**Optimal Hydration Plan - Male**

If you haven't read our Blog on Optimal Hydration, we suggest you give it a read before going through this plan. It will help bring the things outlined below together for you.

Below is an actual plan for one of our male athletes. This plan is structured similarly to the 200+ Race Day Nutrition plans we've written for athletes**. We've fueled athletes through just about every major endurance event on the planet so please know there is a ton of data that went into this.

**Each plan for our athlete's is specific to them. There will be some similarities, but our goal is to follow the evidence specific to you – no matter where that takes us.

Before we delve into the detailed plan below, it's important to know that this specific plan WILL NOT work for everyone. We wish that it would, but that's just not how it works. With that being said, we are confident that anyone can take this plan and adapt it to their specific needs and find great success.

**Athlete Background / Info**

Age: 42
Weight: 175*
Gender: M
Fluid Loss per hour: 42 oz.
Fluid Intake per hour: 32 oz.
Sodium Intake per hour: 750 mg
Event Type: Ironman Triathlon
Event Duration: 12 hours
Event Day: Sunday
Event Start Time: 7 am
*Average training weight.



**Hedging Our Bets**

There are ways to increase fluid and sodium stores prior to your event to help mitigate losses. The way we increase our stores is through fluid / sodium loading. The way we load said stores is by consuming NBS Preload.

Now, you will notice that our athlete weighs 175 lbs., which we noted as his average training weight. We say average training weight because on race day his weight will shift up to around 183 pounds. The reason it shifts up is due to full glycogen and water stores. PLEASE do not worry about race day weight in terms of power to weight ratio. The mindset of the less you weigh the faster you go is not always correct. I promise you the extra 8 pounds of fuel (glycogen and water) will make him and YOU a lot faster.

Based on our athletes fluid loss through sweat and fluid consumption rate, we would expect him to lose a total of 7.5 lbs. of water weight. Theoretically, he will finish the race close to his normal training weight.

**Plan**

Friday

Water Intake: .65 - .75 oz. of water per lb. of body weight (113 - 131 oz.). The best option would be to put all of your daily water in a container with 6 tbsp. of hydration mix. You want your urine to be light yellow. If it is completely clear, back off your hydration amount.

Salt Intake: normal. Do NOT over-salt your food.

Saturday

Water Intake: 80 - 100 oz. – same protocol as Friday. The difference in fluid intake will be made up through NBS Preload starting 12 hours prior to the event.

Salt Intake: normal. Do NOT over-salt your food.



Saturday, 7pm*
NBS Preload – 2 tbsp. mixed with 16 oz. of water
*Loading should normally occur within 12 hours of the start of your event. Excess sodium and water outside of the 12 hours can leave you bloated and with heavy legs.

Saturday, 9pm
NBS Preload – 2 tbsp. mixed with 16 oz. of water

Sunday

Sunday, upon waking
NBS Preload – 2 tbsp. mixed with 16 oz. of water

Sunday, pre race breakfast
Begin sipping a bottle of hydration.

Sunday, 1 hour prior to race start
NBS Preload – 2* tbsp. mixed with 16 oz. of water

Sunday, 30 min. prior to race start
NBS Preload – 2* tbsp. mixed with 16 oz. of water
*This athlete can consume 10 servings of Preload prior to his event. This amount is specific to him. You must test your tolerance for the product as excess sodium bicarbonate can affect some athletes.

Swim – none

T1 – none

Bike

The bike is a calorie and fluid delivery system. Its main function is to set you up for a successful run (for you triathletes). You've got to make sure your bike plan is rock solid, or your run will suffer. IF YOU HAVE ANY ISSUES WITHIN THE FIRST 10K OF THE RUN, IT IS BECAUSE YOUR BIKE PLAN WAS NOT RIGHT FOR YOU.

First 15 min.

Nothing but maybe some plain water to rinse your mouth out. This gives your stomach time to settle after being parallel in the swim*.

