

## Pocatello Pioneers 2018

### Hydration:

**Pre-Race:** Daily, ensure adequate hydration, typically at least 2 liters of water a day, up to double this amount on any day that includes training. Urine should be light straw colored. You can't catch up on overall hydration on the day of the race. Ensure that you are adequately hydrated on the day prior to the race. You'll also need extra hydration when at high elevation.

**Race Day:** Drink plenty of fluids prior to starting the race. During the race consume 16-22 oz per hour, slightly less if you are lighter than average or if it is very cool, slightly more if you are larger than average or on very hot days. It is very hard to catch up on hydration if you're behind. Drink from the beginning of the race. Some bike computers allow you to set alarms to remind you to drink. I try to hydrate in 15 minute segments. Clear water bottles offer the advantage of being able to track how much you've been drinking during the race. With a clear bottle you know that you should be drinking approximately one-fourth of a bottle every 15 minutes.

**General Precautions:** If you drink too much each day or during the race you can deplete your sodium and potassium and get cramping and weakness from hyponatremia (also known as water intoxication). To prevent this consume electrolytes with your water during the race and keep water intake within recommended ranges.

### Electrolytes:

**Pre-Race:** With a healthy, well-balanced diet no special preparation is needed. However, consuming electrolytes with any race-day hydration may be beneficial.

**Race-Day:** Consume approximately 200mg of sodium and 100mg of potassium per bottle of water (this is approximately the amount in 20oz of Gatorade). Commercial electrolyte tabs (Hammer Fizz, Gu Hydration tabs, etc.) typically offer better and more complete electrolyte replacement blends than Gatorade or PowerAde, but these drinks are much better than having nothing or plain water. Gatorade diluted in half with an added electrolyte tab offers a good electrolyte mix, offers some calorie replacement, and won't seem too sweet which is often an issue when trying to drink undiluted sports drinks during hard exercise/race conditions. The new Gatorade Endurance formula has less sugar and more electrolytes and may be a good option.

### Nutrition:

**Pre-Race:** Daily, you'll feel much better if you're eating "clean" foods like whole grains, vegetables, lean meats, etc., not burgers, fries, and cookies. The majority of calories should come from complex carbohydrates, lean protein, and healthy fats like avocado or olive oil. Learn what you can and can't eat before practice without feeling bloated and "crampy." By experimenting prior to practice you'll know what will work on race day. In the 1-2 days before the race eat foods

that are easy to digest (pasta, breads, rice, chicken, fish, eggs) and limit foods that cause gas production (broccoli or beans for example).

**Race Day:** Eat 2-4 hours prior to the race. Eat easy to digest complex carbs and small amounts of protein and healthy fats. Examples would be bagel with peanut butter, oatmeal with boiled egg, or dry granola with milk. 15-30 minutes prior to race get small sugar or carb intake from an energy gel or drink.

**During the race:** There is research suggesting that in events that last longer than 45 minutes that consuming carbs will improve performance. Most of you will be on the course for longer than 45 minutes. For races of typical length try to consume 75-150 calories per hour of exercise, this will vary based on your body size and overall intensity. If you aren't currently consuming any sort of nutrition during practice and races then start on the low end. Options for this include energy gels and chews, things like Gu packets, Hammer Gel, etc., or energy drinks like Gatorade or more advanced stuff like Hammer Heed or Infinit Nutrition products. Heed and Infinit contain complex carbs and electrolytes all in one blend. I've learned that I get almost instant stomach cramps from energy gels if I eat them right before or during races. However, if I dissolve a couple of them in a bottle of water and add electrolyte tabs I can slowly sip the bottle throughout the race and feel fine with no cramping. This may take some experimenting but don't experiment on race day. If you are using energy gels they typically are 100 calories each, take one 30 minutes into the race and for those of you racing longer a second one around 1hr into the race.

**Post-Race:** After both races and practice, recovery nutrition is important. This is when rebuilding starts and strength is gained. There are many theories here but the general rule is to get calories in within 30 minutes after the workout. Carbohydrates with some protein is helpful during this time. Bagels with peanut butter, fruit juice and yogurt, or even chocolate milk could be options for this.

**General Precautions:** Try to ensure regular meal times and snacks daily. Don't try to change your normal routine on race day. Avoid heavy fats and greasy foods prior to racing (cream sauces, gravy, cheese sauces). Many people who can normally eat dairy struggle to digest it when exercising, some people aren't bothered by it. Again learn what works for you under practice/race conditions. One big mistake is decide to "eat clean" a few days before the race and accidentally cut your calories because you are eating healthier. Make sure that you continue to get plenty of calories in the days leading up to the race.

### **Caffeine:**

Caffeine is a banned substance for NICA events and any consumption on race day is prohibited. Caffeine has enough addictive effects that if you regularly consume caffeine and then skip it on race to stay within the rules you won't feel well on race day. I'd recommend avoiding it altogether so that you don't have worry about effects of caffeine withdrawal on race day. Be aware that many energy gels contain caffeine, read ingredients carefully when purchasing.

### **Final Thoughts:**

Try to use Saturday practices as race simulation, eat what you'd eat before a race, use your race-day nutrition, try to figure out what works. There are no absolutes here. We have many people associated with the team who have experience with fueling for race events, feel free to ask around. I'm willing to answer questions and get more in depth if you would like to. What works for one person may not work for others but following the general guidelines on hydration and electrolytes will make a big difference. It takes a lot of practice to drink from a water bottle while racing a mountain bike so many people end up not drinking enough. Consider using a Camelback if you are struggling to drink from bottles. It's harder to keep track of how much you are drinking during a race with the Camelback but most people will probably be better off with using one compared to drinking from a bottle.

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