

# ENDURANCE

## NEWS

BY HAMMER NUTRITION

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### IN THIS ISSUE...

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## NEW YEAR RESOLUTIONS

5 GOALS FOR A FITTER,  
HEALTHIER 2015

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## PDQFKT

A NEW FASTEST  
KNOWN TIME ON MOAB'S  
WHITE RIM TRAIL

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## TOUR OF GIANTS

THE ALLURE OF A  
FIVE DAY RUN  
THROUGH THE ALPS

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# 5 FUELING MISTAKES

(you might be making)

### PLUS...

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New Hammer Apparel for 2015

Ski Mountaineering

Healthy, Nutritious Recipes

Skyrunning Takes Off

News from Hammer Athletes

**And More!**



## THE LEADOUT

### **In the cold light of day.**

The season's first dusting of snow called Hammer Nutrition athlete David Steele to the Cataract Mountain area of Glacier Park for an impromptu October hike. Read more about Steele's lofty pursuits in "Peak Adventure," page 16.

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**PHOTO: MYKE HERMSMEYER**







# WELCOME



Happy New Year! I hope this year brings you great health and sees you achieve new heights in your athletic performance. As always, we will be here to help you every step of the way.

This year marks the 28th year since I started this company in my apartment in San Francisco, and the 24th year since I launched *Endurance News*, penning every word of it myself. Much has changed in that time. Hammer Nutrition has grown from a one-man show to market leader in the world of endurance fuels and supplements, the latter being a category that I invented.

One thing will never change, however. That's my commitment to serve your needs with the most innovative and effective, highest quality, all natural products—all backed by "Golden

Rule" customer service and the information you need to succeed in your chosen sport.

## New for 2015

Speaking of success, the first big thing for 2015 is our newest educational resource—*The 5 Secrets of Success*. This 24-page book is available as a free PDF download from our website right now. We'll also include a free print copy in every order we ship for at least the first six months of this year.

I created *The 5 Secrets* in response to your feedback on our existing educational resources. It distills everything we know about fueling for athletic success into five key components—pre-exercise calorie timing; caloric intake, fluid intake, and electrolyte intake during exercise; and post-exercise refueling. Whether you are a longtime follower or new to the Hammer way, this book will make it all clear to you. Invest just 20-30 minutes to read it, and you'll be a fueling expert too! As with everything we do, I welcome your feedback.

Also new this year are the look and feel of this publication. Our creative team has taken it up several notches in terms of design, content, readability, and more. New feature articles, higher quality photography, and expanded customer-driven content are just some of the improvements you'll enjoy. You can also look forward to more improvements with each issue. We're eager to hear from you, so please be sure to shoot us a note. Better still, send us your story for the next issue!

Enjoy the read, then please recycle by sharing this issue with a friend.

**Brian Frank**  
Hammer Nutrition Owner

### On the cover:

Rose Grant hammers to a 4th place women at the Whitefish Whiteout.

Photos: Myke Hermsmeyer



The San Francisco apartment where it all started!  
Photo: Brian Frank

## ENDURANCE NEWS

The informed athlete's advantage since 1992

AN EXCLUSIVE PUBLICATION OF:



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### MISSION

*Endurance News* provides informative, inspirational content to help endurance athletes like you achieve peak performance and health. The views expressed favor a healthy diet, hard training that emphasizes quality over quantity, and prudent supplementation to improve health and performance. Back issues are available at: [www.hammernutrition.com](http://www.hammernutrition.com)

### CORE VALUES

**Five-Star Service:** From day one, we've strived to treat every client the way we want to be treated: fairly, honestly, and individually. Your trust is our top priority.

**Innovation:** Our development of new, cutting-edge products and categories has led the field since 1987.

**High Quality:** Our consumable products are researched, tested, and made in the USA to the strictest standards.

**Education:** We educate and empower athletes with free, easily accessible information on health and performance.

**Principles before Profits:** Profits never take priority over our values. If it says "Hammer Nutrition," it's good for you.



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26



18

**FEATURES**

January / February / March 2015: Issue 93

**10 / Runner's High**

Epic challenge and spectacular views draw more athletes to skyrunning.

BY HILLARY ALLEN

**14 / 5 Fueling Myths Busted**

Avoiding these common mistakes will help ensure race day success.

BY THE ENDURANCE NEWS STAFF

**16 / Peak Adventure**

Ski mountaineering offers high-altitude fun for those up to the challenge.

BY DAVID STEELE

**18 / 5 Key New Year Resolutions**

Make these changes now for better health and performance in 2015.

BY BRIAN FRANK

**28 / Bee-Ware!**

Don't bee-lieve the hype. As an endurance fuel, honey is NOT so sweet.

BY STEVE BORN

**30 / Vitamin E**

This powerful supplement lowers blood pressure and prevents pneumonia.

BY STEVE BORN

**32 / Position Yourself for Success**

Strengthen, tone, and increase endurance with yoga cross training.

BY MARIA MASLANKA

**34 / Training for Ultra Success**

This basic training plan gives you the tools to go the distance.

BY JOHN FITZGERALD

**40 / NEW Products for 2015**

You'll love these latest additions to the Hammer line-up!

BY THE ENDURANCE NEWS STAFF

**50 / Hammer-Boosted Goodies**

Skip the candy! Treat your body to these healthy, easy-to-make foods.

BY VICKI HACKMAN

**54 / Powering Up Aasgard Pass**

Two determined, Hammer-fueled hikers conquer the killer trail.

BY EMILIE MORESHEAD

**56 / Hell Hike and Raft**

Eleven adventurers accept the challenge... and live to blog about it.

BY TARA OSTER

**72 / Tour of Giants**

The allure and reward of a five-day run through the Alps.

BY JASON POOLE

**80 / Glacier Preservation Project**

One family's memorable journey in wilderness conservation.

BY SETH EAGLETON

**REGULARS**

4 / **Publisher's Note**

6 / **Starting Lines**

8 / **#howihammer**

12 / **Teams: Marian's Super Year**

20 / **The Atypical Athlete**

22, 26, 42, 44 / **Provisions**

24 / **Ask Hammer Nutrition**

36 / **EMS: Neuromuscular Inhibition**

48 / **Coffee: Love Your Liver**

52 / **From the Kitchen**

58 / **Athlete Spotlight: Kelly Agnew**

60 / **Aid Station**

62 / **Record Setters**

64, 66 / **Events**

68 / **Hammer International**

74 / **From Our Athletes**

82 / **Finish Chute**

## Adventuring with Hammer

Just wanted to update everyone about my summer of adventure. I was all over the place — from mountain running through Montana, Wyoming, Idaho, Colorado,



Utah, Arizona, and Washington state to fly fishing and mountain biking in the Bob Marshall Wilderness. Wherever I went, Hammer Nutrition was part of my travels. Riding at the top of the Bridger Ridges outside Bozeman, MT, my Hammer wind

jacket kept me warm and dry ... an awesome piece! When I ripped my knee open during my mountain run, I ate my Cashew Coconut Chocolate Chip Hammer Bars to keep me energized and then duct taped the wrappers around my leg to stop the bleeding. It worked great, and my knee healed nicely! I was even wearing my favorite Hammer visor when I got engaged in the Bob Marshall Wilderness!

**BRANDYN ROARKE** / HAMMER ATHLETE



### Hammer on!

We love hearing from our clients! Drop us a line and share a tip or tell us about your latest adventure. You can also stay in touch with us and other Hammerheads via social media (see page 8). Please send your letters and comments to [letters@hammernutrition.com](mailto:letters@hammernutrition.com)



## Against the wind

The Pike's Peak Hill Climb (14,115 ft.) is a badass climb, but when you add 50-mph winds, heavy fog, and 30° F temperatures, you have a serious race not only against other competitors, but also against mother nature. I've never seen so many hypothermic people in one place! From about 13K to the summit, hard rime ice covered everything but the road. I could hear people behind me falling off their bikes. Many (including me) were forced to walk part of the way due to the intense headwind. But I got back on my unicycle after a short distance and summited this beast in 2:45, one of just 96 finishers (the rest were all bicyclists) — with 75 DNFs. It was an incredible experience on an iconic mountain. Thanks to Hammer Nutrition's HEED, Perpetuem, and Endurolytes, I felt solid throughout.

**MIKE TIERNEY** / HAMMER ATHLETE

## Unprecedented service

Thanks so much for your help. It's unprecedented to get such personalized attention from a company. I definitely know where I'll get ALL such products in the future. I used Hammer Gel and HEED throughout my training, and I will be using them again during my first marathon.

**KEN** / CLIENT

## In the kitchen with Laura

Thank you for including "From the Kitchen of Laura Labelle" recipes in *Endurance News*! I look forward to seeing the new ideas each issue and to trying them out. My current favorite dessert recipe is her sugar-free, gluten-free, vegan cookies with bananas, coconut, oatmeal, and other goodies. I often get requests from friends and family to make more of them. When I saw the Vegan Huck-leberry Cookies recipe in your last issue I was eager to try them too. My Christmas gift packages included both of them! Please keep the delicious and healthy recipes coming!

**JENNIE** / CLIENT

*Editor's note: Our 100-page cookbook includes the above recipes and dozens of others — all delicious, healthful, and easy to make. Search "cookbook," at [www.hammernutrition.com](http://www.hammernutrition.com) and download your FREE copy today!*







### Hammerin' the Hunnerd

Thank you for sponsoring the Pumpkin Holler Hunnerd! I just started running five months ago and completed my first 50K. I learned so much about nutrition from the other runners during this race. I was carrying only water bottles — no fuels or electrolytes. Fortunately, I had several choices of Hammer products at aid stations, thanks to your sponsorship. Now I'm looking forward to a 100 mile race, or possibly longer.

JEREMY / CLIENT

### 23 years and counting ...

I am one of the luckiest guys in the world! I get to coach cool, inspirational athletes and fully live the triathlon lifestyle. Since 1992, when I became a Hammer athlete, I've used your products exclusively. I can unequivocally state, they are extremely effective, and have helped me be successful. My all-time favorite product is Perpetuem Caffé Latte. I use it on all my training and racing rides of 1 hour or more. After right knee surgery last January, I'm now running as well as I have in many years.

JEFF CUDEBACK / HAMMER ATHLETE



### Spot-on fueling for a new PR

What a day at the Missouri Cowbell Marathon! I gave it everything I had and finished with a big PR of 3:06:25 (4th AG). Fueled by Hammer Gel, Perpetuem, and Endurolytes Extreme, my nutrition was SPOT ON. I was steady all day and had the best race of my life. A lot of fast, young guys were out there, and I was on a mission to be one of them. Everything from my kit to my fuel performed amazingly well. I couldn't have done it without you. Thanks for the support!

LUKE SINAK / HAMMER ATHLETE

### Perpetuem goes the distance

I am a total convert to the benefits of Perpetuem! I'm 66 and in good shape but I really saw a difference with the 5-hour bottle of Perpetuem that I mixed for a hike up White Mountain Peak in California recently. It was the only food source I brought with me. I did the 3,500-ft. gain, 15-mile round-trip in 5 hours and 1 minute! Felt great during and after it. Thanks so much for the great products!

DAVE P. / CLIENT

### Newfound energy for high school athletes

As a marathoner and high school football coach, I am a huge fan of Perpetuem. After experiencing great results by fueling with it in four marathons, I encouraged a core group of boys on the football team to use Perpetuem before and during practices and games. The effects were amazing! The other coaches and I noticed a big increase in the boys' energy levels. Next season, I plan to add Endurolytes and Recoverite to the regimen. I'll visit you folks at Hammer when I make it to Montana!

DAVE W. / CLIENT

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# #howihammer

PHOTOS, FEATS, AND WORD ON THE STREET FROM HAMMER NUTRITION SOCIAL MEDIA

## Overheard ...

*"I gotta tell ya, Orange-Vanilla Recoverite is THE most refreshing thing after a run."*

*"Your products continue to amaze me even after a decade of using them!"*

*"I am stoked to have @hammernutrition fueling my races this winter!"*

*"No hyperbole — Nocciola is the BEST Hammer Gel I've ever had!"*

*"#nutsaboutnocciola"*

*"2014 totals: 26 mtb/cx/road races, 13 top 5, 9 podium, 5 wins! Thanks @hammernutrition"*



@hammernutrition



facebook.com/hammernutrition



@hammernutrition



@dfatherstone



### An expanded outlook

Devin Featherstone and his faithful running partner Stevie, a rescued pit bull, take in the views from Alberta's Northover Ridge area. Known for its technical alpine trails, Northover rewards the adventurous with truly stunning scenery. The photo won top honors in the @hammernutrition and @UltraSportsLive "Running Moment" photo contest.



@krudmeister



### Human-powered triple crown

Long-distance adventurer Adam Bradley, who set the 2009 Pacific Crest Trail unsupported speed record, embarked on a new adventure in June. Bradley seeks to be the first person to connect the three major wilderness trails in the United States, and the terrain between, using only his own power. Follow his entertaining exploits online: <http://krudmeister.blogspot.com/>



### Caption it!

We asked Facebook followers to caption this photo and picked a lucky winner to receive a Hammer Nutrition prize pack. Follow us there for more fun contests!

*"T2 turned out to be farther north than Glenn had expected."*

*"Because you could never go to work on Monday and say you bailed on a race."*

*"Laundry day."*

Hammer Nutrition  
Client Advisors from  
left: Andraya, Denise,  
Brittani, Steve,  
Nathan, Megan



# AT YOUR SERVICE

## IT'S ALL ABOUT YOU!

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BY BRIAN FRANK

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Since the very beginning when the 800 number rang on our home line in our little apartment in San Francisco and Soni and I answered the phone no matter when it rang — during dinner, in the middle of the night — I've never lost sight of the fact that this business is all about you.

A lot has changed in the last 28 years, and we've grown quite a bit, but my commitment has not changed one iota. That is why it pains me to admit that in the past few years, much of my former staff working in Customer Service lost sight of the forest through the trees, as the saying goes. Many of you reading this know what I'm talking about. I sincerely apologize.

Which is why we have a whole new crew of Client Advisors, led by none other than Steve Born. He's on the phone, taking orders and doing "mini" fueling clinics with clients all day, Monday through Thursday. I'm available too; all you have to do is ask. Whether you speak directly to Steve, me, or one of my well-trained staff, we'll be sure you get what you need, and nothing less, whether it takes 5 minutes or an hour.

Twenty-six years ago, when Steve was doing RAAM and trying to figure out his nutrition and fueling, I spent hours on the phone with him going over every detail, on many occasions, until he had it all figured out. With the resources we have in place now, like our new guide, *The 5 Secrets of Success for Endurance Fueling*, and our website, you can certainly do a lot of study and research

on your own. But sometimes you just need to talk to someone. That's where we come in.

I call our customer service team members "advisors" because they are not just order takers. They are here to help you in any and every way they can. Our goal is to eliminate nutrition and fueling as a variable or weak link in your training, preparation, and competitions, period. I promise you that when you call our offices, you'll get the treatment you deserve, along with the products and knowledge you need to succeed.

In the end, I know it's all about you ... always has been, always will be. When you succeed, we succeed. We're standing by, ready to be of assistance, so give us a call. You won't be disappointed.  
**800.336.1977 [HN]**

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"Please tell Steve his nutrition advice was 'spot on' for my Ironman AZ race. We spoke twice before the event. Even though big wind was taking racers to a walk, I was able to keep running. I PR'd the bike even under those conditions. I placed 19th out of 112 in my AG. Thanks Steve!" - **Sandy Logan**

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# RUNNER'S HIGH

## Epic challenges draw adventurous athletes to skyrunning

BY HILLARY ALLEN

Although I had heard of skyrunning in Europe — running ultra distances over technical terrain with crazy elevation gains of at least 3,000 meters — I never anticipated running a series of these races across the U.S. last year.

But when I learned that the U.S. would be launching its own Skyrunner Series in 2014, I became interested. I love uphill running, and I live just a short drive away from Colorado's high country, where I can get in a lot of vertical training. The technicality is an added bonus; sky racing demands both concentration and a sense of playfulness. So last season I

leaped into sky racing and ended up falling in love with the demanding terrain that defines these ultras. Here's a recap of a few of my favorite 2014 sky races:

**Speedgoat 50K** (4th place female), my first skyrunning ultra, was my crash course. With 11,000 feet of vertical over 33 miles, Speedgoat did not disappoint. The course had almost no flat sections and required a ton of off-trail "running." (I felt more like I was throwing myself down the mountain at times rather than running!) It included exposed ridgelines and dried up riverbeds with loose rocks ... so much fun!





**Run the Rut 50K** (5th place female), the World Championship for the Skyrunner Series, held at Montana’s Big Sky Resort, was next. Some great competition showed up to run the technical talus fields up, down, and over Lone Peak. This race most closely resembles skyrunning in Europe, and I can’t wait to run it again — if only as an excuse to return to Montana.

**Flagstaff 55K** (1st place female), the U.S. Skyrunner Series finale, featured a very different course. The biggest climb of the day was at mile 31 — 2,000 feet in 2 miles and 2,000 feet straight down to the finish. This, after already climbing 8,000 feet. It’s challenging to stay focused in these situations!

But those moments also make it fun. Pushing myself, wondering if I can make a climb or descent, then feeling so proud crossing the finish line makes me want to come back for more. I plan to run as many sky races as I can in 2015, and I am most excited for the Mont Blanc 80K in France. **[HN]**

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Hillary Allen began road running three years ago in graduate school. Last year she discovered trail running and ran her first ultras.

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**Clockwise from opposite:**  
Topping out on Lone Peak in 5th place at the 2014 Run the Rut 50K.

Scrambling along Headwaters Ridge at The Rut, trying to hold Ellie Greenwood at bay.

A quick rest during a training run on the Flatirons above Boulder, CO.

Descending the ridgeline off Mount Baldy at the 2014 Speedgoat 50K near Alta, UT.  
Photos: Myke Hermsmeyer

## How Hillary Hammers

For each race, I used essentially the same nutrition plan. Hammer Gel is my go-to fuel, and I consume 2-3 per hour. I drink water and begin replenishing electrolytes early with Endurolytes Extreme (especially useful in hot conditions). On steep uphill sections when I’m power hiking and want a break from gels, I incorporate Hammer Bars. After each race, I refuel with a Recoverite smoothie and HEED.

## U.S. Skyrunning grows

The 2015 U.S. Skyrunning Series will expand to 19 races with \$50,000 in total prize money. “I’m excited to bring the original skyrunning concept to the U.S. with some of the most exciting races around,” says series director Ian Sharman.



# HAMMER FUELS KNIGHTS CYCLING TEAM TO ANOTHER CHAMPIONSHIP YEAR

BY THE ENDURANCE NEWS STAFF



Photo: Marian University Cycling Team with Coach Dean Peterson and the women's team pursuit athletes. Courtesy of the Marian University Cycling Team.

The Marian University Knights Cycling Team wrapped up another incredibly successful season with Collegiate Division I Regional and National Championships in cyclocross, BMX, road, track, and 2013-14 Team Omnium — all fueled by Hammer Nutrition. At the Cyclocross Nationals, held recently in Austin, TX, the team garnered its fourth straight national cyclocross championship and its 27th national championship overall.

The track championship — the Knights' ninth straight national title — was especially sweet, as the team earned it while hosting the 2014 USA Cycling Collegiate Track National Championships. The team narrowly missed first in MTB, after a fierce battle with the University of Colorado and Ft. Lewis College at MTB National Championships.

Led by head coach Dean Peterson, the central Indiana team numbers about 60 student-athletes from 28 states and four countries. The coaching staff talked with us about the season.

*EN: Balancing classes and training at a high level must be tough for your athletes. What does a normal day look like for a Marian University Cycling Team athlete?*

Marian: School is the priority. Most take 15-20 credit hours, which leaves plenty of time for training and recovery. But good time management skills are a MUST. You fit in rides when you can—sometimes in the early morning, sometimes late, sometimes group rides and other times individual intervals. It all depends on the schoolwork load, time of year, and their other campus activities such as show choir, student government, peace and justice club, etc. Some riders live together, which allows them to share nutritional ideas and to cook, train, and study together.

*EN: Frequent travel to races can make healthy eating difficult. How does the team maintain good nutrition on the road?*

Marian: For big trips (like national championships), we try to rent a house locally and cook together instead of staying in a hotel and eating out. No matter where we are (bus, house, hotel, or our indoor facility), we always have our “Hammer spot” with products to keep energy and hydration levels high.

*EN: What kind of Hammer products do the team's racers use?*

Marian: We're big on what goes into the tank before, during, and after races. Hammer products help us meet all of those needs for a wide variety of athletes. Recoverite, Hammer Gel, and Hammer Bars are the most popular. We let the riders figure out what works best for them.

