

SOS

5 *Secrets of Success*



Fuel Right, Feel Great!®

Guaranteed since 1987!

SOS

Secrets of Success for Endurance Fueling



This book distills the knowledge we have gained over three decades of helping athletes successfully fuel for every endurance endeavor imaginable. You name it, we've done it, or helped other athletes do it. By following the guidelines revealed in this book, you too will accomplish your goals and become the best you can be.

Informed by rigorous science and proven in use, our methods and products are the surest path to optimal performance and health. We are so passionate about helping our clients

that we literally wrote the book on it! We're pleased to say that more and more "experts" now sing our tune and champion our philosophy.

This book, like all our educational resources, is offered to all free of charge. If you have additional questions, please consult our website—or, better yet, call to speak with an expert client advisor. We're here to serve you!

Brian Frank

Brian Frank, Owner



Our fueling recommendations:

Calories per hour:	120 to 180 calories
Fluids per hour:	20 to 25 oz.
Electrolytes per hour:	1 to 6 Endurolytes®, 1 to 2 Endurolytes® Extreme Powder, 1 to 2 Endurolytes Fizz

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Our Philosophy:

Less is Best

For successful fueling, less is better than more!

Hammer Nutrition has advocated the “less is best” approach for more than 30 years. Proper fueling is achieved by consuming the least amount necessary to keep you feeling your best hour after hour. This philosophy guides all our fueling recommendations.

What makes us so sure we’re right? Beyond a wealth of scientific research, over 30 years of working with thousands of athletes has proven it! Follow this approach and you, too, will reach your fullest athletic potential, recover well, and feel great every day.



Russell DeBarberis climbing during a trip to Mallorca, Spain.
Photo: Mallorca Cycling Photos

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Pre-Exercise Fueling

When and how much to eat before exercise

Observe the three-hour rule!

The timing of your pre-exercise meal is critical. Be sure to complete your meal no less than three hours before your workout or race, regardless of your event's duration. (That means the fork or spoon is down at 6 a.m. if your event starts at 9 a.m.). Three hours allows your body to fully process the meal and avoid intestinal distress. You'll feel "light on your feet" as your body devotes all blood and oxygen to your physical

efforts rather than digesting your meal.

Additionally, eating within three hours of exercise can seriously hamper performance. As nutritional expert Dr. Bill Misner points out, raising blood sugar within three hours of endurance exercise reduces the body's ability to burn fat as fuel. A meal during this time will lead your body to burn through its limited reserves of stored carbohydrates (muscle glycogen) more quickly.



Photo: Think Develop

When and how much to eat before exercise

This combination of rapid glycogen depletion and decreased fat burning reduces endurance and performance. Though it may sound counterintuitive, the science is clear: for optimal performance, abstain from eating for three hours prior to your start time.

30 minutes before you start:

Consume one serving of Fully Charged in 4 to 8 oz. of water.

10 minutes before you start:

Consume one serving of
1 Hammer Gel,
2 Endurolytes or
1 Endurolytes Extreme, and
4 to 8 oz. of water.



Our fueling recommendations:

Adopt and consistently follow these pre-exercise fueling recommendations and watch your performance soar! Properly timing your caloric intake before every activity will ensure you get the most out of your time, no matter your goals, intensity, or duration of exercise.

Three hours before exercise, complete your meal of 300 to 500 calories of low-fiber, easy-to-digest complex carbs and a small amount of protein.

Want to “top up” before starting? Consume a serving of Hammer Gel® 10 minutes prior to beginning your activity.

Fully Charged will change your life! Thirty minutes before you exercise, mix one scoop or stick pack in 6 to 8 oz. of water. For a prolonged workout, add an additional scoop or stick pack to your water bottle midway through.



SECRET #1 Pre-Exercise Fueling

When and how much to eat before exercise

Pre-Exercise meal

Consume 300 to 500 calories of mostly low-fiber, easy-to-digest complex carbohydrates and a small amount of protein.

The purpose of your pre-exercise meal is to top off the liver glycogen stores your body expends during sleep. Muscle glycogen, which constitutes about 80% of your total

carbohydrate stores, remains intact overnight, so if you had a proper recovery meal after your last workout, your muscle glycogen will already be full. Since you only need to top off your liver-stored glycogen, a light meal of 300 to 500 calories is sufficient.


