IN THIS ISSUE...

Meet Russell Elcock
Inspiring others and reaching goals

5 Reasons Every Athlete Should Supplement
Eating well is only the start

Eat Better, Feel Better
Tame inflammation

PLUS...

New Formula Xobaline and Almond Cacao Vegan Protein Bar

AND MORE!
Welcome to the 107th issue of Endurance News!

As the owner of this issue suggests, we are still celebrating our 30th anniversary, so I have one more opportunity to acknowledge the real heroes of this story—that is you, our customers! I have always looked to you for inspiration, motivation and guidance. This is why we love to share your submissions with the rest of the family, and this issue, like every other, is full of them!

I like helping people and I like solving problems, and Hammer has given me a vehicle for doing both, which leads to an exceedingly high level of “job satisfaction” for me and my staff. Words are inadequate for expressing my gratitude for giving me the opportunity to do what I do from the past 30 years and call it a job.

So, once again, I say thank you to each and every one of you who comprise our global Hammer Family and help make this company what you see today!

This is why we cherish your feedback above all else—all of it! Whether good or bad, we fastidiously gather every single bit we can from phone calls, emails, reviews and in person, compile it and share with all of our staff. The compliments and kudos buoy our spirits and motivate us. The constructive criticism and suggestions encourage us to continue striving for improvement in everything we do, from products to processes.

This is also why I am asking you to continue or even step up your feedback. You can reach us by emailing support@hammernutrition.com or suggesting@ hammernutrition.com or by calling our toll free number (800) 356-1977. Whether you have a two or three digit customer number, or just discovered Hammer last week, I want to hear from you.

Based on your feedback, we went back to the drawing board on our Vegan Protein Almond Cacoa bar. While the taste was good, the bars dried out quickly and some of you said tasted like sawdust. So, we went back to the drawing board, updated the formula to make it moister, and changed the flavor profile to make it even more savory than before. This bar is sweet, but it is delicious and will begin shipping in late October, shortly after you receive this issue. Any remaining stock of the existing, soon to be “old” formula will go up on our clearance page for $1 shipping in late October, shortly after you receive this issue. Any remaining stock...

We stand by what we preach. Loren Durkin runs the Fat Dog 120. Mason-Gere wins Butte 100 and Anna Durkin hammer their way to success.

From the archives: the anti-acid diet.

Enduro Epic
Race Report: Laramie

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Teams: Team Honor Warriors
EMS: Off-season Fitness Support
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It's so tempting to grab a ready-made energy drink. They are convenient and we see other athletes drinking them. But, what's inside could be more harmful than the actual benefits. Read the studies we've found.

But, what's inside could be more harmful than the actual benefits. Read the studies we've found.
Starting Lines
Letters from Hammer Nutrition Athletes & Clients

Hammering Past The Competition

Mahalo to our Namolokama crew for pulling me to a first place in our 60’s, and a very close race to the finish line, placing second in the 50’s at the Regatta Championships in Hawaii. Mahalo Hammer Nutrition for providing everything needed to prepare me with the correct fuels and supplements needed for our rigorous sport!

I started off with Chocolate Perpetuem and an Oatmeal Hammer Bar three hours before race. These events are half-mile sprints, so I sipped on Fully Charged and downed a Raspberry Hammer Gel minutes before each race, adding an Energy Surge as we pushed off towards the starting line. In my cooler, I keep Grape Endurolytes Fizz and water. In my dry pack, 30 minutes prior to each race, I take Endurance Amino, Anti-Fatigue Caps, Endurolytes Extreme, and Race Caps Supreme. I hammer my recovery with Strawberry Recoverite, Anti-Fatigue Caps, Endurolytes Extreme, and Race Caps Supreme. I Hammer my recovery with Strawberry Recoverite, Anti-Fatigue Caps, Endurolytes Extreme, and Race Caps Supreme. I Hammer my recovery with Strawberry Recoverite, Anti-Fatigue Caps, Endurolytes Extreme, and Race Caps Supreme. I Hammer my recovery with Strawberry Recoverite, Anti-Fatigue Caps, Endurolytes Extreme, and Race Caps Supreme.

We Believe in You!

“I can’t say enough good things about Hammer Nutrition. Not only do they make great products and have great customer service but they also look out for their athletes. Thanks for all the extra goodies, the replacement socks I needed for our rigorous sport!”

Hammer Athlete Vic Allen, third from the left, relies on Hammer supplements and fuels needed to compete in the Regatta championships in Hawaii. Photo: Courtesy Vic Allen

Epic Success

“Thank you Hammer Nutrition for an epic race weekend! I participated in the Lake Logan multisport festival doing back to back races that included a half-iron distance race on Saturday and a sprint distance race on Sunday. I was able to bring home 2nd AG and 16th OA in the half, and 1st AG and 2nd OA in the sprint. Thank you for providing me with the fuels, supplements, and knowledge necessary to exceed my expectations.”

- Colleen LaFrance

Drastic Improvement with Tissue Rejuvenator

“A few months ago I was training and ran into the back wheel of my training partner’s bike. I went down causing trauma to my knee. I could hardly walk on it. I was told by my PT that I had strained the ligaments on the posterior side. I would have to take it easy. To help me recover I started supplementing with Tissue Rejuvenator. It seemed like a couple of days after taking it the pain in my knee was less. I noticed drastic improvements every day I took it. I was able to participate in the Idaho State Road Race a couple of weeks later and mentor a new Cat 1 racer to the win. I am pain-free in my knee and take Tissue Rejuvenator daily!”

-Jenn Halladay

From Skeptic to Believer

“Thanks Hammer. I often share my Hammer products with my training and racing partner. She is a pretty tough sell for fuels over ‘real food’, but has come to really appreciate some of the Hammer products (including Endurolytes, Endurance Amino, Anti Fatigue Caps, HEED, and Perpetueum Solids) I have introduced her to, and has even become less of a skeptic. She has loved Fully Charged—mentioning that she could feel the B-vitamins increasing her blood flow without the jittery feeling of other pre-workout products.

Well done Hammer! It makes it easy to make the skeptics believers with Hammer.”

-Shelley Koenig

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- Increases energy
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ENDURANCE NEWS 107
CELEBRATING 30 YEARS OF ENDURANCE!

Send Us Your Letters!
#howihammer

HAMMER HAPPENINGS ON FACEBOOK, INSTAGRAM & TWITTER. USE THE HASHTAG TO SHARE YOUR PHOTOS!

@stephen_arnes Nice session with @ryan_arnes_ #howihammer #hammernutrition #rudyproject #aloeup

dw racingteam Everybody needs a training partner! #hammernutrition #howihammer #run #nutrition #donnerwealthmanagement #dw racingteam

cat_stadie Spontaneously signed up for a half marathon this weekend. Thanks to hammernutrition for the support in my training and racing! I used Hammer Gels to keep me strong and consistent to the finish. #howihammer #ownyourrace

Chris Flint Great job to all those who volunteered their time this morning to put on Paris Landing Sprint Tri. I had an absolute blast. If you haven’t raced there, go give it a shot. I placed 3rd in my AG and 25th overall, great competition. #howihammer #hammernutrition

@tunderface Kicking off XC season with a bang yesterday. First place, a course record, and tying my current Road 5K PR. I’m happy with where my fitness is going into Rock N’ Roll San Jose with still 7 weeks to build. #howihammer #marathontraining

ryan_ingham_endurance Most kids don’t like to wake up early, especially at 5 am! These two woke up excited, maybe for the hike, but I’m sure it was the post-hike donuts if they made it to the top!! #fitfam #howihammer

@lunderface

drew_silvers What fuels you? ...I have learned many life lessons during experiences spent outside. Pushing limits, conquering obstacles, and having meaningful conversations with friends has helped make me who I am today. Thank you to those of you (you know who you are) for soaking in the well earned views placed in front of us. #GlacierNationalPark #BestofMontana #HowiHammer

dwracingteam Everybody needs a training partner! #hammernutrition #howihammer #run #nutrition #donnerwealthmanagement #dw racingteam

@tunderface Kicking off XC season with a bang yesterday. First place, a course record, and tying my current Road 5K PR. I’m happy with where my fitness is going into Rock N’ Roll San Jose with still 7 weeks to build. #howihammer #marathontraining

Keep the conversation going! Use #howihammer for a chance to be featured on Hammer Nutrition’s social media pages and right here in Endurance News!
Meet Russell Elcock

Russell Elcock of Barbados is a semi-professional road cyclist to watch. At only 23 years old, he already has the most National Time Trial titles—nine to be exact. He was the National Time Trial record holder from 2008-2016.

Russell started riding at age 12. “I always had a love for bicycles,” he says. “I used to race up and down my street with my friends as a youngster on a normal mountain bike. As I got older, I attended the Barbados National Sports Council Summer Camp and enrolled in the cycling program there and I became interested in racing. I liked the racing bikes, the cycling suits, and I used to watch the Tour de France regularly and dreamed of being a pro and winning.”

His first local race was in 2006 at the age of 12. He came in 3rd place in his age group and then his cycling took off from there.

Russell now rides for a team in Trinidad called Team DPS, but he is based in Barbados. He works for the United Nations Development Programme. “Even though I am working, I still want to continue cycling at a high level,” he adds.

His proudest moments were winning a double gold (for both time trial and road race) at the Caribbean Junior Championships, a bronze medal at the Caribbean Elite Championships, and 2nd place at the John T. Memorial Classic in Anguilla. He aspires to go to the Commonwealth Games next year, and the Olympic games in 2020: “Those two games would be my ultimate goal!”

He looked up to Fabian Cancellara as a child, since his best ability is in the time trial area. His biggest heroes, however, are his parents. “I must say my parents have supported me heavily through the years and I’m grateful for their support,” he says. “Thank you to my friends and family who have supported me through the years. Thank you to my Mom and Dad. And most of all, thank God. Without God nothing is possible.”

Russell has been using Hammer Nutrition products since 2013. He says, “I learned about Hammer when I first went on a training stint to Trinidad—I saw the products in a bike shop there and decided to try them since I was having a lot of problems with cramping.”

Since taking Hammer Nutrition products, he has seen results: “I no longer get cramps. I train better; feel better while I am riding. They are great products. I can always depend on Hammer Nutrition to get me through some really tough races.” Russell’s favorite Hammer product is Race Day Boost.

How Russell Hammers

Before and During:

- Race Day Boost
- Anti-Fatigue Caps
- Race Caps Supreme
- Hammer Gels
- Perpetuem
- Endurolytes

Recovery:

- Recoverite
- Race Caps Supreme

Smooth sustained energy with protein!

Ultra Gels have:
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- No sugar “crash”
- 3 delicious flavors!

How our Ultra Gels are different:

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- No sugar “crash”
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Hammer Gel:
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Our Customers Say It Best

Easily digestible, great tasting, and satisfying. HAMMER products rule.”

- Online reviewer
Snack smart this holiday season

BY ANDREYA GROZIK

Keeping hunger under control now will help you resist holiday sweets and temptations that you will regret later. Instead of giving in to candy, cookies, rich appetizers, or junk food—which will probably be well within reach throughout the holiday season—you can make the conscious decision to choose something that’s good for you and makes you feel good. The best snack options will not contain refined sugar and carbs, processed and artificial ingredients, trans fats, or large quantities of salt.

Hammer Nutrition recommends these easy go-to healthy snacks:

- Colorful fruits and veggies.
  - Apple slices spread with nut butter is easy, satisfying and filling.
  - A variety of pre-cut veggies like carrots, peppers, celery and cucumber, make it easy to snack and go.
- Protein-rich choices like nuts, nut butters, hummus, and lean meats.
- Good-for-you grains like quinoa and brown rice.
- A homemade trail mix with ingredients that have low-to-no added sugar or salt.
- Hammer Protein shakes
  - Protein shakes are fast to shake up or blend with frozen or fresh fruit and greens for a delicious smoothie.
  - Hammer Bars are perfect as a pre-race meal or for post-workout, but they also make a great snack!
    - Perfect real-food snack option that the whole family can enjoy!
    - They will fill you up with only the best quality, natural, organic ingredients.
    - A great pick-me-up and energy boost whenever you need it.
    - You can toss them in your bag or backpack, keep them at your desk, or wherever you need get-up-and-go when you’re on the go!
    - Easy on your stomach and easy to digest.
    - Hammer Bars are guilt-free! No refined sugars and only healthy fats (EFA’s) with a variety of flavors will keep away taste boredom.