Their needs can vary depending on the event. On MTB weekends, the cross-country racers need a liquid fuel mix and an energy bar for longer races. During a slalom tournament or downhill run, which are just short bursts of effort followed by significant downtime, our gravity riders need extended hydration and quick energy, such as from Hammer Gel — which is also useful for the short track XC efforts.

*EN: What are the team's goals for 2015?*

Marian: It can be a long year for collegiate riders: Many begin racing in February, continue road season through September, and then get into MTB and cross, balancing collegiate, trade team, and the national team. We try to maximize training over the winter and use racing, training blocks, school schedules, and smart travel to get good rest at the right times.

Our primary 2015 goals for road and BMX are to win the MWCCC conference title, as that takes the full team and is our “regular season.” Then, we have our targets on being as well prepared as possible to be a top-3 team at National Championships.

## HOW THE KNIGHTS HAMMER

“When I get back from a hard ride and have only 30 minutes before class, I head right to my Recoverite to maximize my recovery,” says senior cyclist Danny Gerow. Gerow also loves Hammer Bars, especially Chocolate Chip. “If I've been on the bike earlier, often I grab one to avoid bonking during class. They digest quickly with a lot of nutritional punch.”



# Happy to report rapid recovery!



Hi Hammer Folks,

In June, I crashed my bike and suffered a broken hip. Shortly after surgery, I contacted Hammer Nutrition for rehabilitation guidance. Steve Born suggested several products, including Tissue Rejuvenator.

Tissue Rejuvenator's ability to reduce pain and inflammation was incredible! By taking 4 TR capsules per day, I was able to greatly reduce my need for over-the-counter pain medication. Even my doctor was surprised by my rapid healing. I was allowed back on the stationary bike just six weeks after the crash, and at 12 weeks, the doctor allowed me to return to outdoor biking.

I have no doubt that a structured rehab program and superior Hammer Nutrition supplementation led to my quick recovery. In addition to TR, I used Hammer Vegan Protein, Race Caps Supreme, Mito Caps, EndurOmega, Super Antioxidant, AO Booster, and Premium Insurance Caps. I plan to train aggressively this winter, and have already set goals for the upcoming racing season. You can bet that Hammer Nutrition products will be key to achieving those goals!

Corky Semler

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# 5 FUELING MYTHS, BUSTED!

**Don't be myth-guided; avoid these common mistakes and experience race day success**

BY THE ENDURANCE NEWS STAFF

**M** yths arise when humans attempt to make sense of mystery, to compartmentalize complex ideas. They persist because they are compelling and at some level appealing. Exercise fueling is no exception to the draw and staying power of well-intentioned but ultimately misguided advice. We need water, so more must be better, right? Wrong. Our body needs fuel, so shouldn't we fill our stomachs? No! We're here to guide you through the wasteland of bad science and misinformation. Here are five common fueling myths, BUSTED! Want more easily-digested nuggets of endurance fueling wisdom? Check out the Hammer Blog at:

[www.hammernutrition.com/blog](http://www.hammernutrition.com/blog)

## **Myth #1: Drink as much fluid as possible during exercise.**

Wrong! Drinking too much fluid during exercise will impair performance, and could even result in potentially life-threatening water intoxication (dilutional hyponatremia). Instead of trying to replace all fluids lost during exercise, drink an amount that your body can readily process and that will keep you adequately hydrated.

**Recommendation:** 20-25 ounces (approx. 590-740 milliliters) of fluid per hour. Lighter athletes in cooler conditions might need only 16-18 ounces per hour, while larger athletes in warmer temperatures might need up to 28 ounces hourly. Remember that the risk of hyponatremia increases substantially when an athlete repeatedly consumes more than 30 fluid ounces per hour.



## **Myth #2: Candy bars or other simple sugar products are a good fuel.**

Wrong, wrong, wrong! Neither candy bars nor "sports fuels" that contain simple sugars (fructose, sucrose, glucose, etc.) provide adequate energy during exercise — and they certainly won't help you reach the finish line faster. The truth is, they most often lead to energy crashes, stomach distress, and bonking. Simple sugar-based products must be consumed at very calorically weak concentrations to be digested efficiently.

**Recommendation:** Fuel with complex carbohydrates, preferably maltodextrin. To get the proper amount of easily digested calories, rely on fuels that use complex carbohydrates (maltodextrin is ideal) only, with no added simple sugar. Hammer Gel and HEED are perfect for workouts and races up to 2 hours, sometimes longer under certain circumstances. For extended workouts and races, select Perpetuem or Sustained Energy as your primary fuel. The maltodextrin in these products provides rapid, sustained energy — without the flash and crash of candy or simple sugar-based fuels.



**Myth #3: To stay energized during exercise, stoke your body with at least 300 calories per hour to replace what you're burning.**

Nope! Athletes who try to replace “calories out” with an equal or near equal amount of “calories in” usually suffer digestive maladies, painful cramping, and poorer than expected performance. Body fat and glycogen stores easily fill the gap between energy output and fuel intake, so it’s detrimental overkill to attempt calorie-for-calorie replacement.

**Recommendation:** 150-180 calories per hour is typically sufficient for the average size endurance athlete (approximately 160-165 pounds). Lighter weight athletes (<120-125 lbs.) may need less, while heavier athletes (>190 lbs.) may need slightly more on occasion.



**Myth #4: Salt tablets will help prevent cramping during exercise.**

Um, no. Athletes who fail to replenish electrolytes will impair their performance, and may incur painful and debilitating cramping and spasms. But salt is not the answer! Salt tablets (and sodium loading in any form): 1) provide only sodium and chloride — just two of the electrolytes your body requires; and 2) can oversupply sodium and overwhelm your body’s natural ability to regulate this electrolyte with potentially dangerous consequences.

**Recommendation:** Replenish electrolytes with the chemical-free Hammer Nutrition Endurolytes family of products. They are an inexpensive, easy-to-dose, and easy-to-consume way to get the full spectrum of necessary electrolytes. Use them consistently during workouts and races to fulfill this crucial fueling need.



**Myth #5: Always fuel up with a hearty breakfast before you exercise.**

NOT a good idea! The goal of pre-exercise calorie consumption is to top off your liver glycogen, which has been depleted during sleep. You can’t add anything to muscle glycogen at this time, so stuffing yourself is counterproductive, especially if you’ve got an early morning race start. A sure way to deplete hard-earned glycogen stores too rapidly is to eat a meal (or energy bar, gel, or sports drink) an hour or two before the race.

**Recommendation:** Consume 300-400 calories, no later than 3 hours before exercise. Look for easily digested, low-fiber complex carbs (not oatmeal) and a small amount of protein. Good choices include a banana and 1 cup of yogurt, Cream of Rice cereal topped with one serving Hammer Gel, or half a skinless baked potato topped with plain yogurt. If it’s not possible to finish your meal 3 hours before the event, have a small amount of easily digested complex carbs, such as a Hammer Gel, 5-10 minutes before the start. Either strategy will help top off liver glycogen stores without negatively affecting the way your body burns its muscle glycogen.





## Ski mountaineering blends disciplines and tests limits

BY DAVID STEELE

Most folks think of skiing in its downhill version, with lifts, lodges, ski patrol, and hot chocolate just minutes away. Ski mountaineering (also known as “skimo”) is different. Instead of riding to the top, you walk, climb, skin, and thrash your way up through ice, dense forest, or waist-deep snow. Then you navigate those harsh conditions all the way back down, skiing on very tired legs.

You must choose a route that will maximize your safety from ever-present avalanches and other hazards of a volatile mountain environment. Pay close attention to the drop-offs below. And be prepared to set an anchor and rappel through icy crux ...

Such difficulties require several well-developed skill sets, but that blend also brings considerable benefit. Ski mountaineering allows me to play in the mountains, retreat quickly if necessary,

and swoop (instead of slog) back down the mountain. When everything goes well, it’s a whole pile of fun.

### Cold mountain fueling

Fueling in frigid temperatures can pose unique challenges but Hammer Nutrition offers some really great solutions. In the cold, thirst often doesn’t kick in to remind you to drink. To stay hydrated and replenish electrolytes, I add Endurolytes Fizz to the snowmelt

I’m drinking. It tastes good even in lukewarm to hot water. For consistent energy, I like Hammer Bars, which have a much lower freezing point than any of the competitors’ bars I’ve tested. They’re a great touring snack. To meet my protein needs, I chew on Perpetuem Solids both in camp and while moving.

Along with backcountry skiing, ski mountaineering continues to draw converts from alpinists (who are already solid mountaineers but haven’t



## Crushing Vertical

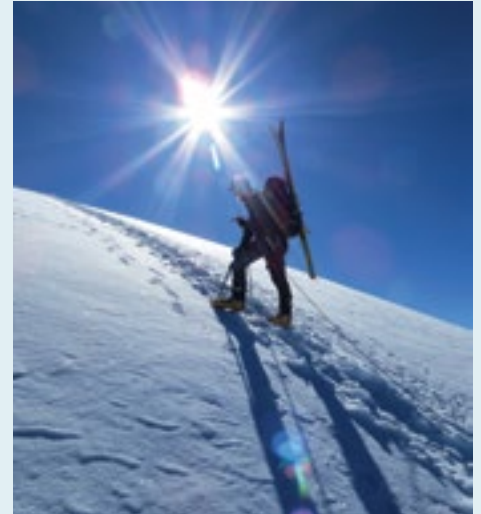
A 20-day midwinter ski tour on the brink of the Arctic Circle — with  $-0^{\circ}\text{F}$  temperatures, blistering winds, and only glimpses of daylight — will put your body through the wringer. Choosing the correct fuel and having easy and convenient access to it are critical.

Perpetuem Solids was our primary fuel source for our Alaska ski tour. The solids' convenient size provided quick access to all-day energy right out of the pocket — extremely beneficial when stopping to take off gloves to dig through a backpack isn't an option. When feeling mentally and physically drained on the final climb at the end of the day, I supplemented with Montana

Huckleberry Hammer Gel. It provides instant motivation to push on, and quickly raises my blood sugar level to give me the energy to finish strong.

The phenomenal fuel-to-weight ratio of Hammer Gel and Perpetuem Solids even warrant them a place in my first aid kit. I've since used both as a primary source on climbs in the high Cascades, tours throughout the Rockies, and 10,000+ vertical foot quad-burning assaults in Ecuador. As a backcountry skier, high motivation and the right fuels help me to keep crushing vertical, day after day after day in the high alpine!

*-Blake Votilla*



Blake, fueled by Perpetuem on an October tour in Ecuador.  
Photo: Daniel Soupir



developed their skiing skills) and skiers (who may be proficient in their turns but aren't sure how to set anchors or travel safely in glacial terrain). Either way, the challenges offer great opportunities for learning. I've developed climbing/skiing partnerships with friends who are older, faster, and more experienced in the mountains than I am. Building on their knowledge has saved me from making the same mistakes. This winter, I'm supplementing that with formal avalanche education and wilderness first aid training. **[HN]**

David Steele is a professional skier, mountaineer, and writer hailing from Northwest Montana. When not pulling pine needles out of his skin glue, he enjoys vegetables, literature, and a good nap. Follow along at [www.skinningwithbearspray.com](http://www.skinningwithbearspray.com) or @davidpowdersteele on Instagram.

Main Story Photos: Myke Hermesmeyer

# 5 KEY RESOLUTIONS

**Make these changes now for better health and athletic performance in 2015**

BY BRIAN FRANK

The new year is a perfect time to refocus on health and to set goals that will help you enjoy improved athletic performance. Here are some of my favorite resolutions. Adopting any or all will have profound positive effects:

**1. Drink more water.** If you are not drinking 1/2 ounce of fresh water per pound of bodyweight daily, you are living in a state of constant dehydration. This is not conducive to optimal health or athletic performance. Chronic dehydration strains your organs and increases joint stiffness, risk of injury, and additional problems. Increase your daily fluid intake by 12 ounces per week until you reach your target. Start each day with a tall glass of water upon rising; consume water gradually throughout the day, ceasing intake 1-2 hours before bed.

**2. Eat less sugar.** Americans reportedly eat more than 150 pounds of sugar per year on average, and athletes who consume sugary products in training can double this number. Sugar is a leading contributor to the epidemic diseases we face as a nation. Aim for a more reasonable intake of 20 pounds per year. Don't think that it's OK to consume sugar because you are an athlete. No one gets a free pass. Check labels. Anything from a package or can should contain less than 20% of total carbohydrate calories from sugar, especially sports products.

**3. Eat less salt.** Americans consume 8,000-12,000 mg of sodium per day on average, and this number can easily be higher for athletes who use high-sodium electrolyte supplements and drinks. For optimal health and performance, limit your daily intake to no more than 2,500-3,000 mg. High sodium diets are directly linked to high blood pressure, heart disease, and a host of other maladies. If you sweat profusely and/or develop salt stains on your clothing and skin, you're consuming too much sodium. Reducing the sodium in your diet will make you healthier and vastly improve your heat tolerance while exercising, guaranteed.

**4. Eliminate artificial ingredients.** Artificial sweeteners, colors, and flavors are common in foods and sports products even though they are toxic. No one can argue that point. Proponents simply claim that the amounts are so low that they won't really harm you. Not true. Over time, the cumulative effects are a health hazard, pure and simple. Read labels and avoid products that contain any artificial ingredients.

**5. Take vitamins.** If you aren't currently taking a high-quality vitamin/mineral supplement, your body is deficient in key nutrients. Many doctors and nutritionists claim you don't need to take vitamins if you eat a "balanced diet," but where's their proof? Research? There is none. The "balanced diet" is a myth — it does not exist. **[HN]**





# Not **JUST** for race day!

The endurance enhancing benefits, general health benefits, and potential anti-aging benefits derived from Race Caps Supreme are cumulative. We recommend taking this product year-round and on a daily basis to benefit your overall health and performance.



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- Increases workload capacity
- Enhances energy and endurance



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Purchase Race Caps Supreme and receive a FREE packet of Hammer Whey\*.  
Promo code EN93RCS. Limit one. Offer expires 2/28/15. Valid while supplies last.  
*\*If you prefer a specific flavor, please indicate your choice in the "notes" section of your order.*



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## Dek hockey goalie

BY PATRICK S. KOCHANOWSKI

In 1996, before I knew about Hammer Nutrition, I completed the Pittsburgh Marathon but hit the wall so hard at mile 21 that I would have had to die just to feel better.

In 2007 I caught the distance bug again and started training for my first ultra marathon, but this time I did some research and found Hammer products. Using Hammer Gel, Endurolytes, Perpetuem, Anti-Fatigue Caps, Tissue Rejuvenator, and Recoverite, I successfully completed both a 50K and 50-miler with a smile on my face. Over the next few years, I also completed the 350-mile Great Allegheny Passage, competed in ultra MTB and obstacle course races, and achieved the rank of Third Degree Black Belt in Tae Kwon Do, all fueled by Hammer.

Now I compete in adult dek hockey — an organized form of street hockey played with a hard plastic ball on a perforated plastic dek (not deck). As goalie, I use HEED, Hammer Gel, and Energy Surge to keep my 47-year-old body strong and alert throughout the entire game. For additional support after and between games, I take Recoverite, PSA Caps, Super Antioxidant, Tissue Rejuvenator, and REM Caps.

Goaltending is often called the most important position in hockey. Although it might not look difficult, if you watch the game closely you will see the goaltender constantly moving, which is all the more difficult due to the weight of equipment. Everyone should try it just once to see how hard it really is ... but I absolutely love it.

Hammer lets me do a much better job of stopping the ball when my team (the Heavy Wristers) is on the penalty kill and I'm facing a flurry of shots from all directions as the last line of defense. Thank you for making the products that make my life better both on and off the dek.

Dek hockey goaltending demands focus and stamina, says Kochanowski.

Photo: Courtesy of Patrick S. Kochanowski

# The atypical [Hammer] athlete

In each issue of *Endurance News*, we highlight some of the less conventional ways athletes use our products. From professionals in the firefighting business to adventurers doing things the rest of us only dream about, Hammer Nutrition customers use our products far and wide. Hammer's atypical athletes prove that the importance of smart fueling and nutrition applies to far more than cycling and running!



## Sabiq Arabian Ranch

BY CAROL GILES



As endurance riders, my husband, Ron Sproat, and I routinely compete in 50- to 100-mile races. Combined, we've raced more than 21,000 miles. Endurance riding often requires long hours in the saddle and, at times, walking or running on the ground to allow your horse to rest. It's not unusual for a 100-mile race to last 10-16 hours or longer.

For such distances, finding a way to replace electrolytes and provide a source of energy is essential. We've used a number of other products but found them either too sweet or too salty, or they had a bad aftertaste. Now, thanks to Hammer Nutrition products, we FINALLY have the endurance fuels we need.

We use HEED, Perpetum Solids, and Endurolytes tablets during races. We find them very palatable. Not only do these products keep our electrolytes replenished and balanced, but they also provide a constant and steady source of energy throughout the day. After the ride, we use Recoverite to speed muscle recovery. We are truly amazed at how much faster we are able to return to full work after a strenuous ride. Thanks for the wonderful products!

BY CELENA PENTRACK

I work for Sabiq Arabian Ranch, owned by Carol Giles and Ron Sproat, who are top competitive riders in the Pacific Northwest. Soon after they discovered your products they introduced them to me, and now I am a firm believer, too.

I've always had very sensitive digestion, and I often experience hard energy crashes. To deal with this I used to try to eat a snack every hour. During races, when we trot or canter for up to 16 hours a day, electrolytes and smart food choices are key.

A few months ago I was loading my water bottles for a 50-mile race the following day. Carol offered me some HEED and Perpetum for my bottles since I had forgotten my regular electrolyte tabs. The next day I realized several things: It was good. It satisfied my hunger. And, most exciting, I had NO crashes! My energy level was perfect the entire day, even though I had not eaten anything else. I could not believe it. I had struggled with this for so long, but with HEED and Perpetum I felt great!

I generally don't go overboard about a product, but these products tipped my Richter scale. Now I drink HEED daily while working on the ranch and I no longer deal with scary food crashes. I use Perpetum on race days, and then follow with Recoverite after the race. I've been spreading my enthusiasm about your products because I want other 24/7 endurance athletes to know they work!

**Above:**  
Ron Sproat (left) and Carol Giles (center) compete in endurance races that last 16 hours or more.

**Right:**  
Celena Pentrack drinks HEED daily while working at Sabiq Arabian Ranch.

**Photos this page:**  
Courtesy of Celena Pentrack



STEVE'S

# FAVES

## AO BOOSTER

BY STEVE BORN

**A**O (Antioxidant) Booster may be one of the most important products Hammer Nutrition produces. Like the four Daily Essentials — Premium Insurance Caps, Race Caps Supreme, Mito Caps, and EndurOmega — AO Booster provides a range of powerful benefits for athletic performance and health. It neutralizes fat-soluble produced free radicals (something that few other antioxidant formulas do) for comprehensive immune system support. With AO Booster, you'll also notice benefits to your eyes and skin. And because nearly every component of this product possesses potent anti-inflammatory properties, it's also extremely effective for reducing post-workout soreness.

### The importance of fat-soluble antioxidants

Our bodies need antioxidants to protect us from the damaging effects of free radicals, described by Bill Misner, Ph.D. as “molecular wrecking machines.” Athletes especially need antioxidants because they produce free radicals in much higher numbers than sedentary people do.

If there were only one or two types of free radicals, we might be able to get by with just one or two antioxidants (e.g., vitamin C and vitamin E). But there are numerous types of free radicals, both water-soluble and fat-soluble, so we need a variety of antioxidants to combat them. Many people “take mega-doses of water-soluble AOs, but neglect the fat-soluble components,” writes Dr. Misner. “It's my view that natural fatty acid nutrition and fat-soluble antioxidants should accompany ... water-soluble components [such as] Vitamin C, B-Complex, and [the multiple antioxidants in] Super Antioxidant for reducing free radicals.” This was our motivation for developing

AO Booster. Its unique formula of fat-soluble antioxidants perfectly complements the wide range of water-soluble antioxidants in our Super Antioxidant and Premium Insurance Caps supplements. And because AO Booster also has powerful anti-inflammatory properties, it's a great adjunct to Tissue Rejuvenator and EndurOmega for alleviating muscle and joint pain.

