

HOW TO HAMMER

Endurance Fuels and Supplements Product Manual



Guaranteed since 1987

Fuel Right, Feel Great!®

HOW TO HAMMER

Endurance Fuels and Supplements Product Manual



Helping athletes achieve peak performance since 1987



Read to Succeed!

This book provides complete usage guidelines for each of Hammer Nutrition's fuels and supplements. Incorrect use or application of even the best product can result in a less than optimal outcome. Due to space limitations, instructions on package labels are somewhat limited. Combine the information in this book with our scientifically based, athlete-proven 5 Secrets of Success, and you have a winning combination, guaranteed!

Keep this powerful resource close by and refer to it often. As always, if you ever have any questions, do not hesitate—give us a call today!

Keep Hammering!



Brin Fack Brian Frank

Hammer Nutrition Founder and Owner

ON THE COVER: Ron Amos celebrates a victory as he cruises through the rain to the finish line at the Green Mountain Stage Race (GMSR). Ron and teammate David Gazsi earned seven podiums over four races for the Hammer Nutrition team, including 1st and 2nd overall in the General Classification. Hammer has won the overall title at the GMSR four times in the past five years. Photo: Angelica Dixon

None of the statements in this manual should be construed as dispensing medical advice or making claims regarding the cure of diseases, nor can these products prevent heat stroke, hyponatremia, or any other results of excessive physical exhaustion. You, the athlete, must listen to your body and use common sense to avoid serious injury. None of the statements contained in this manual have been evaluated by the Food and Drug Administration. You should consult a licensed health care professional if you have any pre-existing medical conditions.

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Secrets of Success for **Endurance Fueling**



THE SECRETS TO YOUR SUCCESS

Esecrets of Success is the "bible" of endurance Ofueling. This is the all-encompassing, failproof guide guaranteed to support your best results in any athletic endeavor. This book distills the knowledge we've gained from more than three decades of rigorous research and field testing. Put these principles to work and you WILL succeed!

DOWNLOAD YOUR FREE COPY TODAY! hammernutrition.com/sos



Our Philosophy:

LESS IS BEST

FOR SUCCESSFUL FUELING, LESS IS BETTER THAN MORE!



Our fueling recommendations:

Calories per hour: 120 to 180 calories

Fluids per hour: 20 to 25 oz

Electrolytes per hour: 1 to 6 Endurolytes® capsules, or

1 to 2 Endurolytes Extreme capsules, or 1 to 2 scoops Endurolytes Extreme Powder, or

1 to 2 Endurolytes Fizz

Tammer 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.



PRE-EXERCISE FUELING

WHEN AND HOW MUCH TO FAT BEFORE EXERCISE



Our fueling recommendations:

dopt 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 effort, regardless of 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 before you start your activity.

For more information, read 5 Secrets of Success.



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 "carboloading" 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.

Above: Gabrielle Suver on her way to another win at the Fort De Soto Sprint Duathlon.

Photo: Fixed Focus Photography





CALORIES COUNT

WHAT AND HOW MUCH YOU CONSUME DURING EXERCISE CAN MAKE THE DIFFERENCE BETWEEN CRUSHING IT AND BEING CRUSHED



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.

For more information, read 5 Secrets of Success.



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, a major cause of fatigue.



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

Above: **Kunal Patel** on a morning run through Valley Forge National Park, PA. Photo: Priva Patel



PROPER HYDRATION

WHAT YOU NEED TO KNOW TO STAY IN THE FLOW

Our fueling recommendations:

No 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)

For more information, read 5 Secrets of Success.



Hydrate effectively all day, every day.



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



Do not attempt to replace the fluids you lose by consuming an equal amount.



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

Above: Gary Kingham warms up on the water prior to competing in a kayak race with Hammer keeping him strong from start to finish. Photo courtesy of Gary Kingham.





ELECTROLYTE REPLENISHMENT

RESUPPLY THESE VITAL MINERALS TO **FINISH STRONG**



Our fueling recommendations:

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

*Extreme conditions may warrant higher levels of electrolyte replenishment.

For more information, read 5 Secrets of Success.



Electrolyte replenishment is important regardless of weather conditions.



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

A high intake level of sodium leads to increased sodium loss during exercise, which leads to more sodium required 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.

Above: A Hammer clad ambassador on a climb during the Central Coast Double next to the Pacific Ocean. Photo: Central Coast Reflections





RECOVERY DONE RIGHT

FOR BETTER PERFORMANCE TOMORROW, RECOVER RIGHT TODAY!



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

For more information, read 5 Secrets of Success.



Consuming 30 to 60 grams of high-quality, complex carbohydrates immediately after exercise will restore glycogen.



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



Using a 3:1 carbohydrateto-protein ratio (found in Recoverite®) decreases muscle soreness.



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

Above: Jon Breitegan relaxes after hammering Unpaved of the Susquehanna River Valley event. Recovery (especially with Recoverite) is the key to conquering tomorrow's workout. Photo: Salsa Cycles

CBD

The Gold Standard for superior recovery.

CBD has massive benefits, especially in the areas of decreased aches/soreness and better sleep quality. Sadly, most products on the market today are seriously overpriced, at the least, or are completely fake.

We introduced our line of CBD products specifically to give you a trusted, quality source for your CBD products and so you can avoid getting taken for a ride.

Rest assured that any CBD product

with the Hammer Nutrition label exceeds the most stringent standards regarding quality and purity, and will be reasonably priced!

All Hammer CBD products are produced from organically grown, non-GMO, USA-raised hemp.

Our CBD products are a broadspectrum formula, meaning that all the beneficial cannabinoids and terpenes are present, but with no THC. If you have any CBD questions, we're ready to help!



Right: Scarlet Kaplan dives into a training swim in Whitefish Lake. Scarlet is a swim coach and offers triathlon training classes where fueling is a central topic.



Hammer CBD

The Gold Standard

- Improves sleep quality
- Reduces aches and soreness
- · Shortens recovery time
- · Broad-spectrum CBD with 0.0% THC







HOW TO USE

When it comes to calculating how much CBD will be ideal for you, look at your body weight and current physical status, including any issues (e.g., poor sleep) you may be dealing with.

The wide variety of premium-quality offerings from Hammer Nutrition allows you to personalize the dose.

Softgels

Available in two potencies: 10 mg and 25 mg of broad-spectrum CBD hemp oil.

Water-Soluble Hydro Tincture

Our Hydro tincture comes in a 250 mg potency. One dropper (1 ml) supplies 8.33 mg of broad-spectrum CBD hemp oil.



Oil-Based Tincture

Available in three potencies: 250 mg, 750 mg, and 1500 mg.

- One dropper (1 ml) of the 250 mg tincture supplies 8.33 mg of broad-spectrum CBD hemp oil
- One dropper (1 ml) of the 750 mg tincture supplies 25 mg of broadspectrum CBD hemp oil
- One dropper (1 ml) of the 1500 mg tincture supplies 50 mg of broadspectrum CBD hemp oil

Balm

Our 500 mg and 30 mg sticks can be topically applied as a supplement, or as a stand-alone relief from aches and numerous skin conditions.



Right: Tim VanGilder hammering in the mid-week Over the Hump MTB Series Race in Orange County in 2013. For decades, How to Hammer has provided detailed usage instructions athletes need to fuel right and feel great

Photo: Scott McClain. Called to Creation



VARIABLES

Body Weight

Lighter athletes may find that a daily amount of 8.33 mg to 10 mg is a good starting point, and perhaps even their ideal dose. Bigger athletes may require higher amounts; we suggest starting at 16.7 mg to 25 mg per day.

Physical Status/Condition

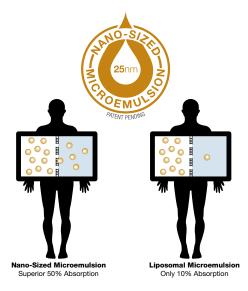
People dealing with chronic issues like aches, soreness, discomforts, or poor sleep usually find that higher amounts of CBD (25-50 mg daily) will work best for them.

We suggest that you start by following our dosing guidelines and then gauge your body's response. If, for example, you find that one dropper

of CBD Hydro (8.33 mg) or one dropper of oil-based tincture (8.33 mg) or one 10 mg softgel is helping you sleep throughout the night and permitting you to wake up on time and without grogginess, you've found your dose!

If you find that our suggested amounts aren't sufficient, increase the dose slightly until you achieve a full night's sleep and no grogginess in the morning. If you don't wake up at your normal time and/or you feel a bit groggy, lower the dose.

The same is true with physical discomforts. Start with the suggested amounts, gauge their effect on your aches and soreness, and adjust accordingly.



Nano-sized microemulsion for superior absorption

With standard CBD products, 10% or less of the ingested product is actually accessed by the body. In contrast, Hammer CBD's nanosized droplets generate up to 50% absorption rates—five times that of others. Not everyone will receive the highest amount, but everyone can count on greater absorption and bioavailability using the softgels or the Hydro formulations.

As with any supplement, what matters is not how much you consume but how much your body absorbs. Both the softgels and Hydro utilize our proprietary nanosized microemulsion manufacturing process, which results in up to five times better absorption compared to liposomal microemulsion (standard CBD products).

This results in maximal impact and benefit from smaller doses, greater potential health improvements overall, and the absolute best bang for vour buck.

- We've heard from numerous athletes that it takes up to two weeks for their bodies to adjust to a specific CBD dose. Therefore, monitor your response for 10-14 days before adjusting your dose.
- If you use a combination of softgels and tinctures, the dosing amount options are nearly limitless, allowing you to alter the dose as needed.
 - EXAMPLE: One 25 mg softgel + 1/2 dropper of 750 mg oil-based tincture = 37.5 mg of broadspectrum CBD hemp oil.
- Whenever possible, consume Hammer CBD products with fatcontaining foods. You don't need to consume a lot of fat to benefit. Be sure you choose foods with healthy fats provided by avocados, nuts and seeds, olives, fatty fish (salmon), along with healthy oils, such as virgin olive oil and flaxseed oil.
- Take CBD with EndurOmega. Hammer Nutrition's premiumquality, super-healthy omega-3 fatty acid supplement will help enhance CBD absorption.
- Use **EnduroZyme** with each meal. Not only will you get the maximum absorption of all the nutrients and compounds in your food, but you also will improve CBD absorption thanks to two key EnduroZyme ingredients:
 - Lipase, which helps break down fats and triglycerides and improves fat utilization
 - BioperineTM, a standardized extract from the fruit of black or long pepper that enhances the absorption of whole food and dietary supplements

CBD SPECTRUMS: WHAT'S THE DIFFERENCE?



BROAD-SPECTRUM CBD

Best of Both Worlds!

- Cannabidiol (CBD)
- × THC
- Cannabinoids, Terpenes, Flavonoids, and plant material
- Entourage Effect (The beneficial results) produced from the synergistic interaction of cannabinoids, terpenes, and flavonoids.)



FULL-SPECTRUM CBD

Whole-Plant Hemp Extract

- √ Cannabidiol (CBD)
- ✓ THC
- ✓ Cannabinoids, Terpenes, Flavonoids, and plant material
- ✓ Entourage Effect



CBD ISOLATE

Just Cannabidiol

- √ Cannabidiol (CBD)
- x THC
- X Cannabinoids, Terpenes, Flavonoids, and plant material
- X Entourage Effect

INGREDIENT BREAKDOWN

All of our CBD products are made from broad-spectrum CBD hemp oil. Always consider the type or form of CBD product that's being offered to you. Full-spectrum, broad-spectrum, and CBD isolate are all options, but Hammer sells only broad-spectrum.

Broad-spectrum is the best of both worlds thanks to advances in extraction technology, broad-spectrum products are produced by removing only the THC from a full-spectrum oil. All Hammer Nutrition products are broad-spectrum formulas, allowing you to enjoy all the "entourage effect" benefits of the cannabinoid/ terpene/flavonoid components without the risk of failing a drug test that checks for THC.

A Certificate of Analysis (COA) is available for all Hammer Nutrition CBD products. A COA clearly indicates what's in the product-beneficial cannabinoids, terpenes, and flavonoids-and what's not in the product (THC). This is assurance that you're supplying your body with the finest, most beneficial broad-spectrum formula available.

FUELING

Hammer Nutrition makes real endurance fuel, not sugarloaded junk food masquerading as sports nutrition.

Hammer products contain no refined sugars, excess sodium, citric acid, or artificial sweeteners, colors, or flavors—only the healthiest, natural ingredients are good enough for us to sell.

Not only do we make the best products, we know how to use them

to get you to the finish line in record time with a smile on your face.

Use Hammer fuels according to our protocols and your success is guaranteed. 33+ years working with thousands of athletes, all over the world, doing every type of endurance event imaginable has proven it.

■

QUICK	PRE-EXERCISE		DURING EXERCISE		RECOVERY	DAILY
REFERENCE CHART	3 hours before	10 min before	2-3 hours	3+ hours	within 30 min after exercise	as needed
Hammer Gel®		✓	√			
Endurolytes®		√	√	✓	√	
HEED®		√	✓			
Perpetuem® & Perpetuem® Solids	√	√		✓		
Sustained Energy	✓	√		✓		
Recoverite® & Vegan Recoverite®					✓	√
Raw Energy Bars	✓				✓	\checkmark
Whey Protein Bars & Vegan Protein Bars					✓	✓
Whey, Vegan, & Soy Protein					✓	✓
Liquid Endurance			Use on days	before a big e	vent.	

Right: Ryan Ingham running in California. He fuels his robust ultrarunning schedule with Hammer Gel, HEED, Fizz, Hammer Bars®, and a bevy of Hammer supplements. Photo courtesy of Ryan Ingham.



Hammer Gel®

Real endurance fuel

- · Rock-solid sustained energy
- · No sugar crash
- · Easy to digest

SERVING SIZE: 1.7 TBSP (33 g)

Contains 80 to 100 calories per serving, depending on the flavor.

PRE-EXERCISE	DURING EXERCISE
10 min before	2-3 hours
✓	✓

HOW TO USE

Individual dosage needs will vary. Read *5 Secrets of Success* at **hammernutrition.com** for more information.

Use as a primary source of calories during exercise and competition lasting up to two hours.

Consume 0.5-2.5 servings per hour, along with 16-28 ounces (475-830 ml) of plain water per hour from a separate source

If using more than one fuel, be sure to count all of the calories from all of the products consumed to reach a correct total hourly intake.

Hammer Flask

- Use a 26-serving jug of Hammer Gel to fill a Hammer Flask to the desired level. Each mark on the flask represents one serving. Flasks hold up to five servings of Hammer Gel.
- 2. Top with water for desired consistency and shake well.

