

“Sugar is sweet...sometimes”

Live Healthy and Be Well

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I remember hearing my grandmother say many times when I was growing up that if I ate too much sugar and candy, I would get “Sugar Diabetes.” At the time, being an invincible young person, I had no idea what that meant or I thought that was something for “old people.” Let’s talk about “sugar,” – the different types, symptoms, causes, and most importantly, how to treat and manage high blood sugar if you have it. And, we will see it is not just an “old person disease,” but can occur at any age, and untreated can lead to a multitude of problems and complications.

Before we discuss the disease itself, we need to describe it accurately. *Insulin* is an important hormone made by the pancreas which allows the body to properly process dietary sugars. When sugars are ingested, insulin is normally released which allows the sugars to be taken into the cells and absorbed like they should for proper nutrition and metabolism. If the pancreas produces no insulin, or not enough, or if the cell receptors are gone or damaged which sense and respond to the insulin – too much sugar stays in the blood and is not absorbed. This is what leads to the dangerous complications and outcomes of this disease.

The proper medical term for “sugar” is *Diabetes* (“to pass through”) *Mellitus* (“from honey”) or DM for short. There are two types of this condition with different origins, although the complications and results are nearly the same. Type 1 DM is often called “Juvenile Onset,” as it tends to present in childhood or late teens. In this form of Diabetes, the cells which produce insulin have been destroyed or “knocked out,” so that no insulin is produced. The tendency to have this condition is thought to be genetically inherited, and may be triggered by a viral illness which brings about the actual full blown disease process. Once these cells are non-functional, there is no cure, only management of the condition, requiring administration of insulin at regular intervals.

Type 2 DM usually presents in an adult patient, often overweight, and results from the body’s inability to properly use the insulin that is produced. The receptors that “sense” the insulin may be damaged or insufficient, and the insulin that is produced is not able to be utilized properly. Another thought is that as obesity adds more tissue (fat) to the body, there are only so many receptors, and they may be somewhat overwhelmed as there is more body tissue to be “serviced” by the limited insulin receptors. Milder forms of this condition may be called “borderline” diabetes, while more severe forms will be obvious “sugar,” with all the symptoms, complications, and dangers of fulminant DM. So, eating sugar itself will not “cause” DM – but it can to the extent that too much can lead to being overweight.

The symptoms of DM, regardless of type, are all related to the fact that the blood sugar is too high for the body to manage and handle. The “3-P’s” are common – *Polydipsia* (thirst and need

to drink), *Polyuria* (frequent production of sweet urine), and *Polyphagia* (increased appetite/hunger). When the blood sugar gets too high, the kidneys cannot process well and begin to spill the sugar into the urine – this leads to frequent urination, and that results in the body’s need for more water and constant thirst. If the blood sugar becomes uncontrollably high, a dangerous condition called Diabetic Ketoacidosis (DKA) may result which can lead to coma and even death in its most severe form. Even in milder forms, high blood sugar over time can lead to kidney, eye, heart, nerve, blood vessel, and other types of organ damage. It reduces the body’s ability to heal wounds and surgical incisions, and can lead to the formation of ulcerated “sores” that do not heal and may eventually become infected and require the amputation of limbs.

If you have any of the above symptoms, or see them in your child or a young person, please see a provider and check the blood sugar level. If you are diagnosed with DM of either type, you will need to maintain tight control of your blood sugar. This may be accomplished with actual insulin, or other medications as needed. Managing your sugar within controlled limits is critical for your future health and wellness – so please do whatever it takes to accomplish that control.

We really do enjoy hearing from you with any questions, concerns, or ideas for future columns and/or health and wellness related issues for the *Georgia Mountain Laurel*. Please send an email to [rabundoctor@gmail.com](mailto:rabundoctor@gmail.com), or call us at 706-782-3572, and we will be sure to consider your input. This and previous articles can now be found on the web at [www.rabundoctor.com](http://www.rabundoctor.com) in an archived format. If you use Twitter, then follow us for health tips and wellness advice @rabundoctor. Until next month, live healthy and be well!