What Will You Do When Disaster Strikes?

Click on the image to go to the checklist

“Advance preparation is a key defense for chronic disease management during emergencies.”

When you’re dealing with a chronic medical condition like diabetes, diligence and preparation are key.

But when an emergency situation or natural disaster strikes at your home or workplace – whether fires or floods, hurricanes, blizzards or even something like an unexpected auto breakdown – the disruption of a normal routine and limited access to much-needed resources can create chaos.”

Read more at My Diabetes Emergency Plan

Before Using Prescription Medication for Diabetic Neuropathy – Try These Supplements

> *Clinical studies suggest use of benfotiamine (a specific form of B1) and methylcobalamine (a specific form of B12) with right alpha lipoic acid can reduce neuropathy in as little as 3 weeks… Years of clinical studies have proven that these ingredients work at eliminating unwanted symptoms from nerve pain. In fact, many of the studies conclude that these forms of B vitamins and R-Alpha Lipoic Acid actually reverse neuropathy…*
>
> *– Read more at DiabeticConnect.com*

R-alpha lipoic acid on Amazon

Vitamin B12 (Methylcobalamin) and Vitamin B1 (Benfotiamine) on Amazon

Please consult your doctor before undergoing any health

treatments or taking new supplements. This post, and all information on this site, is for educational and informational purposes only.*

Double Diabetes – An Increasing Epidemic

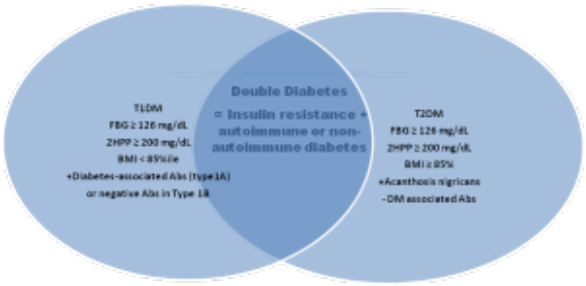
From the NY Daily News

As reported on ABC News, there has been a recent brouhaha over an inappropriate tweet made by the CEO of CrossFit and the ensuing Twitter exchange between him and singer/Type 1 diabetes advocate, Nick Jonas, regarding consumption of sugary beverages and developing diabetes. Some people misinterpreted the ensuing exchange as if CrossFit was claiming that sugar *causes* **Type 1 diabetes**. (It doesn't. Type 1 diabetes is an autoimmune disease where the pancreas gets attacked by antibodies and can no longer produce insulin.) CrossFit then put up a Facebook post clarifying what they meant, saying their intention was to warn people that drinking sugary beverages *can lead* to **Type 2 diabetes** and wanted to help prevent people with Type 1 Diabetes from *also developing* Type 2 Diabetes.

Once again, CrossFit got pounced on by people misreading what they said and interpreting it as “Type 1 diabetes can ‘turn into’ Type 2 diabetes.” Hold on! “Can lead to” and “can turn into” are ***not*** the same thing.

Can a person with Type 1 diabetes ***also develop*** Type 2 diabetes? YES. It is becoming an increasing epidemic and is referred to as “Double Diabetes”.

> *From the Medscape article listed below:* ***“It is quite possible to have a patient who develops DM1 due to autoimmune destruction of beta cells who also has the genetic predisposition for insulin resistance. Therefore, if this patient gains weight and becomes more sedentary, insulin resistance and features of the dysmetabolic syndrome could occur.”***



From NY Daily News

Everyday Health has an article on Double Diabetes – published in 2009. This is not something new. You can read it here: The Double Diabetes Epidemic

While CrossFit’s tweet was uncalled for, and their lack of apology unfortunate – as well as doing a poor job explaining what they meant – the whole exchange did lead to more awareness of this important topic. Once the brouhaha is over, and the flurry of rants is over on social media, more thoughtful discussion can occur. The diabetes epidemic is real, and the double diabetes epidemic is real.