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RECOVERY: A Crucial Component for Athletic Success

By Steve Born

"How well you recover today will greatly determine your performance tomorrow"".

What we do in training is definitely important, but if we neglect to consistently take the proper steps to recover properly, we will never get the full value out of the time and energy spent in training. Remember, the gains we make in our training occur during recovery, but only in the presence of adequate rest and optimal nutritional support. If we don’t attend to that, we not only miss out on the benefits of our workouts, we can create more problems such as getting sick or injured.

“Refill the tank” with high-quality carbohydrates and protein

When you begin a workout or race, the primary fuel your body uses for the first 60-90 minutes or so is known as muscle glycogen. As your limited stores of this premium fuel (muscle glycogen) become depleted, your body switches over to burning fat reserves, along with carbohydrates and protein consumed during exercise.

Several studies have shown that the pre-exercise muscle glycogen level is the most important energy determinant for exercise performance. Athletes who have more of this readily available fuel in their bodies have a definite advantage. The good news is that you can substantially increase your glycogen storage capacity through the process of training and replenishing. Carbohydrate replenishment as soon as possible after exercise (within 30-60 minutes), when the body is most receptive to carbohydrate uptake, maximizes both glycogen synthesis and storage.

Protein – An essential component for recovery

Carbohydrate intake promotes many aspects of post-exercise recovery, but it can’t do the job alone; you need protein as well. Protein—ideally whey protein isolate—in your post-workout fuel provides these benefits:

• Raw materials to rebuild stressed muscles - Whey protein isolate is the premier protein source of the three branched chain amino acids (BCAAs - leucine, isoleucine, valine) used for muscle tissue repair.

• Enhanced glycogen storage - Numerous research studies have shown that the consumption of carbohydrates plus protein, versus carbohydrates alone, is a superior way to maximize post-exercise muscle glycogen synthesis.

• Immune system maintenance – Whey protein isolate contains high levels of amino acids that spur the production of what may be the strongest antioxidant of them all: glutathione.

Ideally formulated for recovery

Recoverite is precisely formulated to give your body exactly what it needs after a workout or race: an ideal 3:1 ratio of complex carbohydrates and the highest quality whey protein isolate, along with generous amounts of the multi-beneficial amino acid L-glutamine; the powerful antioxidant and anti-glycation nutrient L-carnosine; and a full spectrum of electrolytes. You can count on Recoverite to:

• Restore muscle glycogen
• Reduce post-exercise soreness
• Help build lean muscle tissue

Recoverite provides your body with exactly what it craves after a workout, allowing you to get the full value out of every minute that you put into your training. So when your workout has been completed, mix a couple of scoops of Recoverite with cold water, drink, and you’re done! You’ve just put the best possible “finishing touches” on your workout, and you’ve given your body a great head start on tomorrow’s workout and your upcoming races.

Endurance News 107
Celebrating 30 Years of Endurance!
Avoid Salt and Your Heart will Love You

BY ANDREYA GROZIK

The average American adult consumes enough salt to damage their heart muscles. In a recent study published in the Journal of the American College of Cardiology, participants who consumed more than 3.7 grams of salt per day showed increased damage to their hearts making it harder to pump blood.

As reported by Reuters, “Compared with adults who ate less sodium, people who consumed more than 3.7 grams of sodium a day were more likely to have enlargement in the left chambers of the heart that are responsible for pumping oxygen-rich blood into the body. They were also more likely to have signs of muscle strain in the heart that can precede structural damage.”

Dr. Senthil Selvaraj, lead study author, says, “This study enhances our understanding of the adverse effects of salt intake on heart function.”

The goal is to limit daily salt intake to one teaspoon (about 2 grams) or less, as recommended by the World Health Organization. This includes all the food you eat throughout the day that already contains salt, not just table salt that you add to a meal. Reading food labels is a good habit to get into. According to the American Heart Association, “up to 75 percent of the sodium we consume is hidden in processed foods like tomato sauce, soups, condiments, canned foods and prepared mixes.”

Since cardiovascular diseases are the number one cause of death worldwide—killing nearly one in three people—lowering salt intake needs to become a priority. A high salt diet can increase blood pressure, for example, which then increases the chance of stroke, heart attacks, and heart failure.

“Up to 75 percent of the sodium we consume is hidden in processed foods...”

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“Up to 75 percent of the sodium we consume is hidden in processed foods...”
Updated SOS
So many successful athletes turn to Hammer Nutrition for fueling and supplements, along with the educational materials we provide free of charge. If you are not familiar with S.O.S. 5 Secrets of Success, it is one of the resources we have created to help you maximize your athletic performance. In this issue of Endurance News, we will give you a sample of this informational guide, taken from section 1: Pre-Exercise Fueling.

Pre-Exercise Fueling
When and how much to eat before exercise.

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

Complete your meal three hours before exercise: 300-500 calories of complex carbs and some protein. Want to “top up” before starting? Consume a serving of Hammer Gel® 10 minutes prior to your start.

Observe the three-hour rule!
The timing of your pre-exercise meal is critical. Be sure to complete your meal no less than three hours before your workout or race, regardless of its duration. (That means fork or spoon down at 6 a.m. if your event starts at 9 a.m.) Three hours allows time for your body to fully process the meal and avoid intestinal distress. You’ll feel “light on your feet,” as your body devotes all blood and oxygen to your physical efforts, rather than expending energy digesting your meal.

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New Studies for Healthy Healing

2

NSAIDs Impede Recovery and Weaken Muscles

Prostaglandins are chemicals produced by the body in response to illness and injury, and Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) reduce production of them in the body. While prostaglandins can cause pain, inflammation, and cramping, for example, they are also involved in the healing process.

A recent study published in the Proceedings of the National Academy of Sciences shows that taking NSAIDs block Prostaglandin E2 (PGE2), which is not good for muscle recovery. The study results establish that PGE2 is “a crucial inflammatory mediator of muscle stem cells, the building blocks of muscle regeneration.”

NSAIDs are not beneficial for healing because they “inhibit PGE2 synthesis, hinder muscle regeneration, and lead to weakened muscles.” If injured muscles are treated with PGE2 even one time, it’s important to note that PGE2 “dramatically accelerates muscle repair and recovery of strength.” According to Stuart Warden, Ph.D., P.T., Associate Professor of Physical Therapy at the Indiana University School of Health and Rehabilitation Sciences, taking NSAIDs can be harmful to more than muscles: “NSAIDs not only impair muscle formation, but also tendon, ligament, and bone [formation].” NSAIDs taken prior to exercise have the potential to reduce how well tissues adapt in response to loading. Taking NSAIDs after exercise has not been found to benefit muscle recovery and has the potential to also delay healing by reducing collagen synthesis.

David C. Neiman, Dr.PH., director of the Appalachian State University Human Performance Lab, says, “There is no good physiological reason for any exerciser—from the fitness enthusiast to ultra-athlete—to use ibuprofen during exercise.” The next time you reach for NSAIDs, remember that they inhibit your body’s natural recovery process, can cause weakened muscles, and potentially negatively impact your kidneys. Hammer Nutrition’s Tissue Rejuvenator can safely, healthfully, and effectively decrease pain and inflammation.

NSAIDs Warning for Endurance Athletes

Another new study, published in Emergency Medicine Journal, reveals NSAIDs’ detrimental effects on your kidneys. As many as 75% ultra-runners take NSAIDs during races. If you are one of them, you could be increasing your chance of kidney damage by 18%.

The study concludes:

1. “There were increased rates of AKI (acute kidney injury) in those who took ibuprofen.”

2. “Consideration should therefore be taken before ingesting NSAIDs during endurance running as it could exacerbate renal [kidney] injury.”

According to Dr. Leslie Spry, Spokesperson for the National Kidney Foundation, “Drugs that can injure the kidney and reduce kidney function include non-steroidal anti-inflammatory drugs (NSAIDs) such as Ibuprofen, Motrin, Advil, Aleve, Naprosyn and Naproxen. These drugs directly decrease kidney function and, in some cases, can lead to kidney failure.”

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THE safe alternative to NSAIDS, a better solution for your joints

Anti-inflammatory support

Protects joint integrity

Promotes tissue repair

Our Customers Say It Best

“I hurt my knee and my daughter-in-law recommended Tissue Rejuvenator to me. I used it and feel a great difference. It’s a great product.”

-Online reviewer
 Race Report: Laramie Enduro Epic

BY BRIAN BROTHERS

Two laps of the new 28-mile long Laramie Enduro course were on my platter as a preparation for an upcoming 100-miler. At just over 6,000 feet of climbing for the 56 miles, it seemed like a good idea to test my legs after a few setbacks the last few months.

Hydration prior to the race was accomplished with Hammer Endurolytes Fizz (electrolytes with flavor—goes with any meal!) I had a good night’s sleep and woke at 5:45 a.m. for my 7 a.m. start. From there, I had my solid pre-race regime of Hammer Nutrition Race Caps Supreme and Anti-Fatigue Caps, Compex EMS warm-up routine, and Perpetuem.

Twenty minutes prior to the start, I had 1.5 scoops of Fully Charged to prime the engine before heading out onto my bike and lining up for the 2-lap Epic. One Hammer Gel before the race started, and it was a fun “road style” pack ride for the first three miles of dirt road, with climbs that would separate everyone before the single-track. I treated the first lap like a one lap race, planning on relaxing a bit on the second lap.

Interestingly, the eventual 50+ winner and I were riding together the first lap. He was from the lowlands of San Antonio, Texas, but was riding really well. I left him to go on his own on the road section the next lap. I was thinking about next week’s race and was sticking to the plan of tempo riding the second lap.

The temps were dropping fast this second lap as the clouds built up. The forecast was for thunderstorms starting around noon, which I’ve never experienced that early before. This would be a first, as lightning started cracking well before I hit the north side trails of Tie City that were wet and slick with mud. The rain had started in earnest with lightning crashing all around me by then. “No need to be a statistic.” was my thought as I headed up the last ascent of Haunted Forest.

I finally dropped a Single Speed rider that had caught me, and was thinking about how warm and dry it would be when I got back into my trailer, when I was caught by another rider. Anthony M., a longtime fellow competitor and also a 50+ rider. As much as I hoped to follow his wheel, the slick trail and roots kept me back. By the time we reached the top of the climb, he had 20 seconds on me and I had nothing to respond with.

I had hoped to make up any time on the last descent but with the rocks being slick with rain, I thought it best to finish without a crash. When I finished, I heard the sounds of people calling my name, but all I could think of was getting dry and warm.

As pleased as I was to finish in 3rd place, I think it was the few individuals that came up to me after the race and thanked me for the fueling recommendations that made me even happier. They had all used what I have been encouraging them to in all races: a Hammer Gel prior, and HEED or Perpetuem, with a couple of Hammer Gels during the race. They told me they felt great and would continue doing the same in upcoming events. That was the highlight for me—seeing others perform well on products I have been using exclusively for the last four years.

Endurance News 107 Celebrating 30 Years of Endurance!
Acidosis:
A term you should know

BY BRIAN FRANK

On the pH scale, extremely acidic foods are at a pH of 1.0-1.5. The lower the pH, the more acidic. Acid-forming foods and drinks should be avoided. The opposite end is extremely alkaline, with a pH of 7.0 or more. Alkaline-forming foods and drinks are your best bet. Hammer Nutrition products, such as Hammer Bars and HEED, are alkaline.

If you frequently feel sluggish or “burned out” and can’t identify the cause, the problem could very well be acidosis—the term for a body fluid pH that’s below the normal range of 7.35-7.45. Prolonged periods of acidosis lead to depression of the central nervous system and a general feeling of fatigue or malaise, and can contribute to many other health problems.

As an athlete you’re likely in this state most of the time. Here’s why: you exercise a lot, you probably eat an acidic diet, and you could be consuming highly acidic products while you exercise if you use brands other than Hammer Nutrition. The good news is that you can remedy this situation by changing your diet and using non-acidic products when you exercise.

Why you’re at risk
Exercise significantly raises acidity in your body—Metabolism produces acidic products that lower the pH of body fluids and tissues. For example, carbon dioxide is a by-product of metabolism, and carbon dioxide combines with water to form carbonic acid. Anaerobic metabolism produces lactic acid, protein metabolism produces phosphoric and sulfuric acids, and lipid metabolism produces fatty acids. Your body must continuously eliminate these acidic substances to maintain pH homeostasis.

Acidic diet. Like most Americans, you likely are eating a diet that promotes acidity. Wheat, sugar, dairy, and meat—the staples of most people’s daily diet—are all acid-forming. (See “The anti-acid diet.”)

