



# NUTRITION FOR MOUNTAIN BIKERS

By Carrie Mullin Innes, MSc, RD, IOC Dip Sport Nutr [@mullinnes](#)

## FUELING FOR STAGE RACING - IT'S DIFFERENT

- Stage racing is different than regular or one day racing: we aren't fueling for the hour or three ahead, we are fueling for the days ahead. Once the engine starts to burn, the metabolism will be firing hot and constantly and that's what you have to feed, a hungry metabolism.
- On the micro side or a one day event, we keep the glycogen and protein fueled before competition, always topped up with consideration and care to timing and relevant effort i.e. Long Slow ride - more need for Carbo's, Hard hilly effort with lots of muscle breakdown - more protein, and a race or mixed effort will require understanding of both needs and the timing to get those nutrients in (Glycemic Window).
- During the effort, our body is burning mostly glycogen and this can be fueled a number of ways, but the principle is simple - try what you want to use before, make sure your body likes and accepts the fuel and then fuel regularly. Over a longish event we are ideally moving a little below threshold and should try to fill our nutritional with more solid foods (complex carbohydrates), as we near the later stages of the event the last hour, then we open up the possibility of more simple sugars and a final kick to finish.
- The moment we finish the effort we are now inside the glycemic window, the time the body is optimally screaming to replace all those lost calories - asking for protein to rebuild and asking for it in a well-timed sequence. Essentially, we reverse the process: simple sugars carried on liquids are readily absorbed, the blood sugar stabilizes and we then move to a protein ingestion, again the liquid form is absorbed super quick, and within the window (approx. 45 min to 1 hour) after the event we saddle up to the food trough and feed hard. If we weren't worried about riding again until say Wednesday after a Sunday race, then disregard that window and starve your body.
- With the stage race in mind we aren't just topping off the systems and rebuilding - remember that hot burning metabolism - in a stage race you eat all the time, even when you don't want to, remember you are "Eating for Tomorrow"!

- ANDREAS HESTLER, Mountain Bike Athlete, Coach, Olympian, Team Captain and Marketing Director for BC Bike Race

**PRE-RIDE FUEL** Pre-race nutrition should begin 1-3 days in advance. Eating meals that contain plenty of carbohydrate-rich foods such as rice, pasta, bread, cereal, potatoes and other grains will provide energy for muscles (muscle glycogen). A "Racer's Plate" that is 1/2 grains/starchy foods, 1/4 fruits and/or vegetables and a 1/4 lean protein is a guide for good fueling. Snacking on fruit, fruit juice or fruit smoothies will increase carbohydrate intake further. Low fibre grains such as white rice, white bread and pasta may prevent gastro-intestinal (GI) upset during racing. Race day meals and snacks top up energy stores. Consume smaller volumes of food when meals are close to start time and include snacks such as fruit prior to racing if needed.

## PRE-RACE MEAL IDEAS:



Oatmeal with fruit & yogurt



Toast with eggs, turkey bacon & fruit



Fruit smoothie with waffles and lean ham



Bagel, peanut butter & fruit

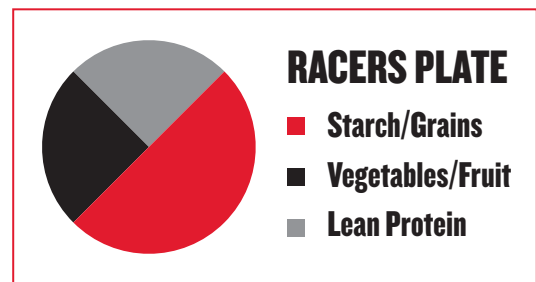


## WHILE YOU'RE IN THE SADDLE

Proper fueling and hydration is important. Begin the race well hydrated and drink at regular intervals (e.g. 125 mL every 15-20 minutes) to prevent dehydration. Sports drinks containing electrolytes and carbohydrates offer several benefits. Cytomax® is available on the race course and provides an advanced carbohydrate system to improve performance and hydration. Carbohydrate intake during exercise lasting >2 hours is required to maintain performance. Consuming different types of carbohydrates can lessen GI upset and offer performance benefits<sup>1</sup>. Fuel at regular intervals with a variety of easy to digest carbohydrates such as sports drinks, gels, gummies, high carb sports bars, pretzels, crackers, bagel pieces and dried fruit. Fueling should be practiced in training before use in racing. Also consider space - some fuel sources take up more space and are not easy to carry.

## AFTER YOU HIT THE BRAKES

Recovery nutrition should begin immediately after each race in can be done in two stages: an immediate recovery snack followed by a meal 1 - 1.5 hrs later. Carbohydrates are needed for refueling muscle glycogen stores and 20-30 g of protein is needed for muscle repair<sup>2</sup> in both the recovery snack and meal. The "Racer's plate" can be used as a guide for carbohydrate and protein portions in recovery. Adequate amounts of fluid are also needed in recovery to replace sweat losses and sodium containing foods and drinks should be included to replace sodium losses from sweat.



## IMMEDIATE RECOVERY SNACK IDEAS



Protein shake such as Muscle Milk, fruit and a bagel



Protein bar, sports drink and a muffin



Fruit smoothie with protein powder and a wrap sandwich

## RECOVERY MEAL IDEAS



Chicken and veggie skewers, rice, pita bread and hummus



Lean beef burger with salad and potato wedges



Pasta with turkey sausage and roasted vegetables

<sup>1</sup> Wilson PB. 2015. Multiple transportable carbohydrates during exercise: current limitations and directions for future research. J Strength Cond Res 29(7):2056-70.

<sup>2</sup> Morton RW, McGlory C & Phillips SM. Nutritional interventions to augment resistance training-induced skeletal muscle hypertrophy. Front Physiol Vol 6 article 245.



musclemlkcan



musclemlkcan



musclemlkcanada

#strongereveryday