EN

All the benefits of our best-selling Endurolytes Extreme capsules, an easy-to-mix powder that dissolves quickly and completely. Consume with water alone or add it to your liquid fuels—Endurolytes Extreme Powder has you covered.



When and how much to eat before exercise

Bottom line:

After 30 years offering this advice, we have yet to hear from a single person that it did not work. Apply this approach consistently and watch how well your body responds. 

**HAMMER
Quick Tips**

Sleep. Eat. Time your fuel before your start and enjoy a steady output all day.



If you must eat, consume Hammer Gel within 10 minutes of starting.



Don't "carbo-cram" the night before. Real "carbo-loading" is achieved through proper recovery, day in and day out.



For dinner, eat light and clean. That means no refined sugar, saturated fats, or alcohol. Eat until you're satisfied and call it a night.



Layne McCormick fueling with Hammer Gel during a training ride.
Photo: Alicia McCormick

Calories Count

What and how much you consume during exercise can be the difference between crushing it or being crushed

As with every aspect of performance, proper nutrition requires planning and practice if you want to reap the benefits on race day. Here's the inside track on successfully fueling all your activities.



Our fueling recommendations:

Consume 120 to 180 calories per hour of activity.

Fuel with complex carbohydrates like maltodextrin instead of simple sugars or blends.

For exercise longer than two hours, your primary fuel should include protein in a ratio of about 8:1 of carbs to protein.

Carbohydrates

Athletes know “carbs are king” when it comes to fueling for endurance exercise. But you can't consume just any carbohydrate at any time. Here's what works:

Complex carbohydrates offer steady, usable energy without stomach distress

Products containing simple sugars—typically sucrose, fructose, and/or glucose (dextrose)—must be extremely diluted

(a 6 to 8% solution in water) to be digested. This presents an immediate problem, as this solution is too weak to meet the caloric needs presented by endurance exercise. However, increasing the solution will cause the sugars to sit in the gut as fluids are recruited from elsewhere in the body. This “osmotic pressure” increases rates of dehydration and electrolyte depletion and often causes severe GI issues. In contrast, complex carbohydrates (such as those

What and how much to consume during exercise

found in HEED and Hammer Gel) can be efficiently digested at solution concentrations of up to 18%. You can therefore absorb sufficient calories to fuel your exercise hour after hour without overconsuming fluids or causing yourself digestive distress.

Fast energy without the crash

The complex carbohydrate source in Hammer Nutrition's fuels is maltodextrin. This easily absorbed starch elevates blood sugar rapidly for the quick energy you need during

exercise. However, unlike with simple sugars, the body takes longer to break down the molecular structure of complex carbohydrates like maltodextrin, keeping blood sugar levels stable over time. While sugars spike insulin levels and then quickly drop them—leading to “peaks and valleys” of energy—complex carbohydrates raise blood insulin just as effectively, but without the corresponding “crash.” Your energy will be stable and reliable, no matter the distance.



Victor Sheldon drinks Recoverite immediately after all tough rides.
Photo: Lab Ratz Media

SECRET #2 Calories Count

What and how much to consume during exercise

Avoid multiple carbohydrate sources during exercise

Some sports fuels contain a mix of simple sugars and complex carbohydrates. However, like simple sugar alone, these blends are only absorbable at either very low solutions or exceedingly low heart rates (like when taking a brisk walk). If you want steady energy while pushing the pace, steer clear of simple sugars, regardless of what they're mixed with.

Fatty acids

Even the leanest athletes have vast stores of caloric reserves in the form of body fat, with larger athletes' bodies holding upwards of 100,000 calories of expendable energy. When exercise goes beyond two hours, these fatty acids should be the body's primary fuel, providing approximately 60 to 65% of your energy needs. However, when you consume too many calories,



HEED[®], Hammer Gel[®], and Perpetuem[®] will fuel your exercise hour after hour without overconsumption of fluids or digestive distress.

What and how much to consume during exercise

your body switches gears, becoming intent on using the food you've eaten and your carbohydrate reserves instead. In order to support your body's natural ability to efficiently access energy stores from fat, consume just enough calories to feel your best during exercise (no more than about 180 calories per hour) no matter what the distance.

**Fueling:**

120 to 180 cal/hr

FACT: During athletic activity, your body can't process calories to match what it expends. If you want to achieve your best performance, **DO NOT** follow the "calories out, calories in" protocol recommended by some "experts."