Acidic fuels. For some athletes, the third strike on the acid front comes from what’s consumed during exercise. If you use ANY other brand of sports drink, energy bars/chomps/chews, or effervescing electrolyte tabs, take a minute to read the ingredients. You’ll notice that sugar, salt, and citric acid (all acids) are the primary ingredients. The most popular sports drink has a pH of 2.4; battery acid has a pH of 1! Most other energy drinks have a pH of 4.5 or less, which is highly acidic. Consuming highly acidic products when you’re exercising is like throwing gasoline on a fire.

The anti-acid solution
The good news is that acidosis is a temporary state that you can correct with a modicum of effort. Here are a couple of ways to reduce acidity in your body:

1. Eat more alkaline-forming foods, fewer acid-forming foods. You don’t have to go to a 100% plant based diet, although that would not be a bad choice. But you do need to cut out as many acid-promoting foods as you can. For a partial list, see “The anti-acid diet.”

2. Consider the acidity of the products you consume during exercise. Our products are formulated to avoid further increases in acidity and to help neutralize the acid you are naturally producing; they contain powerful acid buffers like L-Carnosine and sodium tribasic phosphate, but do not contain sugar, citric acid, or excess sodium. While the pH of most sports drinks is between 2.0 and 4.0, HEED is 7.04! Reducing acidity and avoiding prolonged states of acidosis in your body will help you avoid the “burn” and achieve higher levels of health and physical performance.

Beat the bonk with gel.
No refined, simple sugars
No artificial colors or sweeteners

Thanks to Hammer Gel, Jason, type 1 diabetic, can Fuel Right and Feel Great!” without worrying about blood sugar spikes.

Photo: Courtesy Jason Denbo

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ESPRESSO
MONTANA HUCKLEBERRY
RASPBERRY
APPLE CINNAMON
PEANUT BUTTER CHOCOLATE
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PEANUT BUTTER
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Single serving packets $1.40 ea
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Phytomax is a concentrated source of vegetable nutrition that not only contains vitamins and minerals, but is also loaded with enzymes, phytoestrogens, and phytonutrients. All of these are so important for overall health but are unfortunately no longer available in appreciable amounts in a large percentage of our food supply. Extensive and specific harvesting and processing procedures ensure potency, yielding a “super green” food that, with a pH of 12.0, is an easy way to help maintain ideal body alkalinity.
Reasons Every Athlete Should Supplement

BY ENDURANCE NEWS STAFF

1. Get the Essentials: Supplements like Premium Insurance Caps help supply the essential nutrients that your body needs to function properly and that it cannot make on its own. Essential vitamins include A, C, D, and E, as well as the B-complex vitamins. There are also essential minerals that your body needs to help regulate various processes for it to function. For endurance athletes, replenishing these nutrients is imperative all year long, especially during peak training periods when you need your body to perform at its best.

2. Feel Better: The ingredients in supplements such as Hammer Nutrition’s Daily Essentials have been proven to boost immunity and gut health. So when nasty cold/flu bugs hit, your body will be prepared. Ever get the winter blues? Consuming omega-3 fatty acids (EndurOmega) and vitamin D (Premium Insurance Caps) appears to be important “spark plugs” that aid energy production and help speed recovery. Mito Caps Supreme are also available in EndurOmega, Mito Caps, and Race Caps Supreme have been linked to improved muscle mass and function, as well as higher energy levels during workouts, increased endurance, and decreased soreness. The Coenzyme Q10 and idebenone components in Race Caps Supreme are important “spark plugs” that aid energy production and help speed recovery. Mito Caps benefit mitochondria function, which means improved athletic performance.

3. Look Better: Vitamin A (which the body converts beta-carotene into) has been proven to aid in the replenishment of skin cells, hair growth, and maintenance of healthy teeth and gums. Beta-carotene and vitamins C and E protect against free radicals that can harm skin cells and cause signs of aging, as well as boost collagen production. The minerals calcium and iron are crucial for healthy teeth and gums. Folic acid and the B-complex vitamins also assist with hair health and growth.

4. Enjoy Life, Longer: The nutrients in EndurOmega, Mito Caps, and Race Caps Supreme have been linked to improved muscle mass and function, and help speed recovery. Mito Caps Supreme are also available in EndurOmega, Mito Caps, and Race Caps Supreme have been linked to improved muscle mass and function, as well as higher energy levels during workouts, increased endurance, and decreased soreness. The Coenzyme Q10 and idebenone components in Race Caps Supreme are important “spark plugs” that aid energy production and help speed recovery. Mito Caps benefit mitochondria function, which means improved athletic performance.

5. Perform Better: The nutrients in Premium Insurance Caps, Mito Caps, Race Caps Supreme, EndurOmega, Boron, and Chromium (Premium Insurance Caps plus additional amounts of vitamin D, if necessary) can help reduce symptoms of seasonal affective disorder. Magnesium (Premium Insurance Caps, Essential Mg) is also beneficial for helping alleviate depression and symptoms of SAD.

As we have previously reported in Endurance News, the notion of eating a “balanced diet” for a strong, healthy body is a myth. Yes, the foods you consume will provide some nutrients, calories, satiation, pleasure, etc. But that’s not enough in our modern world. Many factors—including depleted agricultural soils, increased consumption of processed foods, and busy schedules—have contributed to our inability to ingest all of the nutrients we need. While eating a diet that includes plenty of vegetables, fruits, lean proteins, and low GI (glycemic index) starches and grains is still extremely important every day, below are five excellent reasons to supplement your healthy diet.
**Product Spotlight**

**Premium Insurance Caps**

Supplementation is a fact of modern life: start here

*BY ENDURANCE NEWS STAFF*

No one would choose to have average health, knowing that supreme health is within easy reach. Naturally, you want to get the absolute most from your body during activity. That’s where an intelligent, high-quality supplement program comes in. Supplements play a vital role in helping you achieve optimal overall health. Premium Insurance Caps is the foundation of that supplement program, and it should be part of your daily routine. Here’s why:

1. **Optimum, not minimum, amounts** - Unlike many vitamin/mineral supplements that contain inadequate Reference Daily Intake (RDI) amounts of nutrients, Premium Insurance Caps contains Optimum Daily Intake (ODI) amounts of the highest quality vitamins and minerals. Dr. Shari Lieberman hits the nail on the head about why the use of ODI amounts in supplementation is so important: “RDIs reflect amounts adequate to prevent nutrient-deficiency diseases, and are not tailored for individual needs. In order to attain a state of optimum health and disease prevention, we must take into our bodies optimum, not minimum, amounts of vitamins and minerals.”

2. **Capsules, not tablets** - The nutrients in Premium Insurance Caps are contained within a two-piece all-vegetable capsule. That means they will dissolve more rapidly and completely than tablets would, so your body actually will receive the nutrients you’re consuming. Because tablets can take longer to break down, they often irritate the intestinal lining, causing stomach discomfort. Additionally, tablets can pass through the entire digestive system partially dissolved, or not dissolved at all. Either way, your body does not get the full volume of nutrients you ingest, which means you’re not getting what you paid for.

3. **Highly assimilated minerals exist in various forms** - Some companies use inferior options such as magnesium oxide or calcium carbonate which are poorly absorbed. The amino acid chelates used in premium insurance caps are easily assimilated in the human body.

4. **Multiple digestive enzymes for maximum nutrient absorption** - It’s not what you consume, it’s what you absorb. To aid the absorption of nutrients, Premium Insurance Caps includes digestive aids such as Bioperine®, pepsin, bromelain, papain, and more.

5. **Label Fluffing** - Some companies add auxiliary nutrients at levels that have no real value. When you buy such a product, you’re paying for a product that has little more than an impressive label. All of the nutrients included in Premium Insurance Caps are at levels that will provide real benefits.

High-potency Premium Insurance Caps provides your body with the foundation of vitamins and minerals it needs to function properly, maximize training, and achieve supreme health. Reach for it daily.

**Fill the holes in your diet**

- Essential calcium and magnesium
- 50 mg of quercetin per capsule
- Highly-assimilated

**Our Customers Say It Best**

“I use Premium Insurance Caps daily as my ‘insurance’ that I’m getting what my body needs. I am a busy mom, physical therapist, triathlon and running coach and compete professionally in triathlons myself. I need to make sure my body gets what it requires.”

-Online reviewer

**High-Potency Multivitamin**

**Daily essential with all the nutrients and minerals you need to stay healthy and sustain energy levels during events**

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**Hammernutrition.com 800.336.1977**
Low Sugar, Sweet Outlook

BY ANDREYA GROZIK

Sugar isn’t just bad for the body; it’s bad for the mind too.

A new study by researchers at the University College of London, published in Scientific Reports, links higher sugar intake to higher rates of depression, anxiety, and other common mental disorders. The study revealed that men without a mood disorder who consumed more than 67 grams of sugar a day were 23% more likely to be diagnosed with depression or anxiety within five years than men who consumed 40 grams or less of sugar. Lead study author, Anika Knuppel, says, “There is increasing evidence for the physical damage sugar has on our health. Our work suggests an additional mental health effect.”

There are several theories for these results, and inflammation is a front-runner: A high sugar diet can lead to inflammation. Early research links inflammation to mood disorders. Another theory blames a particular protein, BDNF, which is the result of a sugary diet, and perhaps a cause of depression and anxiety.

Knuppel says, “Sweet food has been found to induce positive feelings in the short-term...Our study suggests a high intake of sugary foods is more likely to have the opposite effect on mental health in the long-term.” The researchers found that those without mental disorders did not consume more sugar than those without a mental disorders. This weakens any theory of reverse causation—that those with mental disorders are more likely to consume more sugar.

Dr. Michael Roizen and Dr. Mehmet Oz write, “This [study] adds to lab-generated info on other mental health challenges that added sugar causes. It can trigger addictive behavior and cognitive decline: One study showed that it fueled food addiction; another found that rats preferred sugar water to cocaine. Yet another lab study found that a sugar-boosted diet can make rats forget how to get through a maze.”

According to the World Health Organization, added sugars should be limited to less than 5% of our diets. On average, Americans consume nearly three times that amount. Added sugars include sweet foods, beverages, and processed foods like ketchup.

This study is important because it shows that overconsumption of sugar can lead to unhealthy brain chemical imbalances. The researchers concluded, “Lower intake of sugar may be associated with better psychological health.”

Dr. Yella Hewings-Martin writes for Medical News Today: “[S]tudies have indicated that individuals who experience depression benefit from eating a healthful diet. Importantly, choosing foods that are low in refined ingredients, such as sugar, but high in omega-3 fatty acids, vitamins, and minerals can relieve the symptoms of depression. Scientists think that the power of these foods lies in promoting good brain health.”

Sugar intake should be less than 5% of your diet.
I don’t like to swallow pills, especially while I’m riding, so I usually just bite into them. Can I do this with all Hammer Nutrition capsules?

For Hammer Nutrition supplements that are commonly used during exercise—including Race Caps Supreme, Mito Caps, Anti-Fatigue Caps, and Endurance Amino—it is completely acceptable to open up the capsules (or bite into them) and consume the contents. However, keep in mind that some of the nutrients in these products have an extremely bad-to-utterly-foul taste. We do not recommend consuming the capsule contents of Endurolytes and Endurolytes Extreme because of the ginger root extract found in these two products. While very soothing to the stomach, some of ginger’s naturally occurring compounds—zingerone and capsaicin—can have a burning effect on the mouth and throat if the powder comes in contact with them. We therefore recommend that you DO NOT open up the capsules and swallow the contents of these two products. Consume the capsule whole for best results.

Is it true that men should avoid soy because it mimics estrogen?

This is not true; men can and should consume soy. As males age, testosterone production decreases, while estrogen levels increase proportionate to testosterone decrease. These bodily produced estrogens—particularly Estradiol 17-Beta—are extremely powerful and bind to/occupy numerous receptor sites, especially on the prostate gland, which is where negative prostate-specific issues can begin. The naturally occurring phytoestrogens in soy—primarily Daidzein and Genistein—have massively weaker estrogenic properties than the bodily produced ones. When soy is consumed, these phytoestrogens effectively block the more-harmful bodily produced estrogens from binding to and occupying the receptor sites on the prostate gland. The estrogenic effects from Daidzein and Genistein are more than 1,000 times weaker than those from the bodily produced estrogens, so in essence the phytoestrogens in soy have an anti-estrogenic effect.