Scholarly articles:

- Metabolic Syndrome in Type 1 Diabetes from Diabetes Care
- Adult Patients with Type 1 Diabetes on the Metabolic Syndrome on Medscape
- Metabolic Syndrome and Type 1 Diabetes: Prevelance and Risk Factors
- Double Diabetes: The Search for Treatment Paradigm in Children and Adolescents from "Hot Topics in Endocrine and Endocrine-Related Diseases"

Have Diabetes, Will Travel

Traveling With Diabetes

Having diabetes should not stop you from doing the things you love, and that includes traveling. Below is a collection of sources on traveling with diabetes:

From Empower Your Health: Travel Check List

To help you pack for your trip, here is a checklist of supplies to take:

1. Diabetes pills, insulin in vials or pens, or other injectable diabetes medicines
2. Syringes or insulin pens
3. Glucose monitoring equipment – glucose meter, lancet device and lancets
4. Snacks

5. Diabetes identification – wallet card, necklace and/or bracelet
6. Emergency supplies – such as quick-acting sugar, like glucose tablets, and ketone test strips. If you use insulin, also bring a glucagon emergency kit.
7. Other helpful supplies in the event of illness – antinausea, anti-diarrhea medicines such as Compazine®.

For further tips on being prepared for travel, including what to do about insulin pumps and CGMS and a sample travel letter, visit Empower Your Health: Travel Tips for People with Diabetes

From the American Diabetes Association a printable PDF on the TSA rules and your rights: Travel and Diabetes Fact Sheet

Have questions on how to dose your insulin when traveling across time zones? Good information can be found in this article of Clinical Diabetes: Have Insulin, Will Fly: Diabetes Management During Air Travel and Time Zone Adjustment Strategies

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Can Eating This Healthy Breakfast Help Lower Your Risk for Diabetes?

What’s for breakfast?

Yogurt would be a good choice according to a report in BMC Medicine. Having a 1 cup serving of yogurt a day might decrease your risk of developing **type 2 diabetes** by 18%.

Zendocrinology’s Spin: Yogurt is a staple of the Mediterranean diet which has been shown to have health benefits in the prevention and treatment of diabetes. Inflammation and gut bacteria are hot topics on this subject as well. So we suggest plain low fat greek yogurt with active cultures. Sweeten with stevia or a little honey, sprinkle with ground flax seed, and add a few berries and nuts such as walnuts and pecans. Yum.

BMC Study Details here: http://www.healio.com/endocrinology/diabetes/news/online/%7B911926bd-9a5a-4f16-ae83-4b3104749e62%7D/daily-yogurt-consumption-decreased-risk-for-type-2-diabetes

Mediterranean diet and Diabetes here: http://www.webmd.com/diabetes/news/20140327/take-heart-mediterranean-diet-combats-diabetes-study-says

The Road Too Often Traveled – PreDiabetes to Type 2 Diabetes

Have you been told that you have "**Pre-Diabetes**"? What does that mean? The road from normal blood sugar to a level that would qualify you to be formally diagnosed with **Type 2 Diabetes** is a long one. Some can have pre-diabetes for years before reaching that point.

The levels of blood glucose that are used to diagnose Type 2 Diabetes are those in which the microvascular – small blood vessels – complications of diabetes can start to develop (causing damage to the kidneys, nerves, and the vessels in the eyes). However the macro-vascular – large vessels – complications such as heart disease start to occur during the "pre-diabetes" stage.

YOU can control the rate you travel down this road. YOU can even go into reverse! Healthy eating, exercising, and weight loss can improve your chances. It has been shown that losing just 7% of your body weight will lower your chances of developing diabetes by 58% in the next 5 years if you have pre-diabetes.

Learn more about pre-diabetes and insulin resistance here: National Institute of Health – Insulin Resistance

The Metformin and B12 Deficiency Connection

Do you have **diabetes** and experience tingling and pain in your hands or feet? Is it diabetic neuropathy or could you be suffering from B12 deficiency instead? The symptoms can mimic each other. Metformin is the first line pharmaceutical in the treatment for **Type 2 Diabetes** worldwide. The benefits of this drug have been established. However, a not often known fact is that it can cause malabsorption of vitamin B12.

