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## Race Day Nutrition Rules

Unfortunately there is not 'one size, one way' fits all when it comes to race nutrition. While many foods affect individuals in certain ways (your genetic blueprint), there are some rules that apply to all, that you need to follow when it comes to race day nutrition. This way you'll avoid many of the nutrition woes athletes set themselves up for on race day. Seriously do not overlook this important aspect of your race day. You owe it to yourself to leave no stone unturned as you have invested a lot of training hours into this.

Test. Test. Test.

There's one overriding goal when it comes to race nutrition. Find out in training via thorough testing what is the "minimal effective dose" to get the absolute best performance without gastrointestinal show stoppers for you.

N=1 here.

### Rule #1

If you are going to have a pre race meal it needs to be consumed a minimum of 3 hours before race start and it needs to be minimal.

Yes, I said IF. When you have spent many months training right and even by following our simple and effective nutrition advice you will have become more fat adapted (metabolically efficient) so you don't necessarily need to eat food because you have been doing this week-in week-out for many months and your body will be primed to use fat as fuel from the get go.

Why change on race day?

If you do choose to eat something. It only needs to be a couple of hundred calories and should be had with a good fat

Your pre-race meal *needs* to be consumed a minimum of 3 hours before race start. The reason for this is 3 hours allows enough time for the body to fully digest the meal and



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it's this digestion time that will help you avoid gastrointestinal distress. Further to that reason and just as important to performance is that when you eat closer than 3 hours to your race start you'll get elevated blood sugar that will cause excess insulin release which will cause hypoglycemia (low blood sugar) and the feeling of lethargy on the race start... not good! Having high insulin also inhibits our fats-to-fuel conversion which can be a major loss to endurance performance and those high insulin levels will also increase of muscle glycogen usage - meaning rapid carbohydrate fuel depletion.

By eating your pre-race meal 3 or more hours before race start you'll effectively top up your liver glycogen stores, allow time for full digestion and for your insulin and blood glucose to normalise thus saving you from potential intestinal distress and major performance loss.

Again. If you have been following the advice then you have been at the least training your long sessions without breakfast. So you don't need to start again on race day. Just back yourself. Feel nice and good and start fuelling 20-30 minutes into the bike.

If you must have something follow the advice above and below in Rule #2.

## Rule #2

So you *feel* the need for a pre-race meal. The goal here is to just remove any hunger pangs. You cannot increase energy when you have full muscle glycogen stores.

With that out of the way again. Your meal must be small. Say 200-400 calories is plenty to remove the hunger and top off any liver glycogen that has been slightly depleted overnight.

A small liquid shake with a some banana, water, salt, avocado and a little rice protein would do the trick. (If you are going to do this on race day, practice before the event in training!).

You could also do some white rice, and egg/bacon with a lot of butter and that would do the trick too. Good to test this in a pre race simulation.



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Your fluid requirements only need to satisfy your hydration without putting you at risk for overhydration! All you need is between 290ml-350ml of fluid (with no calories) each hour up to 30 minutes prior to race start. (700-900ml of total fluid).

Hit 3x Salt Sticks (or 2x S-Caps) about 45 minutes out from race start to ensure your body has what it needs on board.

### Rule #3

It is worth mentioning again because it ranks up there with the biggest mistakes I see athletes do race morning. *No calories within 3 hours to race start.* I have mentioned (above) why it is a performance destroyer to ingest calories within 3 hours of race start.

The fact is you don't need the pre-race gel either. Water plus some electrolytes work a real treat.

Again, if you have followed the advice you'll not only have plenty of muscle glycogen stores onboard that will last you around 90 minutes into the race but you'll have so much energy from your fat stores to draw on that you cannot bonk (unless you under do your salt!)

Adding in carbs when you don't need them is a surefire way to turn off your fat burning capacity and help lead you to a race destroying bonk.

If you have had some breakfast > 3h before race start then you don't actually need anything before the race. If you missed breakfast or have hunger pangs then have a pre-race gel or sports drink like Skratch Labs or a homemade one using 500 ml of water, 1 tablespoon of rice malt syrup, juice of a lemon and a good pinch of sea salt (or contents of a salt stick) will give you a great natural alternative while giving you a small amount of calories.