### The AO Booster formula

*Tocopherol (150 mg)/tocotrienol (50 mg), maximum vitamin E power* — “To obtain optimal benefits from [the antioxidant] vitamin E, a mixture of tocopherols (alpha, beta, delta, and gamma) and tocotrienols (alpha, beta, delta, and gamma) is required,” says Karin Granstrom Jordan, M.D. “When taken together, these various forms of vitamin E work synergistically.” AO Booster contains the full complement of vitamin E nutrients — all four tocopherols and all four tocotrienols — for maximum antioxidant benefits.

Research has suggested that supplementing with just alpha-tocopherol (the form in most supplements) may lower your body's level of gamma-tocopherol, an important nutrient “found to reduce inflammation, regulate factors that guard against certain cancers, and activate genes involved in protecting against Alzheimer's disease,” according to Dr. Lyle MacWilliam.

Tocotrienols may be even more effective free radical scavengers than tocopherols. According to research by Lester Packer, Ph.D., and Barrie Tan, Ph.D., tocotrienols may have 30-60 times more antioxidant power than alpha-tocopherol. Research has shown that tocotrienols help maintain healthy cholesterol levels; they also appear to possess anti-cancer and anti-diabetes properties.

*Lutein, a superb antioxidant for eyes and skin* — This carotenoid (a class of natural fat-soluble pigments) has a particular



### HOW TO USE AO BOOSTER

On workout days, take 1 capsule AO Booster after exercise with Recoverite; take 1 additional capsule at another time during the day (with food). On non-workout days, take 1 capsule of AO Booster (with food) per day.

affinity for eyes and skin, helping to protect them from ultraviolet (UV) damage. Lutein also may cut the risk of age-related macular degeneration (AMD), and help protect against skin and breast cancers as well as atherosclerosis, which can lead to cardiovascular disease.

*Astaxanthin, supreme antioxidant/anti-inflammatory* — This carotenoid, often derived from the microalgae *Haematococcus pluvialis*, is suggested to be 10 times stronger than beta-carotene and 100 times stronger than vitamin E in antioxidant capabilities. Dr. Misner writes, “When I researched which fat-soluble antioxidants neutralized the most free radicals in fatty tissue, it was a virtual tie between lycopene and astaxanthin, with lutein a close second.”

Astaxanthin is also hailed for its impressive anti-inflammatory properties. Additionally, Japanese research suggests that mice supplemented with astaxanthin appeared to burn fatty acids for fuel more efficiently, were able to exercise longer, and had greatly decreased fat accumulation compared to mice not receiving astaxanthin.

### THE BOTTOM LINE

You can't beat the nutrient combination in AO Booster for fat-soluble antioxidant power. Add to that its potent anti-inflammatory properties and you have a truly superb post-exercise recovery supplement. **[HN]**

### NEED TO KNOW

For more information on the importance of antioxidants for health and athletic performance, visit the Advanced Knowledge section on: [www.hammernutrition.com](http://www.hammernutrition.com).



# GREGORY TAYLOR'S IRONMAN BOULDER RACE RECIPE



## TRAINING:

**Mornings:** Big Ring 53x11 Coffee accompanied by Perpetuem Solids  
**During the day:** Hammer Bars and/or Hammer Recovery Bars  
**Workout fuels:** HEED, Hammer Gel, Endurolytes Fizz or Endurolytes Extreme  
**After EVERY workout:** Recoverite  
**Before bed:** 2 scoops Recoverite

## RACE DAY:

**Prerace meal (4 hours prior to start):** Coffee and Hammer Bar (Cashew Coconut Chocolate Chip)  
**Before the swim:** Apple Cinnamon Hammer Gel plus water  
**On the bike:** 2 bottles of HEED (150 calories per bottle) with Endurolytes Fizz, a flask of Hammer Gel, Endurolytes Extreme, and Perpetuem Solids  
**The run:** Hammer Gel and Endurolytes, water from the aid station

## RESULTS

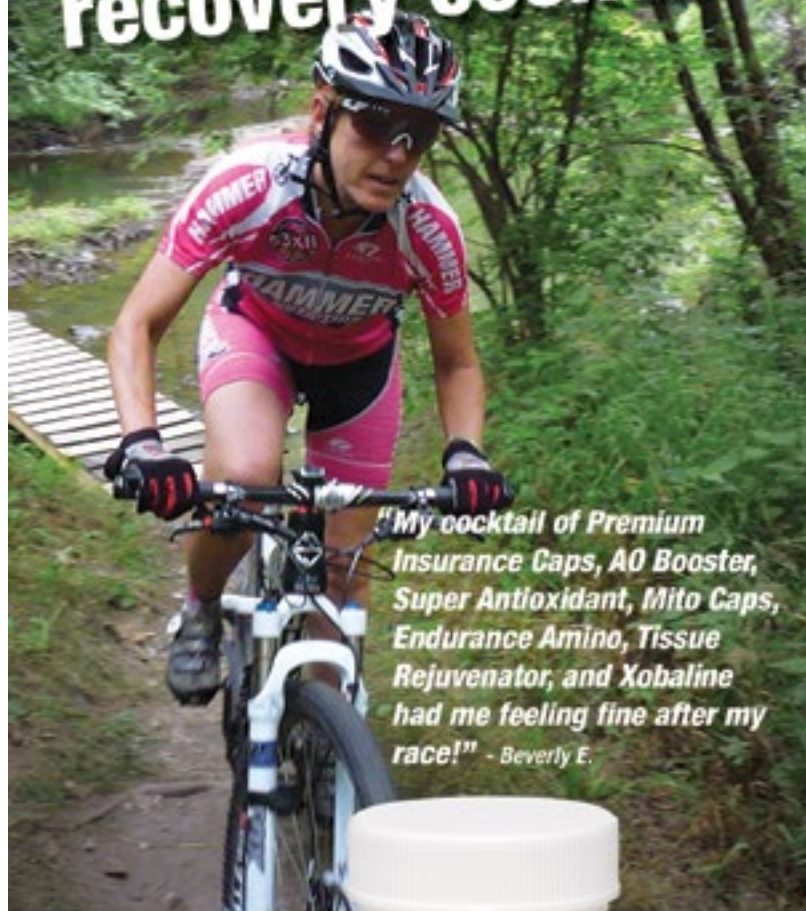
### 1st AG, 60-64

**Update:** 1st AG Olympic Distance, USAT National Championships (six days after IM Boulder); 1st AG 70.3 World Championships

*"HEED with Fizz plus Hammer Gel, all day long!"* – Gregory Taylor

Top photo this page: FinisherPix.

# Complete your recovery cocktail!



*"My cocktail of Premium Insurance Caps, AO Booster, Super Antioxidant, Mito Caps, Endurance Amino, Tissue Rejuvenator, and Xobaline had me feeling fine after my race!"* – Beverly E.



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USA



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SIMPLE  
SUGARS

MSRP  
60 Capsules - \$33.95  
3 or more - \$29.95 ea

- Speeds exercise recovery
- Complements Super Antioxidant
- Fights free radicals

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Shown above, Beverly Enlow Hammers hard at a mountain bike race. PHOTO: COURTESY BEVERLY ENLOW

# ASK HAMMER NUTRITION

BY ENDURANCE NEWS STAFF

**Q:** What's the difference between Hammer Whey and Recoverite, and what is the best time to use either or both of these products?

**A:** **Hammer Whey** is a great recovery product for pure strength workouts (e.g., weight training in the gym). Every serving (1 scoop) contains 18 grams of 100% whey protein isolate and 6 grams of glutamine. Consuming 1 scoop of Hammer Whey immediately after your strength workout/weight training will provide your body with amino acids to support the repair and building of lean muscle tissue. The glutamine in the product will help maintain a strong immune system.

Hammer Whey is also beneficial if taken at bedtime. Consuming 1 scoop just before bed will provide amino acids that your body can use to aid its repair processes. In addition, the glutamine will elevate serum human growth hormone (HGH) levels to help build muscle tissue. You can take Hammer Whey anytime during the day to bolster daily protein intake, too.

**Recoverite** is an ideal recovery product for an aerobic/endurance workout. Every serving (2 scoops) contains 10 grams of the same whey protein isolate that's in Hammer Whey, as well as 3 grams of glutamine. The important difference is that every serving of Recoverite contains 32 grams of complex carbohydrates, while Hammer Whey contains only 0-1 grams of naturally occurring carbohydrates (no added carbohydrates).



Your body needs these carbohydrates immediately after an aerobic/endurance workout to replenish and increase depleted glycogen stores. The protein and glutamine in Recoverite also help restore glycogen. The protein also supplies amino acids needed to support the repair and building of muscle tissue; glutamine supports healthy immunity. Recoverite also can be used occasionally as a meal replacement drink.

**Q:** Why is it so important to not eat anything for 3 hours prior to my workout or race?

**A:** Eating within 3 hours of exercise promotes faster release and depletion of muscle glycogen; it also inhibits fat utilization. The combination of accelerated glycogen depletion and disrupted availability of your primary long-distance fuel (fat) can devastate your performance.

After you eat, insulin and blood glucose take 3 hours to return to baseline levels. And that's exactly where you want them to be when you begin to exercise or race, so that your body will:

- utilize its finite stores of muscle glycogen more efficiently, and
- access and use the calories from body fat stores more effectively.

Both of these effects will postpone fatigue and extend endurance ... which is what we all want!



**Above:** Doing it wrong. Eating a large or heavy meal like this an hour or two before a race can ruin your performance potential.



**Q:** Does Perpetuem contain electrolytes? If so, do I need to use any Endurolytes products with Perpetuem?



**A:** Yes, Perpetuem does contain some electrolytic minerals. But unlike HEED (which is formulated to include electrolytes), the electrolytes in Perpetuem were not added by design. The minerals in Perpetuem occur naturally as a result of the product's other components, primarily the sodium phosphate and soy.



Perpetuem is a complete calorie source—complex carbohydrates, soy protein, and a healthy, soy-derived fat—but it does not contain a well-balanced profile of electrolytes. That's why you should use Endurolytes to supply electrolytes when using Perpetuem. Keeping your intake of calories and electrolytes separate allows you to regulate them with greater precision on an hourly basis.

**THE BOTTOM LINE**

Perpetuem = calories, Endurolytes = electrolytes

**Electrolytes in Perpetuem vs. Endurolytes**

Mineral	Perpetuem (1 scoop)	Endurolytes (1 capsule)
Calcium	18 mg	50 mg
Magnesium	4 mg	25 mg
Potassium	60 mg	25 mg
Sodium	110 mg	40 mg
Chloride	0 mg	60 mg

***“I use Hammer Whey as an HGH boost before bed, when I really need to recover well!”*** - Mike B.

**Tip:** Just before bed, mix 1 scoop of Hammer Whey in 4-6 ounces of water and consume. This practice may safely raise HGH levels while you sleep by as much as 400% compared to the usual nightly spike. That's enough to enhance muscle building and benefit health and performance.

- Helps maintain & repair lean muscle
- Immune system support
- Glutamine enhances exercise recovery



**MSRP**  
 Single Serving - \$3.50  
 6 or more - \$2.95 ea  
 24 Servings - \$39.95  
 3 or more - \$37.95 ea



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# YOU'LL GO NUTS FOR NOCCIOLA!

**Our new hazelnut-chocolate flavor gel is ultra effective, ultra delicious**

BY STEVE BORN



Now we've done it ... created the most delicious endurance fuel ever, that is! Last fall, we introduced the latest in our series of Hammer Gel flavors: Nocciola (pronounced no-CHO-lah). Early reviews are in, and the verdict is unanimous; Nocciola is "a game changer," and "on another level completely."

Like the Italian gelato flavor from which it derives its name, Nocciola has an irresistible hazelnut-chocolate taste that is satisfyingly rich and still incredibly refreshing. It joins fellow newcomers Peanut Butter and Peanut Butter-Chocolate in our family of Hammer Gel "ultra-fuels" that are ideal for the full spectrum of athletic activity. Thanks to naturally-occurring protein and fat, these flavors not only satisfy your taste buds, but also your energy requirements, even when you're going long.

For nearly two decades, Hammer Gel has been the benchmark for concentrated

carbohydrate energy. Every Hammer Gel flavor offers benefits for endurance workouts and races that you won't get from other "energy" fuels. Unlike the vast majority of products on the market, which are little more than sugar candies, Hammer Gel is real endurance fuel.

#### Hammer Gel:

- provides sustained, rock solid energy;
- raises blood sugar levels fast;
- is smooth and easy to digest.

All 13 flavors of Hammer Gel are made with real, wholesome ingredients — not refined sugars, which cause flash and crash energy swings, nausea, and cramping.

With spring training just ahead, now is the perfect time to stock up on Hammer Gel, including new Nocciola! Order 12 or more single serving packets, or three or more jugs, and save. [HN]

## Five-Star Online Reviews



*"The new Nocciola is absolutely delicious. Hammer Gel is the only gel I use — the others are much too sweet for me. This new flavor rocks!"*

*"Delicious, delicious! Do I actually have to work out to have one?"*

*"When it's cold and rainy and I'm looking out the window trying to bump myself into action, a helping of the Nocciola Hammer Gel warms my attitude."*

*"Nocciola Hammer Gel is awesome! I have yet to be disappointed with your products or service."*

*"If you are looking for quality fuel, Hammer Gel is it. The jugs work great for filling a flask for longer activities. The single servings are nice to stash in a running belt or pack."*





# 2 DELICIOUS NEW FLAVORS!

The new Hammer Gel flavors, Peanut Butter-Chocolate and Nocciola (Hazelnut-Chocolate), give you 13 delicious flavors to fuel your workout or race. Both flavors are available in single-serve pouches and economical 26-serving jugs!

- Provides rock solid energy
- Raises blood sugar levels fast
- Smooth & easy to digest

**FLAVORS:** Apple-Cinnamon, Banana, Chocolate, Espresso, Nocciola (Hazelnut-Chocolate), Montana Huckleberry, Orange, Peanut Butter, Peanut Butter-Chocolate, Raspberry, Tropical, Unflavored (26-serving only), Vanilla

**MSRP**

26 Serving Jug - \$19.95    Single Serving - \$1.40  
3 or more - \$17.95 ea    12 or more - \$1.25 ea  
5-serving flask - \$2.39



**FREE!**

Purchase 1 or more jugs or 12 or more pouches of Hammer Gel and receive a FREE sample of Peanut Butter-Chocolate and Nocciola Hammer Gel. Promo code EN93HG. Limit one. Offer expires 2/28/15. Valid while supplies last.



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HONEY — THE NOT-SO-SWEET ENDURANCE FUEL

# ‘BEE’WARE!

For fast-acting, high-quality energy during exercise, maltodextrin is still the winner

BY STEVE BORN

Like some athletes, you might be tempted to consider using honey as an energy fuel. “And why not?” you might ask. “Honey supplies carbohydrates, it’s natural, it’s unrefined, and it’s relatively inexpensive.” But while these things may be true, the fact is that honey makes a very poor energy fuel for endurance athletes, particularly in comparison to maltodextrin (complex carbohydrates). Here are the “highs” and “lows” of honey, and why you should save it for sweetening your tea or cornbread:

**HIGH simple sugar content = LOW calorie donation**

Nearly 80% of honey’s makeup is in the form of simple sugars such as fructose (a.k.a. levulose), glucose, and sucrose. In order to match body fluid osmolality parameters (280-302 mOsm), simple sugars must be mixed in calorie-weak concentrations of only 6-8%. Any higher than that and the potential for stomach distress increases dramatically. By comparison, the maltodextrin used in Hammer Gel, HEED, and other Hammer Nutrition fuels can be mixed in 15-18% solutions and still digested efficiently, providing significantly more calories for energy production.

**HIGH fructose content increases stomach distress**

More than one-third (38%) of honey is in the form of fructose, probably the poorest energy source there is. Additionally, it’s estimated that 35% of people have fructose malabsorption. For those who have this digestive condition,

consuming just 1-2 grams of fructose hourly is enough to cause gastrointestinal issues such as bloating, gas, and diarrhea.

**LOW Glycemic Index rating**

When exercising, you don’t want to wait for your fuel’s energy to kick in. Unfortunately, with a Glycemic Index Rating (GI) ranging as low as 58 to a mediocre-high of 78, honey will make you wait for that energy. Maltodextrin provides energy fast; it has an ideal-for-exercise GI rating that ranges from 100-136.

**HIGH acidity**

During exercise, you’re already producing a fair amount of acid—both stomach acid and systemic acid from muscle metabolism. The last thing you want to do is consume a fuel that adds to that acid “burden.” But with the pH of honey being an extremely acidic 3.9, that’s exactly what you’ll be doing when you consume it. The results? A much greater likelihood of stomach distress, nausea, cramping — and bonking. Maltodextrin, however, has an ideal, close-to-neutral pH of 6.5 for smooth and easy digestion, dependable energy, and the best possible results during workouts and races.*[HN]*



COMPARISON FACTORS	HONEY	MALTODEXTRIN
Fructose	38%	None
Glucose	31%	<20%
Maltose	7%	None
Sucrose	1.3%	None
Water	17%	None
Glycemic Index	58-78	100-136

“Yes, honey is natural. But please understand: Honey makes a very poor energy fuel for endurance athletes, particularly in comparison to maltodextrin (complex carbohydrates).”





# Old school isn't cool when it comes to your fuel!



You probably don't use equipment from the 1960s today, so why fuel with a sports drink with the same ingredients used back then? Technology has come a long way in 50 years! HEED is truly a sports drink 2.0, delivering sustained energy in a mild, non-acidic, electrolyte-rich blend. No need for sugar, excess sodium, citric acid, or other old school ingredients!

- Provides steady energy
- Reduces cramps
- Buffers lactic acid

**TOP FLAVOR!**



***"There are still a lot of 'old school' thoughts out there when it comes to sports nutrition, so I'm very excited I switched to Hammer!" - Michelle M.***

**MSRP**

Single Serving - \$1.95    16 Servings - \$19.95  
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# Hammer Supplements Provide the E You Need

**Boosting vitamin E could lower blood pressure & protect against pneumonia**

BY STEVE BORN

Two recent studies — one dealing with blood pressure and the other pneumonia — suggest important additional benefits to vitamin E supplementation.

Of the many steps you can take to ensure healthy blood pressure levels, consuming a sufficient amount of vitamin E may be one of the easiest and most effective. Recent research published in the *Journal of Nutritional Science and Vitaminology* suggests an association between higher vitamin E intake and lower risk of hypertension.

Defining hypertension as systolic blood pressure of 140 mmHg or higher, diastolic blood pressure of 90 mmHg or higher, or the use of an antihypertensive drug, Dr. Akiko Kuwabara and associates examined data from participants in Japan's National Health and Nutrition Survey 2007 — a total of 1,405 men and 2,102 women aged 40 and older. Participants' dietary records were analyzed for vitamin E intake as well as for other nutrients.

A 27% lower risk of hypertension was found for those whose vitamin E intake was among the top third of all subjects. For those in the middle third, the risk was 19% lower.

Vitamin E was clearly responsible for this beneficial effect; adjusting for increased intake of other nutrients known to lower blood pressure did not significantly affect the results.

“Oxidative damage and free radical production in the endothelium are closely involved in the pathogenesis of the atherosclerotic process which leads to cardiovascular disease,” says Dr. Kuwabara. “Since vitamin E is a fat-soluble vitamin with potent antioxidative activity and one of its main physiological roles is considered to be the inhibition of unsaturated fatty acid oxidation, vitamin E is a promising candidate against oxidative stress-induced unfavorable consequences.”

## Vitamin E and Pneumonia

In research reported in *The Journal of Immunology*, vitamin E played a significant role in protecting mice against pneumonia, a common lung inflammation that claims the lives of an estimated 60,000 people annually in the United States.

Tufts University School of Medicine researchers supplemented the diets of 4-month-old and 22-to-24-month-old mice with extra vitamin E (alpha-tocopherol) for four weeks prior to infecting them with the disease.

A control group did not receive extra vitamin E. Researchers then evaluated the vitamin's ability to regulate neutrophil (the most common type of white blood cell) responses in improving resistance to the illness.

The results: Two days after infection, the older mice in the control group had a 1,000-time greater bacterial burden and significantly higher levels of neutrophils in the lungs than the younger control mice. These effects were largely prevented in the older mice given the vitamin E; their neutrophils in the lungs were comparable to those of the younger control group.

Head researcher Dr. Elsa N. Bou Ghanem summarized, “Our research is the first study to demonstrate that dietary vitamin E regulates neutrophil entry into the lungs in mice, and so dramatically reduces inflammation, and helps fight off infection by this common type of bacteria.” **[HN]**







## HARNESS THE POWER OF VITAMIN E

Vitamin E-rich foods include sunflower seeds (37 IU per 1/2 cup), almonds (27 IU per 1/2 cup), peanuts (15 IU per 1/2 cup), avocado (4.6 IU per 1 cup cubed), spinach (5.5 IU per 1 cup cooked), and broccoli (3.4 IU per 1 cup cooked).