Long-term use of metformin, as well as having a preexisting malabsorptive illness, can increase your chance of developing a deficiency. If you are on metformin, ask your doctor to check your B12 level annually. Taking sublingual B12 supplements or having an annual 1,000 mcg B12 injection can help prevent this risk. Taking calcium carbonate daily, 1200 mg, may also block the mechanism that is involved with the malaborption.

References: Metformin-induced Vitamin B12 Deficiency

Presenting as a Peripheral Neuropathy
David S.H. Bell, MD
South Med J. 2010;103(3):265-267.

Age Ageing. 2006 Mar;35(2):200-1.
Metformin-related vitamin B12 deficiency.
Liu KW1, Dai LK, Jean W.

Antibiotic Use and Diabetes Risk

We all know how the overuse of antibiotics can lead to antibiotic resistance and hard to treat infections, but unnecessary over use of antibiotics has also been linked to a significant increase in the risk of developing **diabetes**! Other studies have also shown a link between antibiotic use and obesity, inflammatory conditions, and autoimmune disease. Once again, the likely culprit may be the altercation of our normal gut micro-biome.

Source:

Repeated Antibiotics Raise Diabetes Risk on Live Science
Microbiome May Drive the Course of Diabetes and Obesity from Clinical Endocrinology News

Let’s Talk about Lipohypertrophy and Injecting Insulin

Injecting Insulin

Do you inject insulin? Repeatedly using the same area to inject can lead to **Lipohypertrophy** which is an accumulation of fatty deposits under the skin. This is not just a cosmetic issue. Lipohypertrophy can lead to poor and inconsistent insulin absorption and wreak havoc on your blood sugar control. It is estimated that 20 to 40% of people with **Type 1 diabetes** and 4% with **Type 2 diabetes** develop lipohypertrophy.

Please read this article on the problem of “Lipohypertrophy” from the British Medical Journal: Poor Glycaemic control caused by Insulin Induced Lipohypertrophy

Chowdhury TA, Escudier V. Poor glycaemic control caused by insulin induced lipohypertrophy. BMJ : British Medical Journal. 2003;327(7411):383-384.

Why Carbohydrate Counting Doesn’t Cut It

Your doctor and/or nutritionist probably has you “carb counting” to help dose your insulin with meals. However, even when you are good with carb counting you are frustrated with the variability in your sugars. Here’s why:

A high fat meal increases the amount of free fatty acids (FFAs) in the blood which causes insulin resistance. You will need more insulin to overcome this insulin resistance FFAs chronically elevated due to repeatedly consuming high fat meals, especially high in saturated fats, is associated with persistent skeletal muscle and liver insulin resistance. This is the same insulin resistance seen with obesity. Protein is slowly broken down and some of it is turned into carbohydrates. The higher the protein load in a meal, the greater impact in your blood sugars hours after a meal. The Glycemic Index (GI), or how rapidly a carbohydrate can impact your blood glucose, can cause a mismatch to the timing of your mealtime insulin peak.

Researches, as reported in the June 2015 issue of Diabetes Care, evaluated the effect of Glycemic Index (GI), protein, and fat composition in meals and effects on post prandial (after the meal) blood sugars in Type 1 Diabetes. They reviewed various studies that used continuous glucose monitoring (CGMS).

The researchers concluded that GI, protein, and fat can drastically affect glucose concentrations in individuals with type 1 diabetes. The effect on three hour postprandial glucose concentrations with the addition of 35 g of fat and 40 g of protein to a meal is equivalent to that resulting from the consumption of 20 g of carbohydrates without insulin. The addition of 50 g of fat to a meal can increase insulin requirements for by greater than two fold.

Study Source: Bell KJ. Impact of Fat, Protein, and Glycemic Index on Postprandial Glucose Control in Type 1 Diabetes: Implications for Intensive Diabetes Management in the Continuous Glucose Monitoring Era. Diabetes Care. June 2015. 38(6)1008-15.