For more information, please see Dr. Bill Misner’s article, “Soy Protein - Friend or Foe?” on page 6 in Endurance News #54 (hammernutrition.com/downloads/ENews/ENissue54.pdf), and “Soy Scores Again” on page 9 in the same issue.

Soy derivatives, particularly soy proteins and the isoflavones, are powerfully beneficial for numerous health benefits.

Soy derivatives, particularly soy proteins and the isoflavones, are powerfully beneficial for numerous health benefits.
On Belay

BY ANDREYA GROZIK

Hammer Sponsored Athlete, Andrea Koenig, has climbed all the “14ers”—mountaineering lingo for peaks over 14,000 feet—in the lower 48 states. There are 90 of them if you count the sub-peaks, which are over 14,000 feet high but have less than 280 feet of prominence. This is remarkable for many reasons, but even more so since she was facing a fear head on. “I didn’t think I’d get over this fear of heights, but she continues to do what she loves and stays active as always.”

Andrea’s favorite climbs—one that stand out because of their beauty and steepness on the hike as well on the peak itself. “I’ve climbed.” She explains that the difficulty was due to the loose rock and steepness on the hike as well on the peak itself. Andrea credits her partner and IFMGA guide, Simon Meis, for being “a great partner for this amazing trip.” Despite being challenging, she uses the word “amazing” more than once to describe this trip. This was another of the “50 Classic Climbs of North America.”

Andrea admires renowned American rock climbers Alex Honnold, Tommy Caldwell, and Lynn Hill, but she says her greatest personal motivators over the years have been her many climbing partners. She emphasizes the importance of having the right climbing partner who possesses characteristics such as a steady temperament, and the ability to communicate effectively and remain positive even without much sleep.

Andrea concludes, “I skimo and bike race often as well as train for aerobic fitness sports on my bike, but climbing is still probably my favorite sport. I would love to be able to climb more often.”

How Andrea Hammers

Before and During: Race Caps Supreme, Fully Charged, Energy Surge, Perpetuem, and Hammer Gel
After: Tissue Rejuvenator

Reliable long-distance fueling

For cycling, Andrea holds the records for:

• The Dead Ride Tour (starting and ending in Ridgeway, Colorado)
• The women’s record for the Colorado Last Chance 1200K brevet
• The 400K brevet with the Rocky Mountain Cycling Club

For major USA Cycling and Bicycle Racing Association of Colorado (BRAC) accomplishments:

• State Championship time trial
• The 400K brevet with the Rocky Mountain Cycling Club
• The 400K brevet with the Rocky Mountain Cycling Club

In each issue of Endurance News, we highlight some of the less conventional ways our nutritional fuels help people. From firefighters to farmers, Hammer Nutrition customers use our products far and wide to produce amazing results. Hammer’s “atypical athletes” show how smart fueling benefits others beyond cycling and running. This issue, we feature Andrea Koenig, seen below. Photo: Mike Poborsky
Salt Doubles Risk of Heart Failure

BY STEVE BORN

The results of a 12-year study involving more than 4,500 people are undeniably sobering: High salt intake dramatically increases the risk of heart failure.

Researchers from National Institute for Health and Welfare in Finland studied a total of 4,630 healthy men and women aged 25 to 64 years who were participants in the North Karelia Salt Study or the National FINRISK Study. The data that researchers collected for baseline purposes included measurements of the participant’s weight, height and blood pressure, a blood sample, and a 24-hour urine sample. Participants also completed a health behavior questionnaire.

Over the next 12 years, using the 24-hour sodium extraction method (considered to be the most accurate way to estimate salt intake), participants’ urine samples were collected to gauge their intake. According to lead researcher, Professor Pekka Jousilahti: “People who consumed more than 13.7 grams [1,370 milligrams] of salt daily had a two times higher risk of heart failure compared to those consuming less than 6.8 grams [6,800 milligrams]. The optimal daily salt intake is probably even lower than 6.8 grams [6,800 milligrams]. The World Health Organization recommends a maximum of 5 grams [5,000 milligrams] per day and the physiological need is 2 to 3 grams [2,000 to 3,000 milligrams] per day.”

NOTE: The World Health Organization (WHO) estimates that 2.5 million deaths could be prevented each year if global salt consumption were reduced to the recommended level.

A wealth of research has linked salt to high blood pressure. This new study, however, showed that excess salt does serious damage to the heart, even when scientists accounted for high blood pressure. Professor Jousilahti states, “The heart does not like salt. High salt intake markedly increases the risk of heart failure. This salt-related increase in heart failure risk was independent of blood pressure.”

Professor Sir Nilesh Samani, medical director at the British Heart Foundation, concurred: “We need to consume some salt in our diet but most western diets have salt intakes much greater than the amount required to be healthy. There is a clear relationship between eating too much salt and your risk of having high blood pressure, a major risk factor for heart disease and stroke. This study shows that eating too much salt is also linked with increased risk of heart failure, a debilitating and irreversible condition.”

Graham MacGregor is Professor of Cardiovascular Medicine at Queen Mary University of London, and Chairman of Consensus Action on Salt and Health. He summarizes the seriousness of this issue: “This is a very important study. It is a powerful message that we need to be more ambitious in cutting salt from our diet. We have an aging population and heart failure is becoming increasingly common. And it is a terrible way to die; I would rather die of cancer than heart failure.”

Average Goal: keep salt under 5,000 milligrams daily.

Quick Energy Low-Sugar Sports Drink

- Contains diabetic friendly sweeteners
- No added simple sugars
- No citric acid

HEED is formulated with complex carbohydrates for long-lasting energy and a full spectrum of electrolytes that you can keep pushing your pace with a smile on your face.

Our Customers Say It Best  ★★★★★

“I find HEED perfect for long endurance events (Ironman, marathons and centuries/double-centuries). It’s easy to digest, replenishes electrolytes, and isn’t too sweet.”

-Crissy R.

80 Servings  $58.95
32 Servings  $29.95
16 Servings  $19.95
Single-serve packets  $1.95
6 or more  $1.80 ea

Mix or match flavors

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Swap Your Pop to help you lose weight

BY ANDREYA GROZIK

Sugar-sweetened drinks are the main single source of sugar in the American diet. Americans do not need this sugar surplus, since we already consume about three times the recommended daily limit. It’s known that sugar can cause tooth decay, type 2 diabetes, cardiovascular disease, weight gain, and obesity. Dr. Gabe Mirkin says, “Sugared drinks raise blood sugar more quickly than sugars in solid foods, so they increase risk for developing diabetes.”

According to the Global Burden of Diseases Nutrition and Chronic Diseases Expert Group, there are approximately 184,000 deaths each year attributed to consumption of sugar-sweetened beverages. Dr. Jennifer Ashton of ABC News says that sugar causes inflammation and oxidative stress, and “it affects the blood vessels in our body, literally every organ system from the brain to the heart to the kidneys.” She says that having one less can of soda per day could reduce a person’s added sugar consumption by 52 pounds in one year.

A Consumer Reports study just released shows just how much of a negative effect one soda each day has on a person:

- Replace the soda with a sports drink to lose about 6 lbs. in a year
- Replace the soda with iced coffee to lose about 9 lbs. in a year
- Replace the soda with water to lose about 14 lbs. in a year

Source: Consumer Reports

If drinking water is out of the question, and you will more realistically opt for sports drinks or iced coffee, be discerning with either choice. When choosing a sports drink, avoid the ones high in sugar, salt, preservatives, artificial coloring and flavors, and other unhealthy ingredients.

While sodium (salt) is an electrolyte, most sports drinks contain too much. Hammer HEED has a reasonable amount of sodium (45 mg), along with a complete and balanced electrolyte profile that also includes other important electrolytes like potassium, magnesium, and calcium.

If iced coffee is more your style, start with a delicious organic coffee that was roasted in small batches for freshness. 53x11 is a great option. Adding sugar, milk, or flavored creamers will not help with weight loss, if that’s your goal.

New Formula Same Low Price!

*15-30% less than the competition! *price per tablet

Quick dissolving!
Residue-free!
Great tasting flavors!

Our Customers Say it Best

“I use Endurolytes Fizz in my water bottles on long rides. With them I don’t cramp. I also love the taste...grape is my favorite.” - Online reviewer

Endurolytes Fizz is a convenient, refreshing way to replenish electrolytes for those who prefer not to take capsules. The new formula leaves no white residue. Try your favorite flavor today!

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Endurance News 107
Celebrating 30 Years of Endurance!
Eat Better, Feel Better
Tame inflammation with smart dietary choices

BY LOREN MASON-GERE

You’re a hard-training athlete with an iron gut and a raging metabolism. Your caloric requirements are through the roof and your appetite is intense. The saying, “If the fire is hot enough, anything will burn” certainly seems to apply to you—so why worry about your diet?

Making dietary changes will not only improve your health, but nearly every athlete will also see an improvement in performance. Understanding the role of food in the inflammation and recovery process is an essential part of honing your diet for peak health and performance.

Training, Diet, and Inflammation
First, you must accept that strenuous training stresses your health. Inflammation is a healthy and necessary part of the body’s recovery and immune system response; but to recover quickly, the body needs to return to a non-inflamed state. This becomes challenging when you combine strenuous training with a diet based heavily on foods that further contribute to inflammation.

If you eat a standard American diet, based on refined grains (particularly those that contain gluten), dairy foods, processed oils, and refined sugar, you are fanning the flames of exercise-induced inflammation from allergies and food intolerances to hypothyroidism and cancer.

To protect your body and support optimal athletic performance, it’s essential that you rely on a diet that is rich in anti-inflammatory, nutrient-dense foods.

The Anti-Inflammatory Diet
Luckily, help is only as far away as the produce aisle. A well-balanced, anti-inflammatory diet based on vegetables and fruits, unrefined ancient grains and legumes (such as quinoa, amaranth, and lentils), omega-3 fatty acids (such as those found in fresh water fish, flax seeds, and walnuts), and spices (such as turmeric, ginger, and garlic) will naturally help to reduce inflammation.

By replacing low-quality, inflammation-producing processed foods with nutrient-rich whole foods, you will experience faster recovery and improved resistance to illness as you protect yourself from future health problems.

FOODS TO FIGHT INFLAMMATION

Aim to include one or more of these anti-inflammatory foods in every meal:

- Blueberries
- Bok Choy
- Broccoli
- Cherries
- Flax Seed
- Garlic
- Ginger
- Green tea
- Herring
- Kale
- Lentils
- Quinoa
- Raspberries
- Salmon
- Sardines
- Strawberries
- Tumeric
- Walnuts

For recipes with these foods, download our FREE cookbook, In the Kitchen with Hammer Nutrition, available at: hammernutrition.com.

Consistent, sustainable energy for PEAK PERFORMANCE

- Rock solid sustained energy
- No sugar “crash”
- No stomach distress

Our Customers Say It Best ★★★★★

“On a recent long run, I tossed my Hammer Gel in my water pack and when the time came, the flavor was delicious and easily consumed in small doses.”

“Hammer Gel gave me the strength to power through my last 5k race with a new huge PR. Thanks, Hammer Nutrition!!!”

-Online reviewers

Our Customers Say It Best

-ESPRESSO**
- RASPBERRY
- PEANUT BUTTER CHOCOLATE*
- CHOCOLATE
- MONTANA HUCKLEBERRY
- APPLE CINNAMON
- TROPICAL**
- VANILLA
- CRANBERRY

Rock solid sustained energy
No sugar “crash”
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* Ultra Hammer Gels contain high quality nut protein and fats
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For recipes with these foods, download our FREE cookbook, In the Kitchen with Hammer Nutrition, available at: hammernutrition.com.
Feeling more focused and alert, and having greater energy and endurance—all without that unpleasant jittery or wired sensation—are great reasons to use Fully Charged. Even better are the results that our clients have experienced—the same kind of results that you can experience using Fully Charged! No stimulants, no excessive amounts of caffeine, no artificial or questionable ingredients, and NO HYPE!

• Fully Charged can be used year round prior to any workout you may be doing—endurance, strength, cross-training, etc.—and it can be used prior to multiple workouts done in a day.

• Though we market Fully Charged as a pre-exercise supplement, it is absolutely 100% OK, and highly beneficial, to take during prolonged bouts of exercise. In our testing of Fully Charged, we found that the benefits ranged from 4-6 hours, sometimes longer. Many athletes that are using the product are taking another dose during their longer workouts and races (about every 3-4 hours, but sometimes as short as every 2 hours) and the feedback we’ve received from them has been nothing short of sensational!