SECRET #2 Calories Count

What and how much to consume during exercise

Protein

For activities lasting longer than 90 to 120 minutes, 5 to 15% of your calorie expenditure will come from protein. If your fuel doesn't supply protein, your body will scavenge it from muscle tissue, causing muscle fatigue

and breakdown, post-exercise soreness, and a weakened immune system.


To avoid this muscle cannibalization, your fuel should incorporate protein in a ratio of about 8:1 (by weight) of carbs to protein.



The Grey Area


Fueling for two- to three-hour sessions:

Digestion is most difficult when exertion levels are highest.

When fueling for two-to-three hour sessions that include high exertion levels, it is often best to choose carb-only fuels (HEED or Hammer Gel®), as these are most easily digested. Although some ammonia build-up and muscle breakdown may occur, the impact is minimal during such durations. For steady efforts beyond this time frame, Perpetuem should be the fuel of choice from the onset of exercise. 



What and how much to consume during exercise

Sustained Energy, Perpetuem, and Perpetuem Solids® meet this requirement and are your best fuel choices for long-duration exercise. For these sessions, use a fuel containing protein from the get-go. 

HAMMER Quick Tips



Replenishing calories during exercise in amounts of 120 to 180 calories per hour supports efficient energy production. Plus, this won't interfere with your body's use of fatty acids for fuel.



During efforts of two hours or longer, about 5 to 15% of calories used should come from protein, whether from fuel or muscles.



Plant proteins are preferred for use during exercise because their metabolization doesn't produce ammonia, which is a big factor in creating fatigue.



For two-to-three-hour events or high-intensity workouts, a "carb-only" fuel may be more beneficial than a carb/protein fuel.

Mitch DeYoung hammers down the single track course during the Lumberjack 100 in Wellston, MI.
Photo: Robert Meendering

Proper Hydration

What you need to know to stay in the flow

Water is the most critical component in exercise fueling. It cools your body, transports nutrients, and allows healthy cellular functioning and energy release. However, many athletes have trouble gauging how much fluid to drink. Many attempt to replace fluids at the same rate they're lost through sweat. While this may seem sensible, in truth it is a recipe for disaster.



Our fueling recommendations:

To avoid performance and health problems associated with low blood sodium, your fluid intake should not routinely exceed 25 oz. per hour, relative to weight and conditions.

Average athletes, average temps: 20 to 25 oz. (approx. 590 to 740 ml of fluids per hour)

Lighter athletes or cooler temps: 16 to 18 oz. (approx. 473 to 532 ml of fluids per hour)

Heavier athletes or hotter temps: up to 28 oz. (approx. 830 ml of fluids per hour)

The fact is, you can finish an activity of any length with a water weight loss of 2% without suffering any performance declines or health impacts. Forget the advice to “drink to replace.”



Drop your favorite FIZZ flavor tabs into 8 to 10 oz. of water for a sparkling burst of rehydration on the go!

Instead, abide by the following principles:

Your body cannot absorb fluids at the same rate it loses them

On average, you lose about one liter, about 34 oz., of fluid per hour during exercise—and even more in extreme heat or humidity.



What you need to know to stay in the flow

Research has shown the optimal average water intake to be one water bottle (20 to 25 oz.) per hour.

The goal with hydration, like caloric consumption, is to consume an amount your body can process without causing additional side effects. Research by Dr. Tim Noakes, who collected data for ten years from some 10,000 ultra runners,

shows that most endurance athletes can efficiently absorb 16 to 24 fluid oz. per hour and that consuming more than this does not improve performance. In fact, overconsumption can have grave consequences. When blood sodium concentrations become too low, performance immediately declines.

In severe cases, too high of a fluid intake can overwhelm the body's levels of electrolytes, leading to water intoxication or dilutional hyponatremia, which can be fatal.

No matter how long or extreme your exercise regimen or races may be, HEED will keep you properly hydrated without bloating or cramping.




SECRET #3 Proper Hydration

What you need to know to stay in the flow

Good hydration starts before you even get moving

For daily hydration needs outside of exercise, aim to take in 0.5 to 0.6 fluid oz. of pure, clean water per pound of body weight. This amount is in addition to the amount of fluids you take in during activity.