Hammer Flasks are a great way to mix flavors and allow flexibility in serving size. This is ecological, economical, and easy to access and consume one-handed.



- For workouts or races lasting longer than 2 hours, choose Hammer Ultra Gels which include protein and healthy fats—Nocciola, Peanut Butter, and Peanut Butter Chocolate.
- All Hammer Gel flavors are glutenfree. All but Nocciola are vegan.
- Hammer Gel contains branched-chain amino acids to support energy production and reduce muscle breakdown.
- Hammer Gels **do not** contain electrolytes. Meet electrolyte needs with our Endurolytes® product line.
- Hammer Gel may be used as the sole source of calories during workouts and races up to two hours, perhaps up to three hours under certain circumstances. For longer training sessions or races, select either Perpetuem® or Sustained Energy as your primary fuel source.
- Hammer Gel is perfectly compatible with all other Hammer Nutrition fuels. During ultra-distance events, while Hammer Gel cannot be your sole source of calories every single hour, it may be used occasionally to give you a little variety.



Thorn Bickel rounds a corner at Trailside Park. Thorn relies on Nocciola, Vanilla, Huckleberry, and Orange Hammer Gel to fuel his MTB adventures. Photo: Ron Winsett

- Espresso Hammer Gel contains 50 mg caffeine per serving.
- Tropical Hammer Gel contains 25 mg caffeine per serving.
- You can use Hammer Gel to flavor Sustained Energy, Hammer Soy Protein, or Hammer Whey Protein smoothies, etc.
- Hammer Gel flavors can be mixed for a variety of tastes:
 - Banana + Chocolate or Espresso = Banana Split
 - Orange + Vanilla = Orange Creamsicle
 - Raspberry + Orange + Banana = Fruit Punch
 - Raspberry + Espresso = Raspberry Mocha
 - Vanilla mixed with any other flavor will make it milder

INGREDIENT BREAKDOWN

Maltodextrin - A high-glycemic-index (GI) complex carbohydrate. Provides fast-acting, long-lasting energy during exercise and replenishes glycogen stores after exercise.

Energy Smart® (Grape Juice, Rice Dextrin) - This allnatural, low-sugar sweetener plays an important role in Hammer Gel's delicious flavor while contributing minimally to the overall carbohydrate content. Energy Smart® is certified non-GMO, gluten-free, and allergen-free.

Citric Acid - Used in minimal amounts to meet FDA requirements for acidity levels. Hammer Gel contains less citric acid than comparable products.

Salt - Minimally added for preservation, flavor, and digestive support. Not a source of electrolytes (see Endurolytes® product line).

L-Leucine, L-Isoleucine, L-Valine - The branchedchain amino acids (BCAAs) protect against muscle tissue breakdown, while also helping alleviate fatigue.

L-Alanine – This amino acid is used to help meet energy demands, particularly when the body's carbohydrates stores are running low.

Potassium Chloride – Source of potassium and chloride. Cultured Dextrose (Used in pouches and some jugs) -FDA-approved, all-natural preservative.

Potassium Sorbate (Used in some jugs) – FDA-approved preservative.

Endurolytes®

Precise electrolyte replenishment

- · Full-spectrum formula
- · Rapidly assimilated
- · Versatile dosing

SERVING SIZES:

Endurolytes: 2 capsules

Endurolytes Extreme: 1 capsule

Endurolytes Extreme Powder: 1 scoop (2q)

Endurolytes Fizz: 1 tablet (4.4-4.5g)

PRE-EXERCISE	DURING EXERCISE		RECOVERY
10 min before	2-3 hours	3+ hours	within 30 min after exercise

Indurolytes is a perfectly balanced, full-spectrum, rapidly assimilated electrolyte source. Prevent cramps, ensure smooth energy production, optimize hydration status, and accelerate recovery by properly addressing your electrolyte needs during exercise.

Dietary salt intake, fitness level, weather, acclimatization, and other variables affect electrolyte use and depletion. We suggest the following dosages as a starting point. To determine your optimum dosage, complete vour own trials with Endurolytes under a variety of conditions.





HOW TO USE

Endurolytes: Take 1-6 capsules per hour as needed. Take one dose 30-60 minutes prior to exercise, one dose each hour during exercise, and one dose immediately following exercise.

Endurolytes Fizz: Take 1-2 tablets per hour as needed.

Endurolytes Extreme: Take 1 capsule per hour. Increase to 2 capsules (and up to 3) per hour as conditions or needs dictate.

Endurolytes Extreme Powder: Consume 1-2 scoops per hour, mixed in water. Prolonged exercise or extreme conditions may warrant higher dosages.

- If using Endurolytes Fizz, add tablets to your water or fuel bottle(s), allow them to dissolve completely, and consume as needed to maintain proper hydration and electrolyte levels.
- Endurolytes Fizz contains none of the toxic chemicals (such as polyethylene glycol), artificial flavors, or artificial sweeteners found in other effervescent electrolyte products.

CHOOSE YOUR ENDUROLYTES® CAPSULES WITH WATER FLAVORED DRINKS IF YOU: IF YOU: IF YOU: IF YOU: Have no cramping Have no cramping history Have cramping problems Have cramping problems history Have a low sweat rate Have a high sweat rate Have a high sweat rate Have a low sweat rate Can take up to 6 Get salt stains on clothes/ Get salt stains on clothes/ capsules per hour skin after exercise skin after exercise Prefer smaller doses of sodium Prefer smaller doses of Are in extreme heat Are in extreme heat sodium environments environments ENDUROLYTES ENDUROLYTES XTREME **Endurolytes Endurolytes Extreme** Endurolytes Extreme Endurolytes Fizz

- Endurolytes Extreme Powder may be added to other liquid fuels to increase electrolyte content.
- Endurolytes Extreme Powder is well suited for use in hydration packs as it leaves no residue.
- If using Fizz or Endurolytes Extreme Powder, it is recommended that you also carry Endurolytes or Endurolytes Extreme capsules. Should you cramp or experience other
- symptoms of electrolyte depletion, capsules are far easier to consume and much more rapidly absorbed.

Powder

• Ginger Root is used only in Endurolytes and Endurolytes Extreme. Ginger root contains zingerone and capsaicin compounds, which can have a burning effect on the mouth and throat with direct contact. We do not recommend opening up the capsules.

HEED

The real sports drink

- Sustains energy with no sugar crash
- · Reduces cramps
- · Buffers lactic acid
- · Supports dental health

SERVING SIZE: 1 level scoop (30-32g)

Contains 110 calories per serving

PRE-EXERCISE	DURING EXERCISE
10 min before	2-3 hours
✓	√

The "one bottle solution" for athletes who prefer a drink over Gel and water. HEED contains a full-spectrum electrolyte profile and key auxiliary nutrients. It may be used to meet all fueling needs for short workouts, or as part of a comprehensive system for longduration activities.

HOW TO USE

Individual dosage needs will vary. Read 5 Secrets of Success at hammernutrition.com for more information.

Mix 0.5-2 scoops of HEED in 16-28 ounces (475-828 ml) of water. Sip continuously during exercise.



- For many athletes, 1-2 scoops of HEED will completely fulfill electrolyte requirements in normal conditions.
- In hotter climates or during longer activities, add Endurolytes® or Endurolytes Extreme.
- In all instances, carrying backup Endurolytes capsules is recommended.
- When exercise lasts longer than 2-3 hours, Perpetuem® or Sustained Energy may be preferable.
- Cherry Bomb HEED contains 25 mg of caffeine and 500 mg of taurine.





Ultrarunner and Race Director **Jessie Pappenfus** jogs on an early morning training run in Whitefish, MT. Jessie fuels her long mountain runs with Hammer fuels and plenty of Recoverite® at the finish!

INGREDIENT BREAKDOWN

Maltodextrin - A high-glycemic-index (GI) complex carbohydrate ideal for providing fast-acting, long-lasting energy during exercise and for replenishing the body's glycogen stores after exercise.

Xylitol - This natural sweetener is found in a variety of fibrous fruits and vegetables. It promotes oral health, as it does not ferment into the acid-producing bacteria that cause tooth decay. NOTE: Xylitol is unsafe for consumption by dogs; therefore, we do not recommend you feed your dog any xylitol-containing products, including HEED or Recoverite.

Full-spectrum electrolyte profile – The complete profile of sodium, chloride, calcium, magnesium, and potassium helps maintain the performance of many important bodily functions during exercise, while also helping protect against muscle cramping.

L-Carnosine – One of the most versatile and beneficial

nutrients available. It buffers lactic acid during exercise and offers antioxidant support.

Glycine – This amino acid aids muscle repair, protects collagen in joints, and reduces joint pain. Additionally, glycine has a naturally sweet taste, contributing to HEED's delicious flavor.

L-Tyrosine – Aids in the functioning of the adrenal, pituitary, and thyroid glands, which are responsible for the production and regulation of numerous key hormones. This contributes to increased performance levels and decreased recovery time.

Manganese - This trace mineral is necessary for optimal muscle cell enzyme reactions and for the conversion of fatty acids and protein into energy.

Chromemate® brand chromium polynicotinate – This trace mineral helps regulate blood sugar and plays a vital role in the synthesis of glucose, fatty acids, and amino acids.

Perpetuem[®]

Diesel for endurance athletes

- Stabilizes energy and blood sugar
- · Maximizes fat utilization
- · Protects lean muscle mass

SERVING SIZE: 2 level scoops (69g)

Contains 260 to 270 calories per serving, depending on the flavor

PRE-EXE	RCISE	DURING EXERCISE
3 hours 10 min before before		3+ hours
✓	✓	√

Perpetuem is designed to meet the specific macronutrient needs of endurance events lasting several hours to many days. It is comprised of 75% long-chain carbohydrates, 13% fatty acids, and 10% protein. This unique blend is easily digested, provides steady energy, satiates hunger, optimizes fat-burning, and minimizes muscle cannibalization.

HOW TO USE

Individual dosage needs will vary. Read 5 Secrets of Success at hammernutrition.com for more information.

One Hour Bottles

Add one hour's worth of fuel to 16-28 ounces (475-828 ml) of water. Consume one bottle hourly.

This option is preferred by those who like to consume their calories and water together, or prefer flavored drinks to water. It is most effective when resupply is easy, such as on lap courses or when using a follow vehicle. Otherwise, mix bottles when refueling.

Multi-Hour Bottles

Multiply your hourly caloric needs



by the duration of planned activity and add to one water bottle. If you use 1.5 scoops per hour, and you plan a four-hour activity, add 6 scoops to one bottle with water. Add a few scoops at a time, shaking as you go in order to mix water and powder.

Take small sips every 15-20 minutes. You may want to mark the outside of your bottle with "hourly" hash marks to better track your consumption. This allows self-sufficient fueling for many hours. Water and electrolytes needs should be met through other sources.

Paste

Use a blender or bowl and spoon to mix scoops of Perpetuem powder with a small amount of water, gradually adding water to create a thick, paste-like consistency. Fill a Hammer Flask with the concentrate.

Depending on the concentration of your mix, each flask can supply you with 2-4 hours of fuel. As with the multi-hour bottle, carry additional plain water and electrolytes to meet those requirements.



Vivian La Berreda hammers through the Sean O'Brien 100K. Vivian used Perpetuem as a key part of her fueling during the 13-hour effort. Photo: Ricardo Cuevas

TIPS AND CONSIDERATIONS

- For exercise lasting three hours or more, use Perpetuem from start to finish.
- Remember that a more concentrated mix will have a stronger/ sweeter flavor.
- Because Perpetuem contains no artificial preservatives, it should NOT be pre-mixed several hours before use, especially in warm weather.
- To prolong freshness, try mixing desired powder quantity in a half bottle of water and freezing the night before usage. Top up with water just prior to departure.

INGREDIENT BREAKDOWN

Maltodextrin - A high-glycemic-index (GI) complex carbohydrate ideal for providing fast-acting, long-lasting energy during exercise.

Isolated Soy Protein - A dry powder food ingredient that has been separated or isolated from the other components of the soybean, making it 90 to 95 percent protein, and nearly carbohydrate- and fat-free.

Energy Smart® (Grape Juice, Rice Dextrin) - This allnatural, low-sugar sweetener plays an important role in Perpetuem's delicious flavor while contributing minimally to the overall carbohydrate content. Energy Smart® is certified non-GMO, gluten-free, and allergen-free.

Soy Lecithin - An extract from soybean oil, lecithin is an

easily digestible source of healthful fat. It helps create a feeling of satiety and also supports the body's natural fat-burning capabilities.

Sodium (Tribasic) Phosphate - This compound enhances the functioning of all three of the body's ATP-producing energy systems—the short-term ATP-CP system, the medium-term lactic acid system, and the long-term oxygen/aerobic system.

A primary benefit of sodium (tribasic) phosphate is its ability to buffer blood acidity and help maintain a more ideal acid-alkaline balance by neutralizing excess hydrogen ions within the muscle cell. Effectively buffering lactic acid extends energy production. This nutrient also increases 2,3 diphosphoglycerate (2,3-DPG). This compound, found in red blood cells, helps release oxygen from hemoglobin into the muscle cells. An increase in 2,3-DPG will improve the availability of oxygen to working muscles during exercise.

L-Carnosine – This dipeptide (a combination of two amino acids) is a potent lactic acid buffer. It also offers antioxidant support.

L-Carnitine Tartrate - L-Carnitine Tartrate is a compound containing L-carnitine chelated ("bonded") to L-tartrate, which is a salt of tartaric acid. L-carnitine is the key nutrient involved in the shuttling of fatty acids into the cell for energy production. Tartrate is a potent antioxidant. Choline Bitartrate - A type of B-complex vitamin that helps with efficient use of body fat stores as energy. Choline bitartrate also supports enhanced cognition, learning, and memory.

Stevia – A natural, calorie-free sweetener derived from the leaves of Stevia rebaudiana, a plant native to Central and South America. Unlike sugar, it does not affect blood sugar levels or contribute to tooth decay.

Chromium Polynicotinate – This trace mineral helps regulate blood sugar and plays a vital role in energy production.

Perpetuem® Solids

Steady energy you can chew on

- · Steady, reliable energy
- · Buffers lactic acid
- Stable and packable for any duration at any temperature

SERVING SIZE: 3 tablets (26g)

Contains 100 calories per serving

PRE-EXERCISE		DURING EXERCISE
3 hours 10 min before before		3+ hours
/	√	√

solid source of calories designed to be used in addition to other fuels to help you reach your ideal hourly intake during exercise/competition lasting more than two hours. On occasion, Perpetuem Solids may be used as a sole source of calories.