• When you’re looking for a pick-me-up any time during your day, you can count on Fully Charged to safely and naturally help increase energy levels, reduce fatigue, promote mental alertness, and more. Unlike other pre-workout supplements or the plethora of ready-to-drink energy drinks—the primary goal of which is to apparently get you as wired and amped up as possible—Fully Charged contains no stimulants or excessive amounts of caffeine (only 15 mg per serving). With Fully Charged you can enjoy a clean, long-lasting boost of energy, without getting your heart racing and making you feeling jittery or nauseous.

• The tart cherry taste is 100% natural and quite subtle; it doesn’t have a chemical and/or super sweet taste that so many other pre-exercise drinks do. Most athletes will mix it in water and consume 30 minutes prior to exercise, while others will create their own unique taste, mixing Fully Charged in a water bottle containing 1-2 Endurolytes Fizz tablets. Others actually prefer to take their first serving of Fully Charged just before they start their workout or race, mixing a scoop in their bottle(s) of HEED, Sustained Energy, or Perpetuem.

• Fully Charged is perfectly compatible with any and all Hammer Nutrition supplements you may be taking that are for before and during exercise, and it does not replace any of the Hammer Nutrition supplements or fuels.
Karin S. Weller: Inspiring & Empowering

Karin Weller of Turlock, California, has only been riding since 2012, but you would never know it with her expansive racing record and impressive accomplishments. This was the same year she was introduced to, and started using, Hammer Nutrition products.

When her three daughters moved out of the house in 2011, Karin started getting into activities such as trail running, mountain biking, kayaking, and hiking. She started seeking out athletic groups, and that’s how she fell in love with road biking and riding long distance. “Riding is anti-anxiety. I never feel anything negative when I’m on the bike,” she says.

In 2014, she learned about randonneuring. She then started doing races (200K and 300K, Double Centuries, and earned the prestigious California Triple Crown) by herself, and says she felt really proud of herself. “I believe in the product and I love the product!”

Karin regularly uses Hammer HEED, Perpetuem (her main source of fuel), Anti-Fatigue Caps, and Hammer Whey Protein. She also takes Hammer Gel when training and racing. In addition to Anti-Fatigue Caps, the Hammer Nutrition supplements she takes consistently are Endurance Amino, Race Caps Supreme, and Essential MG. “I love the Daily Essentials as well,” she says, which along with Race Caps Supreme, also includes Premium Insurance Caps and Mito Caps.

Another beloved product in her Hammer Nutrition regimen is Fully Charged. “I like Fully Charged when I am going to do hard efforts—intervals with high power—in training,” she says. “Now that Hammer Nutrition has the individual packets, it will make it more convenient.”

As far as recovery goes, she says Recoverite and EMS are crucial: “I also use Recoverite after my workouts and bring it with me when I travel to train. There are so many great Hammer products,” she says. “Then I complete my recovery with my EMS.”

Karin’s plans for next year include Race Across the West solo, and longer randonneuring events. She would also like to do more riding for women’s charities such as Haven Women’s Center in Modesto, California. “I like racing for women,” she says. “As I’ve gotten older, I realize how important it is to be supportive of each other, not competitive.”

“There is so much I am excited about,” she concludes. “I really feel blessed to be a part of the Hammer family and have the opportunity to be racing and training endurance.”

Karin Weller’s positivity and passion truly inspires and empowers others.

Karin Weller is a Hammer Nutrition Sponsored Athlete and active member of our Referral Program.

Karin’s Tips for New Riders

1. Believe in yourself. The more you ride, the more confident you will become.
2. Find a good skills clinic to learn bike-handling skills.
3. Educate yourself; know what you want to learn.
4. Everyone will have opinions; listen to your gut, do what makes you happy.
5. Ride with people who are slightly stronger than you are.
6. Try riding solo; Enjoy the challenge and finishing.
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Karin S. Weller at the Start of the Race Across America. Photo: Brian Sinclair

Karin Weller is a Hammer Nutrition Sponsored Athlete and active member of our Referral Program.
FROM THE KITCHEN OF
LAURA LABELLE

Comfy & Cozy For Fall

BY LAURA LABELLE

Heading into fall is always when I feel like I want to break out my sweaters, boots and jackets. I also begin to crave heartier foods to satisfy my growing appetite in the cooling weather. Typically, I start roasting more for the richer flavors. I love “one dish” roasted meals like pot roast with veggies, or a whole chicken with veggies in the dish—the veggies caramelize with the juices and make such a delicious easy dish. One of my favorite tricks is to add what I call “savory herbs” like rosemary, sage, oregano, bay and thyme. These herbs are fantastic for roasting meats, poultry and veggies; they add amazing rich flavor that marries well when roasted. Finally, it’s not too hot to turn on the oven in California!

When I cook hearty roasts that are rich and filling, I love to accompany them with a large green salad or some other light side salads, like tomatoes with onions and herbs. For me, one of the secrets to making meals exciting is the balance of textures, colors and flavors.

Soups and stews are also huge comfort foods I really enjoy during the fall season. Chicken stew is a personal favorite (and the leftovers make wonderful pot pie!), or shepherd’s pie with mashed potatoes on top. As the seasons change, I always gravitate towards what becomes available in our local markets. Eating fresh and local as much as possible is always a goal.

Below is a list of mostly new and some favorite recipes featured in our new edition of “In The Kitchen with Hammer Nutrition.” Please enjoy the recipes featured in this issue and try some of our others below.

改善肌肉恢复和训练结果

高质量蛋白粉有助于提高训练后肌肉恢复效果和睡眠质量。

- 充满必需氨基酸，增强运动恢复。
- 无胃部不适。

Laura Labelle studied at Ecole De Cordon Bleu in Paris, and 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.

Laura Labelle

A few fall favorites from In The Kitchen with Hammer Nutrition:

- Dhal soup pg. 94
- Pumpkin soup pg. 97
- Pink soup pg. 102
- Potatoes, Fennel & Leaks au Gratin pg. 114
- Parmesan Cauliflower pg. 113
- Roasted Cauliflower with Turmeric pg. 115
- Roasted Squash pg. 116
- Balsamic Crock Pot Chicken pg. 138
- Lemon Roasted Herbed Chicken pg. 142
- Roasted Butternut pg. 161
- Roasted Root Veggies pg. 162

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Laura Labelle

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Easy Coffee Braised Roast

**Ingredients:**
- 3 – 3 1/2 pounds beef chuck pot roast
- 1 tsp. salt
- 1/2 tsp. ground black pepper
- 1 TBS vegetable oil
- 1 large onion, halved and sliced
- 1 large red pepper
- 2 celery stalks cut into 2-inch pieces
- 3 cloves garlic minced
- 1/4 cup beef broth
- 1 cup chopped pineapple
- 2 tsp. 53 x 11 coffee (finely ground to a powder)
- 1/4 tsp. crushed red pepper
- 1/2 tsp. ground coriander
- 2 pounds sweet potatoes, peeled, halved lengthwise, and cut into 2-inch pieces
- 2 TBS chopped basil

**Preparation:**
Preheat oven to 325 degrees F. Trim fat from meat. Rub meat with salt and black pepper. In a 6-quart Dutch oven, brown roast on all sides in hot oil over medium-high heat. Transfer to a plate.
Add onion, red pepper and garlic to Dutch oven. Cook and stir for 4 to 5 minutes or until onion and garlic are tender and starting to brown. Return roast to Dutch oven. Add broth, pineapple, coffee powder, crushed red pepper, and coriander. Bring to a boil.

Bake, covered, for 1 hour and 45 minutes. Add potatoes. Bake, covered, for 45 minutes to 1 hour more or until meat and vegetables are tender.

Transfer meat and vegetables to a platter; cover to keep warm; bring liquid in Dutch oven to boiling. Transfer meat and vegetables to a platter; cover to keep warm; bring liquid in Dutch oven to boiling. Reduce heat, and simmer, uncovered, for 10 to 15 minutes or until slightly thickened. Serve sauce with meat and potatoes. If desired, sprinkle with additional crushed red pepper. Garnish with chopped basil.

---

**Hearty Chicken Stew**

**Ingredients:**
- 6 chicken thighs
- (4 half breasts can be substituted)
- 2 TBS flour
- 2 TBS avocado oil
- 2 sprigs fresh thyme
- 2 sprigs fresh oregano
- 2 small or dry bay leaves
- 1 large onion
- 2 large carrots
- 4 large Russet potatoes
- 1 cup white mushrooms
- 1/4 cup white wine
- 2 1/2 cups chicken broth
- 1 tsp. salt
- 1/4 tsp. black pepper
- 1/2 tsp. crushed red pepper
- 1/2 tsp. ground coriander
- 2 TBS chopped parsley

**Preparation:**
Cut chicken thighs in two, and then roll in flour. In a large pot, heat avocado oil and add fresh herbs, chopped onion, and chicken on high stirring to let brown but not burn. After a few minutes reduce heat to medium. Wash and peel carrots cut into large pieces; wash and cut potatoes into 4. Add carrots, potatoes and wine. Cook on medium heat for a few minutes to cook out the acidity of the wine, and then add chicken broth. Cover and lower heat and cook for one hour, then add mushrooms and cook for another 30 minutes uncovered. Remove from heat and add salt and pepper to taste. Garnish with a little chopped parsley.
Drinking Coffee Can Extend Your Life

BY STEVE BORN

Research continues to reveal that coffee supplies some pretty remarkable health benefits, such as protection against type 2 diabetes and prostate cancer. The most eye-opening research, however, shows that coffee consumption may be associated with lower mortality risk.

This latest study, the largest of its kind to date, confirms that higher coffee intake (approximately three cups daily), is linked to a lower risk of mortality from any cause.

The study involved over 500,000 men and women from ten European countries, who originally took part in the European Prospective Investigation into Cancer and Nutrition (EPIC) study. Over an approximate 16-year period, study participants provided information via questionnaires and interviews so that researchers could ascertain the amount of coffee each participant consumed.

Lead researcher, Dr. Marc Gunter of the International Agency for Research on Cancer, states, “We found that higher coffee consumption was associated with a lower risk of death from any cause, and specifically for circulatory diseases, and digestive diseases.

Importantly, these results were similar across all of the ten European countries, with variable coffee drinking habits and customs. Our study also offers important insights into the possible mechanisms for the beneficial health effects of coffee.”

Dr. Gunter continued, “We found that drinking more coffee was associated with a more favorable liver function profile and immune response. This, along with the consistency of the results with other studies in the U.S. and Japan gives us greater confidence that coffee may have beneficial health effects.”

Coffee is loaded with antioxidant power, as well as literally thousands of phytochemicals that may offer protective and potential life-extending benefits. As more and more positive research about these benefits continue to come in, it appears that coffee can be a very healthy part of one’s diet.

Veronica W. Setiawan, PhD, Associate Professor of Preventive Medicine at the Keck School of Medicine of USC, states, “We cannot say drinking coffee will prolong your life, but we see an association. If you like to drink coffee, drink up! If you’re not a coffee drinker, then you need to consider if you should start.”

The study results were astounding!

- For the men whose intake of coffee was among the top 25% (approximately 3 cups daily), a 12% lower risk of all-cause mortality was noted compared to those men who did not drink coffee. For women, the risk was 9% lower.
- Death due to digestive diseases was 59% lower for men consuming the higher amounts of coffee, and 40% lower for women.
- Compared to non-coffee drinkers, women consuming the higher amount of coffee had a 22% lower risk of death from circulatory disease, and a 30% lower risk of dying from cerebrovascular disease (most likely stroke).
- Higher coffee intake was also associated with lower liver enzyme levels; lower lipoprotein(a), a type of cholesterol of which high levels are correlated to increased cardiovascular disease risk; and lower glycated hemoglobin levels, which indicates lower glucose build-up in the blood and is related to diabetes.
- Higher coffee intake was also associated with lower liver enzyme levels; lower lipoprotein(a), a type of cholesterol of which high levels are correlated to increased cardiovascular disease risk; and lower glycated hemoglobin levels, which indicates lower glucose build-up in the blood and is related to diabetes.
Stay Focused in the Off-season

Nick Castellano is a Triathlon Coach, Personal Trainer, and Massage Therapist. He says that the biggest mistake athletes make once race season is over is discontinuing the imperative work. Time off is needed from racing, but not from training. While it is necessary to decrease the intensity of the training, and maybe taking a break from the power meters, heart rate monitors, and the swim clock—the idea is to continue building on last year’s work. Off-season is the time for corrective exercises, strengthening, and base training specific to your sport.