Clearly, it isn't easy to obtain the 400–1200 IU Optimal Daily Intake for vitamin E through diet alone. Several Hammer Nutrition products — particularly AO Booster, which contains all eight members of the vitamin E “family” — can help bridge the gap, ensuring that you get plenty of this heart-healthy vitamin.

**AO Booster** – Each capsule contains a 150-mg blend of tocopherols and a 50-mg blend of tocotrienols. Studies suggest that optimal health benefits are obtained via intake of a mixture of tocopherols and tocotrienols versus “regular” vitamin E (d-alpha tocopherol) only. One researcher writes, “While alpha-tocopherol has long been known as an important antioxidant, research has now shown that the complete vitamin E team is much more effective. The different vitamin E forms have complementary effects as free radical scavengers. Together they can fight a wider spectrum of free radicals than alpha-tocopherol alone.”

**Premium Insurance Caps** – Each capsule supplies approximately 57 IU of vitamin E (d-alpha tocopherol). A 3-capsule per day serving provides 171 IU of vitamin E; 7 capsules per day supply 399 IU of vitamin E.

**Race Caps Supreme** – Each capsule supplies 133 IU of vitamin E. Two capsules per day supply 266 IU of vitamin E; by consuming the suggested serving of 3-4 capsules on workout days, you get 399-532 IU of vitamin E.

**Mito Caps** – Each capsule supplies 12.5 IU of vitamin E. Consuming a 2-capsule serving on non-workout days will give you 25 IU of vitamin E; consuming 4-6 capsules on workout days will give you 50-75 IU of vitamin E. [HN]

“I wouldn't be the athlete I am without Race Caps Supreme, Mito Caps, and Premium Insurance Caps.”

- REILLY SMITH'S 2014 RESULTS: 1st place AG Ironman 70.3 Texas, 1st place AG Ironman 70.3 Utah, 2nd place AG Ironman 70.3 Oceanside, 2nd place AG Ironman 70.3 Vineman, 4th place AG Ironman 70.3 Canada



Photo: wadingphotography.com

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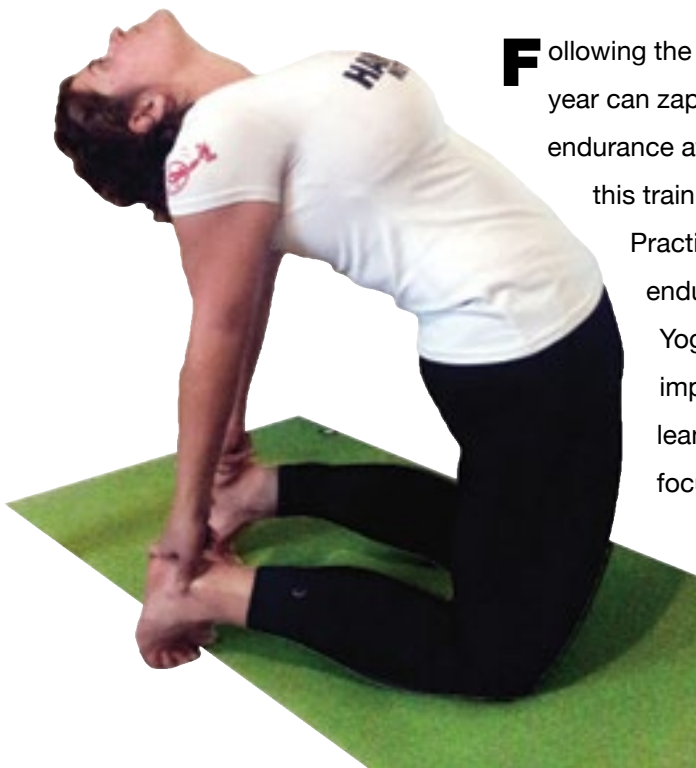




# POSITION YOURSELF FOR SUCCESS

**Stretch your off-season routine, gain advantage by adding yoga to workouts**

BY MARIA MASLANKA



**F**ollowing the same “off season” workout routines year after year can zap the motivation from even the most dedicated endurance athlete. Instead of covering the same old ground this training season, consider switching it up with yoga.

Practicing yoga has given me an edge as a competitive, endurance athlete — and it can work for you, too!

Yoga increases muscle strength, tone, and flexibility. It improves vitality, relieves stress, and helps you stay lean. Yoga also delivers mental clarity, endurance, focus, and discipline. And the Pranayama (breathing techniques) and meditation skills you’ll develop can come in quite handy during a 24+-hour race in the wild!

**Top and opposite:** Brosious enjoys the great outdoors from every angle. **Photos:** MacKenzie Brosious **Left:** Maslanka in camel pose. **Photo:** Maria Maslanka



Boredom is rarely a problem with yoga because there are many styles to choose from. I especially enjoy Ashtanga and Bikram to maintain fitness and help me achieve my goals for adventure racing and orienteering. Both styles consist of a series of universal poses.

**Ashtanga yoga** is ideal for the athlete who wants to gain body strength, flexibility, and mental focus, and to learn beneficial breathing techniques. A traditional class could include 60-90 minutes of constant, flowing movement with challenging poses such as headstands, backbends, forward folds, and twisting postures. Utilizing your body's core generates heat from within.

**Bikram yoga** is a 90-minute, heat-induced "suffer-fest!" In contrast to the internally generated heat of ashtanga, the heat of bikram begins externally, with a steady room temperature of 104°F and 40% humidity level.

Bikram is also very disciplined: you are told when to move, when to drink, and when to rest. Although many of its poses are not extremely difficult, dealing with the heat and discipline requires mental concentration and endurance. A 90-minute session can feel much longer.

### Where to start

If you'd like to try a few beginner poses, I suggest Tree Pose (Vrikasana), Camel Pose (Ustrasana; see page 32, bottom), and Triangle Pose (Utthita Trikonasana).

Yoga involves both body and mind:

- **When in a pose, try to slow your mind.** Breathe deeply in and out



through your nose. Eventually, any muscles that are tight or sore will begin to relax and open up.

- **When stretching**, think of creating space and flexibility into specific areas of tightness.
- **Remember that flexibility comes with time and patience.** Be kind and honest with yourself when attempting certain postures.

### Power fueling for yoga

With the intense heat of Bikram and the power required for Ashtanga, proper fueling before, during, and after a class is vital. For a Bikram class, I like to add Hammer Nutrition's HEED to my water bottle. Besides the energy provided by the complex carbohydrate maltodextrin,



HEED includes electrolytes. The heat and humidity of Bikram increases sweating and electrolyte loss, so I sometimes have a few Endurolytes, too.

For an Ashtanga class, I often go for Perpetuem Solids, which provide the energy needed to power through the challenging poses. After any training session, I reward myself with Recoverite mixed with a cup of coconut milk. It helps repair muscles and joints, restores muscle glycogen, and reduces soreness.

Paying attention to daily nutrition during winter cross training is important, too. Try to avoid all refined sugars, excess salt, and large amounts of fat. Aim to eat as cleanly as possible, and check labels before you buy or consume. (*See my nutritious Oatmeal Recoverite Cookies recipe on page 50.*)

The 10 years I've devoted to practicing and teaching yoga have benefited me immensely. People often ask "don't you

## YOGA TIPS FOR ATHLETES

Yoga is beneficial for both cross training and recovery. Asana (the physical form of yoga), will wake up inactive areas of your body. Pranayama (breathing exercises) teaches you to stay calm and breathe through discomfort. Take this to the trail or road, and you'll be able to work with your body and mind, rather than fight them.

- You'll reduce soreness if you start and advance slowly. In a stretch, go just to the first point of sensation. If you are unable to breathe comfortably or can't relax, you've pushed too far.
- Use myofascial release tools. Grab your foam roller, stick, ball or whatever you have around the house. After warming up the muscle group, roll it out and then stretch. Again, go easy, especially on the stretch. – MacKenzie Brosious

get cross training from the mountain biking, trail running, paddling, and swimming you already do?"

The answer is yes! But yoga is a great complement. Its unique fitness and health benefits can improve your athletic performance and quality of life for years to come. Namaste. *[HN]*

Maria Maslanka ran her first race (a marathon) on a dare, barely finishing due to poor nutrition and training. She dialed in both and fell in love with endurance racing. Her current passion is 24-hour adventure racing and orienteering.

MacKenzie Brosious is a yoga instructor, personal trainer, and medical exercise specialist in Bozeman, MT.





# GOING THE DISTANCE

Follow these 4 simple steps to ultramarathon training success

BY JOHN FITZGERALD

“Run 100 miles!? How can you do that!? That’s crazy!”

I hear those words a lot — even from runners who have completed a marathon. Although running 50 or 100 miles might seem daunting and the training impossible, training for an ultra isn’t that different from training for a marathon.

Just as you don’t have to do training runs of 26.2 miles to be able to complete a marathon race, you don’t need to run 50 or 100 miles when training for an ultra. In fact, trying to run the full distance of the event in training will leave you very tired, and could even lead to injury. Like marathon training, ultra training should include strength building, speed workouts, and periods of rest. Here are a few other practices that I follow when training for an ultra long race.

**Right:** A training run on Mt. Jumbo in Missoula, MT, readies John for his next mountain ultra.

**Opposite page:** John (in green) pushes on toward a 7th place OA at the 2014 Red Hot 55K in Moab, UT.

Photos: Myke Hermsmeyer







**1 Train in/on conditions similar to those of your event at least once a week.** Sounds obvious, but many runners don't do it. If you're training for a mountain ultra, incorporate ascents and descents similar to what you'll encounter on the course. Also try to train on a similar surface (e.g., loose rock, dirt roads, mud, sand, paved roads). If your race will be mostly technical single track, don't limit your training to paved roads. Do some training in the heat of the day too.

**2 Schedule a training race.** Put a 5K, 10K, or marathon training race on your calendar. This will help you gain fitness, practice race day nutrition, and have fun! A shorter race will allow you to test your prerace meal, work on leg turnover, and test your anaerobic energy system. With a longer race, you can test your prerace and in-race fueling plans.

**3 Include back-to-back long training runs.** This will help your body learn what it feels like to run on tired legs, which will benefit you tremendously on race day! I like to vary the terrains for these back-to-back runs to develop different muscle groups. For instance, on Saturday you might do a 4-hour trail run with lots of ascents and descents. Then on Sunday, you could do a 3-4-hour run on flat to rolling terrain.

**4 Fuel right!** Whether training or racing, be sure to fuel and hydrate properly to perform at your highest potential. When training, I carry a 20-ounce water bottle with me throughout the day to remind me to hydrate. If the conditions are hot, I take Endurolytes to replenish electrolytes and prevent cramping. Endurance Amino provides additional support before and after difficult training blocks.

For races of 50 or 100 miles, Hammer Gel and Perpetuem are my go-to fuels. During the longer events, I aim to have a 16- to 20-ounce bottle of Perpetuem (mixed with water) per hour, and a half or whole Hammer Bar every 4 hours. Hammer Nutrition recommends fueling with a blend of complex carbohydrates and a little protein during athletic activity that lasts 3 hours or more. The protein combats muscle cannibalization and fatigue.

Good options include Perpetuem, Sustained Energy, and Hammer Bars. The nut-flavored Hammer Gels (Peanut Butter, Peanut Butter-Chocolate, or new Nocciola/Hazelnut-Chocolate) include some protein, too.

During training, take the time to find the fueling plan that works for you. When you do, you'll be able to run longer than you thought possible and feel great doing it!

[HN]

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Hammer Athlete John Fitzgerald has finished in the top three in numerous ultra events from trail marathons to 100Ks and 100-milers. He holds a B.A. in exercise science and is owner of Fitzgerald Endurance Coaching; [www.fitzgeraldendurancecoaching.com](http://www.fitzgeraldendurancecoaching.com)

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# EMS AND NEUROMUSCULAR INHIBITION

BY BRIAN FRANK

Personally dealing with neuromuscular inhibition (NI) was what led me to discover EMS (electro muscular stimulation) in 2003 and to become an advocate of the technology. Doing post-purchase EMS consultations with dozens of clients in recent months reminded me how many athletes are living with NI too. Since then, I have found EMS to be uniquely effective in identifying and correcting this common tendency.

I believe NI to be one of the root causes of strength discrepancies between left side and right side muscles seen in most athletes. Strength discrepancies in the leg muscles are also a contributing cause to hip and lower back problems. This is where the body has to counter the rotational torque created by one leg applying more power than the other.

My definition for NI is when a muscle does not fully respond to the brain signaling it to contract. It's almost as if the muscle is partially paralyzed. This can often be seen visually and felt physically when attempting to create a peak contraction where one muscle shows more definition and firmness compared to its opposite counterpart.

In more extreme instances, it can be noted by differences in the circumference of the upper or lower leg. Another means of identifying these underperforming muscles is when doing isolation exercises



An athlete uses an EMS unit during USMS Nationals in Omaha in 2010. Photo: wadleyphotography.com

with resistance. One muscle will be noticeably stronger than its counterpart.

For cyclists, the Spinscan feature of the original Computrainer program and now the new pedal-based power meters that can show the power split between left and right pedals provide another means for measuring power output from each leg. However, if much more than a

couple of percent difference is detected, one is still left with limited options for correction. Isolated leg training on the bike or in the gym produces limited results and can easily lead to other problems in the hips and back.

The causes are many — lingering effects from injuries, surgery, structural irregularities, poor biomechanics, and in the case

of the glutes and piriformis, from excessive time spent in a seated position — using them as a cushion.

The type of activity an athlete engages in can also be a contributor. Runners tend to have very responsive vastus medialis (the inside of the quad muscle) and somewhat laconic vastus lateralis (the outside) part of the quad. With cyclists, it can be the opposite. Triathletes typically have more active quads, but one will usually still be stronger.

## Using EMS to identify NI

When doing EMS demonstrations on an athlete for the first time, knowing nothing in advance about that person, I can usually determine whether they are naturally a stronger runner or cyclist and whether or not they've sustained an injury or had surgery on one leg or the other just by seeing how each muscle responds.

This is done by connecting each muscle in the quadriceps group to one channel of the EMS device, turning on the machine and setting it to the same level of electrical current on all four muscles and noting the different responses in the vastus medialis and vastus lateralis of each leg. In almost every demo I have ever done or witnessed over the past 12 years, one or more of the muscles shows NI of 20% or more, as measured by the amount of electrical current needed to get it to match the dominant muscles.

CONTINUED ON **PAGE 38**



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“Today, I have almost no back or hip problems and the difference in strength between my left and right muscles is almost imperceptible.”

EMS  
CONTINUED FROM PAGE 36

I recall one athlete, who happened to be a doctor, whom I did a demo on in Kona a couple of years ago. She had surgery on her right knee more than 30 years ago. At 25 ma of current input (a pretty high initial level), her left quad was bouncing vigorously, as would be expected, but the muscles in her right quad were barely twitching at all. I had to use more than double the current going into that quad to get it to respond at all. Upon further questioning, she indicated that quad was prone to cramping and that she had several other chronic issues related to it being perpetually weak, which she'd been completely unsuccessful

in addressing up to that point. She bought an EMS unit on the spot.

Different practitioners have different terms for this condition. I've heard kinesiologists, chiropractors, and massage therapists use terms such as “switched off” or “deactivated” to describe a muscle that isn't responsive to peak contractions initiated by brain signals.

#### My experience with NI

Prior to my discovery of EMS, all my attempts at correction were fruitless. I tried isolated leg training, conventional resistance training, stretching, adjustments, and more. My dominant muscles got stronger and their weaker

counterparts barely improved, and the disparity remained constant. This muscle strength imbalance in turn led to chronic hip and back problems that culminated in two ruptured disks in my back. Then I discovered EMS.

Using EMS, I was instantly able to see that my glutes, piriformis, hamstrings, and quads on my right leg were noticeably weaker and less responsive to the same level of electrical current compared to their counterparts on my left leg. I also discovered the cause of the muscles in my left leg being perpetually tight and unresponsive to stretching — they were compensating for the underperforming muscles of my right leg. With daily use of the

Active Recovery program and using the Strength programs on alternating days, using higher input levels on the weaker, NI-affected muscles, I was able to get them to contract with the same intensity as my dominant muscles. Today, I have almost no back or hip problems and the difference in strength between my left and right muscles is almost imperceptible.

Note that these are my opinions based on my observations. In addition to increasing circulation and capillary turnover, correcting neuromuscular inhibition and muscle strength discrepancies is another valuable feature of EMS devices. [HN]

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Steven Terry powers through the 2014 Bell's Iceman Cometh Challenge near Traverse City, Michigan. Terry finished 7th overall in the IceBike (fatbike) Category.  
Photo: Christopher Schmidt

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When we're not working to help clients, Hammer staffers love hitting the backroads, peaks, and trails of northwestern Montana. Just like you, we climb, hike, bike, run, swim, paddle, and ski every chance we get! And like you, Hammer Nutrition products fuel our adventures. Here are . . .

A FEW  
OF OUR **FAVES**




 Photographing athletes in remote locations while carrying a pack full of equipment requires stamina. My go-to fuels for field days are **Hammer Gels and Hammer Bars**. They're easy to digest and convenient to carry. For hydration I use a Purist water bottle with Endurolytes Fizz; they're tasty and don't cause a mess in my pack.

**MYKE** / PHOTOGRAPHER / SPONSORSHIP COORDINATOR

 I especially love the **Almond Cacao Hammer Vegan Recovery Bar**. I appreciate the convenience of this protein-rich, post-workout snack (or meal-on-the-go) that contains no animal byproducts, yet combines a hearty, nutty flavor with a chewy texture.

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 I reach for **Recoverite** (my favorite flavor is Chocolate) on almost all of my run and bike workout days — for anything of moderate or better distance or intensity. I definitely notice less post-workout soreness, and the peace of mind I get for giving my body what it needs to rebuild muscle tissue is priceless.

**MIKE** / CREATIVE DIRECTOR







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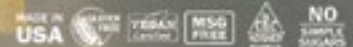
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## **HAMMER GEAR BAG**

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BY STEVE BORN

---

I first wrote about — and raved about — the Hammer Gear Bag three years ago. At that time I had been using the bag frequently for travel, and I was thoroughly impressed by its durability and usefulness.

Three years later (and counting), I'm even more impressed. The Hammer Gear Bag has been my go-to bag for more trips than I can remember, and it shows no signs of damage or even noticeable wear and tear. This is one tough and reliable bag!

The Hammer Gear Bag has become my all-time favorite bag, no matter what I'm carrying — cycling gear, supplements, extra clothing, etc. The lower section easily holds my helmet, shoes, and other cycling-related gear. It's got plenty of space, even for my European size 48 shoes (that's size 13 U.S.)! When I'm not traveling with my bike, I like to use the lower portion of the bag to carry my numerous bottles of supplements. I've yet to have any breakage/spillage issues with anything in that lower section, thanks to the bag's heavy-duty plastic bottom.

The top section is roomy enough to easily hold several days' worth of clothing. Coming from someone who readily admits to packing more stuff than I ever need, that's saying a lot! I also appreciate that I can almost always fit this bag into the overhead carry-on compartment on planes. (Those rare times when I can't fit it into a cramped compartment, I "tag it at the gate" and pick it up on the jet way when the plane lands.) Anytime I don't have to pay or wait for a checked bag (assuming it arrives) I'm a happy guy!

Of course, the Hammer Gear Bag is also the perfect design, size, and functionality for carrying your exercise gear for training or racing. But it's much more versatile than that. I've found that unless I'm going to be on the road for more than a week, this bag is the only piece of luggage I need. However you use it, I have no doubt that you'll call it one of your favorites, too! **[HN]**



# ALICIA SCHULTZ'S IRONMAN 70.3 MIAMI RACE RECIPE



Made in Italy

\$69.95

## HAMMER GEAR BAG FEATURES

- Made in Italy by Bergamo, of heavyweight nylon
- Thick handles with plastic comfort grip
- Zippered top closure with tabs for easy access
- Roomy lower compartment with zippered closure
- Heavy-duty plastic bottom and sides
- Dimensions: footprint 20" x 12"; height 17"; big compartment 19" x 12" x 11"; small compartment 19" x 5" x 11"

### Opposite:

Show your true colors! The Hammer Gear Bag is tough and stylish. Perfect for training, racing, and travel.

### Top:

A roomy, hard-shelled bottom compartment is great for separating wet, muddy gear from clothing. And talk about roomy! It swallows up the author's helmet and size-13s with no problem!

