



Diabetes & Dentistry YOU

Child and Adolescent Diabetes on the Rise

In the last two decades, Japan has seen an estimated four-fold increase in incidence of type 2 diabetes for the 6-to-15 year olds

(According to the American Diabetes Association).

The U.S. reports 8-45% of newly-diagnosed children and adolescents with diabetes – have type 2.¹

There was a time when virtually every case of childhood-onset diabetes was type 1 diabetes, which caused by a genetic abnormality in which the body simply cannot produce insulin. Type 2 diabetes, however, may have as much to do with lifestyle and environment as it does with at genetically “vulnerability” to the disease.

So what is causing the upsurge in child and adolescent diabetes rates?

While this genetic background is important, the alarming increase in new cases of children with type 2 diabetes underscores the role of environmental factors.

— American Diabetes Association
Concensus Statement (2004)

A study by the *International Journal of Obesity*, found that type 2 diabetes in youth mirrors the increasing rates of childhood obesity. Which means that modern generations of youth, who spend increasingly more time in front of keyboards and television, eating processed foods – may very well be eating themselves into a devastating disease.

Still, there may be more to the story than simply sedentary lifestyles and processed foods.

According to multiple studies, individuals with diabetes are up to 3.4 times more likely to develop periodontal disease than systemically healthy individuals. What’s more, a study from the Journal of the American Dental Association (1982, AAP 2006) found 13.6% of subjects with diabetes 13 to 18 years of age, also had periodontitis. That number jumped to 39% among those aged 19 to 32 years.

By comparison, less than 3% non-diabetic control subjects had periodontal disease.

Those statistics are significant in several ways.

The first and most obvious is

Did you know?

Currently, there are five classes of oral medications approved by the FDA for treatment of type 2 diabetes. It is important to note that few safety and effectiveness studies have been conducted in the pediatric population. None of these drugs have FDA approval for use in children.

that young people living with diabetes do in fact match the rate at which adults with diabetes develop gum disease.

The second reason those statistics are significant is they also tell us that the longer a young person lives with diabetes, the greater the chance he or she will develop periodontal disease (much like other complications of diabetes).

In fact, it's well-documented that type 2 diabetes is a "progressive" disease. Which means, over time, if those with diabetes. . .

- Do not manage their blood sugar correctly
- Do not eat a balanced, fiber-rich diet
- Don't treat infection and associated inflammation

quickly and vigorously

. . . the disease will progress to more advanced stages, weakening the body's metabolic system.

With devastating results perhaps.

Why am I telling you all this?

Because periodontal disease, and other oral diseases like xerostomia and oral candidiasis, can wreak havoc on the child or adolescent with diabetes.

If not treated early and aggressively, periodontal infection may advance quickly, creating an over-response by the body and triggering hyperglycemia. Further weakening the body's ability to fight the disease.

What makes this scenario even more hazardous to the young person living with (or at-risk for) diabetes is that oral hygiene, like many inconveniences of childhood, is often a low priority. Which can create a perfect storm of infection, inflammation and out-of-control glucose levels.

But here is the key.

Periodontal disease is completely treatable (if caught early) and highly preventable, with proper dental care.

So if you or a young person you care about is living with diabetes, see a dentist right away.

You can learn more about diabetes and oral health by visiting:

www.DentistryForDiabetics.com/directory/index.php

Diabetes and Oral Health Vulnerabilities

According to the *American Dental Association*, the most common oral health problems associated with diabetes are:

- Tooth decay
- Periodontal disease
- Salivary gland dysfunction (xerostomia)
- Fungal infections (candidiasis)

- Lichen planus and lichenoid reactions (inflammatory skin disease)
- Infection and delayed healing
- Taste impairment

However, good maintenance of blood glucose levels, a well-balanced diet, good oral care at home, and regular dental checkups



with a dentist trained in proper care of patients with diabetes — can prevent advance or onset of many of these diseases.

Oral Health & Treatment

By visiting a dentist 2-4 times per year children, adolescents and adults can maintain good oral health and help manage glucose levels at the same time.