



INTRODUCTION TO NEW DIABETES TECHNOLOGIES

Grace Nelson, MD, Pediatric Endocrinologist

The technology surrounding diabetes has been advancing quickly for the past few years. Insulin pumps and continuous glucose monitors (CGMs) can now work together to improve blood sugar using a hybrid closed loop system. Let's start with reviewing insulin pumps:

- Insulin pumps deliver insulin just under the skin throughout the day. The amount of insulin is either based on a pre-entered rate or based on real-time input from the CGM (we will get to this in a minute). When the person is going to eat, they are able to input this information into the pump and get a larger dose of insulin at that time.

Now let's review continuous glucose monitors.

- Continuous glucose monitors work by checking your body's glucose levels every 3-5 minutes and predicting the trends. Using a CGM gives you the ability to see what your sugar level is at any given time and what you expect it will be in 15-20 minutes. This prediction of where the sugar level is heading can be used to prevent or lessen low and high levels.

Reacting to all the information from the CGM can be hard when you are asleep (or just busy). This is where a "hybrid closed loop system" comes in. This system works by taking sugar trends from the CGM and making insulin changes to keep sugar levels steady/in range. If it detects a rise in sugar, then the amount of insulin will be increased; if it detects a drop in sugar, then it will decrease the amount of insulin being given. If this system worked without any input from the user then we could call it a "closed loop". Even though the hybrid system means the user still has to enter carbs and pay attention to alarms, it can reduce the adjustments needed. The improvements to sugar levels are often noticed at night first, when we are not regularly checking and responding to a CGM reading.

As with all new technology there are downsides. When starting out on these new systems there is usually a "learning curve" or a period of time to get all the settings in the pump to work correctly. Sometimes this means things look worse before they look better. If this happens to you, it is important to reach out to your provider or Diabetes Educator (CDCES) for help! If after reading this introduction to diabetes technologies you have questions or just want more specific information, please let your provider and CDCES know!

TURKEY ROLL-UPS

Tara Karr, MS, RD, LDN, CDCES

Ingredients:

- 1 burrito-sized whole wheat tortilla
- 1 Tablespoon softened fat free cream cheese
- 1 Teaspoon Mrs. Dash seasoning (any flavor)
- 3 slices of turkey
- 1 thinly sliced tomato
- Small handful of spinach or lettuce

Directions:

- Mix cream cheese and seasoning until smooth
- Spread the cream cheese to the edge of the tortilla and top with spinach or lettuce, turkey and tomato
- Tightly roll up the tortilla. Wrap in a damp paper towel and place in the fridge for 1 hour.
- Cut each roll into 6 pieces before eating



NUTRITION FACTS: Serving size: 3 "Roll ups"

Total Carbs: 17 grams
Fiber: 10 grams
Total Protein: 12 grams
Total Fat: 3 grams

STAFF SPOTLIGHT: Grace Nelson, *Pediatric Endocrinologist*



I am excited to be starting as a Pediatric Endocrinologist here at Le Bonheur Children's Hospital. I was diagnosed with Type 1 diabetes in 8th grade. I have learned over the years that although everyone's journey with diabetes is different, we can all learn and be inspired by each other.

My husband and I moved to Memphis after medical school in order to complete our medical training. Memphis has now become home and we are happy to continue working with the wonderful people here. I live with my husband, daughter, 2 dogs and 1 cat. In my spare time, I love walking with the dogs, riding horses, and spending time with my family and friends.

HOW DO I CONTACT THE CLINIC?

Erica Davis, BSN, RN, CDCES, Diabetes Education Coordinator

A common question parents ask is **"How do I reach the diabetes clinic?"** We are always glad to hear from you, and hopefully this will help direct you. Here are some things you should know...

Patient Portal

- **This is the best way to communicate with our clinic.**
 - To send a message to our team you can choose "ULPS Endocrine General or Medicine Requests," or your medical provider's name. The message will then go to the nursing task list for review.
- For each new issue, please create a new message. Replying to a previous message from a different conversation can cause a delay in response.
- This is the preferred way to send Blood Glucose logs.
- If you have an issue with the patient portal please call tech support at 877-621-8014.
- Once you have sent your request messages can take 1-3 days to review and complete. The more complex concerns can take longer. Logs will take 3-5 days for review.

FYI

- As of 3/1/2020 the endocrinecenter@lebonheur.org has been deactivated and is no longer a way to communicate with our clinic.
- Other phone numbers are not monitored lines and should not be used.

Main Clinic Phone: 901-287-7337 • Fax Number: 901-937-6689 • Urgent Line: 901-287-6659



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