### Bottom:

The main, zippered compartment is large enough for all your race gear, nutrition, and supplements. Or, load it up for a few days of travel.



### TRAINING:

**Mornings:** My daily Hammer Vegan Protein shakes and Vegan Recovery Bars helped me stay healthy and helped me keep my nutrition under control.

**Days before the race:** I focus on eating healthy foods, getting lots of rest, and taking Race Day Boost

### RACE DAY:

**Just before the swim:** Hammer Gel, Endurolytes Extreme

**On the bike:** Perpetuem, HEED, Hammer Gel ("Chocolate-Peanut Butter is my new favorite!"), Endurolytes Fizz

**During the run:** Hammer Gel, Endurolytes

## RESULTS

### 1st AG, Female

*"My nutrition had to be perfect since I just completed Augusta 70.3 a few weeks earlier, and I would be dealing with Miami's heat and humidity. Thanks to Hammer, I was able to stay on program and bring home the 1st place podium spot!"* – Alicia Schultz

Action photo: Belle Forino  
Awards photo: Krissi Neville



**USDA**  
**ORGANIC**

## This label is your assurance of clean, quality foods

BY VICKI HACKMAN

You eat wholesome foods, maintain your weight, and work out regularly — not just because you want to turn in winning performances, but also because you care about your health. But when it comes to food choices, does it really matter whether your fresh broccoli, blueberries, or whole grain food bar is “organic?” In a word, yes! Here’s why it pays to choose organic foods.

### Better for you by nature

By definition (USDA standards), organic crops have been raised without the use of synthetic fertilizers or pesticides — products designed to kill insects, fungi, rodents, and weeds. Since the 1940s, conventional farming has relied on such products because they allow producers to manage large-scale operations more easily.

But there are tradeoffs. Pesticides leave residues on foods, and studies have shown an association between pesticide exposure and serious health problems including non-Hodgkin’s lymphoma, leukemia, brain, breast, liver, and prostate cancers; neurological problems such as Parkinson’s disease; and birth defects. Many researchers believe that exposure to multiple pesticides may have a synergistic effect, compounding the threat.

Rinsing produce, even with plain water, will help remove some but not all pesticide residues. A better solution is to do everything you can to avoid pesticide exposure, and that starts with choosing organic foods.

### What the label means

The “Certified Organic” label is your assurance that the food has been produced and processed according to National Organic Program standards. That means that vegetables, fruits, and grains have not been produced using 1) synthetic fertilizers or prohibited pesticides, 2) irradiation, 3) sewage sludge, or 4) genetically modified organisms (GMOs).

Certified Organic Livestock has been fed 100% organic feed (without antibiotics or growth hormones) and was raised in healthy living conditions with access to the outdoors. Multi-ingredient processed foods with the Certified Organic label contain at least 95% Certified Organic ingredients.

To obtain organic certification, agricultural producers must have their operations reviewed by a third-party certifying agent. The process includes on-site inspection and random testing of soil, seeds, and plant and animal tissue for chemical residues. Labeling a product “Certified Organic” without receiving USDA authorization is illegal and can result in a hefty fine plus suspension from the program.

### Top organic picks

Certain foods are far more likely to be heavily treated with chemical pesticides. It’s always a good idea to choose the organic alternatives for these foods when shopping. Conventionally raised fruit — including

peaches, apples, strawberries, grapes, pears, and red raspberries — is usually heavily sprayed and the pesticides don’t easily rinse off. Grapes can be sprayed with up to 35 different pesticides! Among vegetables, choose organic sweet bell peppers, celery, spinach, lettuce, potatoes, and tomatoes to avoid the plethora of pesticides and fungicides usually used to grow these foods. *[HN]*

### Organic on the run

Why buy candy “food” bars that are little more than refined sugar and fat, when you can enjoy wholesome, organic food bars made with complex carbohydrates? With Hammer Nutrition food bars, you can eat organic even when you’re on the run. Both **Hammer Bars** and **Hammer Whey Recovery Bar** are Certified Organic and 100% good-for-you! Choose the Hammer Bar (in five delicious flavors) for reliable, long-lasting energy before, during, and after exercise. Made with 20 grams of whey protein from grass-fed cows, Hammer Whey Recovery Bar is a healthy, solid food recovery choice — as well as a tasty snack anytime you want to boost your protein intake.



# BRIAN BROTHERS' ABOMINABLE FATBIKE RACE RECIPE



## TRAINING:

HEED, Perpetuem, Endurolytes, Race Caps Supreme, Endurance Amino, Anti-Fatigue Caps, Hammer Bar, Recoverite

## RACE DAY:

**Breakfast (3 hours before the race):** Almond Raisin Hammer Bar (“yum—as an added bonus, they stay soft even in freezing temperatures!”)

**Just before the race:** Race Caps Supreme, Endurance Amino, Anti-Fatigue Caps, Vanilla Hammer Gel

**During the race:** HEED

**After the race:** Strawberry Recoverite

## RESULTS

### 6th overall

“The 5-mile loop quickly disintegrated to mostly non-ride-able conditions, favoring strong legs and riders willing to push themselves deep into the pain cave. I was happy with my result as more than 50% of the starters DNF.”

- Brian Brothers

After surviving the Abominable Fatbike Race in Como, CO, last January, Brian went on to finish 2nd Overall in the six-race Mountain Fatbike Series. Photo: MELISSA MELLE



## Enhance your recovery big time

with the BIG Hammer Whey Recovery Bar! 75 grams of chocolatey, peanuty, chewy goodness will satisfy the biggest appetite and deliver **20 grams of premium, natural grass-fed whey protein.**

- 70% organic ingredients
- Gluten-free, GMO-free
- 8 grams of fiber

### MSRP

75g bar - \$3.50

12 or more - \$3.25 ea.

### Flavor:

Peanut Butter-Chocolate



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# LOVE YOUR LIVER

## Drinking coffee daily can help protect your hardest working organ

BY STEVE BORN

It's long been accepted that the liver is the body's hardest working organ, in charge of the monumental task of cleansing your body of toxins and helping other organs to function as they should. Protecting your liver is vital to your overall health, and recent research suggests a very simple way to do that. Drinking three or more cups of coffee per day, regardless of caffeine content, appears to offer powerful protection for the liver.

Using data from the U.S. National Health and Nutrition Examination Survey (NHANES, 1999-2010), which included nearly 28,000 participants, researchers from the National Cancer Institute measured levels of abnormal liver enzymes to ascertain liver health. Participants who reported drinking three or more cups of coffee daily were shown to have had lower levels of the abnormal enzymes alanine transaminase (ALT), aminotransferase (AST), alkaline phosphatase (ALP), and gamma-glutamyl transaminase (GGT) compared to those who consumed no coffee.

Researchers noted a similar outcome for participants who drank only decaffeinated coffee, prompting lead researcher Dr. Qian Xiao to comment, "These data suggest that ingredients in coffee, other than caffeine, may promote liver health. Further studies are needed to identify these components."

### 53x11: Four delicious options, including decaf

Given the latest research, along with dozens of earlier studies that link coffee consumption to good health, you have every reason to drink up! Coffee is more than a satisfying way to kick start your day — it's a tasty herbal beverage with an array of health benefits.

Many athletes also appreciate the energy boost they get from the caffeine in coffee. But if you're overly sensitive to caffeine, or you simply prefer to forego it, you can still benefit from coffee and enjoy the flavor of a freshly brewed cup by choosing a decaffeinated coffee variety.

Organic 53x11 Coffee is available in four delicious varieties, including a decaffeinated blend: the Big Ring (a full-bodied Sumatra varietal), the Early Break (a bright blend perfect for the first morning cup), the Chain Breaker (a darker roast with full-bodied flavor, for espresso or drip), and the Down Shift (a smooth, water-processed decaf so good you won't know it's decaf!). If you've tried other decafs and have been disappointed by the flavor, be sure to give the Down Shift a try. It's naturally delicious, and doesn't have that peculiar "off" note of other decafs.

All 53x11 Coffees are Fair Trade Certified, 100% organic, and micro-roasted daily to our exact specifications. Available ground or as whole beans, 53x11 is delivered fresh to your door within a week or two of roasting. Compare it to supermarket beans, or even the expensive coffees from trendy chains ... you will find that 53x11 is superior coffee, and a terrific value. Enjoy it in good health. **[HN]**





# Join the club!

*Roasted fresh and delivered to your door!*

## 53x11 Coffee of the Month Club

Now you can have this supreme, organic coffee automatically delivered to your door each month. Follow these three easy steps.



**Step 1** Select the number of bags you would like to receive each month, in any combination of blends, and in either ground or whole bean.

**Step 2** Receive a FREE "Perfect Cup of Coffee" Kit, valued at \$20.85!



"Perfect Cup of Coffee" Kit:  
premium 53x11 coffee mug,  
mug-top brew unit, and filters.

Short Sleeve Jersey  
Retail price - \$39.95  
Club price \$33.96

Cycling Bibs  
Retail price - \$74.95  
Club price \$63.71



**Step 3** Enjoy delicious coffee every morning, plus HUGE discounts on 53x11 cycling and tri clothing, casual clothing, and other 53x11 gear!



SUMATRA

ESPRESSO

MEDIUM ROAST

DECAF

MSRP  
\$13.95 - 12 oz. bag  
*The Big Ring, The Chain Breaker,  
The Early Break, The Down Shift*



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# Wholesome, Hammer-Boosted Goodies

BY VICKI HACKMAN

Over the years, we've learned that our clients are not only passionate about health and fitness, but also good eats! Many of you have written to share culinary creations that feature one or more of your favorite Hammer Nutrition products combined with whole foods. Here are a few healthy, tasty, and easy-to-make recipes to treat your taste buds.



## Banana Oatmeal Recoverite Cookies

Quick, easy, healthy, and delicious. Adventurous? Add one or more of the optionals. - **MARIA MASLANKA** / HAMMER ATHLETE

### Ingredients

2 large ripe bananas, mashed  
2 cups rolled oats  
1/2 cup Chocolate Recoverite, prepared

*Optional ingredients:* Cinnamon, honey, vanilla, chocolate chips, peanut butter chips, dried cranberries, raisins, chopped walnuts, shredded coconut

### Preparation

Preheat oven to 350°F. In a large bowl, combine mashed banana with oats until smooth. Add Chocolate Recoverite. Spray a baking sheet with nonstick spray. Drop dough by large tablespoons onto cookie sheet; flatten a bit. Bake 9-12 minutes until golden. Cool on wire rack.

## Blueberry Chai Smoothie

The muscle-building benefits of whey protein, the antioxidant and anti-inflammatory properties of blueberries and flax seed, and the potent health benefits of cinnamon. Plus, it's delicious! Enjoy it for breakfast, as a post-workout shake, or bedtime treat.

### Ingredients

1 scoop Chai Hammer Whey Protein  
1 cup frozen blueberries  
1 teaspoon fresh ground flax seed  
1 cup almond milk  
1/2 teaspoon cinnamon  
1/2 cup water

### Preparation

Add the ingredients to a blender and pulse until smooth.



## Nutty Banana Cinnamon Toast

Healthy carbs and a bit of protein and fat. A great way to start the day or satisfy hunger between meals. - **CHRIS MATTERN** / HAMMER CLIENT

### Ingredients

1 slice of toast (preferably oat, millet, or other non-wheat grain)  
1 packet Peanut Butter, Chocolate-Peanut Butter, or Nocciola Hammer Gel  
1/2 banana, sliced  
1 tablespoon shredded coconut, toasted  
Dash of cinnamon

### Preparation

Toast the bread, then top it with the remaining ingredients.





## Amaranth Granola Bars

Amaranth, an ancient Aztec plant food, is a protein powerhouse and an excellent source of the essential amino acid lysine. You can pop the nutritious seeds like popcorn to make a tasty cereal, or use the “puffed amaranth” to make these delicious bars, which are great for breakfast or after a workout.

**Makes 12-18 bars**

### Ingredients

- 4 tablespoons raw amaranth
- 1 cup dried, unsweetened, shredded coconut
- 1-1/2 cups mixed seeds and nuts (such as toasted sesame seeds, sunflower seeds, pumpkin seeds, ground flax seeds, chopped walnuts, or almonds)
- 1/2 cup almond or peanut butter
- 2 packets (1.7 tablespoons each) Peanut Butter or Nocciola Hammer Gel
- 1/4 cup maple syrup
- 1 teaspoon vanilla extract
- 1/2 cup dried cranberries or blueberries

### Preparation

1. Butter or oil an 8-inch square baking dish. (If pan is metal, line it with oiled parchment paper.)

To puff the amaranth, heat a large skillet over high until it is very hot. Puff 1-2 tablespoons (a single layer) of amaranth at a time, stirring constantly, until most of the amaranth has popped. (Not every seed needs to pop.) Pour the popped amaranth into a bowl; repeat until all amaranth is puffed.

2. In a medium-size bowl, mix together the amaranth, coconut, seeds, and nuts. In a small saucepan, over medium heat, warm the peanut or almond butter until it is pourable. Remove from heat, then add the Hammer Gel, maple syrup, and vanilla. Pour the liquid mixture into the amaranth and nut mixture and stir until evenly combined. Add the dried fruit and mix again. Spread the mixture into an even layer in the baking dish. Refrigerate for at least 90 minutes until set.

3. Cut into bars, then store in an airtight container in the refrigerator.

## SHARE YOUR OWN KITCHEN CREATIONS!

Have you developed your own Hammer-inspired recipe? Share it with us and fellow clients! E-mail your recipe (and a photo, too, if possible) to: [letters@HammerNutrition.com](mailto:letters@HammerNutrition.com)

# Everybody's fave!

**“HAMMER BARS ARE GREAT!**  
*So delicious that my son is stealing my supply!” - Mark S.*

**“LOVE Hammer Bars! Not only are they healthy, *THEY ARE SUPER TASTY* as well!”**  
*- Dana B.*

**“HAMMER BARS ARE MY FAVORITE!** *I know that I can trust Hammer Nutrition to only include ingredients that will benefit me.” - Tara G.*



Delicious taste, moist texture, **all-organic ingredients**, no preservatives, **gluten-free**, great for young athletes, **vegan**, and non-dairy kosher!

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12 or more - \$2.40 ea.



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from the kitchen of  
**laura labelle**

# 4 HEARTY BREAKFASTS

(and healthy ways) to start your day...

**These delicious cereals will get you stoked for even the coldest winter day.**

Laura Labelle, who studied at *Ecole De Cordon Bleu* in Paris, is an acclaimed California-based chef. She opened the popular *Cafe Luna*, was in-house chef for *Mix This* music studio, and operated her own catering company.

With healthy, complex carbs, nuts, and antioxidant-rich fruits, seeds, and spices, these flavorful cereals are the perfect way to fuel for a day on the slopes or an easy winter workout. For a lighter breakfast, sprinkle a tablespoon or two of granola over plain yogurt. Remember to complete your meal at least 3 hours before you begin any exercise. (Also, avoid high-fiber foods on days that you plan to participate in any competitive event.)

## Hot Turmeric Cereal

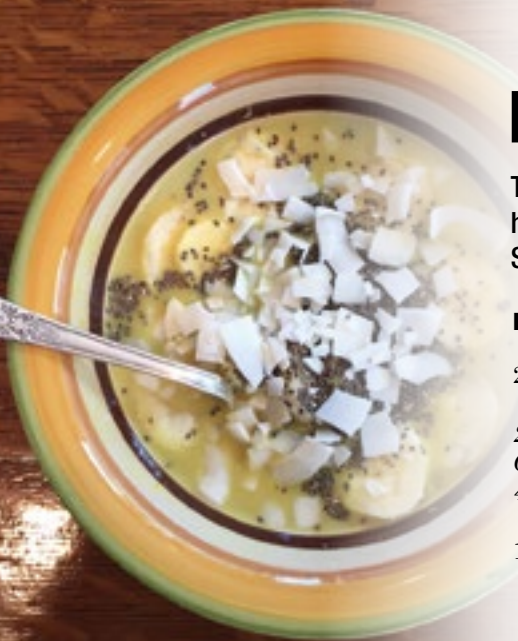
This hot cereal is more than a tasty breakfast. Both turmeric and Tissue Rejuvenator have powerful anti-inflammatory properties to ease joint and muscle soreness! Serve with the milk of your choice (i.e., hemp, rice, coconut, or almond milk).

### Ingredients

2 servings oatmeal or Cream of Rice  
2 teaspoons grated fresh turmeric  
OR  
4 Tissue Rejuvenator capsules  
1 teaspoon honey (if using Tissue Rejuvenator)

### Preparation

In a medium-size saucepan, prepare the cereal according to package directions. For extra flavor, I like to cook my cereal in almond milk instead of water. As the cereal cooks, add either the turmeric or Tissue Rejuvenator capsules. (Break open the capsules and pour the contents into the cereal.) If using Tissue Rejuvenator, add the honey to offset the slightly bitter flavor. Serve with your choice of toppings and milk.





## Vanilla Almond Granola

No need to make a special trip to the market to make this simple but delicious granola. You probably have all of the ingredients you need already in your kitchen.

**Makes 6 servings**

### Ingredients

2 1/2 cups old-fashioned rolled oats  
3/4 cup slivered almonds  
1/2 teaspoon ground cinnamon  
pinch of salt  
1/2 cup pure maple syrup  
1/4 cup melted coconut oil  
1/4 teaspoon almond extract  
1 tablespoon vanilla extract  
(yes, tablespoon)

### Preparation

Preheat oven to 250°F. Line a large baking sheet with parchment paper or a silicone baking mat. Toss the oats, almonds, cinnamon, and salt in a large bowl. Set aside. In a medium bowl, whisk the maple syrup and coconut oil together until combined. Whisk in the almond and vanilla extracts. Pour the liquid over the oats and toss, making sure that all of the oats are moistened.

Spread the mixture onto the prepared baking sheet; bake 30-45 minutes, stirring every 15 minutes, until golden. Allow granola to cool completely. As it cools, the granola will become crunchy. Store in an airtight container at room temperature for up to 3 weeks.

## Hearty Granola

Besides boosting flavor, the nuts and seeds in this granola add substance, protein, and antioxidants. Chia seeds are particularly rich in good-for-you omega-3 fatty acids. Feel free to experiment by adding different nuts, seeds, or berries—such as walnut or hazelnuts, hemp or sesame seeds, dried cranberries, or raisins.

**Makes 12 servings**

### Ingredients

3 cups old-fashioned rolled oats  
1 cup slivered almonds  
1 cup chopped pecans  
3/4 cup shredded sweet coconut  
1/4 cup plus 2 tablespoons coconut or date sugar  
1/4 cup goji berries  
2 tablespoons flax seeds  
2 tablespoons chia seeds  
3/4 teaspoon salt  
1/4 cup plus 2 tablespoons pure maple syrup  
1/4 cup coconut oil

### Preparation

Preheat oven to 250°F. Line a large baking sheet with parchment paper. In a large bowl, mix together all ingredients. Spread the mixture in a single layer on the prepared baking sheet. (You may need to bake the granola in two batches.) Toast in the oven until the ingredients begin to turn golden (about 30-45 minutes), stirring every 15 minutes so that the granola toasts evenly. Allow granola to cool completely. Store in an airtight container at room temperature.

## Fruity Granola

Amp up the flavor and the antioxidants with this fruit-studded cereal combination. Feel free to experiment by substituting other nuts and dried fruits.

**Makes 12 servings**

### Ingredients

3 cups old-fashioned rolled oats  
1 cup coarsely chopped pecans  
1/2 cup unsweetened shredded coconut  
1/2 cup coconut sugar  
3/4 teaspoon cinnamon  
1/4 teaspoon salt  
1/3 cup honey  
2 tablespoons coconut oil  
1 cup assorted dried fruit (such as apples, apricots, raisins, etc.)

### Preparation

Preheat oven to 250°F. Line a large, rimmed baking sheet with parchment paper. In a large bowl, mix together the first six ingredients. (Set aside the assorted dried fruit, which will be added last.)

In a medium saucepan, gently heat the honey and oil over medium-low, stirring until smooth. Pour the honey mixture over the oat mixture; toss. Spread granola on the prepared baking sheet. Bake until golden, stirring every 10 minutes, about 30-40 minutes total. Place sheet on rack. Stir granola; cool. Mix in dried fruit. Store in an airtight container.