TIPS AND CONSIDERATIONS

- Solids are NOT designed to be added to water. Slowly chew them individually.
- Solids are designed as an auxiliary fuel and are generally consumed in combination with a second fueling source.
- A long shelf life makes Solids perfect for all-and multi-day events, selfsupported tours, and expeditions.

INGREDIENT BREAKDOWN

- See Perpetuem Ingredient Breakdown

Maltodextrin, Isolated Soy Protein, Energy Smart®, Soy Lecithin, Sodium (Tribasic) Phosphate, L-Carnosine . L-Carnitine Tartrate. Choline Bitartrate, Stevia, and Chromium Polynicotinate

Zandy Mangold is no stranger to long distances. Whether he's running Boston or tackling 100 miles for charity, Zandy always relies on Hammer Nutrition's all-natural fuels.

Photo: Justin Talbot





Sustained Energy

The original ultra fuel

- · Long-lasting energy
- · Lactic acid-buffering
- Lean muscle mass protection

SERVING SIZE: 3 level scoops (85q)

Contains 320 calories per serving

PRE-EXE	RCISE	DURING EXERCISE
3 hours 10 min before before		3+ hours
✓	✓	✓

The world's first protein-fortified sports drink remains a favorite of athletes who go long and prefer a flavorfree fuel. The 7:1 carb to protein ratio is especially popular with ectomorphic, hyper-metabolic body types who struggle to maintain muscle mass during high volume training but may not efficiently digest or burn fatty acids.

HOW TO USE

As with Perpetuem®, you can mix and consume Sustained Energy in three different ways (the One-Hour Bottle, the Multi-Hour Bottle, and Paste) depending on your needs. See the mixing directions for Perpetuem on page 24. Please experiment to determine the option best for you.

For exercise lasting three hours or more, use from the outset.

TIPS AND CONSIDERATIONS

- Sustained Energy contains no artificial preservatives. To avoid spoilage, do not premix, especially in warm weather.
- Sustained Energy has no flavor added.
- If a flavor is desired, consider combin-



ing with Hammer Gel®, while keeping total caloric levels within the desired consumption range.

 Sustained Energy may be the ideal fuel choice when exercise intensity is at a higher level (approximately 70–85% maximum heart rate, or MHR), whereas Perpetuem may be a more attractive choice when exercise intensity is at a more aerobic pace (under 70% MHR).

INGREDIENT BREAKDOWN

Maltodextrin - A high-glycemic-index (GI) complex carbohydrate ideal for providing fast-acting, long-lasting eneray during exercise.

Isolated Soy Protein - A dry powder food ingredient that has been separated or isolated from the other components of the soybean, making it 90-95% protein, and nearly carbohydrate- and fat-free.

L-Carnosine - This dipeptide (a combination of two amino acids) is a potent lactic acid buffer. It also offers antioxidant support.

L-Carnitine Tartrate - L-Carnitine Tartrate is a compound containing L-carnitine chelated ("bonded") to L-tartrate, which is a salt of tartaric acid, L-carnitine is the key nutrient involved in the shuttling of fatty acids into the cell for energy production. Tartrate is a potent antioxidant. Choline Bitartrate - A type of B-complex vitamin that helps with efficient use of body fat stores as energy. Choline bitartrate also supports enhanced cognition. learning, and memory.

Chromium Polynicotinate - This trace mineral helps regulate blood sugar and plays a vital role in energy production.

Recoverite®

Recovery matters. Do it right.

- · Restores muscle glycogen
- · Rebuilds muscle strength
- · Reduces soreness & fatique

SERVING SIZE: 2 level scoops (49q) Contains 170 calories per serving

RECOVERY	DAILY
within 30 min after exercise	As needed
√	✓

 ${f R}$ ecoverite is exactly what your body needs to reap the most from every activity—a 3:1 ratio of complex carbohydrates to premium whey protein isolate, critical amino acids, and a full spectrum of electrolytes.

HOW TO USE

Mix 2 scoops with 4-8 ounces of water. Consume immediately after exercise. If you don't have a chance to eat post-workout, take a second serving within the hour.

TIPS AND CONSIDERATIONS

- The whey protein component of Recoverite, though derived from dairy, is 97% lactose-free and thus well-tolerated by most individuals even those with dietary intolerances.
- For best flavor, mix with no more than 4-8 oz of water.
- For best results, do not combine with milk or milk substitutes, as this alters the preferable carb:protein ratio and may reduce the rate of digestion.
- Prep Recoverite before your workout by adding two scoops to a clean, dry bottle. Add water and consume upon completion of exercise. To ensure the best flavor and effectiveness of product, do not mix with water in advance.



 Ready-to-use single-serving packets are well-suited for use on the go.

INGREDIENT BREAKDOWN

Maltodextrin - A high-glycemic-index (GI) complex carbohydrate, ideal for providing fast-acting, long-lasting energy during exercise and for replenishing the body's energy (glycogen) stores after exercise.

Whey Protein Isolate - The most bioavailable of all protein sources and the superior source of amino acids for muscle tissue repair and immune system support. Whey protein isolate also provides potent anti-soreness benefits.

L-Glutamine - The most abundant amino acid in the muscles, L-glutamine plays a significant role in the glycogen synthesis process and helps repair and rebuild muscle tissue. It has been shown to help raise levels of glutathione, the most important antioxidant for immune system health. Glutamine also contributes to growth hormone release and digestive health.

Chromemate® brand chromium polynicotinate – This trace mineral helps regulate blood sugar and plays a vital role in the synthesis of glucose, fatty acids, and amino acids. During recovery, chromium facilitates carbohydrate storage (glycogen synthesis).

L-Carnosine - One of the most versatile and beneficial nutrients available. Buffers lactic acid during exercise and offers antioxidant support.

Full-spectrum electrolyte profile - The complete profile of sodium, chloride, calcium, magnesium, and potassium helps replenish depleted mineral stores.

Manganese - This trace mineral plays an important role in the production of superoxide dismutase (SOD), a powerful antioxidant.

Glycine - This amino acid aids muscle repair, protects collagen in joints, and reduces joint pain. Additionally,



glycine has a naturally sweet taste, contributing to Recoverite's delicious flavor.

Xylitol - This natural sweetener is found in a variety of fibrous fruits and vegetables. It promotes oral health, as it does not ferment into the acid-producing bacteria that cause tooth decay. NOTE: Xylitol is unsafe for consumption by dogs; therefore, we do not recommend you feed your dog any xylitol-containing products, including HEED® or Recoverite.

Stevia – This is the extract (stevioside) from the leaves of Stevia rebaudiana, a plant native to subtropical and tropical Central and South America. Stevia is non-caloric and does not affect blood sugar levels. Like xylitol, stevia does not support acid-producing bacteria responsible for tooth decay.

Barbora Kršmaru, member of the Hammer OCR Team in the Czech Republic, charges forward during the Gladiator Race Lanškroun. Photo: Milan Macko



Organic Vegan Recoverite®

Optimize recovery, the vegan way.

- · 100% organic
- · Gluten-free pea protein
- · Easily digested

SERVING SIZE: 2 level scoops (49g)

Contains 180 calories per serving

RECOVERY	DAILY
within 30 min after exercise	As needed
✓	✓

The organic, vegan version of Hammer's best-selling Recoverite has all the benefits of the original in a plant-based, grain-free formula.

Great tasting and easy to mix, Vegan Recoverite includes the same perfect carb to protein ratio, electrolyte profile, and amino acid supplementation that Recoverite fans have relied on for years.

HOW TO USE

Mix 2 scoops with 4-8 ounces of water. Consume immediately after exercise. If you don't have a chance to eat post-workout, take a second serving within the hour.

TIPS AND CONSIDERATIONS

- For best flavor, mix with no more than 4-8 oz of water.
- For best results, do not combine with milk substitutes or other caloric beverages, as this alters the preferable carb:protein ratio and may reduce the rate of digestion.



• Prep Vegan Recoverite before your workout by adding two scoops to a clean, dry bottle. Add water and consume upon completion of exercise. To ensure the best flavor and effectiveness of product do not mix with water in advance.

INGREDIENT BREAKDOWN

Organic Maltodextrin (From Tapioca) – A high-glycemic-index (GI) complex carbohydrate ideal for providing fast-acting, long-lasting energy during exercise and for replenishing the body's energy (glycogen) stores after exercise.

Organic Pea Protein – Considered the least allergenic of all protein sources, organic pea protein is also regarded as arguably the easiest plant protein to digest. Organic pea protein contains an excellent amino acid profile—it's a rich source of the three branched-chain amino acids (BCAAs) L-leucine, L-isoleucine, and L-valine—and is gluten-free and lactose-free.

Erythritol – A natural sweetener, which, like xylitol, is classified as a polyol. Erythritol, unlike xylitol and other polyols, contains no calories. It is also non-glycemic and considered suitable for people with diabetes because it does not raise plasma glucose or insulin levels. Like xylitol, erythritol also promotes oral health, as it does not ferment into the acid-producing bacteria that cause tooth decay.

Sea Salt – Added to Chocolate Vegan Recoverite only to balance the flavor profile.

Right: **Jeff Shehan** enjoys a ride on a sunny day at Herron Park in Kalispell, MT. Hammer Bars are Jeff's favorite product!

Hammer Bar[®]

Real food, ready to roll.

- Reliable long-lasting energy
- · Packable & easy to eat
- Suitable for all diet types

SERVING SIZE: 1 bar (50g)

Contains 190 to 220 calories per serving, depending on the flavor

PRE-EXERCISE	RECOVERY	DAILY
3 hours before	within 30 min after exercise	As needed
✓	/	✓

ade of whole, organic, raw-food sources, and free of added refined sugars, these delicious bars are an ideal solution for the active individual. Soft and easy to eat, digest, and assimilate, Hammer Bars are a great complement to any fueling system or a perfect stand-alone snack. They provide nutrient-dense complex carbohydrates, complete vegetable proteins, and healthy fats. They are certified vegan and kosher, and free of GMOs and gluten.



KIDS LOVE **HAMMER BARS** T00!



HOW TO USE

Use as a complement to other Hammer Nutrition fuels or as a preexercise meal, post-workout/race recovery food, or healthy snack.

- If using during an event, consider cutting open the package in advance to allow easy access.
- Be aware that chocolate-containing bars may melt in high heat. Choose your flavor preferences accordingly.
- Keep Hammer Bars handy—in the car, office, or gym bag—for a healthy snack alternative.



Whey Protein Bar

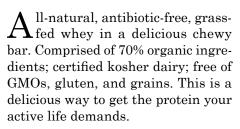
Grass-fed goodness

- Minimizes post-exercise soreness
- Maintains & repairs lean muscle tissue
- · Convenient & delicious

SERVING SIZE: 1 bar (40g)

Contains 170 calories per serving

RECOVERY	DAILY
within 30 min after exercise	As needed
√	√



HOW TO USE

Use as a solid food recovery fuel, a second snack/meal after your immediate post-workout/race Recoverite®, or as a high protein snack.

- Contains no refined sugars, transfatty acids, or any other unhealthy ingredients.
- Whey is the most bioavailable protein with unbeatable quantities of branched-chain amino acids. It is ideal for rebuilding lean muscle tissue and for supporting the immune system.
- For those who prefer a solid snack to liquid, Whey bars are a good alternative to Recoverite®. However, be aware that solid food is always processed more slowly than liquid.



- Keep Whey bars in the car, office, or gym bag for a handy and healthy snack alternative or recovery treat.
- The all-natural, paraben-free chocolate coating will melt in hot weather. They'll still be delicious and safe to consume—just messier.



Vegan Protein Bar

Plant-based, protein-packed

- · Satiating and satisfying
- · Long-lasting energy
- · Delicious flavors

SERVING SIZE: 1 bar (56-57g)

Contain 230 to 250 calories per serving, depending on the flavor

RECOVERY	DAILY
within 30 min after exercise	As needed
✓	✓

oth Chocolate Peanut and Almond Cacao flavors include a potent blend of healthy plant-based proteins from Sacha Inchi and peas. Just like standard Hammer Bars®, these bars are vegan, non-GMO, and soy-, gluten-, and grain-free.

HOW TO USE

Use as a solid food recovery fuel, a second snack/meal after your immediate post-workout/race bottle of Recoverite®, or as a healthy, highprotein snack any time.

- Each bar contains 14-15 grams of high-quality plant protein (pea protein and Sacha Inchi protein), a healthy carbohydrate (organic tapioca), and healthy fats. They do not contain trans fats or cholesterol.
- Vegan Recovery Bars are glutenfree, vegan-certified, and made with organic, non-GMO ingredients.
- No added refined sugars
- The all-natural, paraben-free chocolate coating will melt in the heat. They'll still be delicious and safe to consume—just messier.





Evan Perperis competes during his OCR America event. Evan completed a marathon-length OCR-style event every day for 8 straight days. He fueled his extended effort exclusively with Hammer. Along the way, Evan raised over \$5,000 for Folds of Honor. Photo: Bobby Ross / Stoke Shed

Whey Protein

Your muscles' best friend

- · Maintains & repairs muscle tissue
- · Strengthens immune system
- · Accelerates recovery

SERVING SIZE: 1 level scoop (22.7-25g)Contains 60 to 70 calories per serving,

depending on the flavor

RECOVERY	DAILY
within 30 min after exercise	As needed
✓	√

M ade of 100% grass-fed whey protein isolate, this is the most easily assimilated protein on the planet. Free of lactose, fat, gluten, and added sugar, it's everything you need and nothing you don't. Whey protein is fortified with L-glutamine for additional recovery and immune system support.

HOW TO USE

Mix Hammer Whey with water to boost protein intake after exercise, before bedtime, or throughout the day.

TIPS AND CONSIDERATIONS

- High-quality rBGH-free whey protein, produced in the U.S.A. from 100% grass-fed cows that have never been given artificial hormones, steroids, or growth enhancers. Completely free of antibiotics.
- Whey protein isolate is 97% lactose-free and tolerated by most individuals—even those with dietary intolerances.
- Do NOT use before or during exercise; the glutamine will initially produce ammonia, a cause of muscle fatigue.



• Use Whey Protein before bedtime to naturally raise human growth hormone (HGH) as you sleep.



Camry Penrod celebrates after a successful Montana Beast and Sprint Weekend in Bigfork, MT. Camry finished 2nd AG in the Beast, and 1st AG in the Sprint. Photo: Spartan OCR

Vegan Protein

Delicious 100% organic plant power

- Enhances exercise recovery
- · Supports digestive health
- · Balances body acidity

SERVING SIZE: 1 level scoop (32q)

Contains 110 to 140 calories per serving, depending on the flavor.