*This holds especially true for ocean swims. It's a good bet you swallowed some salt water, and if you watched the video above, you know what that means. Plain water will help dilute anything in your stomach and get it ready to accept your nutrition.

15' – 30' before T2

Our athlete will start their fueling and hydration plan. Their hydration plan includes 32 oz. of NBS per hour, along with plain water from the course. Plain water is to be used as needed, and to pour on the torso to help keep body temperature down. Their calorie source will provide the remainder of the sodium needed to hit the target of 750* mg. per hour.

*This plan puts their sodium intake at 774 mg. per liter of fluid.



Last 30' of the bike

Our athlete will start to back off of their intake and start to mentally prepare for the run. Plain water will be sipped as needed. This slight break will allow their stomach to empty* and prepare for the struggle of getting their body to process calories and fluid on the run.

If you are a cyclist, you can stop here. The bike plan can be adjusted based on your time in the saddle. The good news for you is fueling and hydrating for the bike only is fairly simple. You can process more calories on the bike, and since most bike events top out around 7 hours*, you have some leeway** with your sodium intake.

*Ultra bike events (>8 hrs) will do well to stick closely to this outline and not adjust down – especially if you are racing at altitude – that's you Leadville People.

**You can adjust your sodium down slightly if needed since you do not have to run after.

T2 – Tricks of the Trade

Preload – 1 tbsp. mixed with 8 oz. of water*.

*Again, test this out before race day. Not all athletes can slam back Preload in T2 and then go run a marathon.

Run

Most athletes cannot consume as much fluid or nutrition on the run as they can on the bike. Both calories and fluid will need to be adjusted down. This adjustment means that sodium will shift down along with calories and fluid. REMEMBER, YOUR SODIUM HAS TO BE TIED INTO YOUR FLUID INTAKE*. But here's the thing, since we know we played our hand right on the bike, we have created a nice buffer on the run**. Even though our loss and intake will start to diverge, we won't see a drop in

performance. As an added bonus, you won't have to run 13 miles with a sloshing belly.
*You will run (pun intended) a dangerous game if your sodium (especially salt) intake starts getting to the 1.5g per liter mark.
**Especially if you can tolerate the T2 tricks

## Mile 1 - 3

## NBS Carbo•Hydration – 3 servings with 20 oz. of fluid.

**We have gone to great lengths to test Carbo•Hydration. Our initial testing protocol found that when athletes were dehydrated to 5% loss of total body weight, and consumed 3 servings of Cabo•Hydration in 24 oz. of fluid (total time to consume – 2 min.) their power output while cycling returned to pre dehydration levels within 10 minutes.
***We have also tested the above recommendation at standalone 5k running effort, sprint triathlon effort, Olympic triathlon effort and multiple Ironman finishes.

## Mile 4 to finish

This is when your run plan gets put into action – 24 oz. per hour. Our athlete will hydrate every ½ mile with small sips. The small sips may ease intestinal burden, plus small hits of sugar on your tongue will signal your body to constantly release glycogen stored in those legs**.
*Most athletes will be around .75 - .9 of their bike intake
**More on this next month

We won't tell you that your marathon is not going to be without its woes. At some point in time your body will rebel a little – it's just the name of the game. But we tell people, "Anyone can run 6 miles with slight GI issues, but there is no reason for anyone run 20 miles with a rebellious stomach."

There may be a time when you have to hit water and coke and rely on mental fortitude to get to the finish. Ironman is a tough game so you have to be prepared to suffer. But, we are confident that following a carefully outlined plan will shift your suffering away from GI and more towards those screaming muscles from pushing yourself to new heights.



There you have it. We hope this information will help you better understand optimal hydration and how to create an optimal hydration plan for yourself. If you are still a bit confused on how to adapt this plan for you or your event, we want to help.

Check out our Services page for information on our Customized Hydration Plan.