One critical tip to always keep in mind: NEVER skip the warm up. This goes for everyone, especially those coming off injuries. It is crucial to increase blood flow to the muscles and warm up the tissue, and it also creates mobility within the joints. Foam rolling is a beneficial second step, to separate the muscle tissue and make it more pliable. Lastly, he recommends dynamic stretching, which is critical for preparing for high intensity usage of our muscles in any sport.

CORRECTIVE WORK

The off-season is a great time to focus on the muscles that prevent injuries—mainly the smaller muscle groups that encase the shoulder and hip joints, as well as postural muscles within the trunk and neck. These muscles are important because they stabilize the joints.

STRENGTHENING

It is also important to strengthen the prime movers—the big visible muscles (like the serratus, lats, triceps, quads, glutes, and hamstrings) that create locomotion to propel us forward. You can do this with tubing, bands, free weights, machines, and suspension training.

BASE TRAINING

Base training is the conditioning of the cardiovascular and respiratory systems. This is also when you should evaluate and reanalyze your form. Nick recommends getting a comprehensive Functional Movement Screening (FMS). He uses the free app called Technique, so he can analyze his clients’ swim, bike, and run form. He suggests that athletes use this on as well on their off-season. Once you reestablish form, then focus on slow, steady duration with an emphasis on having fun!

During the off-season, it’s important to generally be mind-body aware of how you feel, make the off-season fun by mixing things up, and always maintain a healthy diet. Nick says, “You’re always going to gain a few pounds off season,” and he always maintains a healthy diet. He also recommends a regular regimen of Hammer Nutrition’s Endurance Amino, AO Booster, Essential MG, Premium Insurance Caps, and Race Caps Supreme.

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- Helps improve circulation
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- Benefits skin & eyes
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Your Brain Needs Quality Sleep

A new study in the online issue of Neurology, the medical journal of the American Academy of Neurology, validates the importance of a good night's sleep. The less REM (rapid eye movement) sleep you get, the greater your chance of developing dementia. REM sleep occurs during the dream stage.

As reported by Science Daily, “Researchers found links between both a lower percentage of REM sleep and a longer time to get to the REM sleep stage and a greater risk of dementia. In fact, for every percent reduction in REM sleep, there was a 9 percent increase in the risk of dementia.”

Hammer Nutrition’s REM Caps will help you achieve the quality sleep you need nightly. REM Caps contains four nutrients—Valerian Root Extract, Melatonin, 5-HTP (5-Hydroxytryptophan), and Magnesium—to help you get to sleep quickly, and achieve adequate REM sleep.

Melatonin (a hormone naturally produced in the brain) is also a very powerful antioxidant shown to be a potent immune system stimulator, with the potential to help prevent certain cancers. For a more sound, restful, and productive sleep and its added health and performance benefits, REM Caps is a natural solution.

Soak Away Soreness

Adding Epsom salts to your bath is an excellent way to soothe sore muscles, relieve pain and inflammation, increase circulation, reduce swelling, improve function, and lower blood pressure. Epsom salt is a mineral compound of magnesium and sulfate. This naturally occurring combination is beneficial to muscles—relaxing them and minimizing spasms and cramps.

Add ½ cup- 2 cups Epsom salts to running water that is very warm but not hot. Soak for 10-20 minutes.

Another great way to relieve aches and pains naturally is with Hammer Nutrition’s 5-star rated Tissue Rejuvenator. It is a safe and effective alternative to pain medications such as NSAIDs (nonsteroidal anti-inflammatory drugs).
Several Hammer Endurance News articles have covered the dangers of chronic NSAID (nonsteroidal anti-inflammatory drug) use. Issues with gastrointestinal bleeds, cardiovascular events, and even quicker progression of joint related conditions like arthritis are among the list of side effects from this common over-the-counter ‘solution’ to pain.

Choosing to take NSAIDS for pain relief will not address the cause of the pain. If poor biomechanics—the way the body moves through certain motions—is the cause of the constant pain after workouts, then the better option would be to find a coach or practitioner that understands the sport and can help address the movement issue. If the pain is from chronic inflammation as a result of infections, trauma, toxins, a high stress lifestyle and/or a diet high in salt, sugar and processed foods, there are better supplements and natural remedies that will actually help the body reduce inflammation at the source.

Inflammation is a healthy process that occurs in times of injury. It is a function of the immune system to heal, repair and also protect against foreign invasions. However, inflammation is only supposed to be active for a certain amount of time. The immune system, which started the inflammatory process, is also supposed to turn it off. With the exposures to numerous toxins, poor diets and lifestyle habits, the inflammatory process starts, but never ends. The result is widespread inflammation through out the entire body.

This is a dangerous process that leads to joint pains, fatigue, brain fog, leaky gut, and can be the beginnings of dangerous diseases like cardiovascular disease and autoimmune diseases, to name a few.

So, what nutrients work for you not against you? Glucosamine sulfate, Chondroitin sulfate and MSM (methylsulfonylmethane) are a triffecta that at 1,000-1,500 mg can provide better pain relief than NSAIDS in two weeks, while maintaining joint cartilage.

Turmeric is a powerful anti-inflammatory that reduces overall chronic inflammation and assists in turning off short-term acute inflammation. It also functions as an antioxidant and can reduce the oxidation that is formed from hard training or high training programs. It is also popular for its ability to fight products and processes that can lead to cancer.

Digestive enzymes not only help with digestion, but also function as anti-inflammatory because they can reduce swelling and brusing after injury. Herbal painkillers like Boswellia serrata and Devil’s claw are also popular choices for arthritic type pains.

Eating plenty of green leafy vegetables provides calcium, B-vitamins, vitamin C and other nutrients that support better recovery and provide better nutrition.

Better recovery depends a lot on lifestyle. How you choose to support your body and your training throughout the day makes a large difference in how many years you can compete, as well as how soon you can return to training. Supplements like Hammer Tissue Rejuvenator and alternative remedies are better choices that work for you, keeping you active and achieving your goals.

BY KIRSTIN LAURITZEN, DC

Tumeric: an ingredient in Tissue Rejuvenator, is a powerful natural aid to reducing chronic inflammation.
Rethink Your Drink

BY ANDREYA GROZIK

Energy drinks often have excessive levels of caffeine and sugar. They typically exceed 25 grams of sugar, and some of them have as much as 100+ grams! On average, they contain 37 grams of sugar, which is the equivalent of nine teaspooons of table sugar! Not to mention, many of these energy drinks have upwards of 500 milligrams of caffeine, which the American Academy of Pediatrics (AAP) says is equal to 14 cans of soda.

In a recent study reported in the Journal of the American Heart Association, results showed energy drinks caused dangerous changes to blood pressure and heart function. The participants’ blood pressure and heart rhythms were measured after drinking 32 oz. of an energy drink. They had an average of a five point increase in blood pressure, and an increased rate of heartbeat arrhythmia. According to Emily Fletcher, Pharm. D., in American Heart Association News, “The resulting arrhythmia can be life-threatening.” She said that the blood pressure increase lasted for several hours. “Those who consumed the energy drinks still had a mildly elevated blood pressure after six hours.” The study also showed that the effects were not the result from caffeine alone.

Cleveland Clinic reports that there are more than 500 energy drinks on the market—many of which make incredible claims. The popularity of energy drinks amongst children and teens is concerning, and the AAP says that these drinks are “heavily marketed to children and adolescents.” According to Cleveland Clinic, “Physicians have seen an uptick in the number of adolescents who consume energy drinks and experience abnormal heart rhythms.” To add fuel to the fire, some young adults are mixing energy drinks with alcohol, which poses a new set of health problems—as does taking energy drinks with medication.

In a study presented to the American Heart Association’s Scientific Sessions, more than 40% of calls to poison centers about energy drinks involve children under the age of six, where side effects included suffering serious cardiac and neurological symptoms like heart arrhythmia and seizures. Because of these dangerous side effects, the AAP recommends that kids and adolescents not consume energy drinks. Peter Aziz, MD, a pediatric cardiologist at Cleveland Children’s Clinic, says that energy drinks can do harm, especially to children: “There is absolutely no reason that any child should be drinking these beverages.”

Commonly reported side effects of highly-caffeinated energy drinks are heart palpitations (tachycardia), anxiety, shortness of breath, increased heart rate (this alone has caused multiple hospital visits), chest pain, insomnia, caffeine and sugar crash, nervousness, restlessness, stomach upset, dizziness, shaking/itteriness, agitation, and headache. Energy drinks are not a good option when exercising, training, or racing, because not only will they not quench your thirst, but they can also dehydrate you.

There are safe ways to boost energy, including exercise and staying hydrated. For a healthy energy drink alternative that keeps you going without sugar or caffeine, Hammer Nutrition’s sports drink HEED is a great bet. Along with long-lasting energy, it also supplies you with much-needed electrolytes and amino acids. Athletes have been calling it a game-changer for years now. For an extra advantage, Hammer Nutrition’s new, best-selling Fully Charged can increase your energy and endurance without the large amounts of caffeine or stimulants. The proprietary blend of natural ingredients will—safely—get you mentally and physically revved to go! 

Energy drinks on the market—many of which make incredible claims. The popularity of energy drinks amongst children and teens is concerning, and the AAP says that these drinks are “heavily marketed to children and adolescents.” According to Emily Fletcher, Pharm. D., in American Heart Association News, “The resulting arrhythmia can be life-threatening.”

We are the safe alternative.
The Gobi March

Hammer Nutrition athlete takes 3rd place in race across the Gobi Desert

BY ENDURANCE NEWS STAFF

The Gobi March is a 250K (155 mile) footrace organized by 4Deserts in the North Eastern part of China. It is a six stage running race across the ancient silk road, where competitors have to carry 17-22 pounds of their belongings for the week across varying terrain, from alpine hills to intense dry desert. With temperatures ranging from 135 degrees Fahrenheit during the day, and dropping to 40 degrees in the upper hills at night, this event can be as much a mental challenge as a physical one. For Jeff Ross, it was his first multi-stage race of his career: “I had never done any distance over 50K so I knew this one would be a challenge.”

“The 82K final day stage was a tough one, with temperatures up to 125 degrees!” he says. “Apart from that, I had no issues whatsoever in stomaching everything, and I truly feel that Hammer helped me to perform well, and to recover quickly each day for the new stage ahead. Whilst I learned a lot about this kind of ultra racing, there is not too much that I would do differently in terms of my fueling strategy,” he says. “Would I do it again? YES, of course I would!!!”

Race Stats
- 6 stages
- Max temp: 135 °F
- Min temp: 40 °F
- 115+ participants
- 15+ countries represented

The 3rd place award and the finishers medal from the 2017 Gobi March.

My first PUPFiT 80K trail run went surprisingly well! I wasn’t sure I was going to sustain my pace for as long as I did, but thanks to my fueling strategy that I formulated after the Addo 76Km trail run, I pulled off a pretty exceptional finish.

I started the race with two Endurolytes Extreme capsules and a Hammer Gel. My intake of Perpetuem remained constant from when I left the house right through to the very end. Once I’d settled into my pace, it was relatively smooth sailing with me taking a Gel and two Endurolytes Extremos capsules every hour. From the 56Km mark, the going was tough with the rise in temperature. I dropped from 7th to 12th place at this stage but fellow Hammer Ambassador Devon Coetzee pulled me out of my dark patch and changed the outcome of my race and I came in strong to finish 10th, in a time of 9h:23min.

All in all, my race was fueled entirely by Endurolytes Extreme, Hammer Gels, and Perpetuem, and I cannot tell you how pleased I am with this strategy. I’m so chuffed and I just want to say thank you so much for the support, my next race is in October so watch this space!
Maintain Off-season Fitness with EMS

BY STEVE BORN

Race season is winding down, and many of us are now looking forward to a few months of recovery. Rest and recovery are essential to ongoing athletic performance and overall wellness, but that doesn’t mean we must give up all of our hard-earned fitness gains. By using an Electrical Muscle Stimulation (EMS) unit during the off-season, you can maintain—and even improve—your level of fitness. By early next season, you’ll be one giant step ahead of the competition. Here are three important ways that EMS can work to your advantage during the off-season.

1. Weight training
For athletes who lift weights in the off-season, both Compex and Globus offer some excellent training programs that build strength in a variety of ways:

• Resistance (Compex), Resistance Strength (Globus)–This program trains the Type IIA fast-twitch muscle fibers and is similar to doing a weight workout with fairly light weights and high (20+) reps.