Bottom line:

By hydrating properly (taking in 20 to 25 oz. of fluids per hour), you'll attain peak performance with less fatigue, bloating, and cramping. You'll feel better before, during, and after you exercise. 

Daily hydration

Foundation for success

For daily hydration, aim for 0.5 to 0.6 oz. of fluid per pound of body weight in addition to what you drink while training or racing. The majority of your hydration should come from pure, clean water.

100 lbs	50 to 60 oz.
110 lbs	55 to 66 oz.
120 lbs	60 to 72 oz.
130 lbs	65 to 78 oz.
140 lbs	70 to 84 oz.
150 lbs	75 to 90 oz.
160 lbs	80 to 96 oz.
170 lbs	85 to 102 oz.
180 lbs	90 to 108 oz.
190 lbs	95 to 114 oz.

What you need to know to stay in the flow



HAMMER Quick Tips



Hydrate effectively all day, every day.



During exercise, practice measured fluid consumption, varying intake for temperature and sweat rate.



Do not attempt to replace the fluids you lose with an equal amount replaced.



Don't try to super-hydrate prior to exercise.



Electrolyte Replenishment

Resupply with these vital minerals correctly to finish strong

Think of electrolytes as the motor oil in your car. They don't make the engine run, but they're absolutely necessary to keep everything operating smoothly. Just as you wouldn't wait for

your engine to seize before you top off the oil, don't wait "to cramp up" before you replenish electrolytes. Long before you cramp, your output suffers due to mineral depletion.



Our fueling recommendations:

To keep your body functioning smoothly through a long workout or race, replenish the full spectrum of electrolytes consistently and completely.

**Extreme conditions may warrant higher levels of electrolyte replenishment. Use the tear sheet on page 31 to plan your intake.*



Tieni Duro rider, Lucas Johnston, during the Lodi Crit in Sacramento, CA. Photo Credit: Jason Kent

Resupply with these vital minerals to correctly finish strong

Electrolytes 101

The goal of electrolyte replenishment is smooth, uninterrupted, uncompromised performance. Without the proper levels of electrolytes, your body can't carry out critical body functions such as muscle contractions, normal heart rhythms, and nerve impulses, all of which are critical for performance and health.

Salt tablets are not the answer!

Salt tablets are an unacceptable choice for electrolyte replenishment for two important reasons:

- 1) They can oversupply sodium, thereby overwhelming your body's ability to regulate electrolyte and fluid balance, and
- 2) They provide only two

electrolytes, sodium and chloride, when your body requires several types of electrolytes.

Your body has very effective mechanisms for monitoring and conserving its stores of sodium. Consuming excessive amounts of sodium interferes with this natural process. If your body detects a drastic increase in sodium from outside sources, whether from salty food or electrolyte products too high in sodium, your body will stop filtering and recirculating sodium and instead begin purging the excess. The immediate results of this are swelling and elevated blood pressure, with extreme cases resulting in lethargy, muscle weakness, seizures, and even death.

Precisely formulated without excess salt, refined sugars, or artificial ingredients, our full-spectrum electrolyte products support peak performance in the toughest conditions.



SECRET #4 Electrolyte Replenishment

Resupply with these vital minerals to correctly finish strong

Skip the salty foods

A similar process occurs if you routinely consume high levels of sodium in your diet. The habitual consumption of excessive sodium sets up the body to routinely dump high levels of sodium from its system. If you're consuming more than 2,300 milligrams of sodium per day, your sodium loss during activity will be increased, thus making you more likely to cramp and increasing your need for electrolyte supplementation. By building your diet around natural, unprocessed foods, you will consume sufficient sodium to meet your needs without interrupting your body's natural regulatory processes. The average person stores 8,000 milligrams of dietary sodium in body tissues. By reducing sodium in your diet and replenishing sodium levels during exercise with the minimum amount necessary, you can enable your system to make the best use of your stores. Attempting to "sodium load" prior to activity by taking in large amounts of salt triggers your body to rapidly dump it during exercise, perpetuating a cycle of high-sodium consumption and expenditure.

Full-Spectrum Electrolyte Replenishment

Proper electrolyte replenishment requires a consistent approach that incorporates all the electrolytic minerals in a proper balance—not just "salt."

Hammer Nutrition's Endurolytes are designed to meet your body's complete electrolyte requirements, which include sodium, chloride, potassium, magnesium, calcium, and manganese. These minerals help counter the effects of over-heating, optimize bodily functions, and enhance performance, especially for activities that last longer than two hours.



