goodell, S. (2015, September). Diabetes Screening and Monitoring in the Dental Office. Retrieved from <http://nyshealthfoundation.org/uploads/resources/Diabetes-Screening-and-Monitoring-Dental-Office.pdf>

MacGill, M. (2016, January 5). Diabetes: Symptoms, Causes and Treatments. Retrieved April 01, 2016, from <http://www.medicalnewstoday.com/info/diabetes/>

People with Diabetes at Higher Risk for Developing Gum Disease. (2012, January). Retrieved April 01, 2016, from <http://www.knowyourteeth.com/infobites/abc/article/?abc=p>

Strauss, S. M., Rosedale, M. T., Pesce, M. A., Rindskopf, D. M., Kaur, N., Juterbock, C. M., & ... Danoff, A. (2015). The Potential for Glycemic Control Monitoring and Screening for Diabetes at Dental Visits Using Oral Blood. *American Journal Of Public Health*, 105(4), 796-801 pp. doi:10.2105/AJPH.2014.302357

William R. Rowley and Clement Bezold. *Population Health Management*. (2012, August), 15(4): 194-200. doi:10.1089/pop.2011.0053.

## Image Citation

<http://f.tqn.com/y/obesity/1/W/k/3/-/-/GettyImages-500015073.jpg>

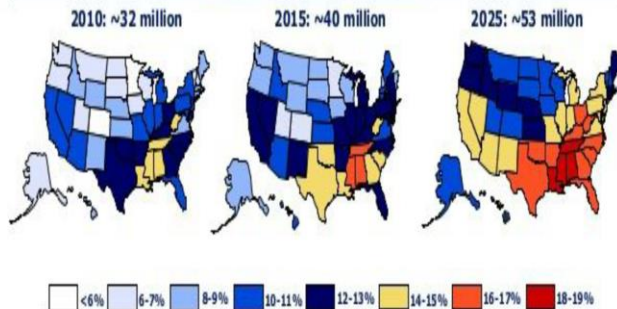
<https://yourhealthofima.files.wordpress.com/2012/03/drymouth.jpg>

[http://www.orangectdentist.com/wp-content/uploads/2013/05/Gum\\_Periodontal\\_Treatment\\_West\\_Haven\\_CT.jpg](http://www.orangectdentist.com/wp-content/uploads/2013/05/Gum_Periodontal_Treatment_West_Haven_CT.jpg)

# Diabetes, Obesity and Oral Health

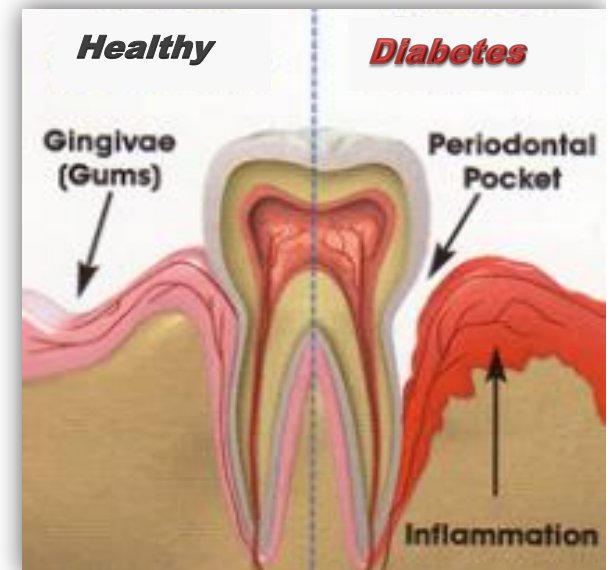
## Today, diabetes affects more than 32 million Americans

### Increasing prevalence of diabetes



CMD 2011  
West Virginia Center for Diabetes and Endocrinology

Note: Improvements in therapies and medical management over time are factored in.  
Source: CDC Behavioral Risk Factor Surveillance System; National Impact of Recent Increase in Incidence on Future Diabetes Burden; Diabetes Care 2010; 33:2314-2316; Boyle, Projection of the year 2050 burden of diabetes in the US adult population, <http://www.people-athletics.com/content/6/1/20>; Institute for Alternative Future projections



Students:  
Michelle Barreto, Michelle Dicu, Gehan Ibrahim

## DIABETES

Diabetes is a group of disorders characterized by chronic high blood glucose levels (hyperglycemia) due to the body's failure to produce any or enough insulin glucose levels.