• Strength (Compex), Maximum Strength (Globus)–Training the Type IIB fast-twitch muscle fibers, this program is similar to a weight workout with heavier weights but fewer (8-10) reps.

• Explosive Strength (Compex and Globus)—This program stimulates the Type IIB fast-twitch muscle fibers and the Type IIB fast-twitch creatine phosphate energy system, similar to doing plyometrics or a 1-3 rep max weight workout.

Using EMS also can help prevent injury because it will only tax your muscles, not joints or connective tissue like heavy lifting would. EMS strength training is an excellent complement to weight training and off-season training. You can use one of the above workout programs to add volume to your training day.

2. Cardio and endurance maintenance
The EMS endurance programs are ideal for maximizing the benefits of cardio workouts at the gym. Because of the muscles’ tremendous workload, an endurance workout session equates to 4-5 hours on the bike, or 2-3 hours of running.

Also, continue using Active Recovery often; it will not stress or fatigue your muscles but will help maintain the muscle responsiveness that you developed by using the workout programs. The Active Recovery program on both Compex and Globus will help keep you loose and injury-free by:

• Increasing blood flow to the muscle group to flush out accumulated waste products, making room for fresh blood with oxygen and nutrients.

• Stimulating the production of endorphins, for an analgesic/pain-alleviating response.

• Massaging and relaxing the muscle.

3. Recovery from overuse and injury
If you’ve developed an overuse injury or injured yourself in a crash or fall, now is the perfect time to focus on a full recovery. The Active Recovery program (on both Compex and Globus) is one of the best ways to help your body repair itself. You can’t overuse the Active Recovery program. Running it daily or even multiple times the same day will help speed your recovery and prepare you for next season.

Run the Active Recovery on the muscles that surround your injury to increase the flow of blood and nutrients to the area for healing.

With EMS as your ally this fall and winter, you can hold onto the fitness you’ve gained this season, and start next season stronger than ever before!

Electronic Muscle Stimulation
Muscle pain therapy from the comfort of your home.

Benefits:

• Relax overworked muscles
• Relieve muscle cramping
• Improve training results

Order an EMS unit from Hammer and enjoy
FREE Shipping
FREE 30 Minute Consultation
FREE Extra Pads, a $29 value
Seven models available, see website for details.
It was my privilege to organize, interview riders, and be part of a four man team competing in the 2017 Race Across America (RAAM). Our team raced in the 60-69 year old category. I am a partially disabled Vietnam Veteran, Alan Johnson is a retired Army pilot, and Michael Hunter and Bob Rich are retired Highway Patrolmen. We raced 3,140 miles, climbed 175,000 vertical feet, and finished our race in 8 days, 16 hours and 30 minutes, taking first place in our division.

The desert was hot, hot, hot; the mountains steep; and as usual, Kansas was windy. We were the 10th fastest team overall, climbing Wolf Creek Pass in Colorado, and on a long segment in Kansas we were the seventh fastest team of all time.

Every time I race, I raise funds for the Wounded Warrior project, helping our returning veterans and families any way I can. Since I started racing, I have consistently used Hammer Nutrition products: Perpetuem, Sustained Energy, Race Caps Supreme, Endurolytes, and Anti-Fatigue Caps. During our RAAM, I never once ran out of energy, became unbalanced in my electrolytes, or experienced a big fatigue factor. I attribute this to proper training as well as proper nutrition. Over the many miles I continually ingested a liquid diet coupled with proper hydration, and during brief breaks only ate smaller amounts of chewable food.

This October, I have entered the Senior World Championships, and in November, the World Time Trials. Rest assured, I will supplement my diet with Hammer Products. Thank you Hammer Nutrition for your support and amazing products.

Team Honor Warriors

BY RANDY HORTON

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It was my privilege to organize, interview riders, and be part of a four man team competing in the 2017 Race Across America (RAAM). Our team raced in the 60-69 year old category. I am a partially disabled Vietnam Veteran, Alan Johnson is a retired Army pilot, and Michael Hunter and Bob Rich are retired Highway Patrolmen. We raced 3,140 miles, climbed 175,000 vertical feet, and finished our race in 8 days, 16 hours and 30 minutes, taking first place in our division.

The desert was hot, hot, hot; the mountains steep; and as usual, Kansas was windy. We were the 10th fastest team overall, climbing Wolf Creek Pass in Colorado, and on a long segment in Kansas we were the seventh fastest team of all time.

Every time I race, I raise funds for the Wounded Warrior project, helping our returning veterans and families any way I can. Since I started racing, I have consistently used Hammer Nutrition products: Perpetuem, Sustained Energy, Race Caps Supreme, Endurolytes, and Anti-Fatigue Caps. During our RAAM, I never once ran out of energy, became unbalanced in my electrolytes, or experienced a big fatigue factor. I attribute this to proper training as well as proper nutrition. Over the many miles I continually ingested a liquid diet coupled with proper hydration, and during brief breaks only ate smaller amounts of chewable food.

This October, I have entered the Senior World Championships, and in November, the World Time Trials. Rest assured, I will supplement my diet with Hammer Products. Thank you Hammer Nutrition for your support and amazing products.

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WE SUPPORT: YOUR SPORT

CYCLING
SWIMMING
MOTOCROSS
SKIING

AZ CROSS SERIES (CYCLOCROSS)
Sedona Parks and Recreation has agreed to a unique event partnership for AZ CROSS SERIES 81-82. October 28-29, at Foase Grounds Park in Sedona. Two days of racing in Red Rocks country.

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PONY EXPRESS TRAIL RUN (ULTRA RUN)
FARMERVILLE, TX
These races are a great opportunity for first-time trail runners to run on a flat and fast course while enjoying the scenery of an old railroad route through the Wagoner county south of North East Dallas.

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PUMPKINMAN TRIATHLON
BOULDER, CO
This point-to-point race begins at Boulder Beach and ends at Wilbur Square in Boulder City, just 25 miles from the Las Vegas Strip. Boasting a Sprint and Olympic distance to choose from this race is known to be scenic yet challenging, due to the gorgeous climb into Boulder City from Lake Mead. It is the perfect race for the whole family to enjoy.

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SWIM AROUND FORT DE SOTO (OWS)
TIERRA VERDE, FL
This is a 10K (6.5 mile) open water swim race around three sides of the beautiful park and island chain of Fort De Soto. Each solo swimmer will have a pilot (kayak escort) to provide safety, navigation, and nutrition to the swimmer. Swimmers can enter as a solo swimmer, 2-person relay, or 3-person relay. Relay teams must take turns swimming and paddling, meaning that each person swims a portion of the race and paddles the kayak a portion of the race. Relay swimmers cannot have a dedicated pilot!

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END-TOMBED (MTB)
ARVILLA, ND
The Extreme North Dakota Twelve hour Mountain Bike Enduro of Delirium is an annual epic Halloween-themed bike race. Taking place in Turtle River State Park, the riders will ride solo or as part of a relay team to try to get in as many laps as possible in 12 hours. The course has lots of windy single track, some double track, and even a smidgen of road riding (which you’ll lov eby the end!).

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TURKEY TRI & TROT
OREM, UT
The 5K run is a simple loop run with one uphill climb to 700 feet. The bike course is three loops totaling 12 miles. This is a 350 meter indoor swim in a 50 meter pool at the Orem Fitness Center. Participants will enter one end and finish at the other end. It is a snake-style swim, meaning you swim 500 and snake under the line and swim the next 50 in the opposite direction. All swimmers will be traveling the same direction.

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SWAN 65 (MTB)
PISGAH FOREST, NC
The Swampy Swans Swan 65 Mountain Bike Journey begins at 2500 feet, and consists of a triad of cloverleaf shaped loops winding around Cloughrae Gap in Pisgah National Forest. Rolling over rugged mining roads, fun single track, tough climbs and bluebaiting descents, the super fun course will test your skills
and desire as you explore the devilish terrain of the Pisgah National Forest.

DEAD OF WINTER DOUBLE (ROAD CYCLE)
MALIBU, CA
This popular double was resurrected in 2013 after 20 years of hibernation. This low-cost ride is intended as a last-chance double for California Triple Crown candidates and fans of the Grand Tour. It begins on PCH in Malibu and takes the Grand Tour Lowland Route, switching to the Highland Route in Ojai. Support is minimum: water and Hammer Nutrition products at all rest stops with roving SAG for the duration. The Dead of Winter is limited to 75 riders to minimize cost and maximize attention to safety:

http://www.lawheelmen.org/wheelmen-featured-106

DECEMBER 02, 2017

ULTRAMAN WORLD CHAMPIONSHIPS (TRIATHLON)
KAILUA-KONA, HI
Ho'otiki Invitation Qualification Priority: All applicants must have finished an event with at least a 2.4 mile swim, 112 mile bike, and 26.2 mile run or longer in the previous 18 months. (1) Former Ultraman finisher (Florida, Australia or World Championships) (2) Former 6/12/24 hour rider (3) First timers or World Championships (2) Former Ultraman finisher (Florida, Australia or World Championships) (2) Former 6/12/24 hour rider (3) First timers in the previous 18 months. (1) Former Ultraman finisher (Florida, Australia or World Championships) (2) Former 6/12/24 hour rider (3) First timers in the previous 18 months.

NOVEMBER 07, 2017

CLEARNWATER RIVER RUNNING CAMP
LEWISTON, ID
The camp will have daily training sessions for runners of all abilities as well as group dynamic activities, educational sessions, games, swimming, beach and other competitions. Although the camp is to assist in the development of young runners, we will also be emphasizing fun and team building. Camp participants must be 8th-12th graders in the upcoming school year. High school graduates are not eligible.

connect.lcsc.edu/crosscountry/clearwaterrunningcamp.html

NOVEMBER 05, 2017

ROUND 8 BIG6 GP SERIES/VIKINGS (MOTOCROSS)
LAKE ELSINORE, CA
The course will be designed and built by ZipTy Racing’s Ty Davis so you can expect this to be one heck of a course, and the proximity to Lake Havasu just makes it that much better. Come on out and enjoy some of the best offroad racing on the west coast.

DECEMBER 02, 2017

ISLE DU BOIS 55K (ULTRA RUN)
PILOT POINT, TX
The race takes place on the DOBRA Trail at Ray Roberts Lake State Park, Isle du Bois Unit in Pilot Point, Texas, just 35 minutes north of Denton, TX. The wooded trail is a mix of fast, flat single track along with challenging rocky sections.

detennareamgclub.org/tdb-2017

DECEMBER 02, 2017

WILLOWD TRAIL MARATHON (ULTRA RUN)
WILLOWDO, MO
Presented by Terrain Trail Runners and Terrain Magazine in partnership with City Of Wildwood, Wildwood Trail Marathon is a great wrap up to any runners racing season whether you run road or trail, novice or experienced, the course will not disappoint.

wildwoodtrailmarathon.wedstv.com

DECEMBER 03, 2017

DIRTY 30 (MTB)
COHASSET, MN
Quick n’ Dirty has gained popularity as a fun yet challenging series of races that keeps you tuned up, doesn’t break your wallet, and in most cases, gets you home in time for dinner.

quickndirtymtb.com

DECEMBER 09, 2017

LET US LEAD THE WAY TO FUELING SUCCESS!

Talk with an expert!
Our client advisors are the best in the business! Call today and we will walk you through selecting the exact products to meet your needs.

Our Customers Say It Best
“Great products, amazing service, and as always, Hammer Nutrition’s fueling advice was ‘spot-on.’”

-Online reviewer

800.336.1977
www.hammernutrition.com

How to have Hammer Nutrition sponsor your next event:
For nearly three decades, Hammer Nutrition has been sponsoring endurance events of all kinds, from ultrarunning and ultracycling to marathons, triathlons, adventure races, and much more. In fact, sponsoring grassroots events is one of our favorite ways to help new and experienced athletes, who don’t already know the benefits of “Fueling right, and feeling great” with Hammer.

Race directors who partner with Hammer Nutrition receive on-course HEED, our healthy and highly effective sports drink, to ensure participants’ success; free goody bags packed with our top fuels and educational brochures; Hammer Nutrition banners; and ongoing support from our team of experts. For more information, email: events@hammernutrition.com
In our constant quest to make improvements on our products whenever necessary, the Almond Cacao Protein Bar was at the top of the list.

This has always been somewhat of a tricky formula to nail down taste- and texture-wise, but after many months of formulation possibilities (not to mention lots of taste-testing!), we believe we’ve got it totally dialed in. We think you will as well.