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## Rule #4

Do not jam food down your gullet directly after getting out of the swim. Even if your swim time is 2 hours! I can hear you thinking.. but Kristian, I have surely used all that energy in the swim and I need to start fueling for the day! Yes you have used plenty of energy (but you have plenty stored as muscle glycogen and even more as fat stores), however your heart rate will still be sky high and your blood will be getting shunted away from the stomach to your legs.

So throwing food in now (solids or liquid food) is a sure fire way to shut your stomach down and ruin your race. Period! All you need to do is take in a small amount of water and get into your rhythm on the bike and let your systems settle - approximately 20 minutes and then start your refueling plan.

## Rule #5

Drip, Drip, Drip. Your body is working fairly solidly and your digestive system won't handle hammer blows of food. The best analogy I can think of is if you need to get food intravenously. The nurse doesn't open that thing full throttle as it will just overwhelm your system and this is while it's a rest!

So my best advice is to drip drip drip your fuel in little bits at a time throughout the day. The longer your day goes the more important this is.

***Remember: Less is more. You can always add more but you cannot subtract!***

As the day goes on, our ability to absorb the calories is greatly impacted and reduced. Since you have followed our advice on becoming more fat adapted and you then follow our drip, drip, drip fuelling method, you'll be using exogenous carb intake in a strategic "body cooperative" manner which will work like rocket fuel with your efficient ability to use fats as your major fuel source.



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Throughout your training you should have worked out your N=-1 fuelling amounts you need. The more fat adapted you are the less you actually require. It's the minimal effective dose to give you the greatest performance impact.

Shoving huge amounts of calories down your gullet in the hopes of extra energy will just leave you with a digestive system in serious trouble.

When it comes to running, we do much better on even less calories. You cannot keep up your bike nutrition rate when you run. This is because as the day wears on your absorption rate slows and the higher impact of running makes it harder for your body to absorb. Reduce bike calorie intake by 30-50%.

The simpler the better and it's why it's the only time I like the black magic. Aka coke. It's an evil necessity but when you get enough of it through each aid station it is easy on the stomach and absorbs quickly.

If the weather is hot that means even more reduction with a greater emphasis on hydration (water plus electrolytes).

*A word on solids:* I'm personally all for liquid calories when it comes to racing. I highly recommend all my athletes take on this fueling strategy. Solids are much harder to digest. They need extra fluids to absorb- this means they will pull essential fluid away from your working muscles to absorb the food. It also takes energy to break this type of food down.

*With that being said some of you work just fine on solids and have practiced it repeatedly in training so again n=1. Nothing new.*

Oh and things like Shot Blocks and Honey Stinger Chews I don't consider solids. They break down pretty simply.

## Rule #6



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The amount of fluids consumed without sufficient electrolytes by most athletes are extreme and dangerously excessive. The risk of hyponatremia is real especially for the mid to back of the pack athletes and has been unfortunately fatal for some.

Most athletes in most conditions need ~ 590-750 milliliters per hour. Only in very hot and humid conditions should you need more. If so make sure you increase cautiously and also increase your electrolytes.

This is even more so when you are fat adapted as your kidneys do not hold on to salt like they do a carb dependent athlete. So you need to ensure you're getting adequate electrolytes in via Salt Sticks or similar.

## Rule #7

Electrolytes. As above, when you have become a fat burning machine you need to be critically diligent with your salt supplementation. I'm talking about 2-3 Salt Sticks caps per water bottle due to the facts I mentioned above.

Electrolytes are the oil for your muscles. They are essential to keep your systems running smoothly. How much an athlete needs varies more so than their calories and fluid needs. Some athletes sweat a whole lot more than others so you'll need to experiment a lot in training to find out what works best for you.

As a reminder: When racing in hot climates your calorie needs will greatly reduce but your hydration needs will increase dramatically.

## Summary

The seven rules above if followed, will allow you to minimise the chances of getting stomach distress on race day. Having nutrition problems can be a real show stopper so getting this right is imperative to your race day performance and overall enjoyment of the day.