RECOVERY	DAILY
within 30 min after exercise	As needed
√	✓

Hammer Vegan Protein is a unique blend of five nutrientdense, 100% organic plant proteins: pea, pumpkin, Sacha Inchi, spirulina, and chlorella.

Packed with 20 grams of protein per scoop, Hammer Vegan Protein is dairy- and soy-free, nearly fatfree (1 gram per scoop), and has no saturated fats or cholesterol

It contains no refined sugars or artificial sweeteners.

HOW TO USE

Use Hammer Vegan Protein as a recovery tool after exercise or any time additional protein is needed. Athletes in training should consume at least ½ gram of protein per pound of body weight per day. Get what you need in this natural, delicious form.

INGREDIENT BREAKDOWN

Organic Pea Protein is an easily digested protein with an excellent amino acid profile, containing leucine. isoleucine, valine (the three branched-chain amino acids), lysine, arginine, and glutamine. It assists in lowering levels of grehlin, an appetite-stimulating peptide. This increases the potential for feeling satiated, possibly preventing overeating.

Organic Pumpkin Protein, derived from nutrient-rich





seeds, is not only a complete protein source, but also plentiful in vitamin K and the minerals calcium, iron. magnesium, manganese, zinc, and more. Pumpkin seeds contain numerous phenols with antioxidant properties. Organic Sacha Inchi is derived from the seeds of the

South America Plukenetia volubilis plant. Because it contains all nine essential amino acids, sacha inchi is considered a complete protein source. Sacha inchi is also a potent source of the essential omega-3 and omega-6 fatty acids. Organic Spirulina, a microscopic single-celled alga, is a complete protein source and has the highest concentration of protein by weight of any food. Considered by many to be THE superfood, spirulina is vitamin- and mineral-dense, and rich in enzymes and antioxidants such as superoxide dismutase. It's a potent source of chlorophyll (second only to chlorella) and essential fatty acids. Spirulina is also considered a blood-building nutrient, primarily due to its polypeptide content (called phycocyanin). Additionally, spirulina is believed to help maintain digestive system health by serving as a source of beneficial intestinal flora.

Organic Chlorella is another single-celled alga and, like spirulina, is a complete protein, loaded with chlorophyll and essential fatty acids. Chlorella is perhaps the most vitaminand mineral-dense "green food" available and includes a complete B vitamin profile. (Chlorella has more vitamin B12 by weight than liver!) Chlorella also contains naturally occurring RNA and DNA for assisting in cellular growth and repair, and is considered an "eye health" nutrient, courtesy of its plentiful amounts of beta-carotene and lutein. Lastly, chlorella has gained a reputation as an excellent detoxifying agent. It is said to have the ability to bind to heavy metals and other toxic substances in the bowels.

Soy Protein

Plant-based protein powerhouse

- · Enhances exercise recovery
- · Concentrated, nutrient-dense protein source
- · Supports optimal cholesterol levels

SERVING SIZE: 1 level scoop (28.5g)

Contains 110 calories per serving

RECOVERY	DAILY
within 30 min after exercise	As needed
√	√

his highly concentrated plantbased protein provides 23 grams of easily digested protein per serving. Perfect as a component of a smoothie, meal on the go, or recovery tool.

HOW TO USE

Consume alone or add to smoothies to increase daily protein consumption.

3:1 Soy Recovery Drink

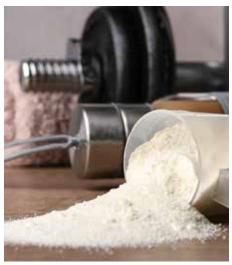
- 0.5 scoop Sov Protein
- 1.25 scoop HEED®
- 4-8 ounces water (118-237 ml)

Provides approximately 180 calories, 33 grams carbohydrates, and 11 grams protein.

TIPS AND CONSIDERATIONS

- Hammer Sov Protein is 100% GMO-free. Research has shown that consuming soy protein may have numerous health benefits
- Because Hammer Soy Protein is formulated for meal supplementation before and after exercise, it is far too concentrated for use during exertion. Perpetuem® and Sustained Energy both contain an adequate amount of soy protein for prolonged exercise.





• Soy is rich in micro-nutrients such as iron and B vitamins. For this reason, it is an excellent choice for use in smoothies or other forms of meals-on-the-go or replacements.

INGREDIENT BREAKDOWN

Non-GMO Soy Protein Isolate - A dry powder food ingredient that has been separated or isolated from the other components of the soybean, making it 90-95% protein, and nearly carbohydrate- and fat-free.

Stevia - A natural, calorie-free sweetener derived from the leaves of Stevia rebaudiana, a plant native to Central and South America. It does not affect blood sugar levels or contribute to tooth decay.

Liquid Endurance

Hyper Hydration Formula

- · Increases heat tolerance
- · Improves hot weather performance
- · Reduces exercise-related dehydration

SERVING SIZE: 0.5 oz. (15 mL) Contains 16 calories per serving

LOADING PROCEDURE

Mix ½ to 1 ounce Liquid Endurance with 16-28 ounces of water.

T nowing that the body cannot process fluids you consume at the same rate you sweat, some degree of dehydration has been accepted as inevitable when exercising in the heat. Glycerol, the active ingredient in Liquid Endurance, maximizes intercellular water levels to be called upon as needed during activity. Decline in body-water levels is thus prevented or delayed. It is the only way to safely and effectively prepare your body for heat exposure, minimizing dehydration, and maximizing performance in hot weather.

HOW TO USE

3 days before a hot weather event, follow the loading procedure based on body weight.

- Slowly sip bottle over 2-3 hours.
- Repeat so that 3 total doses are consumed for the day.

Follow this protocol for 3 days before the event. One dose may be taken the morning of the event.

Scarlet Kaplan sprints down the path at Les Mason Beach in Whitefish, MT on a training run.



TIPS AND CONSIDERATIONS

- · Weigh yourself each day. If you have gained more than 3% of your body weight before finishing the loading procedure, maximum effective fluid increase has been achieved, and it is time to stop loading. More than 3% gain does not improve performance.
- Most athletes will gain 1-2% of their body weight.
- During multi-day events, an additional loading dose may be taken each evening.

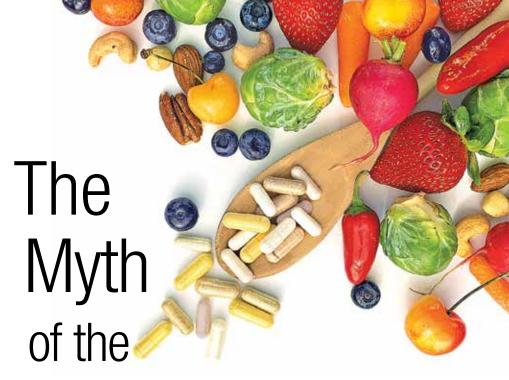


SUPPLEMENTS //

					1	′		
QUICK REFERENCE CHART	Daily	Before exercise	During exercise	Recovery	Before a meal	With a meal	Before bedtime	As needed
Premium Insurance Caps	✓			✓		✓		
Race Caps Supreme	✓	✓		✓				
Mito Caps	✓	✓		✓		✓		
Endur0mega	✓			✓		✓		
Anti-Fatigue Caps		✓	✓					
Energy Surge		✓	✓					
Endurance BCAA+		✓	✓	✓				
Race Day Boost		✓						
Fully Charged		✓	✓					
Tissue Rejuvenator				✓		✓		✓
AO Booster	/			✓		/		
Super Antioxidant			✓	✓		/		
Xobaline	/			✓		/		
REM Caps							/	
Chromemate	/			✓		✓		
Essential Mg	/			√		/	/	
LSA Caps	/					/		
PSA Caps	/						/	
Phytomax	/					/		
Boron	/			√		/		
Digest Caps	/				/			/
EnduroZyme				√		/		/
Phytolean					/			/
ChitoLean					/			
Nasol								/
Clear Day								/
QUICK REFERENCE CHART	Daily	Before exercise	During exercise	Recovery	Before a meal	With a meal	Before bedtime	As needed

Right: Hammer Ambassador Mindy Przeor runs through the Grand Canyon. Mindy and her husband, Kris, utilize several Hammer supplements including Tissue Rejuvenator, Premium Insurance Caps, Super Antioxidant, Chromemate, Xobaline, Race Caps Supreme, Fully Charged, AO Booster, Essential Mg, Boron, Clear Day, and EndurOmega to maintain their busy endurance lifestyle.





"Balanced Diet"

It would be easier to discuss the "balanced diet" if this nebulous phrase had ever been scientifically defined. In fact, there has never been a clinical study documenting what such a diet would include, nor demonstrating that it is possible to meet nutritional requirements through whole foods alone.

What studies do show is that the modern food supply cannot provide all the micronutrients we need to prevent deficiencies (and their related health impacts), let alone achieve optimal health. This research also documents the drastic demineralization of soils (up to 90% declines in some cases), leading to nutritionally void foods. They further

document damage during harvest and production, and degradation during shipping and cooking. The picture becomes clear: even with quality food choices, a "balanced diet" will not meet your needs. And the overconsumption of processed and packaged foods only makes things worse.

The first step to optimal health, performance, and wellness will always be a diet dominated by nutrient-dense whole foods. But that alone will no longer suffice, which is why supplementation has become part of modern life. Hammer Nutrition can provide you with the supplements you need to reach your performance and health goals.

Race Caps Supreme

Tested, trusted, and proven for over 30 years

- · Prolongs endurance
- · Increases energy
- Supports cognitive & cardiovascular health

Daily	Before exercise	Recovery
✓	✓	✓



ace Caps Supreme is a potent Source of Coenzyme Q10 and idebenone. These and other cellular energy catalysts maximize assimilation of these critical nutrients.

HOW TO USE			
	HOW TO USE		
	Daily	1 capsule with food	
Exercise Before UNDER		1-2 capsules 30-90 min. prior to workout (with or without food)	
2 hrs	After	1 capsule after workout with Recoverite® or food	
Before		1-2 capsules 30-90 min. prior to workout (with or without food)	
Exercise OVER 2 hrs	During	1-2 capsules per hour during workouts that exceed 2 hrs	
	After	1-2 capsules after workout with Recoverite or food	

TIPS AND CONSIDERATIONS

 While not a central nervous system stimulant, the energy production of this product means it should be used early in the day.



- Energy production processes generally decline with age. All people over 30 will benefit from this product, whether or not they engage in strenuous exercise regimens.
- Active individuals should increase consumption based on their activity levels.

INGREDIENT BREAKDOWN

Coenzyme Q10 (CoQ10) - A crucially important nutrient (think: "catalyst" or "spark plug") for the efficient production of energy from your food and oxygen intake. CoQ10 exists in every cell of the human body and facilitates proper functioning of all elements of energy production. Unfortunately, body stores naturally decline with age and are rapidly depleted during strenuous exercise, making supplementation essential.

Idebenone – Supplies many of the same benefits as CoQ10, with some distinct advantages based on its more complex chemical structure. Perhaps the most remarkable feature of idebenone is its unique ability to operate under hypoxic (low oxygen) conditions, helping to produce energy and maintain high energy levels without creating free radicals, even at high altitude or during the most intense exercise sessions.

Vitamin E - A powerful antioxidant that, along with CoQ10 and idebenone, helps neutralize the free radicals naturally created during energy production. Vitamin E has numerous general health benefits as well, especially in regard to the cardiovascular and circulatory systems.

OxyAssist – A unique blend of nutrients which work in combination to enhance oxygen utilization, optimize fat burning, increase energy production, and buffer against acid build-up.

Read full ingredient breakdown at hammernutrition.com

Premium Insurance Caps

Daily Multivitamin

- · Supports optimum health
- · Boosts energy all day
- Supports immune function

Daily	Recovery	With a meal
✓	✓	√



remium Insurance Caps contains 54 different nutrients proportionately balanced to support peak health through the rigors of training, competition, and daily life.

HOW TO USE

Take capsules daily in divided doses with food. Individual dosage needs will vary. Start with 3-4 capsules/day and monitor energy and health status.

120 ct bottle - 4 capsules daily

High Potency – For non-athletes or athletes training LESS THAN 8-10 HOURS a week. Fills in nutrient gaps in the daily diet, and supplies significantly greater health benefits than the typical once daily multivitamin.

210 ct bottle - 7 capsules daily

Super-High Potency - For athletes engaged in regular highintensity workouts and/or training MORE THAN 8-10 HOURS a week. Maximizes energy levels, boosts performance, and greatly enhances recovery.



TIPS AND CONSIDERATIONS

- The high-potency, broad-spectrum ingredients may allow for a reduction in other stand-alone nutrient supplements (such as B vitamins, calcium, or vitamin C).
- Allow a 3+ hour window between the use of Premium Insurance Caps and the start of exercise.
- Periods of high-volume training, increased stress, and exposure to contagious sicknesses or infections warrant extra doses.
- This product is well suited for everyone. If you breathe, eat, walk, and exist in the modern world, this product is for you.
- Vitamin B1 may cause urine to have a fishy smell, which is normal and harmless.



INGREDIENT BREAKDOWN

Vitamins – A superior range and supply of highly bioavailable vitamins. These nutrients fill in the gaps of the modern diet and neutralize free radicals created during exercise to support optimal health and wellness.

Vitamin A (as beta-carotene)

Vitamin B1 (thiamine)

Vitamin B2 (riboflavin)

Vitamin B3 (as niacinamide)

Vitamin B6 (as pyridoxine phosphate)

Vitamin B12 (as methylcobalamin)

Vitamin C (as calcium ascorbate)

Vitamin D3 (as cholecalciferol)

Vitamin E (as d-alpha-tocopherol)

Folate (as 5-MTHF)

Biotin (as d-biotin)

Pantothenic Acid (as d-calcium-pantothenate)

Minerals - Premium quality chelated minerals are provided at proper ratios to ensure maximum bioavailability and absorption. Mineral content adheres to the Optimal Daily Intake standards.

Calcium (as AAC* and calcium ascorbate)

lodine (as kelp)

Magnesium (as AAC*)

Zinc (as AAC*)

Selenium (as AAC*)

Copper (as AAC*)

Manganese (as AAC*)

Chromium (as Chromemate™)

Potassium (as AAC*)

Boron (as AAC*)

*AAC = Amino Acid Chelate

Complementary Nutrients:

Bioperine™ – A trademarked standardized extract from the fruit of Piper nigrum (black pepper) or Piper longum (long pepper). Research has shown Bioperine™ significantly enhances nutrient absorption.

Pepsin – A digestive enzyme that helps break down protein, pepsin is also necessary for the proper absorption of vitamin B12.

