

# SPECIAL FEATURE: FITNESS AND HCU

March 20th marked the first day of spring! With the longer daylight hours and warmer weather many of us are looking forward to getting outside and enjoying the fresh air. For many the return of spring also means getting back on track with our fitness goals for the year and evaluating our nutritional goals for our soon to be summer bodies! While Ask Methia addressed the diet aspect – we thought it would be good to share some of our patients' experiences with the fitness side!

## Marathon Training with HCU by Kristin Rapp

It's common knowledge that what you eat before, during and after an endurance event can help or hurt your performance on race day. I've completed 12 full marathons, 19 half marathons, several 100-mile bike rides, a triathlon, and numerous other races. Over the years, many people have asked me how I fuel up for a marathon on such a restrictive diet. To be honest, even after competing in all these athletic events, I'm still learning. The good news is there are lots of books out there about running/exercise & nutrition. I've read some interesting things about runners who follow a plant based, vegan or fruitarian diet – which is very similar to what I eat.



These resources have been great finds for me, however, there isn't much out there in terms of guidelines for how a person with a metabolic disorder should nutritionally prepare for an endurance event. So, I thought I'd share with you some of my personal tips I've gathered over the years.

1. It should go without saying, but you should **always consult with your metabolic team before starting a new exercise plan**. They should be able to work with your unique dietary needs and come up with a nutritional game plan. I've been very fortunate as my nutritionist is also an avid marathon runner herself. I work with her to tweak my diet as my mileage increases during my training cycle.
2. **Take all your prescribed metabolic formula**. Since I'm not getting much in the way of natural protein from my diet, it's essential that I drink all the formula. It provides protein which is important for muscle building and repair. If you have a weak stomach like me, it might be hard to drink formula during an athletic event, but it's so important that you do take it before and after exercise.
3. **Stay hydrated!** I use a powder formula that I mix with water – so that's one way I stay hydrated. I also drink a sports drink such as Gatorade or Nuun to replace sodium and potassium – the electrolytes you lose in sweat. Recently, my dietician recommended another product called UCAN. They have an electrolyte replacement powder and an energy powder that I'll discuss in the next section. One thing I really like about UCAN is it was initially created for a boy with a rare metabolic disorder that required him to be tube-fed every two hours to maintain normal blood sugar levels. I just love the story behind the product.
4. **Carb-loading**. Many runners will probably tell you their favorite part about preparing for a race is that pre-race pasta dinner. Carbohydrates provide fuel so your body has enough energy to cover the distance of your athletic event. This can be a little challenging for someone with a metabolic disorder as some store-bought or restaurant dishes are too high in protein. However, there are an array of medical foods out there that can help if your protein allowance is low. Some of my favorite carb-

loading options include: low protein pasta, rice, pizza and baking mixes; bananas, oatmeal, potatoes, gluten-free waffles, pancakes and breads. Vegan, Vegetarian and Gluten-Free diets have massively increased in popularity over the past few decades which has been great news for me. This increase in popularity with these types of diets has resulted in a lot more HCU-friendly options in the grocery store and even at restaurants. If you're going out of town for an event, check with your hotel or a local restaurant ahead of your trip. They may be willing to cook a low protein dish if you bring your supplies (low protein pasta/rice/baking mix) with you.

5. **Taking care of your body during the recovery process** after a long run or endurance event is just as important as the pre-race preparations. Make sure you're replacing the fluids lost during exercise as well as taking in the appropriate amount of carbs and protein. Some of my go-to options post-race include: formula, watermelon, apples, salty sweet potato fries, avocados, pickles/pickle juice and beets. Some of these foods may seem strange, but there's a reason each one is on my list. The formula provides much needed protein. Watermelon is incredibly hydrating, low in calories, and rich in vitamins and phytonutrients. Apples are a great low-protein choice for replacing carbs. Sweet potatoes are full of vitamin C and minerals that are essential for bone health and muscle recovery. Avocados provide "good fats" which are known to reduce inflammation in the body. Pickles and pickle juice are good for replenishing electrolytes and have been reported to help ease muscle cramps. Beets are not always my favorite, but I try to squeeze them in when I can. They are packed with iron, magnesium, folate and antioxidant properties. It's reported that beets can improve athletic performance, regulate blood pressure and increase blood flow.

Navigating fitness and HCU can be challenging, but it's definitely possible. Don't be afraid to ask for help!

I'm always happy to speak with other HCU patients about health, fitness, running marathons and managing the low-protein diet, so feel free to contact me via Facebook or email [rappkristin@yahoo.com](mailto:rappkristin@yahoo.com).