Mindy Przeor in Switzerland.
Photo Credit: Kris Przeor

Resupply with these vital minerals to correctly finish strong

We do not formulate Endurolytes to reflect the amount of electrolytes lost through exercise. As sweat loss varies greatly from person to person and depends on climate, there is no “one size fits all” approach to replenishment. It is essential that you correlate your dosing to your dietary habits, the climate, and active temperatures.

When selecting your dosage, it is important to remember that the human body can assimilate only about 1/3 of the electrolytes it loses during exercise.

Trying to replace more than this could cause gastric distress, edema, muscle spasms, cramping and a host of other performance-wrecking symptoms.

Hammer Nutrition’s Endurolytes products help your body maintain proper electrolyte levels no matter the conditions or duration of exercise. They allow your body to perform better under the demands of exercise, especially in heat, by providing a full range of minerals, in a proper balance that does not interfere with the body’s normal control systems.

COMPLETE Electrolyte Support

Salt tablets provide only two of the electrolytes your body requires. Endurolytes provide a full spectrum with complementary micronutrients.

Calcium: Necessary for normal heart rhythm, healthy nerve transmission, and strong muscle contractions. During exercise, calcium-dependent enzymes produce energy from fatty acid and amino acid conversion.

Chloride: Critical for maintaining a proper balance and consistency of body fluids and electrolytes.

Manganese: Trace amounts help convert fatty acids and protein into energy.

Sodium: The average athlete already has a vast store of available sodium and consuming excess amounts can cause serious problems. Endurolytes contain moderate amounts of sodium for proper replenishment.

Magnesium: Required for many of the enzymatic reactions for converting fuel to muscle energy.

Potassium: Needed for optimal concentrations of sodium.

SECRET #4 Electrolyte Replenishment

Resupply with these vital minerals to correctly finish strong

Original Endurolytes Capsules

Ideal for athletes consuming a low-sodium diet! Introduced in 1996, this full-spectrum, proportionately balanced electrolyte supplement provides 100 milligrams of sodium chloride. Depending on heat stress levels, 1 to 6 capsules per hour are recommended.

Endurolytes Extreme Capsules

Ideal for athletes who tend to consume a high-sodium diet (evidenced by salt stains on clothing and skin). Triple the sodium, chloride, and potassium compared to original Hammer Nutrition Endurolytes, Endurolytes Extreme allows for a 3:1 reduction in the number of capsules consumed.

Endurolytes Fizz

Equal to approximately two capsules of Endurolytes, this product is ideal for athletes who are unable to consume capsules while exercising and/or those who must have flavor in their water.

HEED


Hammer Nutrition's complex-carbohydrate powdered sports drink contains the same full-spectrum electrolyte profile as Endurolytes. Some athletes find that a scoop or two of HEED in their water bottle will keep them going strong for an hour or more. Others satisfy their complete electrolyte needs by consuming both HEED (an excellent base) and Endurolytes products.



Steven Terry at Zia Rides Event, Dawn to Dusk at McDowell Mountain Regional Park, Maricopa County, AZ. Photo Credit: Gillen Photography.

Resupply with these vital minerals to correctly finish strong

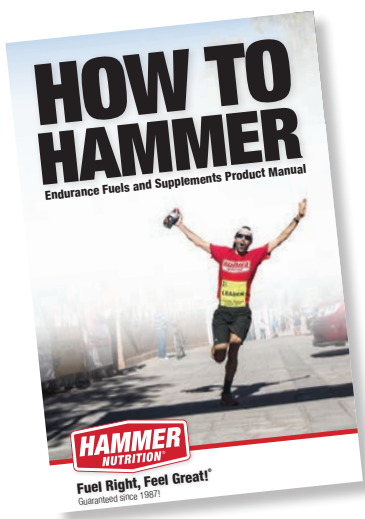
Bottom line:

Salty foods and salt tablets won't cut it when it comes to electrolyte replenishment. Instead, adopt a low-sodium approach in your daily diet with mineral-rich whole foods. During exercise, provide your body comprehensive electrolyte support without compromising internal regulation. 

Build your optimal fueling strategy!

For a complete guide to fueling, replenishing electrolytes, and applying all SOS recommendations, refer to Hammer Nutrition's product usage manual, *How to Hammer*.