Bromelain – An enzyme derived from pineapple, bromelain supports healthy digestion and possesses antiswelling properties.

Papain – An enzyme derived from papaya, papain supports healthy digestion and also has antioxidant and immune system supportive properties.

Phosphatidyl Serine - Also known simply as "PS." Phosphatidyl Serine is a phospholipid that contains both amino acids and fatty acids. It is vital for the maintenance of all cellular function, especially in the brain. It also plays a role in the regulation of the stress hormone cortisol.

PABA (para-amino benzoic acid) - PABA is a B-complex vitamin that aids in the formation of red blood cells. It is also a potent neutralizer of single molecular oxygen, a free radical that is a common byproduct of metabolism. This neutralization is very powerful, because it retards collagen cross-linking, as well as promoting flexibility, healthy cell



Vic Allen paddles during a race in Hawaii. Vic competes at a high level despite losing his sight. He relies on daily training, his teammates and family, and Hammer Nutrition to keep him active and enjoying life. Photo: Annie Allen

structures, and membranes.

Quercetin – A water-soluble flavonoid typically found in onions, apples, leafy vegetables, and other food sources. Quercetin has both antioxidant and anti-swelling properties. **Phosphatidyl Choline** – A phospholipid bound to a choline particle. Phosphatidyl Choline supports brain health and liver function and helps to keep cholesterol levels in check. Inositol - Also known as vitamin B8, inositol's main role is to support the efficient metabolism of amino acids. It is also an important part of the citric acid cycle—the series of chemical reactions that enables the body to create energy from food and oxygen.

Betaine HCL - The combination of betaine and hydrochloric acid. It is a powerful natural-occurring digestive enzyme that helps the breakdown and absorption of vitamin B12, iron, calcium, and other nutrients.

Citrus Bioflavonoids – Working in tandem with vitamin C. citrus bioflavonoids are a potent antioxidant and support healthy blood vessel function.

Proprietary Enzyme Blend (protease, amylase, glucoamylase, lipase, cellulase, phytase, maltase, and sucrase) - A blend of various digestive aids to ensure maximum nutrient absorption.

Mito Caps

Turn back the clock

- · Improves energy production
- · Promotes overall well-being
- · Improves fat metabolism

Daily	Before exercise	Recovery	With a meal
✓	✓	✓	✓



his unique formulation supports and protects mitochondria, the energy-producing organelles in cells. as they work to produce energy, neutralize free radicals, and combat agerelated degeneration.

You'll notice an increase in your baseline energy levels without ever feeling stimulated. You will also feel a sense of stable health and wellness reminiscent of your youth.

HOW TO USE				
Daily		1 capsule 2-3 times daily with food		
Exercise UNDER 2	Before	1 capsule 30-90 min. prior to workout (with or without food)		
hrs	After	2 capsules after workout with Recoverite® or food		
Before		2 capsules 30-90 min. prior to workout (with or without food)		
Exercise OVER 2 hrs	During	1 capsule per hour during workouts that exceed 2 hrs		
	After	2 capsules after workout with Recoverite® or food		



TIPS AND CONSIDERATIONS

- Best used regularly and daily. Greatest impacts will be felt after 1-2 months.
- The sulfur in r-alpha lipoic acid and Vitamin B6 may cause urine to have a medium-to-strong sulfur or fishy smell which is normal and harmless.

INGREDIENT BREAKDOWN

Acetyl L-Carnitine – L-carnitine is a derivative of the amino acid lysine which has been found to restore key elements of mitochondrial energy production and cellular health. Additionally, it serves as the most important link in the production of energy from carbohydrates, protein (amino acids), and fats at the cellular level. It also helps to preserve lean muscle tissue by decreasing excess levels of cortisol. R-Alpha Lipoic Acid (R-ALA) - An essential cofactor for several multi-enzyme complexes that increase critical energy metabolism reactions inside the mitochondria.

DMAE - Dimethylaminoethanol (DMAE) bitartrate stimulates the production of choline, which in turn allows the brain to optimize production of acetylcholine, a neurotransmitter involved in learning and memory. DMAE also enhances the function of acetyl L-carnitine and R-alpha lipoic acid.

Para-amino Benzoic Acid (PABA) - This intricate B-complex vitamin plays an important role in the formation of red blood cells and also functions as an antioxidant. While a potent nutrient in its own right, its primary role in this formula is to multiply and enhance the effects of acetyl L-carnitine and R-alpha lipoic acid.

Ascorbyl Palmitate – A non-acidic, fat-soluble form of vitamin C with the ability to reach specific areas of tissue that standard vitamin C cannot. In addition to its antioxidant properties, ascorbyl palmitate enhances the bioavailability of carnitine.

Read full ingredient breakdown at hammernutrition.com

Endur0mega

Get the omega-3s you need

- · Protects cardiovascular health
- · Supports healthy joints
- · Enhances brain function and mood

Daily	Recovery	With a meal
✓	✓	✓



E ndurOmega is rich in omega-3 essential fatty acids, which provide a wide range of benefits for athletic performance and overall health. They also support heart, skeletal, muscle, and kidney health.

HOW TO USE

Take 2 capsules, two to three times daily, with or without food.

TIPS AND CONSIDERATIONS

- 2 capsules of EndurOmega contain 300 mg of EPA, 200 mg of DHA, and 100 mg of additional omega-3 fatty acids.
- EndurOmega has molecularly distilled and deodorized fish oil made from anchovy, sardine, and mackerel (not salmon, which can be tainted with mercury and other contaminants). It has no fishy odor or aftertaste and is tested via thirdparty independent laboratories to guarantee potency and purity.
- In addition to its many health benefits, EndurOmega increases the absorption of vital fat-soluble nutrients such as Coenzyme Q10, vitamin E. and vitamin D.



• Fish oil has similar health benefits for dogs, so EndurOmega is well suited for your four-legged friends.

INGREDIENT BREAKDOWN

Highly Refined and Concentrated Omega-3 Fish Oil - Derived from fish which is an excellent source of EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid). Proprietary Antioxidant Blend - Consisting of natural tocopherols (vitamin E), rosemary extract, and ascorbyl palmitate (fat-soluble vitamin C). These antioxidants act as powerful natural preservatives to maintain the potency



Jennie Phillips riding to the summit of Mount Diablo—106 miles with 10K feet of elevation. Photo: Brian Fessenden

Anti-Fatigue Caps

Fliminate endurance barriers

- · Prolongs endurance
- · Fights everyday fatigue
- · Eliminates "heavy legs"

Before exercise	During exercise
\checkmark	✓



A nti-Fatigue Caps provides the nutrients your body needs to rapidly remove byproducts of energy production that will limit your performance. Muscle breakdown (either from intensity or long-duration cannibalization) causes ammonia buildup in the body. The result is heavy legs, a foggy mind, and reduced energy output.

This blend of ammonia-binding nutrients helps your body quickly remove this toxin, thereby improving performance.

HOW TO USE

Take 2-4 capsules one hour before an endurance session. During extended efforts, take an additional 1-2 capsules each hour.

TIPS AND CONSIDERATIONS

- While not stimulating, this product does help increase energy levels and is best not taken just before bed.
- Contains potassium/magnesium aspartate, L-citrulline, and OKG, all shown to increase stamina and counteract fatigue.



- While not designed as a daily supplement, it may be used to counteract daily fatigue, or as a recovery tool after long and/or hard training sessions.
- Anti-Fatigue Caps are pink, making them easy to differentiate from Endurolytes® capsules for use during activity. The pink hue comes from beet juice powder.
- For easy dosing during exercise, carry in Hammer's FREE capsule dispensers or prepare hourly baggies in advance.

INGREDIENT BREAKDOWN

Potassium/Magnesium Aspartate – This compound is comprised of potassium and magnesium chelated ("bonded") to the amino acid aspartic acid. It is often used for alleviating general fatigue.

L-Citrulline – This amino acid is found in foods such as watermelon, onions, and garlic. L-citrulline assists in the removal of ammonia from the muscles and liver. Like aspartic acid. it is beneficial in alleviating fatigue.

OKG (Ornithine Alpha-Ketoglutarate) – A combination of the amino acid L-ornithine and the compound alphaketoglutarate, OKG provides a readily available, non-ammonia-producing source of glutamine in the body. Both act as ammonia scavengers in the body.

Beet Juice Powder – While the primary function of this ingredient is coloring the capsules to easily differentiate them from similar-looking capsules such as Endurolytes, beetroot powder also boosts nitric oxide levels.

Energy Surge

Pure energy on demand

- · Increases power output
- · Improves repeatability of highintensity efforts
- · Helps vou finish strong

Before exercise	During exercise
\checkmark	✓



E nergy Surge's 100 mg of PEAK ATP® is the ready-to-use finished product of cellular energy that fuels all high-level efforts. During highintensity exercise, ATP stores are depleted. This sublingual (under the tongue) ATP is rapidly absorbed into your bloodstream.

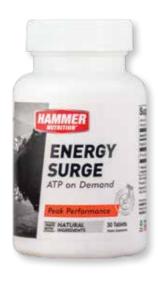
HOW TO USE

Take before interval or speed workouts, or when a big climb, attack, or finishing sprint is expected.

For high intensity, short-duration events (less than one hour), dissolve 1-3 tablets under your tongue 5-30 minutes before the start. For longer events, dissolve 1-3 tablets under your tongue, preferably every hour.

TIPS AND CONSIDERATIONS

• Contains Adenosine Triphosphate (ATP), the chemical compound in cells used to provide energy. ATP is responsible for 95% of the biological activity in the body, including: muscle contractions, circulation, and the building of new tissue.



• Hammer Nutrition's proprietary sublingual formula allows for direct absorption through the mucosa of the mouth and throat into the bloodstream. For even faster absorption chew tablets into a paste. then dissolve under the tongue.

INGREDIENT BREAKDOWN

ATP (Adenosine Triphosphate) - A high-energy molecule found in every cell, often referred to as "the energy currency of life," ATP is formed from a long chain of metabolic events in which a variety of substrates are transferred from the foods you eat. Energy Surge contains pre-formed, ready-to-use ATP.

Magnesium Glycerol Phosphate - A source of magnesium that is bonded to ATP in order for ATP to be biologically active. Magnesium Glycerol Phosphate also helps to balance the product's pH to a neutral state of 7.0.

Fructose - To help buffer the bitter-to-acidic taste of pure ATP, each tablet contains a miniscule amount of fructose (approximately 170 mg/0.17 gm, or 17% of one gram).

Mannitol - Like xylitol, this sweetener is classified as a polyol. It's found in the fruit, leaves, and other parts of many plants, including celery, mushrooms, onions, pumpkins, and strawberries. Mannitol helps buffer the bitter-to-acidic taste of pure ATP.

Cellulose Gum - Made from plant fibers, cellulose gum binds the ingredients together into a tablet. It also stabilizes the ATP, preventing it from reacting before consumption.

Magnesium Stearate - Used in trace amounts as a "flow agent" to prevent the raw materials from sticking to the mechanical equipment, and to ensure a uniform consistency.

Endurance BCAA+

Powerful amino acid benefits

- Delays perception of fatigue
- Builds, maintains, and repairs lean muscle tissue
- · Supports immune system function

Before exercise	During exercise	Recovery
✓	✓	✓



Branched-chain amino acids (BCAAs) assist in muscle repair and development, increase energy levels, support the immune system, stabilize blood sugar levels.

Equally well-suited for strength or endurance exercise, Endurance BCAA+ includes the amino acid L-alanine (to assist in energy production) and glutathione (to support the immune system).

HOW TO USE

Take 2-4 capsules before and after exercise. During prolonged workouts or races, take 1-2 capsules every hour.

TIPS AND CONSIDERATIONS

- Formerly known as "Endurance Amino." (The name was updated in Spring 2018.)
- Take during prolonged exercise to help decrease lean-muscle cannibalization—especially if your primary fuel does not include a protein component.
- Use with Anti-Fatigue Caps for massively enhanced endurance during longer workouts and races.



- For easy dosing during exercise, carry in Hammer's FREE capsule dispensers or prepare hourly baggies of your supplement selections in advance.
- Glutathione contains an organosulfur compound called cysteine which may cause urine to have a sulfur smell. This is normal and harmless.

INGREDIENT BREAKDOWN

L-Leucine, **L-Isoleucine**, **L-Valine** – Collectively known as the branched-chain amino acids (BCAAs), these are among the nine "essential" amino acids which cannot be made by the body and must be obtained from food sources.

L-Alanine – Regarded as a non-essential amino acid, L-alanine can be converted into glucose and then transported by the bloodstream to the muscles.

Reduced Glutathione – A tripeptide of the amino acids glutamic acid, cysteine, and glycine and one of the three endogenous (naturally occurring in the body) antioxidants, it controls excess exposure to free radicals.



Race Day Boost

Get the boost you need

- · Boosts performance
- Increases endurance
- · Reduces lactic acid

Before exercise	With a meal
✓	√



7 nhances the function and performance of your body's three energy performance pathways and effectively buffers lactic acid.

HOW TO USE

Use the four days before a major event (after first testing it in training) to enjoy up to 8% improvement in performance time.

Take four capsules with food and water four times per day (16 capsules daily) for four days prior to competition.

For a multi-day event, this protocol may be used:

- Follow the same four-day loading protocol described above.
- Take four capsules with Recoverite® as soon as possible after racing each day, as well as



another four-capsule dose with food later in the day.

 Follow this twice daily "maintenance dose" protocol after each stage.

TIPS AND CONSIDERATIONS

• Because this product has a "tolerance factor" or biofeedback mechanism, it should NOT be used for every race. Ideally, it should be used four to six times per year, preferably with a minimum of 14-21 days between loading cycles.

INGREDIENT BREAKDOWN

Sodium (Tribasic) Phosphate - This compound enhances the functioning of all three of the body's ATP-producing energy systems: the short-term ATP-CP system, the medium-term lactic acid system, and the long-term oxygen/aerobic system. Malic Acid - A natural substance found in apples and other fruits that helps balance the extreme alkalinity of Race Day Boost, minimizing—or eliminating—the potential for stomach distress. As an essential component of the Krebs cycle, malic acid also helps boost energy levels and is beneficial for liver health.

Use for 4 days before a major event to enjoy up to 8% improvement in performance time!



Fully Charged

Pre-exercise ignitor

- Increases energy
- · Promotes mental acuity
- Improves power output

During exercise
✓



This revolutionary, pre-exercise formula prepares you mentally and physically for any form of exercise. It reduces warm-up time, increases cardiovascular capacity, prevents lactic acid build-up, improves mental acuity, and increases energy levels.