- ❖ **Type 2 diabetes:** A chronic condition that affects the way the body processes blood sugar (glucose).
- ❖ **Type 1 diabetes:** A chronic condition in which the pancreas produces little or no insulin.
- ❖ **Prediabetes:** A condition in which blood sugar is high, but not high enough to be type 2 diabetes.
- ❖ **Gestational diabetes:** A form of high blood sugar affecting pregnant women.

### RISK FACTORS

Obesity or overweight, Impaired glucose tolerance, Insulin resistance, Ethnic background, High blood pressure, Low levels of HDL ("good") cholesterol and high levels of triglycerides, Gestational diabetes, Sedentary lifestyle, Family history, Polycystic ovary syndrome, Age.

### TREND OF DIABETES AND LINK TO OBESITY

- ❖ Of the people diagnosed with type II diabetes, about **80% to 90%** are also diagnosed as obese.
- ❖ Type 2 Diabetes is a chronic metabolic condition that is more frequently reported in the adults over the age of 30.
- ❖ Type 2 diabetes has It is projected to **increase another 64% between 2010 and 2025**, affecting **53.1 million** people and resulting in medical and societal costs of a half trillion dollars a year.
- ❖ **Diabetes causes more deaths a year than breast cancer and AIDS combined.** Having diabetes nearly doubles your chance of having a heart attack.
- ❖ **Every 3 seconds someone is diagnosed with diabetes.**

## HOW DIABETES AFFECTS YOUR MOUTH

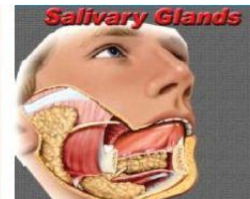
Diabetes is a disease that can harm the eyes, nerves, kidneys, heart and other vital systems in the body.

**Did you know diabetes can also cause problems in your mouth? Such as...**

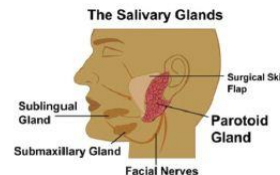
- ❖ **Periodontal disease:** an infection of the gums and bone that hold the teeth in place, which includes painful chewing and possible tooth loss.
- ❖ **Dry Mouth(Xerostomia):** often a symptom of undetected diabetes, can cause soreness, ulcers, infections, and tooth decay. Smoking makes these problems worse.



**Dry Mouth**



**Xerostomia**



## HOW THE DENTAL TEAM CAN HELP

- ❖ Daily brushing, flossing and regular dental check-ups are the best defense against oral complications of diabetes.
- ❖ Supplementary aids such as saliva substitutes can help combat side effects
- ❖ Good blood glucose control is key to controlling and preventing oral problems

## TESTING IN THE DENTAL OFFICE

The need for diabetes glucose screening and monitoring in the dental office; has recently become a hot topic of discussion in the dental profession.

### WHY?

- ❖ **86 million US adults have prediabetes** which places them at higher risk for developing diabetes.
- ❖ Only 11.1% of these individuals are aware of their condition.
- ❖ The majority of Americans see a dentist at least once a year. Making a routine dental visit an advantageous site to perform a diabetes screening.
- ❖ Periodontal disease is one of the earliest complications of diabetes.

### FUTURE CLINICAL APPLICATION

Research has recently proven that oral blood samples can be utilized to perform chairside diabetes screening and monitoring. This quick and easy test has the potential to help save lives while raising patient awareness.

