## How to Not "Bonk"

If you have never heard the term "bonking" consider yourself lucky.
This can happen even to experienced cyclists. Simply put, bonking means that your nutrition hasn't kept up with your glycogen output.

Glycogen is what your body uses for energy. Glycogen is the carbohydrates your body has stored in your muscle and liver to be used for energy. Your body has about a 2 hour stored supply during exercise. On longer rides, you need to continually replenish your glycogen (carb) stores, to avoid bonking.

Cycling nutrition is a little bit different if you are road riding or mountain biking but the basic principles are the same. To keep it simple, we will look at the length of the ride to determine how to keep ourselves properly fueled.

## If cycling is under 90 minutes

If you have eaten in the last 3 hours, you probably don't need to eat anything before riding, or even during riding. If more than 3 hours since you ate, consume a light carb-based snack such as a banana. You don't need to consume anything but water during this short ride, unless sweating profusely.

## If cycling is over 90 minutes

If more than 3 hours since you ate, consume a carb and protein-based meal, allowing at least 90 minutes to digest before you ride, such as sweet potato and Greek yogurt dip; or protein pancakes, fruit and maple syrup

If less than 3 hours since you ate, have a light carb-based snack, such as Greek yogurt and fruit, or an apple with peanut butter. Remember, fruit and vegetables are carbs too!!

## During your 90 minutes plus ride

Aim for 30-60 grams of carbs per hour (based on your weight and work load), for example: • a banana has 27 grams of carbs • Carb based sports drinks vary from 5-40 grams of carbs so read your labels • Energy gels vary from 20-40 grams of carbs.

Do you want to eat or drink your carbs? Make sure food you take won't melt in your back pocket. (learned that lesson the hard way!) My favourite gel is Maple Tap - clean ingredients with a delicious taste and texture.

## Hydration

Sipping 4 to 5 times an hour should keep you hydrated to the recommended levels without stressing about exact dosing. For MTB, a backpack with a water bladder will allow you to sip while riding. Two water bottles on road bike: 1 for water and 1 for electrolytes. Electrolytes are lost through sweat and must be replaced on long rides to prevent muscle cramping and dehydration.

## After Your Ride

You have a 30-45 minute window where the body absorbs nutrients best to promote muscle recovery. So pre-plan your post ride snack or meal (I always have something in the car) Aim to consume 1 gram of carb per kg of body weight (ie - a 60 kg person $=60$ grams of carbs) and 1525 grams of protein. Great choices: A smoothie with whey protein, almond milk, strawberries and spinach (remember fruit and veggies are carbs); Greek Yogurt with fruit and granola; or a meal of quinoa, legumes and vegetables.

If you would like recipes for clean foods sports endurance and recovery, check out the book "Rocket Fuel" by Matthew Kadey.

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