Also use the Fuel Right, Feel Great! tear sheet on page 31 to put your fueling plan into action.



HAMMER Quick Tips



Electrolyte replenishment is important regardless of outside temperatures.



The body only needs 500 to 2,300 milligrams of sodium a day, an amount easily supplied with natural, unprocessed foods.

Intake of high levels of sodium leads to increased sodium loss during exercise, which leads to more required sodium later on.



Adding Endurolytes, Fizz, or HEED to your water bottle is an easy way to help replenish electrolytes consistently throughout your workout or race.



PRO TIP

ENDUROLYTES®

Extreme Powder is formulated for ideal use with hydration packs.

Precise electrolyte replacement

Give as much attention to your recovery as you do to your training.

Recovery Done Right

For better performance tomorrow, recover right today!

Recovery involves rehydration, nutrient replenishment, and long-term mineral fortification.

Rehydration

Rehydrate immediately following your exercise session and continue throughout the day. Consume at least 16 oz. of water immediately following exercise and continue based on temperature, sweat rate, and thirst. You should consume at least 16 oz. of water per pound of body weight lost during a strenuous session.



Our fueling recommendations:

Within 30 minutes after your finish, consume:

- 20 to 30 oz. of water
- 30 to 60 grams of high-glycemic carbohydrates
- 10 to 20 grams of protein, preferably whey isolate, complementary amino acids, and micronutrients



Mitch DeYoung focuses on recovery after the Coast to Coast Gravel Grinder. Photo Credit: Salsa Cycles "Chase the Chaise"

For better performance tomorrow, recover right today!

Macronutrient requirements

First and foremost, the recovery process relies on two essential macronutrients: carbohydrates and protein.

Consuming carbohydrates after exercise will replenish glycogen (carbs stored in muscles) and help your body assimilate protein.

Several studies have shown that pre-exercise muscle glycogen level is the most

important determinant for energy use and exercise performance. Athletes who have more of this readily available fuel in their bodies have a significant advantage.

Fortunately, you can substantially increase your glycogen storage capacity through consistent recovery practices. To maximize glycogen storage and usage, always consume carbohydrates within 30 minutes of your session's end.



Tissue Rejuvenator, Recoverite, Whey Protein, Race Caps Supreme, Hammer CBD, and Premium Insurance Caps are all recovery fuels and supplements precisely formulated to optimize your training efforts and keep you healthy.

SECRET #5 Recovery Done Right

For better performance tomorrow, recover right today!

Choose high-glycemic complex carbohydrates for optimal absorption

A high-glycemic complex carbohydrate is ideal because it raises levels of insulin in the blood. This is desirable after exercise as insulin drives the storage of glycogen, stimulates protein synthesis for repairing and rebuilding muscles, and decreases

muscle breakdown. Though simple sugars will also spike insulin levels, they rapidly drop, leading to decreased energy for the rest of the day. Given simple sugar's inflammatory nature and propensity to cause stomach distress, it is a poor choice for recovery. Instead, choose high-quality complex carbs such as those found in Recoverite.



For better performance tomorrow, recover right today!

Protein

Protein provides the raw materials your body needs to rebuild stressed muscles, enhance glycogen storage, and support the immune system. Whey protein isolate is the best protein choice for recovery due to a variety of reasons.

Whey has the highest Biological Value (BV), of all proteins. BV is a measure of how well and how quickly your body uses the protein that you consume. Whey protein isolate, the purest form of whey protein, has the highest BV of any known source at 154. Many other recovery products use less-absorbative whey protein concentrates which include production by-products, fat, and lactose. Hammer Whey and Recoverite use the

purest whey protein isolate on the market, which is 90 to 97% protein, derived from US-raised grass-fed cattle, and virtually free of fat and lactose.

Superior muscle repair

Compared to other sources, whey protein isolate is a superior source of branched-chain amino acids, including those most crucial to the muscle tissue repair process: leucine, isoleucine, and valine.

Immune System Support

Whey protein contains excellent levels of the amino acids associated with immune system health. Poor protein status and chronic muscle breakdown lead to a decline in immune system health and eventually to many of the sicknesses and ailments associated with over-training.

RECOVER & REPAIR



SECRET #5 Recovery Done Right

For better performance tomorrow, recover right today!