## Download our FREE cookbook!

*In the Kitchen with Hammer Nutrition* includes more than 100 pages of wholesome and delicious recipes for breakfasts, salads, entrees, and everything in between. Download your FREE copy at the Hammer Nutrition website:

[www.hammernutrition.com/cookbook/](http://www.hammernutrition.com/cookbook/)





# POWERING UP AASGARD PASS



## Two determined hikers conquer the killer climb in better than expected time

BY EMILIE MORESHEAD

For three years, I dreamed of returning to Aasgard Pass in Washington state's Cascades Mountains to repeat the brutal climb I made 20 years earlier. The trail covers 18 miles and 4,000 feet of elevation gain, with 2,300 feet of that gain occurring in less than a mile on the push up Aasgard Pass.

This time I wanted to do the killer hike in a single day, together with my friend



**Top:** Beautiful Aasgard Pass in WA state gives hikers all they could ask for.

**Left:** Emilie Moreshead (left) and her friend Jenn Blandy pause to appreciate one of the trail's amazing views.

**Opposite page:** Feeling strong, Moreshead runs a portion of the Aasgard Pass trail.

**Photos:** Emilie Moreshead





Jenn. Busier than expected work schedules severely cut into our spring training, but we decided to go for it anyway.

The night before our hike, I packed every bit of Hammer support that I could: Hammer Gel to slurp along the trail; Endurolytes to prevent cramping; Apple Cinnamon Hammer Bars to nibble during non-technical areas; and the all-important HEED for my hydration bag. (I don't leave home and head for the hills without it!)

The early part of the hike went smoothly enough. Within three hours we had climbed 2,000 feet to reach Colchuck Lake, where the real challenge begins. Anticipating the punishment ahead, we paused for some Perpetum Caffé Latte and stared up at Aasgard.

The climb was as bad as I remembered it to be. We boulder-hopped and scrambled all the way to the top. About three-quarters of the way up Jenn smiled, but I glimpsed pain behind the smile. After recharging with Endurolytes, we continued onward and upward, using our hands and arms nearly as much as our legs.

The view at the pass is rewarding. The upper Enchantment Lakes look like another planet, with rolling granite and alpine water colored by glacial flour. We paused to take a breather then noted that we still had 13 miles to go and not much time to do it in! Across the sandy patches at the top we ran, slowing only to pick our way through the trip-hazard rocky areas. We slid across the snow, hopped the small streams, and fueled on the go, relying on the ease of Hammer's products to eat and to digest. Losing focus was not an option.

With about 5 miles to go Jenn got the itch to open it up, and she let it rip! The last few miles were all mine to pull us in. We both took another hit of Montana Huckleberry



Map: United States Forest Service

## BY THE NUMBERS

**18**

total miles

**4,000**

feet total elevation gain

**2,300**

feet elevation gain in final mile

**10** hours **40** mins

Hammer Gel, and then hammered to the finish with a time of 10:40. Although it wasn't a record, we had pushed ourselves to our limits and enjoyed ourselves thoroughly. I was so thankful I had discovered Hammer Nutrition products a few years ago because I don't think we would have been able to do it otherwise! *[HN]*

EMILIE MORESHEAD is a professional snowmobiler and backcountry exploration junkie. She calls Spokane/Northern Idaho home.

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*"With the help of Perpetuem, I was able to cross the finish line at my third Leadville 100." - Kelly A., USA*

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- Maximizes fat utilization
- Helps prevent muscle fatigue

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16 Servings - \$29.95

32 Servings - \$49.95

\*Mix and match flavors.

Flavors: Caffé Latte,

Orange-Vanilla,

Strawberry-Vanilla,

Unflavored



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# 6 11

## Hell Hike and Raft: 6 tough days and 11 adventurers who lived to blog about it

BY TARA OSTER

My head broke the river's surface as I continued to swallow water. Somehow I'd managed to hold onto the side of the raft after we were "dump-trucked." Our guide, Rick, appeared to my left, jumped back in the raft and pulled me in before dragging the rest of our paddleboat crew onboard. We counted our missing items and laughed at our epic failure. This was our introduction to Waterspout Rapids on the Snake River in the belly of Hells Canyon.

I'd rolled into New Meadows, ID, four days earlier — the last "Hell Hike and Raft" group member to arrive. A Hammer Nutrition-supported event, Hell Hike and Raft began as an idea several months earlier from the minds of hiking blogger, Adam Nutting, and America's Rafting Company owner, Parker Arrien. The idea was simple: get a group of outdoor bloggers together to participate in a backpacking and rafting trip, while simultaneously testing several products to review.

Now here we were, 11 adventure bloggers from across the country, many of whom had never met each other. I wondered how I'd become part of this group, as I was the least practiced, having never been backpacking or rafting. Nevertheless, I had something to prove to myself on this journey.

The crew, along with our guides Marshall and Rick, piled out of the 15-passenger van early the next morning at the trailhead to the heart of the Seven Devils Mountains. Each of us double-checked our packs (mine included Hammer Nutrition Endurolytes, Hammer Recovery Bars, Recoverite, Tissue Rejuvenator, and Hammer Lips, as well as an emergency blanket, flashlight, sleeping bag/pad, thermals, a mid-layer, and gloves). I loaded up my spare water bottle with Endurolytes Fizz — a must for every hike — to help me handle whatever the trail had in store.

Goat Pass challenged me from the get-go. Not heavily used (or well maintained), the trail ascends several hundred feet in a short distance. At the top of the first ridge, looking out over Mirror Lake to the Tower of Babel, I realized how unique and beautiful the Seven Devils are. These mountains offer an appealing contrast to the wilderness of northwest Montana.

We spent the next two days exploring the mountains and received our first glimpse of Hells Canyon from atop Dry Diggins Lookout. On the third day, we hiked down to the mouth of Granite Creek and the bottom of Hells Canyon where we joined Parker and his wife, Becky, to begin the second half of our adventure — rafting the Snake River. Fortunately, no one received any injuries after our "dump-truck" mishap the first day, and we concluded our adventure two days later and approximately 20 miles downriver at Pittsburg Landing. **[HN]**

Read detailed accounts from all the participants at: [www.hellhikeandraft.com](http://www.hellhikeandraft.com)

Tara Oster is a skier, hiker, and blogger in Kalispell, MT. When she's not out exploring, she works as a 911 dispatcher.



**Clockwise from top:** Jes, Rick, Russ, Paulina, Tara, and Wendy shrug off Suicide Point.

**Photo:** Jes Zaneis

Parker Arrien guides half the crew over Granite Creek Rapid.

**Photo:** Val Joiner

The crew assesses the Tower of Babel for the first time.

**Photo:** Tara Oster





**16.6**

*Miles hiked over 3 days*

**10,217**

*Feet of elevation gain*

**26**

*Miles of rafting over 3 days*

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electrolyte  
support  
for all the  
toughest  
conditions!**



- Superior cramp prevention
- Designed for harsh conditions
- Full-spectrum electrolytes

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120 Capsules - \$24.95

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3 or more - \$22.45 ea

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## PDQFKT

Agnew sets unsupported Fastest Known Time on White Rim Trail

On the evening of October 17, 2014, Hammer Nutrition ultrarunner Kelly Agnew set out to run Utah's 100-mile White Rim Trail unsupported, aiming for the Fastest Known Time (FKT). Carrying his own water, nutrition, and supplies, Agnew emerged from the desert 21 hours, 52 minutes, and 12 seconds later, breaking the previous unsupported record by over 5 hours. He shared his observations about the experience with us ...

*EN: How do you feel about your effort and result on this run?*

**KA:** In all honesty, I feel pretty great about the result because I expected to be about an hour slower. But to achieve this, I really heaped a lot of abuse on myself. I'm still not sure that I managed my pace the best way.

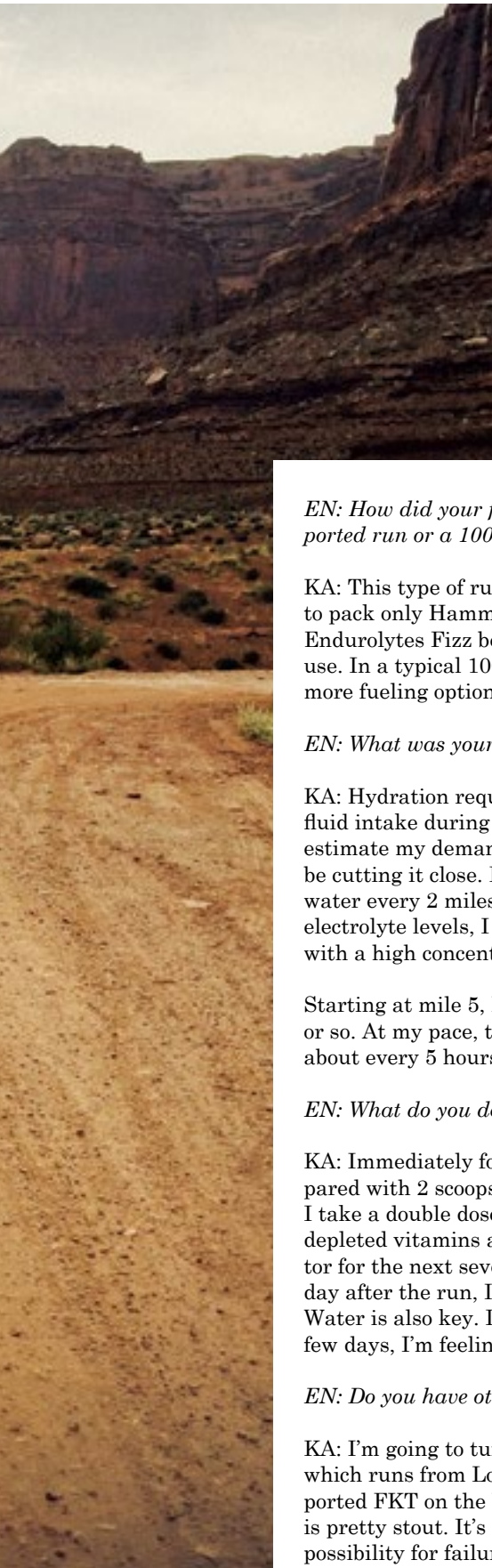
*EN: What kind of gear did you need, and what special preparations did you take to ensure a successful unsupported run?*

**KA:** The biggest issue was how to pack my water. The previous record holder used a modified jogging stroller to pack his water and gear down the trail. I simply couldn't wrap my head around that! I reached out to my friends at Osprey, who provided me with the Osprey Rev 12, which comes with a 2.5-liter bladder. More importantly, it has plenty of storage space.

I added two more 1.5-liter bladders into the main body of the pack. All three bladders were on quick disconnects, so I could swap them easily. I also used four Hammer Nutrition Purist bottles and stuffed two of them in side pockets on the pack and two more inside the pack. That accounted for 285 ounces of water. The pack also held my Hammer Endurolytes Fizz tabs, Hammer Gel, headlamps, batteries, gloves, extra layers for night running and a few pieces of emergency gear. The pack weighed 22.6 pounds but felt surprisingly comfortable.







**Large image:**

En route to a record run.

Photo: Jo Agnew

**This page:**

The White Rim Trail loops 100 miles through stunning Canyonlands National Park. Hammer Gel was a mainstay in Agnew's historic FKT effort.

Photos: Courtesy Kelly Agnew

**Bottom:**

Agnew on-course during another great feat, the 2014 Leadville 100.

Photo: Caleb Wilson

Follow Agnew online:

[www.slippingslowlyintopain.com](http://www.slippingslowlyintopain.com)



*EN: How did your fueling strategy differ from a typical supported run or a 100-miler with aid stations?*

KA: This type of run demands a minimalist mentality. I elected to pack only Hammer Gel pouches, a few Hammer Bars, and Endurolytes Fizz because they're easy to pack and simple to use. In a typical 100-mile race or supported run, I would have more fueling options, but that wasn't practical in this situation.

*EN: What was your timeline for hydration and fueling?*

KA: Hydration required discipline! I had been tracking my fluid intake during long runs and races for several months to estimate my demand for this FKT attempt. 285 ounces would be cutting it close. Beginning at mile 3, I began to slowly sip water every 2 miles to keep my intake steady. To manage my electrolyte levels, I sipped intermittently from a bottle mixed with a high concentration of Endurolytes Fizz.

Starting at mile 5, I began taking Hammer Gel every 3 miles or so. At my pace, that felt right. I also ate a Hammer Bar about every 5 hours, letting my stomach dictate the timing.

*EN: What do you do after a run like this to recover?*

KA: Immediately following a long run, I drink a bottle prepared with 2 scoops of Recoverite. Within a couple of hours, I take a double dose of Premium Insurance Caps to restore depleted vitamins and minerals. I also take Tissue Rejuvenator for the next several days. If running isn't comfortable the day after the run, I walk 3-5 miles a day until I can run again. Water is also key. I keep a bottle with me at all times. Within a few days, I'm feeling pretty close to normal.

*EN: Do you have other running attempts on the horizon?*

KA: I'm going to turn my focus to the 142-mile Kokopelli Trail, which runs from Loma, CO, to Moab, UT. Much like the supported FKT on the White Rim, the current record for Kokopelli is pretty stout. It's going to be a definite challenge with a real possibility for failure. And that's what appeals to me.



# AID STATION

YOUR HANDUP OF NUTRITION TIPS AND TIDBITS

## Sugary soda consumption linked to shorter lifespan

Recent research confirms just how unhealthy sugary soft drinks really are. Findings published in the *American Journal of Public Health* reveal a link between drinking sugar-sweetened sodas and shorter telomeres within white blood cells. Previous research has shown a link between the length of telomeres within white blood cells and human lifespan.

Positioned at the ends of chromosomes, telomeres (tell-oh-meers) are made up of DNA strands. Telomeres are needed for healthy cell reproduction and, similar to the hard plastic tips on shoelaces, they protect the ends of chromosomes from damage. Short telomeres have been associated



with oxidative damage, inflammation, and chronic diseases such as diabetes, heart disease, and some types of cancer.

The “soda/telomere study” included more than 5,300 participants — men and women between the ages of 20 and 65 with no history of cardiovascular disease or diabetes. After analyzing the participants’ diets, University of California scientists noted that increased sugar-sweetened soda intake was associated with decreased telomere length. Consuming 20 ounces of soda every day was associated with approximately 4.6 years of additional biological aging!

Senior study author, Elissa Epel, Ph.D., summarizes, “Regular consumption of sugar-sweetened sodas might influence disease development” by straining the body’s metabolic control of sugars, and by accelerating cellular aging of tissues. “This is the first demonstration that soda is associated with telomere

shortness. Telomere shortening starts long before disease onset. Further, although we only studied adults, it is possible that soda consumption is associated with telomere shortening in children, as well.”

**Source:** University of California, San Francisco. “Sugared soda consumption, cell aging associated in new study.” *ScienceDaily*, 16 October 2014.

## HAMMER QUICK TIP

Refined, simple sugars in any form are bad for you. For a detailed account of the many health problems caused by high sugar consumption, read “Suicide by Sugar” by Nancy Appleton, Ph.D. and G.N. Jacobs, available for purchase at [www.hammernutrition.com](http://www.hammernutrition.com) Hammer Nutrition fuels, including Hammer Gel, HEED, Perpetuem, and Sustained Energy, contain no refined simple sugars—only healthy complex carbohydrates and natural sweeteners such as stevia and xylitol.

## Research: Omega fatty acids help kids with ADD

Swedish researchers have found that supplements of omega-3 and omega-6 fatty acids may benefit children and adolescents with attention deficit disorder (ADD). Seventy-five children and adolescents with attention deficit hyperactivity disorder (ADHD) were given a combination omega-3/omega-6 essential fatty acid supplement or a placebo for more than three months. For the following three months, all participants received the omega supplements.

“In the 35% of the children and adolescents who have the inattentive subtype of ADHD called ADD, the symptoms [including inability to focus] improved so much that we

can talk about a clinically relevant improvement,” says Mats Johnson, a doctoral student at the University of Gothenburg. The participants who showed clear improvement of their symptoms had a better balance between the levels of omega-3 and omega-6 acids in blood samples.

ADHD and ADD are typically treated with stimulant medications that can have dangerous side effects. So the news that ADD symptoms can be improved simply with these essential nutrients is especially exciting.

**Source:** University of Gothenburg. “Omega 3 can help children with ADD, experts say.” *ScienceDaily*, 23 October 2014.



## HAMMER QUICK TIP

Research has shown that a dietary ratio of about 1:3 omega-3s to omega-6s is ideal, but the average diet contains a ratio of just 1:20 omega-3s to omega-6s, according to estimates. A simple way to ensure adequate omega-3 intake is to supplement with EndurOmega. Two soft gel capsules contain 1,000 mg of highest-quality fish oil—distilled, deodorized, and third-party tested for potency and purity. Besides benefiting brain function, omega-3s boost the absorption of CoQ10 and idebenone (key for energy production), support lung function, reduce joint soreness, and help protect against heart disease.



## Don't be fooled, salt by any other name is still salt

Pink Himalayan, Black Lava, Fleur de Sel ... call it what you will, it's salt. Don't be fooled into thinking that pricey artisanal salts are healthier than the standard table salt sold in the blue box. Although they may contain slightly different trace minerals, most cooking salts are basically sodium chloride — the compound that most people consume in excess.

High sodium intake has been linked to serious health problems including chronic kidney disease, high blood pressure, diabetes, heart disease, and osteoporosis. Acute high sodium intake during exercise can cause lethargy, weakness, and swelling. At very high levels, excess sodium can cause seizures, coma, and even death.

“From a health standpoint, sea salt and table salt should both be minimized,”

says Ashley Barrient, a clinical dietician with the Loyola Center for Metabolic Surgery and Bariatric Care. The dietary guidelines for Americans recommend limiting sodium intake to 2,300 mg per day (equal to 1 teaspoon of salt). For those older than 51, African-Americans, or who have been diagnosed



with diabetes or hypertension, a maximum of 1,500 mg of sodium per day is recommended, according to Barrient.

**Source:** Loyola University Health System. “Sea or table, shake the salt habit for better health, says dietician.” *ScienceDaily*, 13 May 2014.

## HAMMER QUICK TIP

High sodium intake before and during exercise will hurt — not help — your performance and health. In your daily diet, avoid processed and packaged foods, which usually are loaded with sodium. During exercise, replenish electrolytes with a balanced, full-spectrum of electrolytes, such as Endurolytes products—not salt tablets. Also avoid endurance fuels that contain excess sodium. The amount of sodium in a sports drink generally reflects the amount of simple sugar it contains. Because they are formulated with complex carbohydrates and not simple sugars, Hammer Gel, HEED, Perpetuem, and Sustained Energy contain appropriate amounts of sodium for peak performance and optimum health.

## Ordering salad? Skip these 5 hidden candies

Salads that feature fresh greens and other veggies offer good-



for-you vitamins, minerals, and fiber — but be careful: restaurant salads often are loaded with hidden sources of sugar, too! When ordering, ask

your server to kindly hold the following not-so-sweet additions:

### 1. Commercial balsamic vinegar.

Unlike expensive, aged balsamic vinegars, this more common version is often flavored with caramel coloring, sugar, and thickeners.

### 2. Fat-free dressings.

They might have fewer calories and less fat, but what they usually have is really bad for you: high-fructose corn syrup or another sweetener and a host of chemical preservatives. Stick with olive oil and lemon juice or cider vinegar, instead.

### 3. Candied walnuts.

The name says it all. Rich in protein, healthy fats, and fiber, walnuts ordinarily are a healthy food. Why coat them in sugar, butter, and salt?

**4. Glazed salmon.** Another healthy food gone wrong. Beware of anything “glazed.” Usually it has been prepared with brown sugar, honey, or some other sweetener.

**5. Croutons.** Generally made of generic wheat bread, these empty calorie carbs come with a bonus: an unhealthy dose of sodium!

**Source:** Mind, Body, Green, “7 Sneaky Sugars that Sabotage Your Salad.” Nov. 11, 2014

## ONE FOR THE ROAD

“

The existence of reservoirs of energy that habitually are not tapped is most familiar to us in the phenomenon of ‘second wind’ ... if an unusual necessity forces us to press onward, a surprising thing occurs. The fatigue gets worse up to a certain critical point, when gradually or suddenly it passes away, and we are fresher than before ... A third and a fourth ‘wind’ may supervene ... in exceptional cases we may find, beyond the very extremity of fatigue-distress, amounts of ease and power that we never dreamed ourselves to own, sources of strength habitually not taxed at all, because habitually we never push through the obstruction, never pass those early critical points. – *Psychologist William James, “The Energies of Men,” 1907*

# RECORD SETTERS

**Hammer-fueled athletes push the limits for endurance and performance**

BY ENDURANCE NEWS STAFF



## World Treadmill Mile Record Set by Bill Misner!

*Spokane, WA* — Bill Misner, Ph.D., Hammer Nutrition emeritus director of research and development, set a new World Treadmill Mile Record for men ages 70-74 with a time of 6:18:15, beating the previous record by more than 4 seconds. The Oct. 1 record-setting performance capped off a stellar third quarter for Bill that included four other winning performances.