Fully Charged uses a potent blend of fruit and vegetable extracts, amino acids, and green tea extract to give you the energy you need without the jitters or over-amped sensations.

HOW TO USE

Mix 1 serving in 4-8 ounces of water. Consume 15-30 minutes before exercise. During prolonged workouts or races, additional doses may be taken.

TIPS AND CONSIDERATIONS

- Fully Charged is compatible with all other Hammer Nutrition supplements and fuels.
- Beta-alanine can cause a temporary tingling in the skin for some users. This is natural and safe and will pass after a few minutes.
- Consider re-dosing mid-activity or mixing with your liquid fuel (i.e. Perpetuem® or HEED®) during long sessions.



- The boost in energy makes Fully Charged an excellent and healthy coffee/caffeine alternative.
- Fully Charged contains approximately 15 mg of caffeine. Base the timing of your consumption on your own tolerance and avoid taking directly before bed.





Brano Behul competes with Hammer OCR Team in the Czech Republic at the Gladiator Race Taxis. Brano is the Hammer Nutrition International Distributor for the Czech Republic. Photo: David Antoš

INGREDIENT BREAKDOWN

Taurine - An amino acid found throughout the body, especially in muscle and nerve tissue. Taurine assists in regulating heartbeat, muscle contractions, and levels of neurotransmitters in the brain. It is essential for the proper use of electrolytic minerals-calcium, magnesium, potassium, and sodium—and ensures proper muscle function. Taurine also increases concentration and focus without stimulating the nervous system. Perhaps most important to athletes, taurine supplementation is correlated with increases in VO2 max and time to exhaustion, due to its ability to buffer lactic acid and maintain healthy pH levels.

Beta-Alanine - This amino acid simultaneously neutralizes acidity levels and enhances blood flow to working

muscles—both of which enhance sports performance. L-Carnitine Fumarate - This amino acid transports fatty acids into the mitochondria for the conversion of cellular energy. Fumaric acid (fumarate) is a Krebs Cycle Intermediate and plays a vital role in energy production. Spectra[™] – A proprietary blend of 29 vegetable, fruit, and herbal ingredients. Spectra™ has been shown in a crossover, double-blind, placebo-controlled study to increase nitric oxide (NO) levels by 64%. Increasing NO levels result in increased blood flow to muscles, enhancing the delivery of nutrients and oxygen supporting increases in endurance and strength. That same study showed that Spectra[™] also provides powerful antioxidant support, reducing free radical production.

Green Tea Extract (standardized to 50% polyphenols) A natural source of caffeine, green tea also contains

polyphenols that provide antioxidant and cardiovascular health support.

elevATPTM - A proprietary, clinically-researched blend of plant-derived trace minerals and polyphenol-rich apple extracts, elevATP™ works with the body's natural energyproducing mechanisms to stimulate the production of adenosine triphosphate (ATP), the energy currency of the body. Beetroot Juice Powder - A rich source of nitrates that help boost nitric oxide (NO) levels.

Tyrosine - This amino acid is the precursor for several important neurotransmitters involved in alleviating stress and fatigue. Tyrosine also promotes mental alertness.

Tart Cherry Extract (standardized to 6.5% anthocyanins) - Cherries contain compounds (anthocyanins) that reduce swelling, which helps maintain normal muscle function, decreases soreness, and accelerates recovery. Soluble Corn Fiber (as Fibersol®-2 AG) - A digestiveresistant maltodextrin used as a prebiotic that facilitates healthy digestion while neutralizing the taste of the product. Tapioca Maltodextrin – A natural root-based starch used in minimal amounts to improve flavor and mixability. Natural Cherry Flavor - Combined with Tart Cherry Extract, this gives Fully Charged its flavor.

Tissue Rejuvenator

Less pain, more gain

· Targets joint & muscle soreness

· Optimizes joint mobility & flexibility

Assists in maximizing recovery

Recovery	With a meal	As needed
✓	✓	√





Hammer's bestselling formula simultaneously helps to rebuild joints, tendons, and soft tissue while reducing soreness, swelling, and discomfort. The documented harmful effects of common pills that relieve discomfort and reduce swelling provide plenty of motivation to cease the consumption of such toxic substances. Tissue Rejuvenator offers a healthy alternative.

HOW TO USE

Take 4 capsules once or twice daily during periods of injury.

Take 1-2 capsules once or twice daily for prevention and maintenance purposes.

TIPS AND CONSIDERATIONS

- The effects of Tissue Rejuvenator are cumulative. Consistent use is vital to achieving the best results.
- Contains glucosamine sulfate, chondroitin sulfate, and methylsulfonylmethane (MSM). If you have a shellfish allergy, consult your physician before use.
- Undenatured Type II Collagen

(UC-IITM) helps the immune system promote healthy joints by increasing joint mobility and flexibility.

- Take one capsule every 2-3 hours during ultra events for discomfort relief.
- Tissue Rejuvenator contains nutrients derived from animals and is not suitable for a vegan diet.
- Tissue Rejuvenator and Vegan Tissue Rejuvenator contain MSM, an organosulfur compound that may cause urine to have a sulfur smell; this is normal and harmless.

IMPORTANT NOTE FOR THOSE WITH SHELLFISH ALLERGIES

Tissue Rejuvenator may be safe (keyword "may") to use even for those with a shellfish allergy. Glucosamine sulfate is derived from the shells of shellfish, while the allergen is in the flesh.

Vegan Tissue Rejuvenator does NOT contain ingredients derived from shellfish.

We strongly recommend that anyone with a shellfish allergy consult their physician before taking Tissue Rejuvenator or any glucosamine sulfate-containing supplements.

Vegan

Tissue Rejuvenator

Vegan joint health support

- · Reduces swelling & soreness
- Supports rebuilding of body tissue
- · Promotes joint mobility



INGREDIENT BREAKDOWN

TISSUE REJUVENATOR

Glucosamine Sulfate - The basic building block of joint cartilage, ligaments, and tendons. It plays a major role in the synthesis of collagen, cartilage, bone, skin, and various lubricating fluids in joints. It also promotes the elasticity of joint movement and functions as an antiswelling agent.

Chondroitin Sulfate - One of the most important building blocks for the repair of damaged cartilage, chondroitin sulfate also blocks the activity of enzymes that break down joint material. This helps reduce swelling and protects cartilage from further damage. Chondroitin sulfate also promotes lubrication and cushioning in the joints. Hammer Nutrition uses only highly purified and sterilized. 100% BSE (Bovine spongiform encephalopathy)-free, bovine-derived chondroitin sulfate produced in the USA. MSM (Methylsulfonylmethane) - Necessary for proper synthesis and maintenance of body tissues such as skin, hair, nails, tendons, and cartilage.

Boswellia Serrata - An Ayurvedic herb with antisoreness properties. Its primary active ingredients are triterpene acids, which may also be useful for relief from exercise-induced breathing difficulties.

Devil's Claw – A South African herb with anti-soreness properties, Devil's Claw has also been used to relieve mild stomach upset.

Yucca Root - A medicinal herb traditionally used to offer relief from stiff joints. It also provides antifungal and antibacterial benefits.

Turmeric (Curcuma longa) Root Extract – A perennial plant of the ginger family, and the spice that gives curry its yellow color. This well-known swelling fighter owes its ability to high levels of curcumin. In addition to being antiswelling, curcumin also possesses antioxidant properties. Quercetin - Naturally found in onions, apples, leafy vegetables, and other food sources, this potent bioflavonoid has both antioxidant and anti-swelling properties.

Undenatured Type II Collagen (UC-II™) - A patented, extensively studied dietary ingredient derived from chicken sternum cartilage. UC-II™ works with the immune system to promote healthy joints and increase joint mobility and flexibility. (U.S. Patents 5,645,851; 5,637,321; 5,529,786; and 5,750,144). UC-II™ is a trademark of InterHealth N.I.

Proprietary Enzyme Blend (peptidase, bromelain, papain, amylase, lipase, cellulase, and phytase) - Aids in the complete absorption of nutrient components.

VEGAN TISSUE REJUVENATOR

GreenGrown® Glucosamine Sulfate - A 100% vegan source glucosamine derived from GMO-free corn. Glucosamine sulfate is the basic building block of joint cartilage, ligaments, and tendons. It plays a major role in the synthesis of collagen, cartilage, bone, skin, and various lubricating fluids in joints. It also promotes the elasticity of joint movement, and functions as an antiswelling agent.

Horsetail Leaf – One of the richest plant sources of silica, which is required for collagen formation, collagen is often referred to as "the glue that holds us together." While primarily known for its beneficial effects on bone health, silica also plays a major role in supporting strong, healthy, flexible joints.

Hyaluronic acid – A type of carbohydrate (mucopolysaccharides, AKA glycosaminoglycans) that occurs naturally throughout the human body and is found primarily in connective tissue, hvaluronic acid serves to lubricate and cushion body tissue.

A0 Booster

Supercharge your recovery

- · Helps maintain proper immune system function
- · Reduces post-workout soreness & swelling
- · Benefits skin & eves

✓	✓
	V

This arsenal of powerful fatsoluble antioxidants is designed to enhance recovery, protect vision, improve your skin, reduce muscle soreness, and support your immune system.

With the entire vitamin E family in proper balance, AO Booster is rapidly absorbed and well-utilized.

HOW TO USE

Non-workout days:

Take 1 capsule with food.

Workout days:

Take 1 capsule after a workout with Recoverite® or food. Take a second dose with food at a time of your choosing.

TIPS AND CONSIDERATIONS

- May also be used to support optimal vision and healthy skin, due to the inclusion of the nutrients astaxanthin and lutein.
- Works synergistically to support and enhance the effectiveness of other antioxidants, including those in Super Antioxidant.



INGREDIENT BREAKDOWN

Gamma E Tocopherol Complex - Extracted and concentrated from oil palm fruits, these are the four tocopherol components of the vitamin E "family"alpha, beta, gamma, and delta-with emphasis on the gamma fraction. These potent fat-soluble antioxidants exist in optimal ratios for absorbability and also offer antiswelling properties.

Tocomin® Full-Spectrum Natural Tocotrienol **Complex** – Extracted and concentrated from oil palm fruits, these are the four tocotrienol components of the vitamin E "family"—alpha, beta, gamma, and delta. They work synergistically with the tocopherols to maximize free radical neutralization.

Lutein - A naturally occurring carotenoid found in high quantities in green leafy vegetables like spinach and kale. It is an antioxidant and has particular benefits for vision. Astaxanthin - A form of microalgae with antioxidant properties that also gives the red color to salmon, lobster. and crab.



Super Antioxidant

Superior recovery tool

- Reduces soreness
- · Reduces free radical damage
- Improves circulation & cognition

During exercise	Recovery	With a meal
√	✓	✓



The broad-spectrum free radical scavengers found in Super Antioxidant help the body remove waste products caused by energy production, thereby reducing muscle soreness, accelerating recovery time, and protecting the immune system.

HOW TO USE

Take 1-2 capsules with Recoverite® or food after workouts

During ultra-distance events, consume 1 capsule every 2-3 hours.

TIPS AND CONSIDERATIONS

- Also supports focus and cognitive acuity (via the ginkgo biloba and vinpocetine components). Take when additional concentration is desired.
- If you live in a highly polluted environment or are regularly exposed to contagious illness, take daily.
- Best consumed early in the day.
- L-glutathione contains an organosulfur compound called cysteine that may cause urine to have a sulfur smell. This is normal and harmless.
- Antioxidant • Super contains



primarily water-soluble antioxidants while AO Booster is comprised of all fat-soluble antioxidants. Taking both will supply you with a wider variety of antioxidants.

INGREDIENT BREAKDOWN

Enteric Coated Super Oxide Dismutase - Also known as SOD, this endogenous (naturally occurring in the body) enzyme has powerful antioxidant properties. The entericcoated form in Super Antioxidant allows it to pass through the stomach for maximal absorption in the small intestine. **Grape Seed Extract** – A strong antioxidant capable of neutralizing numerous free radicals due to its high concentration of bioflavonoids. It also helps strengthen connective tissue and has anti-swelling properties. **L-Glutathione** – Another endogenous antioxidant that helps combat excess exposure to free radicals produced during exercise or from environmental exposure. **Ginkgo Biloba** – A potent herb traditionally used to improve circulation and cognition. It also offers antioxidant support. Gotu Kola - This herb naturally supports healthy circulation. It also possesses antioxidant properties. Vinpocetine - An alkaloid found in the periwinkle plant,



Vindocetine is an excellent antioxidant that also supports

optimal oxygen utilization and enhances circulation.

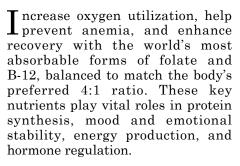
Xobaline

Highest quality nutrients, next level results

- · Reduces fatigue
- · Enhances muscle repair
- · Increases oxygen utilization

Daily	Recovery	With a meal
✓	✓	✓





HOW TO USE

As a recovery tool, consume 1 capsule after workouts or with a meal.

To reverse deficiency or as part of an anemia-recovery plan, take 1-2 capsules daily.

TIPS AND CONSIDERATIONS

- Over 50% of the population does not absorb these nutrients well due to a genetic abnormality. For these individuals, supplementation in methylated forms (as in Xobaline) is the only way to reverse deficiency and protect general health.
- Take before and during periods of high altitude acclimatization to assist with increased oxygen demands and blood cell creation.



- Both vitamin B12 and folate help lower dangerously elevated levels of homocysteine, considered a primary culprit in cardiovascular disease.
- Take during periods of strength training to support building of lean muscle mass via RNA synthesis.

INGREDIENT BREAKDOWN

Folate (5-MTHF) — While standard folic acid must go through a methylation process in order to be absorbed in the body, this form (also known as L-methylfolate) is readily available and highly absorbable. It is the only form that can be processed by the growing number of people (estimated 50% of the US population) with the MTHFR genetic defect. Vitamin B12 (as Methylcobalamin) — The most bioavailable form of this vitamin.



Leialoha Sousa-Sommo rides a fat bike across the iceberg trails in Anchorage, AK.

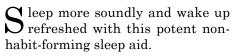
Photo: @renaissance.cvclist

REM Caps

Sleep well to live well

- · Helps you fall asleep faster
- · Leads to deeper sleep
- · Improves immune function





HOW TO USE

Take 1 capsule prior to bed on occasions in which sleeplessness may be expected (periods of high stress, etc.). For systematic/regular sleep deficiencies, take 1 capsule nightly 30 minutes before bedtime for one week. If desired results are not achieved, increase to 2 capsules nightly. If desired results are still not achieved after the second week, increase to 3 capsules nightly.

