

T1D Diet & Nutrition

Healthy diet and nutrition are crucial to humans, especially T1Ds

Carbohydrate Counting

- Carbs are the main macronutrient that T1Ds count and balance with insulin through their insulin-to-carb ratio. Carb ratio (and correction factor) is calculated with the endo/dietician and adjusted as needed
- Carb ratio and correction factor varies from person to person, and changes throughout the lifetime of a T1D. Insulin sensitivity changes over time, and can be improved with exercise, hydration, and even medications like Symlin and Metformin (ask your endo!)
- Carbs are essentially sugar at the molecular level
- The three types of carbs are:
 - Simple (sugar), starches (complex), and fiber (complex)
- Complex carbs are healthier, and fiber helps offset total carb intake and improves digestion
- Foods lower on the <u>glycemic index table</u> help reduce unwanted spikes in BG levels.
- Fat and protein can also be converted into BG, but at much lower rates
- MyFitnessPal, SNAQ, Glucose Buddy, mySugr, OneDrop, Carbs and Cals, DiabetesM, and similar apps can be used to help calculate carbs.

Keto/Intermittent Fasting

 Keto (not to be confused with DKA/diabetic ketoacidosis) is essentially a low carb diet. Many T1Ds have found it simpler to consume ~50-100 carbs per day, so that they may use less insulin

- and reduce the burden of always counting carbs and adjusting insulin needs.
- Intermittent fasting is simply not eating for 12-18 hours our of each day. For instance, if your last meal is at 8PM, not eating again until 10AM would mean 14 hours of intermittent fasting. This is simpler with a CGM.
- Be sure to keep gel packs, gummies, juice, glucagon etc. handy when 1st trying a new program like this
- Paleo (the caveman diet) has also been helpful for many T1Ds since it is also very low carb, but high in nutrition

Hydration

- Hydration is critical for T1Ds. Starting each day with clean water, and drinking plenty throughout the day, especially during exercise, helps reduce BGs when elevated (some excess glucose is eliminated through urine).
- Improved hydration means each system in the body will work better, including the kidneys which are vital to good health.
- Dehydration dramatically reduces athletic and cognitive performance
- Keeping water on you, or readily available makes hydration easier to manage.
- Reverse osmosis filters at home/office and bottled water nearby makes hydration more convenient to manage
- Adding lemon, cucumber, apple cider vinegar, electrolyte packets, to water can add taste and improve hydration
- Sugar free mineral water and other electrolyte drinks can provide variety for those that do not crave plain water

Supplementation

- Vitamins, minerals, and select supplements can improve health for everyone, not just T1Ds.
- Shroom tech, and similar products can help the body use oxygen better. This improves circulation and energy levels, and allows for longer workouts.
- Alpha lipoic acid and benfotiamine are potent antioxidants. Both work to reduce damage from elevated BG levels, nerve damage from chronic T1D, and oxidative stress. This is CRUCIAL for longer T1Ds, or those with chronically elevated BG levels.
- Niacin (especially the flushing type) can help reduce cholesterol
- Fish oil, COQ10, vitamin D, K, E are all great for improving cardiovascular health
- Pure Encapsulations makes excellent vitamin and minerals

- Humic Fulvic minerals in liquid form are easily absorbed, and provide a great source of minerals
- ShroomTech (by Onnit) can help boost energy and get oxygen to muscles. Their AlphaBrain product can be helpful as well with brain fog, and encourages deep sleep when taken before bed

Resources

- The Whole 30 book is a great resource for diet, hormones, and paleo. It is not catered to T1D but many of us have benefited from this
- <u>Dr Berg</u> has great resources for keto, IF, and even OMAD (one meal a day). His videos on YouTube are very informative, and he covers many topics.

EID: 84-4631046 www.t1cure.org ben@t1cure.org