Also in the third quarter, Bill earned a U.S. Road Running AG gold in the 5K, 1st place OA at the Gathering of the Falls Pow Wow (1 mile), 1st AG at the Spokane Tribe 100th annual Pow Wow (5 mile), and 1st OA at the U.S. Road Running Diamond II (5K).

Bill adheres to a plant-based vegan diet complemented by Hammer Vegan Protein. He supplements with REM Caps, iFlora, and PSA Caps, and uses Endurolytes Fizz to replenish electrolytes. Congratulations Dr. Bill!

Top left photo this page:  
Courtesy of Dr. Bill Misner

Top right photo this page:  
Jeffery Genova



## Traci Falbo Sets Indoor World Track Record

*Anchorage, AK* — On Aug. 6, Hammer athlete Traci Falbo set the 48-hour indoor world record by running 943 laps (242.093) miles, around an approximately 413.6-meter indoor track at the Six Days in the Dome event in Anchorage. It was also the second-farthest distance any woman has ever run on any surface during a 48-hour period.

“I used Hammer Gel, Endurolytes Fizz, Race Caps Supreme, and Anti-Fatigue Caps during the race and Recoverite after the race,” she reported. “I knew I had to be smart, so I took in nutrition like clockwork. I had a Hammer Gel every 30 minutes, and at the 2-hour mark, I began taking Anti-Fatigue Caps and Race Caps Supreme hourly. Every 3 hours, I took Endurolytes Fizz in my water for electrolytes.” Read more about her record-setting experience at: <http://tracifalbo.blogspot.com/>

*Update:* At the Tunnel Hill 100 in mid-November, Traci also set the 100-mile American trail running record with a time of 14:45:25, beating the previous record set in 2007 (14:57:18).



## B2K2JA Throw down the Hammer across Catalina Channel

*Santa Catalina Island, CA* — In the dark of night, at 3 a.m. on Sept. 28, 2014, a relay team comprised of veteran open water swimmers Brent Blackman, Bernie Zeruhn, Keith Dickson, Karen Dehmel Schmidt, Jen Schumacher, and Amy Dantzler set out to be the fastest mixed-gender relay team to swim across the approximately 21-mile channel between Santa Catalina Island and Palos Verdes. The team broke not only one but two records when they completed their crossing in the outstanding time of 6:57.43. The Southern California-based team shattered the old mixed team record by more than 30 minutes, and set the record for the fastest overall time for any relay team swimming from Catalina Island to the mainland.

Most of the team drank HEED during their individual swims on the rocky seas. Taking nutrition at 20-minute intervals during their hour-long legs provided nutrition, hydration, and a much-needed mental break. This was especially important for the swimmers who swam during the dark of night.



## New Course Record for Mt. Sentinel Hill Climb

*Missoula, MT* — Jim Walmsley, a Hammer Nutrition athlete, set a new course record for the Mt. Sentinel Hill Climb Oct. 26 with a blistering time of 19:52. Other Hammer supported top-finishers included Andrew Drobeck, 3rd place, and Dan Mazza, who finished 8th. The grueling course allows racers to choose their route to the summit: the shorter, steeper trail or the slightly longer and (slightly) less steep route. Racers climb nearly 2,000 feet covering about 2.25 miles above the University of Montana.

Top photo this page:  
Courtesy of Amy Dantzler

Full page photo:  
Myke Hermsmeyer





# We support your sport

An endurance event “smörgåsbord” — that’s how we would describe the wide variety of events that Hammer Nutrition supports in late winter to early spring. If you live in an area where snow still predominates, keep your Nordic skis waxed and race ready. In warmer climate areas, ultrarunning — which doesn’t seem to have an “off” season — is in full swing. Multisport races are starting to crop up now, too, along with road cycling, ultra cycling, and mountain biking events. As we’re fond of saying, “If it’s ‘endurance,’ chances are Hammer Nutrition supports it!” Look for us at these and other great events in the coming weeks:

## February 6-10 – Iditasport

Wasilla, AK

Tagged “The ORIGINAL human powered race: Ski, Bike, Run,” Iditasport Wasilla starts approximately 45 miles northeast of Anchorage and offers competitors either a 100K or 225-mile challenge. Racers experience Alaska’s majestic Mount Susitna, frozen rivers, freezing temperatures, strong winds, and abundant wildlife.

## February 14 – Bike Sebring 12/24 Hours

Sebring, FL

You’ll begin this race with three laps around the historic 12 Hours of Sebring Race Track before heading out onto public roads and then riding as many miles as you can in 12 or 24 hours. The 24-hour race is a qualifier for the annual Race Across America.



Hammerin’ strong at Bike Sebring 2014. Photo: EDDY RAYFORD

## February 21 – The Walburg Classic

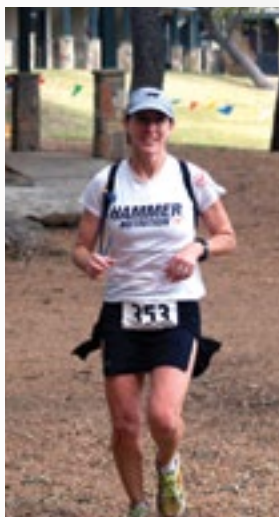
Walburg, TX

For the past decade, as many as 800 cyclists — from Juniors to Cat. 1 Pros — descend upon the little town of Walburg, about 35 miles northeast of Austin, to compete in the largest one-day race on the Texas Bicycle Racing Association calendar.

## February 28 – Nueces Endurance Trail Run

Camp Eagle-Rocksprings, TX

The fourth race of nine in the Texas Trail Running Championship Series, Nueces is celebrating its sixth year, headed up again by trail running legends Joe and Joyce Prusaitis. Their goal, says Joe, is to “create a long distance trail race that is difficult, yet runnable . . . so it isn’t easy, and wasn’t intended to be. It is our intention to provide the very best Texas hospitality. Our stations . . . will provide more encouragement than sympathy, and intend to take care of you as best we can.”



Left: A Nueces Trail runner hammers home. Photo: Joe Prusaitis





Family ski fun at the Great Bear Chase. Photo: Brockit Inc.

## March 6-7 – Great Bear Chase Ski Marathon Calumet, MI

The Great Bear Chase is a late-winter cross-country ski race that showcases Michigan's Keweenaw Peninsula and its bountiful snow. With 50K, 25K, and 10K events, there is something for everyone. Friday, March 6, features a Junior Bear Chase for younger skiers. A great way to finish ski season!

## March 6 – Florida Double ANVIL Walburg, TX

The first of three races on the USA Ultra Triathlon schedule, up to 50 competitors are expected for this double iron-distance race (4.8-mile swim, 224-mile bike, and 52.4-mile run). Running in a non-stop, no-time-out format, athletes have 36 hours to complete the race.

## March 28 – Ouachita Challenge Oden, AR

This 60-mile mountain bike race is contested on two epic trails: The Ouachita is known for its challenging climbs and vast technical sections. The Womble has fast trails and scenic views.

## April 23-26 – Joe Martin Stage Race Fayetteville, AR

Part of the National Race Calendar, this race draws 700+ international cyclists. It's also the kickoff for the International Christian Cycling Club's (IC3) national teams program. IC3 invites you to join them; details at: [www.christiancycling.com](http://www.christiancycling.com)



Darryl Smith (above) is a member of the IC3 NorCal team and a Cat 1 racer. Photo: Courtesy Darryl Smith



## CHARTING A NEW COURSE

**An enduring (and endearing) ultra takes the next step**

BY PAT CAFFREY, FOUNDER

Le Grizz was Montana's first ultramarathon. Today it's one of the world's oldest 50-mile runs — somewhat to my surprise.

I had no grand plan for the future of the event in 1982, the first year we ran Le Grizz. I just took it one year at a time. But I did have a feel for what runners would need to complete the distance — and have a positive experience doing it — because I had run ultras myself. Over Le Grizz's 33-year history, the average completion rate is 95%. *That* was my original intent.

As race director I had plenty of headaches and hassles (having a stubborn streak helped me manage them). But every time a runner finished his or her first 50-miler, I experienced a shared sense of pride and accomplishment. I photographed the runners as they hit the finish line, and I have a photo or video of nearly every finisher, dating back to the very first running.

Unexpectedly, a cadre of repeat entrants steadily grew, and I presided over their annual reunion. Forty-seven runners have completed the event at least 10 times, and of those, nine have finished 20 times. For a third of a century, Le Grizz was my day to hang out with class people at their best, sharing in their accomplishments. What remains is an intact legacy, an event that has established its own traditions.

I will miss the strange scene of lots of runners gathering on a remote road along Hungry Horse Reservoir in early October. After more than three decades it now seems part of the seasonal cycle for me. But now that road will be abandoned and the starting line camp will become a ghost town, of sorts, as the course moves to a new location. I will also miss the many volunteers who returned each year until, like me, they grew too old to continue.





**Opposite:**  
Pre- and post-race camaraderie adds to Le Grizz's appeal.

Ever-changing vistas draw runners closer to the finish.

Photos: Myke Hermsmeyer

Founder Pat Caffrey.

Photo: Flathead Beacon

**This page:**  
For ultrarunners in northwestern Montana and beyond, early October is synonymous with Le Grizz.

Traditionally traversing the Hungry Horse Reservoir, the 50-mile route will move to the equally beautiful North Fork area in 2015.

Right: Start of the 2013 Le Grizz at the Polebridge Merc.  
Photos: Myke Hermsmeyer



## The legacy continues

New race directors Heather Cauffman and Will Hammerquist say the 2015 Le Grizz will be held in the North Fork area of Montana's Flathead River, an area known for its spectacular wilderness beauty. Runners got a taste of the North Fork for the 2013 event, when a government shutdown forced an unexpected change of venue.

"We're working out the route details," says Hammerquist. "What I can guarantee is that runners will love it." Wherever the new path leads, two things won't change: "You will have incredible views ... and you could be eaten by a grizzly."

Polebridge, MT, will no doubt factor in the new route. Hammerquist runs the Polebridge Mercantile, a resupply point for cyclists and backpackers (where Hammer Nutrition products are among the top sellers). "We look forward to Hammer's continued sponsorship of Le Grizz."

Co-director Heather Cauffman, who brings a wealth of race organizational experience, is gearing up for online registration this year. Expect Le Grizz to happen on the same date as in the past. "Pat told us two things must not change: it must be called Le Grizz and it must run the second Saturday of October." Mark your calendar.

It doesn't bother me that the course will move. I hope running the North Fork will continue for many years and provide a Montana wildland experience for a new generation of ultrarunners. Polebridge offers many advantages, and I believe it will be well received by future entrants. Who knows, maybe in another 33 years the run will return to Hungry Horse!

I will be involved in the transition for the next two runs. After that, I expect to enjoy the event as a spectator and hang with old friends. You never know what's going to happen at

Le Grizz. With winners from Australia and Italy the last two years, the event has started to pick up an international flavor. Whatever the future holds, do not expect the usual! **[HNN]**

Hammer Nutrition has been a proud sponsor of LeGrizz for 20 years. Until a new website is ready, check out the old version for more information (and a laugh or two): [www.cheetahherders.com/LeGrizz.html](http://www.cheetahherders.com/LeGrizz.html)





# ALOHA!

## Year one of our “Hammer Canada-powered” Aloha Cycling Retreat is in the books.

BY RYAN CORREY

From Nov. 9-16, our team had the pleasure of hosting four awesome riders in Kona, HI. And we spared no expense! We secured a luxury home accommodation, prepared a diverse range of healthy meals (see the example below), and organized daily activities to complement the smooth volcano ascents. Riders had the opportunity to swim with wild dolphins, visit local markets, go cliff diving, paddle a traditional canoe, do daily core workouts, hear from a local Ironman/ultra athlete, and relax on the beach. Of course, they also got one-on-one fueling advice and EMS demos, and sampled a wide range of Hammer products. Stay tuned to [www.alohacycling.com](http://www.alohacycling.com) for information on future camps. Also please feel free to email any questions to: [ryan@hammernutrition.ca](mailto:ryan@hammernutrition.ca)



Top three photos: Participants work and play hard at the Aloha Cycling Retreat. Photos: Courtesy of Hammer Canada

Above: Aloha hosts Ryan Correy and Sarah Hornby enjoy a Kona ride.

## Sweet Potato Coconut Soup

Lemongrass, ginger, and coconut provide a unique medley of flavours to complement the lush tropics.

BY SARAH HORNBY



### Ingredients

- 1 tablespoon coconut oil
- 1 large onion, peeled and chopped finely
- 2 garlic cloves, crushed
- 2 cm piece fresh ginger, peeled and diced
- 2-3 sweet potatoes, peeled and diced
- 1 tablespoon lemongrass, chopped
- 600 ml (20 fl oz) veg or chicken stock
- 1 13-oz can coconut milk
- Salt and fresh-ground pepper, to taste
- 2 limes (zest and juice)

### Preparation

Heat coconut oil in a large saucepan and gently sauté onion, garlic, and ginger until tender (about 5 minutes). Add diced sweet potatoes and lemongrass, cook for 3 more minutes. Add stock and bring to a boil. Reduce heat and simmer, covered, for 20 minutes until vegetables are tender. Cool soup slightly. Add half the can of coconut milk and puree in batches, using a hand blender or food processor. Return soup to the saucepan; add remaining coconut milk. Salt and pepper to taste. Heat through without allowing the soup to boil. Add lime juice. Ladle soup into bowls and garnish with lime zest. Enjoy!

Sarah Hornby is cook extraordinaire for the Aloha Cycling Retreat and Great Divide Mountain Bike Tour.





## My year as an Athlete Ambassador!

BY KATIE OZOLINS

Last year, I was honored and proud to be selected as an Athlete Ambassador for Hammer Nutrition Canada, a brand I truly believe in. I hit the podium in all my national triathlon and cycling races last year, and I attribute much of my success to my better understanding of nutrition.

The support and encouragement I received from the people at Hammer and from other athletes was immense. As an Ambassador, I loved sharing my knowledge about Hammer products and their benefits. I also appreciated the opportunity to play a part in shaping the company's future.

Katie's commitment to the program has opened up several new doors for her at Hammer Nutrition Canada. In addition to developing her "Coach Katie" business, she provided ride support for us in Hawaii. Look for her at our Carefree Cycling Retreat in Arizona in March. Our 2015 ambassadors will be announced in the next issue of *Endurance News!*

All photos this page:  
Courtesy of Hammer Nutrition Canada



## ARIZONA SPRING TRAINING CAMPS

With a host of rave reviews (and constructive feedback) for the Great Divide Mountain Bike Tour and Aloha Cycling Retreat now in our pocket, excitement mounts for what we believe will be our cornerstone cycling experience, the Carefree Cycling Retreat in Carefree, AZ. Join us for 7 days in the sun!

### Road Cycling Camp

*March 6 - 12, 2015*

Smooth desert rides + coffee shop pace lines + Hammer Nutrition clinics = a 1-2-3 punch for your spring training

### Mountain Bike Camp

*March 14 - 20, 2015*

Gravel grinding in the desert hills, smooth red rock descents, sunset endurance challenges, skill sessions, and laid-back laughs

### What's included?

- Shuttle to and from the Phoenix International Airport
- 7 days of fully supported rides and educational seminars
- 6 nights accommodation at the Carefree Resort & Conference Center
- Breakfast at the hotel each morning
- Group lunches and dinners at local Western themed establishments
- Mechanical support, including setting up and boxing your bike
- All of your Hammer Nutrition endurance fuels and Compex EMS

[www.carefreecycling.com](http://www.carefreecycling.com)







# MONSTERS, MUCK, AND MOORS

BY BILL TIWANA AND GIN SEREIKAITE

We've had a good year sponsoring races and events here in the United Kingdom and in Europe. Many of these events are ones we sponsor year after year. Here are just a few of the fun events we'll be supporting again next year:

**MonsterRacing** multisport and ultra events have grown enormously in recent years! The races attract elite international athletes as well as newcomers. Read more at: [www.monsterracing.net](http://www.monsterracing.net)

**Mucky Races** "run where others fear to tread, from tough mud pits to freezing water wades." The 5, 6, 10, and 12K obstacle races range in difficulty from the Lode of Mud 5K to the Gauntlet with freezing water obstacles. Read more at: [www.muckyraces.co.uk](http://www.muckyraces.co.uk)

**The Hardmoors Ultramarathons** have been called "a classic in the making." Events range from the 26.2 Trail Marathon Series, beginning Feb. 15, to the Hardmoors 160 "Ring of Steele," a 160-mile single stage ultra. Read more at: [www.hardmoors110.org.uk](http://www.hardmoors110.org.uk)

**Tec Sweden** promises all the ultra challenge and fun you could want. Runners from more than 10 countries compete in the 50- and 100-mile events. Find out more at: <http://new.tec100.se>

## From Our Athletes

Hammer UK sponsored many athletes this past year, including boxer **Richard Commey** (below left), who won the Commonwealth Lightweight title in London. Richard was advised and fueled exclusively by Hammer Nutrition.

Read more about Richard at: [www.bbc.co.uk/sport/0/boxing/28280776](http://www.bbc.co.uk/sport/0/boxing/28280776)

**Pedro Maia** (below right), veteran ultra MTB racer from Portugal, won his Class (55-59) at the World Endurance Mountain Bike Organization's 24-Hour Solo World Championships. Pedro wrote, "Thanks to your supplements and information, I'm still competitive and winning races." Check out Pedro on: [http://cmtv.sapo.pt/programas/manha\\_cm/detalhe/pedalar-durante-24-horas.html](http://cmtv.sapo.pt/programas/manha_cm/detalhe/pedalar-durante-24-horas.html)

**Livia Lancelot** (above), the 2014 French Women's Motocross champion and 2008 World Champion, is also sponsored by UK Hammer. You can catch her on YouTube at:

[www.youtube.com/watch?v=tRjV6l2HyTs](http://www.youtube.com/watch?v=tRjV6l2HyTs)

Above photo: Jeff Ruiz.

Right photos: Courtesy Hammer Nutrition UK





CHILE



# HAMMER NUTRITION COMES TO CHILE

BY BRIAN FRANK

Beginning in January, a variety of Hammer Nutrition products became available for purchase in Chile. Our distribution in Columbia and Venezuela has been growing for several years, but this is our first foray into Chile. Hammer is already well known within the Chilean endurance community, and all indicators suggest that our products will be well received.

We've partnered with Renato Sandoval of SZ Limitada ([www.szlimitada.cl](http://www.szlimitada.cl)), who will be following our grassroots, consumer direct model — a first for the Chilean market. Hammer Chile's website [www.hammernutrition.cl](http://www.hammernutrition.cl) is now up and running for consumer direct orders. The site also is home for our new guidebook, the *5 Secrets of Success for Endurance Fueling*, and several of our other key educational resources, all freshly translated into Spanish. Hammer products will be available in Chile through [www.pro-runners.cl](http://www.pro-runners.cl) as well.

Last month, I was fortunate to be able to travel to Chile to meet Renato and his partner Turok Villacura Carter and see the operation firsthand. While there, I led a fueling clinic for the Pro-Runners team on the beach at Vina Del Mar.

**Right:** Hammer Nutrition owner Brian Frank meets with new partners Renato Sandoval (left) and Turok Villacura Carter (center) of Chile.

**Photos this article:** Courtesy of Brian Frank



# SIOBHAN MAIZE'S VIRGINIA DOUBLE ANVIL TRI RACE RECIPE



**Training:** Race Caps Supreme, HEED, Hammer Gel, Perpetuem, Endurolytes, Recoverite; "all were essential for my success while training in the heat of South Carolina!"

**Just before the swim:** Hammer Gel, 2 Endurolytes

**During the swim (4.8 miles, 12 laps):** stopped for Hammer Gel and water after 2.4 miles, then every two laps; "I was 3rd out of the water and I felt great!"

**On the bike (224 miles):** Seat Saver, Perpetuem; "sipping on Perpetuem helped settle my stomach after swallowing a little too much lake water ... Seat Saver was from heaven! Fifteen hours on the bike and no chafing!"