Experiment with decreased usage once sleeping habits have regulated, using only as needed thereafter.

TIPS AND CONSIDERATIONS

- Many users report more vivid dreams with this product. This is a good sign that your body is entering the deepest cycles of sleep.
- The strong odor you may notice in REM Caps occurs naturally from the valerian root extract.



- Do not operate machinery or drive a motor vehicle after consumption. Do not take with alcohol.
- If you are taking anti-anxiety and/ or antidepressant medications, consult your physician before using REM Caps.

INGREDIENT BREAKDOWN

Valerian Root Extract – The extract from the roots of Valeriana officinalis, an herb native to Europe and parts of Asia, which also grows in North America. Valerian root helps support relaxation and sleep.

Melatonin – A derivative of the neurotransmitter serotonin and the amino acid tryptophan. This hormone is naturally produced and secreted by the pineal gland, a tiny organ in the brain.

5-HTP (5-Hydroxytryptophan) - 5-HTP is isolated from the seed of a plant called Griffonia simplicifolia and is a natural precursor of the hormone serotonin. It supports deep sleep and a positive mood.

Magnesium (as Bisglycinate Chelate) - A chemical element and essential mineral chelated ("bonded") to an amino acid.

Enzyme Blend – Protease, amylase, cellulase, lipase, and phytase help maximize absorption of all the nutrients.





Chromemate

Micronutrient with massive benefits

- · Enhances carbohydrate metabolism
- · Stabilizes blood sugar
- · Reduces sugar cravings

Daily	Recovery	With a meal
✓	✓	✓



I hromium is a trace mineral that ✓ helps ensure proper insulin function, enhances recovery, and curbs sugar cravings. Like many other minerals and nutrients, chromium levels have been depleted from the soil and modern food supplies.

HOW TO USE

For blood sugar level support, take 1-2 capsules with meals—especially those high in carbohydrates.

As a recovery tool, take 1 capsule with post-work out Recoverite®.

TIPS AND CONSIDERATIONS

- For those with diabetes, pre-diabetes, hypoglycemia, or anyone following weight loss protocols, this product should be used daily with each meal.
- Due to its role in energy production and the synthesis of glucose, fatty acids, and amino acids. Chromemate is well-suited for occasional use after exhaustive exercise.
- A seven-capsule dose of Premium Insurance Caps provides 200 micrograms of chromium. Research suggests that higher dosing is a



wise strategy for those with blood sugar instability or those seeking to enhance carbohydrate synthesis following exercise.

INGREDIENT BREAKDOWN

ChromeMate® Brand Chromium Polynicotinate - This trace mineral helps regulate blood sugar and plays a vital role in the synthesis of glucose, fatty acids, and amino acids. Proprietary Enzyme Blend (Amylase and Phytase) -These enzymes help maximize absorption of the product.



Essential Mg

Magnesium—undisputed wellness superstar

- Relieves muscle spasms, cramps, and tightness
- Supports optimal blood sugar and blood pressure
- · Deepens sleep

Daily	Recovery	With a meal	Before bedtime
/	√	✓	√



The antidote to widespread magnesium deficiency, this high-quality, multi-source magnesium supplement should be taken by everyone.

HOW TO USE

Take 2 capsules twice a day.

TIPS AND CONSIDERATIONS

- Magnesium is crucial for proper muscle contraction, nerve function, carbohydrate metabolism, ATP activation, protein synthesis, blood pressure normalization, blood sugar level regulation, and at least 300 other body processes.
- Take at night to promote relaxation and deep sleep.



• Optimal bone health is just one of the crucial benefits of supplementing with Essential Mg.

INGREDIENT BREAKDOWN

Magnesium Bisglycinate is magnesium chelated ("bonded") to the amino acid glycine. It is the form of magnesium considered to have the least laxative effect.

Magnesium Succinate is magnesium chelated to succinic acid, a Krebs cycle intermediate.

Magnesium Citrate is magnesium chelated to citric acid, a Krebs cycle intermediate.

Magnesium Malate is magnesium chelated to malic acid, a Krebs cycle intermediate.

Magnesium Taurinate is magnesium chelated to the amino acid taurine.

Jeremy Heath returns to the trails after recovering from a leg injury. Hammer supplements were vital on Jeremy's road to recovery. Photo: Jared Seger



LSA Caps

Support your hardest-working organ

- · Optimizes healthy liver function
- · Supports the immune system
- · Assists in proper glucose metabolism

Daily	With a meal
✓	✓



I SA Caps support optimal wellness, recovery, and performance by protecting the hardest working organ in the human body.

HOW TO USE

Take 2 capsules twice daily with food.

TIPS AND CONSIDERATIONS

- Additional doses following exhaustive training sessions may optimize glucose metabolism and accelerate recovery rate.
- Add to your supplement regimen following any bout of illness or increased exposure to environmental toxins.
- Consumption of alcohol multiplies exercise- and environment-induced liver stress. Those who drink should regularly consume LSA Caps.
- Consider pairing with Endurance BCAA+ and Essential Mg for maximum liver support.

INGREDIENT BREAKDOWN

Artichoke Leaf Extract 10:1 (Cynara Scolymus) – The compounds that make up artichoke leaf—primarily cynarin—have demonstrated antioxidant action and the ability to help maintain healthy digestion and liver function



through promotion of healthy bile flow.

Broccoli Extract 20:1 – Broccoli, like all cruciferous vegetables, contains an organic sulfur compound called sulforaphane, which helps increase levels of detoxification enzymes.

Milk Thistle (80% Silymarin) – Silymarin (pronounced SILL-ee-MAR-inn) is a flavonoid extract from the seeds of the milk thistle plant and touted as one of the most potent liver-protecting substances.

N-Acetyl-L-Cysteine (NAC) – The non-toxic, bioactive form of the amino acid cysteine is readily assimilated into the body from the intestine. NAC itself has antioxidant properties and is a precursor for the endogenous production of glutathione, arguably the most potent antioxidant there is.

BlueRich® Blueberry Concentrate 36:1 – Blueberries contain anthocyanins and pterostilbene, which have antiswelling and antioxidant properties. Both help protect optimal liver function and prevent liver cell damage. BlueRich® is a super-concentrated, all-natural, and GMO-free standardized blueberry extract (equal to over 1/3 cup of whole blueberries).

Vitamin C (Ascorbic Acid) – Has liver-protective capabilities, and works with NAC to help boost bodily levels of glutathione. Vitamin C also helps maintain the stability of NAC.

Selenium (L-Selenomethionine) – This trace mineral, chelated to the amino acid methionine for superior absorption, is involved in the production of glutathione.

Molybdenum (Molybdenum Glycinate) – This trace mineral, chelated to the amino acid glycine for maximum bioavailability, helps produce a number of important enzymes and enzymatic reactions, including xanthine oxidase/dehydrogenase and aldehyde oxidase, which are involved in the liver's detoxification.

PSA Caps

All-natural prostate support

- · Promotes optimal prostate health
- · Reduces frequent urination
- Protects against enlarged prostate

Daily	Before bedtime
✓	√



PSA Caps provides six all-natural nutrients that synergistically work to support the prostate gland, helping to protect against age-related illnesses and function decline, as well as reducing overly frequent urination.

HOW TO USE

Take 2 capsules in the morning and 2 capsules at night.

TIPS AND CONSIDERATIONS

- This is essential for all men over 40.
- Cycling increases pressure on this gland and may increase the risk of nerve damage, impotence, impaired urinary flow, and other disorders. All male cyclists, especially those who experience symptoms of prostate dysfunction, should regularly use this product.
- The nutrients in PSA Caps also provide antioxidant support, help maintain healthy cholesterol levels, and help to reduce swelling.
- To assist in preventing nighttime bathroom trips, take before retiring.
- For maximum impact, product must be used daily.



INGREDIENT BREAKDOWN

Saw Palmetto Extract 40-45% (Serenoa repens) - From a creeping palm with a trunk that lies on or just below the ground surface comes a frequently used herbal treatment for enhancing prostate health. Saw palmetto inhibits 5-alpha reductase, the enzyme that accelerates the conversion of testosterone to dihydrotestosterone (DHT), reducing DHT by up to 66%. Excess DHT is responsible for undesirable prostate growth, AKA benign prostatic hyperplasia (BPH), enlarged prostate.

Beta-Sitosterol – This plant sterol inhibits 5-alpha reductase (the enzyme that converts testosterone to harmful dihydrotestosterone (DHT)) and aromatase (an enzyme that accelerates the conversion of testosterone to unwanted harmful estrogens estradiol and estrone). It improves urine flow velocity in men with an enlarged prostate while also providing anti-swelling effects in prostate tissue.

Stinging Nettle 4:1 (Urtica dioica) - The active ingredient in this herb-like shrub inhibits the ability of epidermal growth factor (EGF) to bind to its receptors in the prostate and to subsequently stimulate the growth of prostate tissue (a key underlying factor in the progression of enlarged prostate).

Graminex® G63® Flower Pollen Extract™ (Secale cereal L.) - This provides a full spectrum of nutrients found inside the pollen grain, without the allergens. It is a source of natural essential and nonessential amino acids, antioxidants, phytosterols, fatty acids, flavonoids, carotenoids, vitamins, and enzymes. Graminex® Flower Pollen Extract™ helps reduce the size and congestion of prostate cells while improving urinary flow rate and clearance.

Indole-3-carbinol (I3C) - Naturally occurring in cruciferous vegetables (broccoli, Brussels sprouts, cauliflower, etc.), I3C has powerful prostate-protecting properties.

Lycopene - This member of the carotenoid family produces the red/reddish color in tomatoes, watermelon, pink grapefruit, guava & papaya and is a powerful antioxidant that protects the DNA content of lymphocytes (cells found in the blood, lymph, and lymphoid tissues) from oxidative damage.

Phytomax

Green-food powerhouse

- Boosts energy
- · Strengthens immunity
- Contains bioavailable nutrients
 & minerals

Daily	With a meal
√	✓



Phytomax is produced from hydrilla verticillata, an aquatic plant containing high levels of vitamins, minerals, chlorophyll, and phytonutrients. Specific harvesting and production processes preserve the plant's "living" enzymes and rich nutrients for unparalleled nutrient density and bioavailability.

HOW TO USE

Take 3 capsules per day with meals. Additional doses should be taken during periods of travel or when access to high quality vegetables is not readily available.

TIPS AND CONSIDERATIONS

- A dosage of 3 capsules daily is sufficient for an athlete who consistently eats 5-7 servings a day of fresh, organic leafy green and cruciferous vegetables. If you eat non-organic, store-bought vegetables, higher doses may be necessary.
- If you do not consume 5-7 servings of vegetables per day, a 6-capsule daily dosage is recommended.
- Consistent use of Phytomax helps



improve mood, mental clarity, and quality of sleep.

• An excellent source of B-12 for vegetarians or vegans who are likely to experience deficiencies in this essential nutrient.

INGREDIENT BREAKDOWN

Hydrilla Verticillata – Also known as water thyme, Hydrilla verticillata is an aquatic plant. This water-submersed perennial herb contains an impressive profile of vitamins, minerals, enzymes, fatty acids, antioxidants, RNA, DNA, chlorophyll, and other phytonutrients.



Taralyn Summers keeps light on her feet through the trails of Twin Lakes Pass in Brighton, UT. Photo: Scott Wesemann

Boron

Natural anabolic hormone support

- · Helps restore exercise-depleted hormones
- Enhances bone health
- Helps restore libido

Daily	Recovery	With a meal
✓	✓	✓



his micronutrient is vital for the production of essential anabolic hormones—testosterone and estrogen—in both men and women. By reversing deficiencies of boron, you may improve mood and reproductive health while improving your recovery from high-volume training. It also protects bone mass and promotes prostate health.

HOW TO USE

Take 1 capsule per day, preferably with a post-workout/race meal.

TIPS AND CONSIDERATIONS

- Each capsule contains 5 mg of boron. The desirable boron dosage for athletes over 40 is 5-10 mg per day.
- Boron also helps you maintain healthy blood pressure levels, joint health, cognitive function, and healthy kidney function.
- Premium Insurance Caps contains 2.5 mg boron per seven capsules. However, high volume athletes, men and women over 40, those returning from injury, or anyone with symptoms of hormone dysregulation should use this product.



• Training-induced hormone disruption is most common during periods of high volume training and/or racing. During these times, additional supplementation is prudent.

INGREDIENT BREAKDOWN

Boron (as Bororganic Glycine) - The trace mineral boron is bonded to the amino acid glycine for superior absorption.

Proprietary Enzyme Blend (Amylase and Phytase) -These enzymes help maximize absorption.



Caroline Smith rides during the Peaceful Valley Cycle Derby of the Colorado Endurance Series.

Digest Caps

Probiotics for improved performance

- · Improves intestinal health
- · Increases nutrient absorption
- · Reduces ammonia levels and fatigue

Daily	Before a meal	As needed
✓	✓	✓





O ptimal health demands proper digestion. These effective probiotic cultures are the "good bacteria" your gut needs for proper nutrient assimilation, waste elimination, and intestinal function.

HOW TO USE

Take 1-2 capsules daily with or without food.

TIPS AND CONSIDERATIONS

- A healthy balance of intestinal flora helps prevent the ammonia produced by the digestion of protein-containing foods. This in turn may help alleviate ammonia-producing fatigue.
- Each capsule contains 2 billion cells of active probiotics.
- Digest Caps is designed for daily use under normal circumstances. If you have recently taken antibiotics or have a history of intestinal distress, we recommend two weeks of iFlora (available from many places online) as the first line of support, then doses of Digest Caps daily for maintenance.

INGREDIENT BREAKDOWN

- **L. Plantarum** A healthy bacteria commonly found in fermented products like sauerkraut, pickles, and brined olives.
- L. Acidophilus DDS-1 The strain of the probiotic L. acidophilus considered to be of the highest quality, potency, and stability.
- L. Casei A beneficial bacteria found in the mouth and intestines.
- **B. Bifidum and B. Longum** Two bacterial strains found within the human body; they are first introduced at birth through breast-feeding.



John Benham IV during his Shine Like Sable 24 Hour Ultra fundraiser. He ended up running over 100 miles with Hammer products powering him through. He raised over \$3,000. Photo: Griffin Miller

EnduroZyme

Digestive enzyme supplement

- Increases nutrient absorption
- · Supports complete digestion
- · Improves GI health

Recovery	With a meal	As needed
✓	✓	✓



E nduroZyme provides premium enzymatic digestive support. Get the most from your food, eliminate GI distress, and feel great with this product.

HOW TO USE

Take 1-2 capsules with meals, as needed.