Micro-essentials

Research has revealed recovery benefits from the consumption of other key antioxidants and amino acids. While many nutrients will enhance recovery, we consider the following to be truly essential.

L-glutamine preserves and rebuilds lean tissue, boosts the body's natural immune defenses, and aids gastrointestinal health.

L-carnosine offers antioxidant support. This nutrient neutralizes all forms of free radicals, thus helping to remove the “waste products” left behind after your workout. It also serves to protect body proteins.

Chromium polynicotinate boosts glycogen synthesis, thus improving your use of post-workout carbohydrates. Studies suggest that athletes who consume chromium along with ample carbohydrates can experience a 300% increase in glycogen synthesis.

Make **RECOVERITE**[®] part of your post-workout routine.

Maximizing recovery is easy!

Simply “refill the tank” with high-quality carbohydrates and protein within 30 to 90 minutes of activity!



Erica Lazarus runs the Las Olas Triathlon
Photo Credit: Fixed Focus Photography



For better performance tomorrow, recover right today!

Recoverite: the perfect recovery tool

Recoverite supplies everything your body needs to jump-start the recovery process. It offers easily assimilated complex carbohydrates from maltodextrin and premium protein from whey protein isolate, in the 3:1 ratio scientifically proven to speed recovery times.

As it contains the essential nutrients outlined previously as well as a full-spectrum blend of electrolytes, Recoverite is truly the perfect tool for the job.

Brian Lopes riding hard at Laguna Beach, CA.
Photo: @shreddyshot

If you want to feel your best, maximize your gains, and make the most of your time, recovery must be a priority in your training. Putting an emphasis on properly refueling when your body is at its most receptive—immediately following exercise—will help restore your body's premium fuel (glycogen), rebuild muscle, and strengthen your immune system.




Recoverite is precisely formulated to restore muscle glycogen, rebuild muscle tissue, and reduce soreness and fatigue.

SECRET #5 Recovery Done Right

For better performance tomorrow, recover right today!

Make Recoverite part of your post-workout routine. To further maximize recovery, consider Hammer Nutrition's line of supplements. Premium Insurance Caps, Race Caps Supreme, and a host of our other high-potency nutritional supplements are 100% guaranteed to improve your health, recovery, and performance.

Bottom line:

Get the most out of your training by giving as much attention to recovery as you do to training. Within 30 minutes of exercise, consume adequate complex carbohydrates, whey protein isolate, and antioxidants. 

HAMMER Quick Tips



Consume 30 to 60 grams of high-quality, complex carbohydrates immediately after exercise restores glycogen.



Whey protein isolate (not concentrate) is virtually free of lactose and fat and is ideal for recovery.



Using a 3:1 carbohydrate-to-protein ratio (such as found in Recoverite) decreases muscle soreness.



A full-spectrum supplement such as Premium Insurance Caps replenishes vitamins and minerals lost during exercise.





Fuel Right, Feel Great![®]

Use the 5 secrets and put your plan into action!

Fill this in, tear it out, and be prepared for amazing results!

Preparing to perform:

- 3 hours prior: eat 300–500 easily digestible calories
- 10-30 minutes prior: 1 scoop **Fully Charged**
in 4-8 oz. water, other supplements as needed
- 5-10 minutes prior: 1 serving **Hammer Gel**

During:

Endurolytes: dosage varies by individual needs

- Endurolytes** ____ capsules/hour
- Endurolytes Extreme** ____ capsules/hour
- Endurolytes Extreme Powder** ____ grams/hour
- Fizz** ____ tablets/hour

Caloric Fulfillment: 150–180 calories/hour

- Hammer Gel** ____ servings/hour (90 calories per serving)
- HEED** ____ scoops/hour (100 calories per scoop)
- Perpetuem** ____ scoops/hour (135 calories per scoop)
- Perpetuem Solids** ____ solids/hour (100 calories per 3 tablets)
- Hammer Bars** ____ bars/hour (170-250 calories per bar)

Recovery:

- Tissue Rejuvenator**
- Recoverite:** 2 scoops in 4-6 oz. water within 30 minutes after training
- Endurolytes**
- Premium Insurance Caps**
- CBD**

Notes:



For a complete guide to fueling, refer to Hammer Nutrition's product usage manual, *How to Hammer*, at www.hammernutrition.com or talk to an expert at 800.336.1977.

SOS

Secrets of Success

- #1 Pre-Exercise Fueling*
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