**During the run (52.4 miles, 26 loops):** Perpetuem, HEED, Endurolytes

## RESULTS

**29 hours 7 minutes; 1st female; 5th overall**

"... tears came to my eyes as I realized what I was about to accomplish after months of dreaming and hours and hours of racing."  
- Siobhan Maize

Race recipe photo: John Maize

79,000'

119 hours



4:00am

# TOUR OF GIANTS

## The allure of a five day run through the Alps

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BY JASON POOLE

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Why wouldn't I get up at 4 a.m. to register for the Tor des Géants, a 330K (205-mile) mountain running race through the Italian Alps? It seemed only natural that the registration process would deprive me of sleep, just like the race. The Tor, as it is known, isn't a stage race. The winner of this journey is the runner who completes the race in the shortest time, making his/her own decisions on when, where, and how long to stop for rest. The course boasts nearly 24,000 meters (79,000 ft.) of elevation gain, and loss, over technical, alpine terrain. Traversing an entire region and running at the foot of some of the highest peaks in the Alps, the Tor also aims to promote tourism in the spectacular Valle d'Aosta.



“The Tor was brilliantly challenging, and its allure mesmerizing.”

### Timing is everything

After I was accepted into the race, one of my first projects was to develop a fueling strategy. With more than two decades of endurance racing under my belt — multi-day adventure races, 100-mile mountain bike races, ultramarathons, 24-hour orienteering races — I was keenly aware that a proper fueling strategy could bring me confidently across the finish line, or spell disaster.

Hammer Nutrition products would be my primary fuel source. Historically for ultramarathons, my plan has consisted of 1 Hammer Gel and 2 Endurolytes at the top of every hour and 1 Perpetuem Solid every 20 minutes. I set the countdown timer on my watch to chime every hour and alert me every 20 minutes to fuel. For the Tor, I also decided to eat part of a Hammer Bar every hour.

Timing is everything. The month that I learned that I had gained entrance to the Tor, I also learned that my family would be relocating to Germany — leaving the mountainous terrain of Colorado for the flat terrain of Munich. As a househusband and Mr. Mom, my ability to leave for all-day trail excursions was limited. My training was reduced to just two mountain running races and regular 60-90 minute, higher-tempo runs around the forests of the Munich suburbs. I would have to rely on my base of 18 years of ultramarathons for success at the Tor.

### Basi Vita Hammer

Before the start, racers are given a generous-sized duffel bag that progresses around the route ahead of you. At each of the seven *basi vita* (“life base” aid stations) access to your duffel ensures that whatever you’ve managed to cram inside is waiting for you. Most of mine was occupied by carefully packaged and labeled bags of Hammer Nutrition products.

The organizers and volunteers were simply amazing. Despite racing for 119 hours and sleeping only 8, I had no stomach distress, muscle cramping, or nausea. I credit this to my use of Hammer products almost exclusively.

The Tor was brilliantly challenging, and its allure mesmerizing. If I can get up again at 4 in the morning on registration day, and luck is on my side, I will head back to the magical town of Courmayeur, Italy, to run it again. **[HN]**

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An enthusiastic endurance athlete since 1989, Jason Poole participates in ultrarunning, adventure racing, and mountain bike racing events. He was a member of the U.S. Rogaining (24-hour orienteering racing) champion team in 2002 and 2003.

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205 miles



Top two photos this page: Bryon Powell // [www.irunfar.com](http://www.irunfar.com)

All other photos: Courtesy of Jason Poole



Photo: Lauren Kucahrski

**MATTHEW KUCHARSKI**

BALTIMORE TRIATHLON  
2ND PLACE AG

“I had a great late season race competing in what was the toughest AG that day! Followed my standard nutrition plan: Endurolytes Fizz and a Hammer Gel before the start, HEED and Hammer Gel on the bike, HEED on the run, and Recoverite post-race.”



Photo: Joann Kolstad

**KRIS KOLSTAD**

SUNFARE HEALTH 5K  
1ST PLACE OVERALL

“Hammer fueled me to my first ever overall victory ... at age 56! Hammer Gel prior to the start, Recoverite at the finish—works every time!”



Photo: Dave Daly

**ALLISON POTREKUS**

MT. SAN GORGONIO  
22-MILE TRAINING RUN

“Perpeutem got me to the top of the highest peak in Southern California!”



Photo: courtesy of Nathan Muldoon

**NATHAN MULDOON**

ENGLISH CHANNEL SWIM

“Last fall I swam the English Channel in 15 hours. I was fueled entirely by Hammer Nutrition’s Perpetuem and a few Hammer Gels. I love your product!”

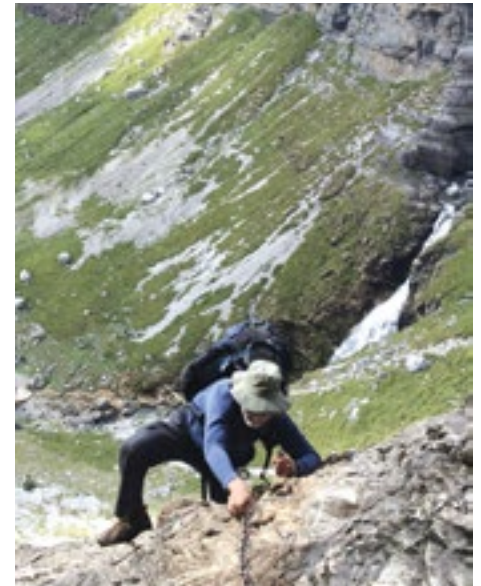


Photo: Sam Hartshorn

**LLOYD RATH**

GR11 TRAIL, SPAIN — 522 MILES,  
128,000 FT. OF ELEVATION CHANGE

“After 49 days on this steep and often rocky trail, my friend Sam and I reached Cap de Creus, north of Barcelona on the Mediterranean. A sea never looked so good. Hammer Gel, Endurolytes, and Super Antioxidant helped keep me fueled, cramp-free, and healthy. It was a great adventure.”





Photo: Luciano, Amigo Lodge, Mozambique

## JOANNA BILANCIERI INDIAN OCEAN SURFING

“Holy Mozambique! No one paddles faster than when battling insane conditions, including rocks, reef, and huge repetitive waves. Fueled by my beloved Hammer Gel and Endurolytes, and protected by my Hammer visor and Hammer Lips, I took on East Africa and got a workout and a half. And of course, I would do it all over again!”



Photo: Sarah Keller

## PHIL GRISDELA HEAD OF THE CHARLES REGATTA (SAILING) 2ND PLACE OVERALL, MEN’S LIGHTWEIGHT SINGLE

“Using Hammer’s Whey Protein in the days before the race ensured that my body was ready to go. Hammer Gel just before the race start gave me the energy I needed to go the 3-mile distance nonstop, despite tricky, windy conditions.”



Photo: Finishpix

## SUZANNE ENDSLEY

IRONMAN 70.3  
LAKE STEVENS  
1ST PLACE AG

“I tried two new awesome products this year and this result showcases them: Race Day Boost and Endurolytes Extreme. Using Race Day Boost for the four days leading up to the race made my race seem effortless. For A races like this, Race Day Boost is the ticket. During the run, my legs felt great, and on the bike, the heat and humidity didn’t bother me thanks to Endurolytes Extreme!”



Photo: Karen Allen

## KRIS AND MINDY PRZEOR CHICAGO MARATHON

“I got my sub 3 and we both qualified for Boston, thanks to Hammer! I had my usual Endurolytes, Endurance Amino, and Anti-Fatigue Caps before and during the race, and Hammer Gel throughout it. A Hammer Vegan Recovery Bar topped off the day.”  
– Kris Przeor



Photo: Lisa Gorris

## MARK GORRIS

BEACH TO BATTLESHIP HALF IRON  
1ST PLACE AG

“An early season injury hampered my training so my attitude was ‘let’s see what the day hands me.’ Although my time wasn’t what I’d hoped for, I finished my 18th Half Iron with a 1st AG under circumstances that had me wondering if I would finish at all. Prerace I fueled with Perpetuem, then had a Montana Huckleberry Hammer Gel and some HEED just prior to the swim. On the bike, it was Perpetuem, Endurolytes, and Tropical Hammer Gel. HEED was on course for the run.”



Photo: Brittani Marquand

## JEREMY GRILLEY

BOXING WIN: 120-105

“I won the biggest fight I have EVER fought, and when it was over I felt like I could do it all again! I never felt completely gassed out, and not once was I ready to quit. I relied solely on Race Day Boost, Anti-Fatigue Caps, Race Caps Supreme, Endurolytes Fizz, Hammer Whey, and Recoverite for my nutritional needs.”



Photo: Russell Perry

## STACY PERRY

HITS TRIATHLON 70.3, 3RD PLACE AG

“I couldn’t have done it without Hammer Nutrition! I used Hammer Gel, Perpetuem, HEED, and Endurolytes. The aid stations supplied HEED and Endurolytes—thank goodness! The run was very hot, but I finished with no cramping.”



Photo: Alan Alborn

## TARA GERAGHTY-MOATS

NORMAL HILL NATIONALS, 3RD PLACE

“I really enjoy skiing fast, shooting straight, and jumping long. I’m now on the U.S. Ski Jumping National Team. I really appreciate that Hammer Nutrition products do not contain artificial colors/flavors and unnecessary ingredients. And the Vegan Recovery Bar is YUMMY! I recommend Hammer products to all my teammates and friends.”



Photo: Courtesy of Travis Krist

## TRAVIS KRIST

TSCEC ENDURO SERIES, HIDDEN FALLS

“The Hammer feed station was a hit! The newbies were surprised by the difference they felt after using Hammer Gel, Hammer Bars, and HEED. Thanks for the support.”





Photo: Courtesy of Eddie Kraft

## EDDIE KRAFT

WEA ROADRACING 1000/A SUPERSTOCK  
750/B SUPERSTOCK CHAMPIONSHIP, 1ST PLACE

“We won aboard a Suzuki GSX-R750. We run three-day events, with 40-80 laps a day in full leathers, often in 90-plus degree heat. Recoverite keeps us strong through the last race. Using Race Caps Supreme, Race Day Boost, and Anti-Fatigue Caps the week before and during the race has significantly decreased cramping, which makes a huge difference on the bike. With Endurolytes Fizz, hydration is easy and I don’t get bloated and sluggish like I would with high-calorie electrolyte drinks.”



Photo: Jessica Muse

## JOHN MUSE

IRONMAN TEXAS

“Hammer was the key to my success in training and during the race. Without Hammer products, there is no way I would have completed the race and recovered as fast as I did.”



Photo: John Stedje

## HANNAH STEDJE

NARROWS 10K TRAIL RACE  
1ST PLACE AG, 2ND PLACE FEMALE

“I joined the Ohio Road River Runners Club to get to know more local athletes. The Narrows 10K Trail Race was my first ORRRC race, and I had a blast! I fuel with Hammer Gel (I’m excited to try the new Nocciola flavor on my next order), and routinely use Recoverite after workouts and races.”



Photo: Courtesy of Christy Griesse

## CHRISTY GRIESSE

SEATTLE MARATHON

“I fueled exclusively with Hammer Gel and sipped Lemon-Lime Endurolytes Fizz. The mild taste and smooth texture of the Gel makes it easy to use and digest.”



Photo: Alan Enslow

## BEVERLY ENSLOW

ICEMAN COMETH  
MOUNTAIN BIKE RACE 3RD PLACE AG

“Even in cold weather I depend on Endurolytes to keep my muscles from cramping. I never cramped, but I ran out of my Hammer Gel and Perpetuem in the slower, wetter conditions. Lesson learned: bring more fuel than I think I’ll need.”

**UPDATED!**

the **little red book**

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and supplements . . .

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RAPID ENERGY THAT LASTS

**When to use:**  
• Race Week energy  
• Race Week fuel for back fat  
• Research for every day

**Recommended Usage:**  
Pre-exercise: 1-2 scoops  
During: 1-2 scoops  
Post-exercise: 1-2 scoops

**Serving Size:**  
One serving contains 60-90 calories depending on the flavor.

**Suggested Scoops by Body Weight:**

WEIGHT	SCOOPS	CALORIES
100-120 lbs (45-55 kg)	1-2 scoops	60-90 cal
120-150 lbs (55-68 kg)	1.5-2 scoops	90-120 cal
150-180 lbs (68-82 kg)	2 scoops	120-150 cal
180-210 lbs (82-95 kg)	2.5 scoops	150-180 cal
210+ lbs (95+ kg)	3-3.5 scoops	180-225 cal

**How to Use:**  
Combine 1.5-2 scoops per hour (about 1 scoop with 30-35 ounces) of water. 475-625 ml of fluid more per hour than a separate water. Use only when it is reasonably hot or during a race.

**Notes:**  
Do not combine or mix with longer than 2 hours, use Perpetuum or Sustained Energy as your primary fuel.  
Hammer Gel may be used for Sustained Energy Hammer Soy Protein, Hammer Whey Protein, or Sustained Energy Hammer Soy Protein, Hammer Whey Protein, or Sustained Energy.

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**Race Caps Supreme**  
POTENT LOCAL PERFORMANCE ENHANCER

**When to use:**  
• Maximum muscle oxygen  
• Maximize endurance energy & endurance  
• Increase metabolic capacity

**Recommended Usage:**  
Pre-exercise: 1-2 scoops  
During: 1-2 scoops  
Post-exercise: 1-2 scoops

**How to Use:**  
Use to increase endurance and reduce recovery time, while supporting the immune system and overall health. Please read our website.

**Supplement Application:**  
Use to increase endurance and reduce recovery time, while supporting the immune system and overall health. Please read our website.

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. . . as well as application charts that show you when to use them!

**Fuel Application Quick Reference Chart**

**When:**

When	Hammer Gel	Perpetuum and Sustained Energy	Hammer Soy Protein	Hammer Whey Protein	Hammer Soy Protein	Hammer Whey Protein	Hammer Soy Protein	Hammer Whey Protein
Pre-exercise meal	✓	✓	✓	✓	✓	✓	✓	✓
At the starting line	✓	✓	✓	✓	✓	✓	✓	✓
1-2 hours	✓	✓	✓	✓	✓	✓	✓	✓
3 hours +	✓	✓	✓	✓	✓	✓	✓	✓
Enhance your recovery	✓	✓	✓	✓	✓	✓	✓	✓
Increase your daily protein intake	✓	✓	✓	✓	✓	✓	✓	✓

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**Supplement Application Quick Reference Chart**

**When:**

When	Race Caps Supreme	Hammer Soy Protein	Hammer Whey Protein	Hammer Soy Protein	Hammer Whey Protein
Pre-exercise meal	✓	✓	✓	✓	✓
At the starting line	✓	✓	✓	✓	✓
1-2 hours	✓	✓	✓	✓	✓
3 hours +	✓	✓	✓	✓	✓
Enhance your recovery	✓	✓	✓	✓	✓
Increase your daily protein intake	✓	✓	✓	✓	✓

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**Supplement Application Quick Reference Chart**

**When:**

When	Hammer Soy Protein	Hammer Whey Protein	Hammer Soy Protein	Hammer Whey Protein
Pre-exercise meal	✓	✓	✓	✓
At the starting line	✓	✓	✓	✓
1-2 hours	✓	✓	✓	✓
3 hours +	✓	✓	✓	✓
Enhance your recovery	✓	✓	✓	✓
Increase your daily protein intake	✓	✓	✓	✓

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"Using your products and following your fueling advice has helped me achieve my best season so far!" - Tom H.

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800.336.1977 / [www.hammernutrition.com](http://www.hammernutrition.com)

**Calories Count - What and how much to consume during exercise**

Available during exercise—no long or extra breaks to refuel. The recommended 120-180 cal/hr range (120 is a minimum of the amount at which the body begins to burn carbohydrate stores) that while maintaining a steady pace, you can consume. It does not mean that you should eat 120-180 calories every 15 minutes. Instead, you should aim to consume 120-180 calories every 15-20 minutes. This means you should consume 4-6 calories per minute. If you are unable to consume 4-6 calories per minute, you will not yield performance-enhancing, maximum performance-sustaining, maximum sustained calories.

### Fatty acids

The typical athlete has a total reserve of calories (up to 300,000) available to use as energy.

## Secret #2 CALORIES COUNT

What and how much you consume during exercise can be the difference between a DNF.

**Our recommendations**  
for most athletes during exercise:

Consume 120-180 calories per hour with complex carbohydrates, such as maltodextrin, and simple sugars in a blend of 2:1 ratio. Your fuel should include protein in a ratio of about 2:1 carbs to protein.

**Fuel lean: 120-180 cal/hr**

FACT: Your body can't process calories in an amount that approximates the amount of calories available. If you want to optimize your performance, you need to follow the "calories out, calories in" rule.

Additional: High-fat diets or low-carbohydrate diets. Your body will only make up the difference. For most athletes, 120-180 calories per hour is the ideal range. If you are unable to consume 120-180 calories per hour, you will not yield performance-enhancing, maximum performance-sustaining, maximum sustained calories. As you can always refill your tank.

10 SECRETS OF SUCCESS







**Clockwise from top left:** Late afternoon light over Ipasha Glacier; making our way along a sketchy traverse near Piegan Glacier; a curious mountain goat near Sexton Glacier; sunrise over Helen Lake, near Ahern Glacier; overlooking Helen Lake from the ridge down from Ahern Peak; under the terminus of Jackson Glacier; overlooking Mt. Merritt after a storm passed; late evening light accentuates the sun cups near Sperry Glacier's terminus. **Photos:** Courtesy of Seth Eagleton

## One family's journey in wilderness conservation

BY SETH EAGLETON

**G**rowing up in northwest Montana, I discovered the back-country of Glacier National Park years ago and have always considered it my backyard. The seed for the Glacier Preservation Project was planted some 20 years ago, while I was there on a 5-day backpacking trip. I wanted to visit every glacier within the Park. At the time, there were 36 glaciers, down from about 150 at the turn of the last century.

In the summer of 2012, I read that only 25 glaciers remained, and they wouldn't be around for more than another decade. I wondered whether anyone had ever documented these disappearing giants in photographs for future generations. In all

my searching I could not find a complete collection of artistic images capturing each glacier and its unique characteristics. My dream and goal is to preserve the 25 remaining glaciers of Glacier National Park through photographic artistry before we lose them forever. The finished product will be a book of images documenting these fascinating natural features. Follow me on this journey as my family and I complete our project:

[www.glacierpreservationproject.com](http://www.glacierpreservationproject.com)

Hammer Nutrition is proud to sponsor the Glacier Preservation Project.





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2. Erik calls\* and places his FIRST order and receives 15% OFF his total. He's happy.

4. Hammer Nutrition gets another satisfied customer. We're happy. It's a win-win-win!

STEPHEN AND ERIK ARMES at the Free to Breathe 5K; Erik placed 1st OA and Stephen placed 5th OA (1st AG). This is merely an example of how the program works. Stephen and his son Erik are both longtime Hammer customers. PHOTO: KARLA ARMES.

\*Orders can be placed online as well. The first-time client must reference the client number or full name of the referring client to receive the discount. Some restrictions apply; see website for details.



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Mention your friend's name or client number (below) to receive 15% off your first order with **HAMMER NUTRITION!** Call or go online now.

Referrer's Name

Client Number

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## Start earning rewards now!

Use this card to get started. Write your name and client number on the card, then give it to a friend! When he/she places their first order and mentions your name, they will receive 15% off.

### Program Details

- 1. Referral rewards can be used just like cash for any order you place.
- 2. We keep track of your rewards for you. Call anytime for an update.
- 3. Whenever you place an order, you can apply your rewards to that order or save them for future use.
- 4. If you order online, just add a note asking that we apply any available rewards.
- 5. Need more cards to give out? Download the PDF on our website at: [www.hammernutrition.com/images/general/referralcards.pdf](http://www.hammernutrition.com/images/general/referralcards.pdf)

**A Few Restrictions** Shipping charges are not included in discounts or rewards. • We cannot offer retroactive rewards. Your friend must mention your name or client number at the time of ordering. • The person being referred must not have ordered anything from us before. • Do not refer your spouse or have a friend be the new client and place an order for you. • Not applicable to members of the same household. • Cannot be used with another offer. • We reserve the right to end this program or refuse any individual at any time without notice. • Referral rewards will expire after one year. • Valid referral cards are always available free of charge. • This rewards program does not apply to EMS unit purchases. Visit [www.hammernutrition.com/deals/ems-referral-program/](http://www.hammernutrition.com/deals/ems-referral-program/) for EMS-specific referral program.



### **More than one way to the top**

Adventure unicyclist and long-time Hammer Nutrition devotee Mike Tierney tops out on lofty Independence Pass in Colorado. Door-to-door from his home, the ride carries Mike some 50 miles with 5,000 feet of climbing.

**PHOTO: ROSHAN RANA**



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