TIPS AND CONSIDERATIONS

- The body's ability to produce digestive enzymes declines with age.
- Strenuous exercise reduces digestive capacities. We strongly recommend taking EnduroZyme with post-exercise snacks or meals, especially large meals following long/exhaustive sessions.
- Can be taken during activity as a part of a fueling protocol to support digestion and prevent possible GI distress.

INGREDIENT BREAKDOWN

Protease – Breaks down proteins into smaller polypeptide fragments (chains of amino acids) and amino acids. Also beneficial as an anti-swelling agent.

Amylase - Breaks down starchy carbohydrates (rice, pasta, potatoes, beans, bananas, etc.) and glycogen (the starch-like fuel stored in the muscles and liver), assisting in converting them into energy.

HemiCellulase – Breaks down specific types of cellulase (see cellulase below), and helps release nutrients that are bound in the cellular structure of fruits and vegetables.

Cellulase – Breaks down cellulose, the fibrous complex



that is a major component in cell walls. Also helps to free up nutrients in fruits and vegetables.

Glucoamylase – Another form of amylase that breaks down starchy carbohydrates (rice, pasta, potatoes, beans, bananas, etc.) by removing free glucose molecules from the ends of the starchy chains (not by simply breaking these into smaller chains).

Bromelain – Derived from pineapple. Breaks down proteins into smaller polypeptide fragments (chains of amino acids) and amino acids. Also beneficial as an anti-swelling agent.

Papain – Derived from papaya. Breaks down proteins into smaller polypeptide fragments (chains of amino acids) and amino acids. Also beneficial as an anti-swelling agent.

Acid Stable Protease - Beneficial as an anti-swelling agent. Breaks down proteins into smaller polypeptide fragments (chains of amino acids) and amino acids.

EnduroZyme Whole Leaf Blend -

Peppermint Leaf – Calms the stomach muscles and improves the flow of bile according to the University of Maryland Medical Center (UMM). Highly beneficial for helping alleviate indigestion.

Aloe Vera Leaf - Helps increase healthy bacteria in the intestines that aid digestion and assists in decreasing swelling in irritable bowel syndrome (IBS), colitis, and other swelling disorders of the gut.

Artichoke Leaf – Considered by many to be a "super food," the phytonutrients in artichokes provide effective relief for indigestion and upset stomach. One of the major sources of fiber found in artichokes is inulin which is a prebiotic. Prebiotics help increase the proportion of probiotics ("good bacteria") in the gut.

Read full ingredient breakdown at hammernutrition.com

Phytolean

Win the war against weight gain

- · Blocks starch absorption
- · Enhances fat burning
- · Decreases fat absorption

Before a meal	As needed
✓	✓



Phytolean increases your body's fat-burning potential, aids in the decrease of fat absorption, and blocks the digestion of starchy carbohydrates.

HOW TO USE

Take 2 capsules before, during, or after high-starch meals. If the meal is excessively high in carbohydrates, a third capsule can be taken. Use yearround as desired.

TIPS AND CONSIDERATIONS

- To lose body fat rather than muscle mass, we strongly encourage you to limit your weight loss to 5 lbs. per month.
- Phytolean should not be taken with post-workout Recoverite® or snacks, as this could slow the recovery process.
- Great for use while recovering from injury, at the end of the season, or other period of reduced activity when your appetite has not yet recalibrated to your decline in energy needs.
- Phytolean and ChitoLean can be used together. Phytolean is primarily a starch-blocker and ChitoLean is primarily a fat-blocker. When you



have a high-starch and high-fat meal in front of you, use both.

INGREDIENT BREAKDOWN

Razberi-K® Raspberry Ketones – The trademarked form of the same standardized raspberry ketones used in weight loss studies. "Ketone" refers to a naturally occurring bioactive compound found in raspberries, used to increase the body's fat-burning capabilities.

Fabenol® Max Phaseolus Vulgaris L. – This natural extract from white kidney beans is commonly referred to as a "starch blocker" or "carbohydrate blocker." It reduces the body's ability to digest and absorb starchy carbohydrates, which then instead pass through the Gl track undigested, similarly to fiber.



Steph Russell competes in the first annual Great Northern Whitewater Triathlon outside of Glacier National Park. Steph swam 4.5 miles of class III rapids, biked 6.5 miles, and finished with a 3.6-mile run. Hammer was the exclusive fuel and recovery partner for the event.

ChitoLean

Bind and block the fat. Lose the weight.

- Helps improve body composition
- · Powerfully assists fat burning
- · Promotes healthy bowel movements





Though most of us do our best to eat the healthiest diet possible, oftentimes we often find ourselves in a situation where there's too much fat in the meal. That's when it's time for ChitoLean. Powered by chitosan, an indigestible fiber, along with a strong assist from Vitamin C, ChitoLean effectively binds unwanted dietary fat and blocks its absorption. N-acetyl-Lcarnitine accompanies the formula to ensure effective fat oxidation.

HOW TO USE

Take three capsules just before, or shortly after beginning, a high-fat meal.

TIPS AND CONSIDERATIONS

- Be sure to drink at least eight ounces of water when using ChitoLean. Wait at least 4 hours before consuming healthy fats (fish oil), fat-soluble vitamins (A, D, E, K), and medications.
- Great for use while recovering from injury, at the end of the season, or other period of reduced activity when



your appetite has not yet recalibrated to your decline in energy needs.

• Phytolean and ChitoLean can be used together. Phytolean is primarily a starch-blocker and ChitoLean is primarily a fat-blocker. When you have a high-starch and high-fat meal in front of you, use both.

INGREDIENT BREAKDOWN

Chitosan is a fiber composed of chitin, from the shell of shellfish. The strong positive charge carried by the chitosan molecule causes it to bind negatively charged substrates such as fat. Chitosan effectively binds fat in the intestine, blocking absorption, and it has also been shown to lower blood cholesterol in animals and humans. Dietary supplementation with chitosan can assist with weight loss and normalization of cholesterol levels, and it may also help inhibit the formation of atherosclerotic plaque (deposit of fat and other substances that accumulate in the lining of the artery wall).

N-Acetyl-L-Carnitine is an amino acid and, like all forms of I-carnitine, it is the nutrient that transports fatty acids into cells for the production of energy. Without adequate supplies of I-carnitine, fatty acids cannot be effectively burned as a fuel source. Exercise depletes carnitine levels, as does the aging process.

Vitamin C helps activate chitosan in the stomach and intestine into a fat-absorbing gel, increasing the fat-binding effects. Research concludes. "Vitamin C increased the fecal fat excretion by chitosan in quineapigs, thereby reducing body weight gain."

Nasol

Relief is just a spray away

 Fast relief of seasonal sensitivity and congestion

· Relieves headache pain

· Non-habit forming

As needed



asol provides fast and dependable sinus relief without steroidal medication. This formula quickly and safely soothes irritation caused by the common cold, sinusitis, seasonal sensitivities, and airborne irritants.

HOW TO USE

Shake bottle well before use. (Very important!)

Spray into each nostril while inhaling deeply.

TIPS AND CONSIDERATIONS

- Nasol is the perfect complement to Clear Day, helping to alleviate the unpleasant symptoms caused by seasonal sensitivities.
- The capsaicin in Nasol may produce a light burning sensation for 2-5 seconds. This reaction is completely normal and safe.
- This natural spray is nonaddictive, nontoxic, and not tolerance-building.

Jason Poole runs through the beautiful countryside near Conifer, CO. Nasol and Clear Day are the ideal solutions to keep any seasonal sensitivities at bay so you can maintain your outdoor lifestyle.

Photo: Patti Poole

INGREDIENT BREAKDOWN

Aloe Vera Extract - The extract from aloe vera, a medicinal plant of desert origin, helps relieve pain and soothes skin irritation.

Rosemary Extract - This aromatic extract from a member of the mint family helps kill bacteria, while also acting as a natural preservative.

Himalayan Salt - Produced from the evaporation of seawater, sea salt helps cleanse and drain sinuses.

Vitamin C (Ascorbic Aid) - Helps fight infection and promotes healing.

Capsicum 4x (Capsaicin) - A micro-dose of the natural compound that makes chili peppers spicy, capsaicin aids in desensitizing sensory neurons, dilating constricted blood vessels, and alleviating pain.

Eucalyptus Oil - The distilled oil from the leaf of eucalyptus helps ease nasal congestion.



Clear Day

No side effects, just relief

- · Reduces seasonal sensitivity symptoms
- · Decreases systemic swelling
- · Reduces the need for medications





I lear Day's potent blend of natural ✓ anti-swelling, antibacterial. antihistamine antiviral. and compounds reduces and prevents the immune responses responsible for airborne allergies—without the associated side effects of medications.

HOW TO USE

Take 1-2 capsules every four hours.

TIPS AND CONSIDERATIONS

- Helps alleviate seasonal sensitivity symptoms such as wheezing, burning eyes, and nasal congestion.
- Active people are at higher risk for an airborne sensitivity response due to increased ventilation during exercise.
- This product does not cause drowsiness.

INGREDIENT BREAKDOWN

Olive Leaf Extract (Standardized to 20% Oleuropeins)

- This naturally occurring compound has anti-swelling, antioxidant, antibacterial, and antiviral properties.

Quercetin - This flavonoid, found in a variety of fruits and vegetables, possesses antioxidant and anti-swelling properties. Quercetin is touted as a natural antihistamine because it helps inhibit the release of histamines and leukotrienes.



Japanese Knotweed Extract (Standardized to 20%

Resveratrol) - Found also in the skin of red grapes and berries, resveratrol is a superb antioxidant, anti-swelling, and antihistamine compound.

Bromelain - An enzyme derived from pineapple. bromelain exhibits powerful anti-swelling and analgesic effects and increases the absorption of quercetin.



53x11 Coffee

Ride Ready

- Fair trade
- · 100% organic
- · Micro-batch roasted



C reated by cyclists, for cyclists, 53x11 Coffee is dedicated to delivering the best cup of organic. fair-trade coffee in the world. We utilize only sustainable organic. pesticide-free farms, and support trade wages and direct purchasing to give more to those growing the beans.

FAIR TRADE



The Fair Trade certification indicates that the coffee farmers receive a minimum price for their crops. (They are also paid a premium for

certified organic goods.) The coffee importer sources directly from the coffee farms and farmer groups, which shortens the supply chain and ensures the "fair price." The greater return on coffee allows the farmers to reinvest in the quality of their farms and the surrounding communities. Beyond price, Fair Trade means that the farms are safe for their workers (living wages, no child labor, etc.). It encourages sustainable farming and prohibits the use of chemicals and pesticides that hurt the environment and the crop. (Source: TransFair USA)

CERTIFIED ORGANIC



With coffee being a highly chemically treated crop, it's important to buy certified organic. The chemicals from

conventionally grown coffees are harmful to us as consumers and the workers that are faced with them every day. Our coffees are certified organic by



Quality Assurance International and abide by the U.S. National Organic Program. This means that they are grown without pesticides, herbicides, or other chemicals, which benefits the coffee producers and consumers. For larger crop yield without chemicals, the growers use sustainable farming methods (crop rotation, terracing, composting, etc.). This results in richer soil. greater biodiversity, and healthier ecosystems. Certified organic coffee not only benefits our health, but it also supports the environment. (Source: Organic Trade Association)

INGREDIENT BREAKDOWN

BIG RING 100% Organic Sumatra single-origin coffee, medium roasted, and shade-grown under a canopy of diverse species of trees that provide a viable habitat for migratory birds.

CHAIN BREAKER Signature Espresso Blend -This rich, nutty blend is equally extraordinary for espresso or drip use. The Chain Breaker consists of beans from Africa, Indonesia, and the Americas, which results in a complex, yet smooth cup.

EARLY BREAK Medium Roast "Everyday" Blend - This medium-roasted blend of Central, South American. and Sumatran beans represents a well-rounded, mildly acidic cup with a clean finish.

DOWN SHIFT Decaffeinated Espresso Blend -A decaffeinated version of our beloved Chain Breaker blend. This blend represents the four major coffeegrowing regions as well, resulting in a remarkable decaf. Decaffeinated using the Swiss Water Method.

Informative Resources



5 Secrets of Success

Possibly the most important informational tool you can own! This book distills the knowledge we've gained through over three decades of rigorous research and field testing. Put these principles to work, and you will succeed—we guarantee it! Get the answers you need to succeed with Hammer Nutrition's 5 Secrets of Success for endurance fueling, an easy-to-read FREE fueling guide that will help you Fuel Right, Feel Great!®

FREE electronic version available at hammernutrition.com/sos



Endurance News

Our free magazine, published five times per year, features insightful articles on diet, nutrition, training, and other topics of interest to endurance athletes.

- · Packed with timely & insightful articles
- Written by endurance experts
- Real stories of perseverance & triumph
- · Tips for success
- Special offers exclusively for Endurance News subscribers

FREE electronic version available at hammernutrition.com/knowledge/endurance-news

We're Social!

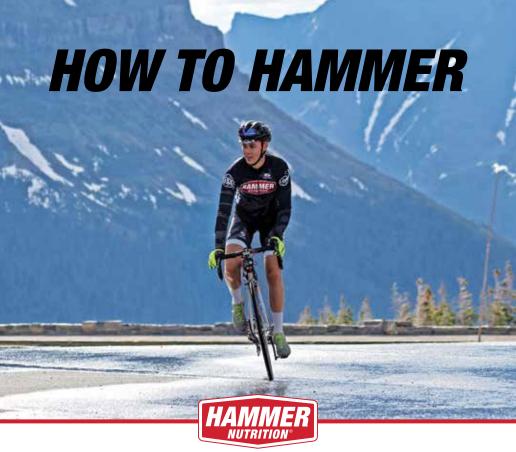
Connect with us to get nutrition questions answered, hear the latest endurance buzz, and see great photography.

Use the hashtag #HowlHammer to show us how you Hammer!









Endurance Fuels and Supplements Product Manual

How to Hammer is a small and handy resource that supplies all the vital information you need for proper application, mixing instructions (where appropriate), suggested usage, and special notes for each Hammer Nutrition product. Please keep this manual filed in a safe place, along with your copy of 5 Secrets of Success, as you will want to refer to both of these resources many times in the future.



"A GREAT READ WITH PERFECT CALCULATIONS"

"This book is another great testament to why this company goes above and beyond! Not only does Hammer Nutrition want you to succeed using their products but they want to make sure you're using them in the most optimal way possible without wasting them. A wonderful company!" - Online Reviewer

Above: Miles Frank enjoys a season-opener ride up the scenic Going-to-the-Sun Road in Glacier National Park. Montana. Photo: Drew Silvers