To make sure that this updated formula for the bars was completely up to our standards, we basically started from scratch. To enhance the flavor, we removed the organic sacha inchi protein and replaced it with organic pumpkin protein. Though sacha inchi is a phenomenal vegetarian protein source, so too is pumpkin protein, which also has a better flavor profile. Organic pumpkin protein is the perfect complement to the organic pea protein that already existed in previous incarnations of the Almond Cacao Protein Bar. Additional flavor enhancements include a small amount of organic date (paste), more cacao nibs, and a touch of salt. The result is a wonderfully delicious balance between sweet and savory. Bingo!

To enhance the texture, as well as making the bar even healthier, we’ve included organic sesame seeds and organic flax.

The carbohydrate-to-protein ratio is now even closer, with each bar containing 18 grams of total carbohydrates and 13 grams of protein.

The newly formulated Almond Cacao Protein Bar is the best-tasting ever, and the perfect choice when you’re looking for a super-healthy, low-carb protein bar.

A wonderfully delicious balance between sweet and savory.
A recent study published in BMC Nutrition reveals that having a sugar-sweetened drink with a meal high in protein slows fat oxidation and causes the body to store more fat. Participants of the study consumed a high protein meal in conjunction with either a sugar-sweetened beverage or an artificially sweetened one. With all other variables (calories, protein, fat, etc.) being the same except for the drinks, researchers found that drinking a sugar-sweetened drink with a high protein meal reduced calorie burning by about 40%, and fat burning by 8%.

According to the lead study author, Dr. Shannon Casperson, “We found that about a third of the additional calories provided by the sugar-sweetened drinks were not expended, fat metabolism was reduced, and it took less energy to metabolize the meal. This decreased metabolic efficiency may ‘prime’ the body to store more fat.”

Combining a sugary drink with a high protein meal can also alter food cravings. Dr. Casperson says, “We were surprised by the impact that the sugar-sweetened drinks had on metabolism when they were paired with higher-protein meals. This combination also increased study subjects’ desires to eat savory and salty food for four hours after eating.”

The bottom line is sugar adds calories but provides no nutritional value. Keep it away from your plate if you want to keep fat away from your waistline. “When you take in sugar with a meal, you burn the sugar first and spare the fat,” says Dr. Mirkin. “Any extra sugar that you take in that is not burned immediately is converted to fatty triglycerides that quickly fill up your fat, liver and muscle cells.”

“...every time you take a sugared drink with your protein meal, you are storing about 30 extra calories of fat in your body...”
A Venerable Favorite gets a Makeover!

BY ENDURANCE NEWS STAFF

In distinct tiny sublingual tablets, Xobaline (pronounced Zo-buh-lean) has been a staple in the Hammer Nutrition product line for over 20 years. Xobaline has been a “must-have, must-use” product, especially after the hardest workouts and training sessions—and it’s still an important product in the Hammer Nutrition line. We are excited to say that we’ve made some significant formula changes—ones that make it an even better product, but without any increase in the price!

The main change is that we have replaced the 800 mg of folic acid in the product with the same amount of a different form called L-methylfolate (5-MTHF). “Plain” folic acid (vitamin B9) is a synthetic form of folate, which is the form that is found in food. By supplementing with 5-MTHF instead of folic acid, you bypass all the steps required for folic acid to become 5-MTHF, allowing for a much greater percentage of active vitamin B9 to be available to the body! Xobaline still contains vitamin B12 (200 mcg) in the methylcobalamin form, the most biologically active form available.

The other change we made was switching to easy-to-swallow vegetable caps. The sublingual tablets were fine, especially in regards to absorption, but with the switch to L-methylfolate (5-MTHF), the more bioavailable form of folic acid/folate, maximum absorption and bioavailability has been achieved, making sublingual absorption no longer necessary.

Hammer Nutrition has always been about innovation, so even though the current formula was pretty stellar, we realized that it could be improved upon. That’s what the newly formulated Xobaline is all about. If you were a fan of the previous formula, you’re going to love this new and improved formula even more!

Why Xobaline?

Even a marginal deficiency in specific nutrients can negatively affect performance and health. Stress of any type, whether it’s physical or emotional, is known to deplete the body of many essential nutrients, including two important B vitamins: folic acid/folate (vitamin B9) and B12. Of the numerous roles these two nutrients play in the body, perhaps the most noteworthy ones for athletes are those that point to folate and B12 as being important catalysts for supporting increased aerobic capacity, energy production, and improved recovery, via their involvement in the production of red blood cells as well as RNA production and re-synthesis. Science suggests that improving RNA “status” within the body results in, among other benefits, gains in both lean muscle mass and mitochondrial re-synthesis. When this occurs, the athlete may expect increases in energy, metabolism, and enhanced recovery after exercise. Vitamin B12, like folate, plays an important role in the reduction of elevated homocysteine levels—elevated levels of which are believed to be a primary culprit in various cardiovascular diseases. B12 is also known to alleviate the tiredness associated with fatigue. The body’s ability to absorb dietary vitamin B12 usually declines in tandem with the progression of the aging process, making supplementation a wise strategy.

Hydrating Energy with a full-spectrum electrolyte profile

- Reduces cramps
- Buffers lactic acid
- No sugar “crash”
- Promotes oral health

FLAVORS
- LEMON-LIME
- MANDARIN ORANGE
- STRAWBERRY
- MELON
- UNFLAVORED

80 Servings $58.95
32 Servings $29.95
16 Servings $19.95
Single-serve packets $1.95

Order today! Use Promo Code: EN107HB

Get one FREE new formula Vegan Almond Cacao bar and one FREE Hammer Cranberry Bar Limit one per customer, while supplies last / Expires 1.10.18

74 Endurance News 107 Celebrating 30 Years of Endurance!
### Employees on the Course

**Reaching goals while practicing the secrets to success**

**Anna Durkin celebrates Canada's birthday at the Fat Dog Trail Race**

Smoke from fires could have put a stop to what’s called “The most scenic ultra race in Canada,” but on race-day, the air was clear and smoke-free. This was Hammer Nutrition’s Anna Marie (Cote) Durkin’s first time in British Columbia, and she says, “The Canadian Rockies are amazing!”

She trained for this race for months, beginning back in April. Aside from the distance, she describes the terrain of the race as “extreme,” with a high elevation gain within the last 20 miles of the race. Despite all this, Anna says, “I was ready for it!”

This was Anna’s third 50-mile race, and the first remote. It was a point-to-point course, which she says helped her maintain a positive attitude to keep moving forward. Her personal goal is to run a 50-mile each year. Next year, she hopes to run her first 100-mile trail race.

“My fueling made the race successful and enjoyable,” Anna pointed out. She started with Hammer Nutrition’s Fully Charged, and then took another serving at the 30-mile mark right before the longest climb of the day. She fueled with Perpetuem and Hammer Gel over the 13 hours she was on the course. She supplemented with Anti-Fatigue Caps, Endurance Amino, and Endurolytes consistently each hour (she pre-made hourly baggies with each hour written on it.) Her fiancé, Kevin, drove for hours to keep her well stocked with all her Hammer products.

Her recovery consisted of Hammer Recoverite and a full spectrum of supplements. She says she really notices a difference using Hammer Nutrition products: “Compared to other races without Anti-Fatigue Caps, Endurance Amino, and Endurolytes consistently each hour (she pre-made hourly baggies) I could keep moving without feeling like my legs are concrete.”

“It was an epic adventure in the Canadian Rocky Mountains,” Anna says. “I thought it would fun to celebrate Canada’s 150th birthday by running my big race of the year in Canada.”

**Fueled by Hammer Nutrition, Loren Mason-Gere wins the Butte 100 Mountain Bike Race**

The Butte 100 Mountain Bike Race is called, “The most difficult 100 mile mountain bike race in the country.” Hammer Nutrition’s own Loren Mason-Gere, who won first place amongst 350 bikers, can corroborate that.

“It’s extraordinarily hard. You have to be all in. The first half of the course is deep loose sandy condition—slow, dry, and hard” Loren says. “The second half has some cool, more technical trails and is almost all legit single track. There are no laps, so you never see anything twice.”

He says he chose Butte 100 for several reasons: “It’s a cool course, place, and scene. It’s well put on. It has a really strong community around it, a ton of good support and history.” This race was also a favorite of their friend Ben Parsons, who, prior to his passing last year, convinced a few of them to participate. Three of those friends made it to the podium this year.

“I like big, difficult, interesting races, wherever they are...” Loren continues, “I like new experiences, going to new places.” In the future, he would like to race the Cape Pioneer Trek in South Africa, and plans to compete in the NW Epic Series of endurance mountain bike races next year, along with other 100-mile races.

**How Loren used Hammer Nutrition products to help him succeed:**

- Before: Fully Charged
- At the start: Hammer Gel
- HEED and Fully Charged mixed at the midpoint aid station
- Hourly: Endurolytes Extreme, Anti-Fatigue Caps, and Endurance Amino in hourly baggies
- Throughout: 1 Hammer Bar and Hammer Gel in flask (total caloric intake: 125-150 calories per hour)
- Recovery: sipped on Recoverite immediately; Premium Insurance Caps, Mito Caps, Endurance Amino; nutrient-dense meal with healthy protein and quality carbs that night
- The next day: recovery ride, and extra Premium Insurance Caps (10-15 miles)

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“**It’s extraordinarily hard. You have to be all in. The first half of the course is deep loose sandy condition—slow, dry, and hard.**"
FOR THE LAST THIRTY YEARS, OUR ATHLETES HAVE BEEN THE HEART AND SOUL OF HAMMER NUTRITION. OUR MISSION TO BRING A UNIQUE LINE OF EFFECTIVE AND HEALTHY ENDURANCE FUELS AND SUPPLEMENTS TO THE MARKET WAS FOUNDED ON THE DESIRE TO EMPOWER ATHLETES AND HELP THEM REACH PEAK PERFORMANCE. OUR "FROM OUR ATHLETES" SECTION FEATURES SUBMISSIONS FROM ATHLETES AT EVERY LEVEL, RANGING FROM ELITE PROS WHO HAVE BEEN COMPETING FOR DECADES TO BEGINNERS COMPLETING THEIR VERY FIRST RACE. THIS IS JUST A SMALL CROSS SECTION OF THE THOUSANDS OF HAMMER ATHLETES AROUND THE WORLD WHO ARE ESTABLISHING HAMMER’S REPUTATION FOR HAVING SAFE, NATURAL, AND PERFORMANCE-PROVEN RESULTS. CONGRATULATIONS TO EVERYONE HERE ON THEIR ACCOMPLISHMENTS. WE LOOK FORWARD TO HEARING FROM EVERYONE ELSE AS THEY HAMMER STRONG IN 2017. BEST WISHES TO ALL!

Bruce Balch  
Cedar City Fire Road 100K Gravel Grinder  
“100K, over 7500 feet of climbing, 9400 ft above sea level. Crazy gravel descents and grueling climbs. I was a bit under the weather going into the race but knew my fitness was where it needed to be. I stayed on top of my fueling and I was able to stay smooth and consistent the entire race. I wanted to do well as this was a Hammer sponsored event.”  
Photo: Laura Balch

Chris Flint  
Derby City Trifecta  
“The race went great. I felt great throughout. I have to get better at navigating through open water. I got bottled up too much early on. I can’t say enough how much credit Hammer products deserve!”  
Photo: Amy Flint

Robert Clarence  
Fort Ritchie Olympic Duathlon  
Hammer Sponsored Athlete, Robert Clarence Hammers his way to a 3rd place finish in his age group and 9th place overall. Clarence used HEED, Endurolytes Fizz, and Perpetueum solids on the race course and was able to knock 5 minutes off his final 10K run.  
Photo: Hypnotic Imagery

Jordan Young  
Rivery Valley Run Trail Festival 15K  
“Hammer was huge for this event. I prepped with Race Day Boost leading up to race day. For race day, I took Anti-Fatigue Caps, Essential MG, Race Caps Supreme, Endurolytes Extreme prior to the race. I fueled during the event with two Hammer Gels and recovered successfully with Recoverite, Xobaline, and Chromemate. Endurolytes were critical in keeping me fresh throughout the high temperature event and giving me the endurance needed to finish strong.”  
Photo: Elizabeth Young

Jill Allardyce  
Boyne City Triathlon  
“Placed second overall. This was an awesome race by Tri To Finish at Boyne mountain. My bike and run on a hilly course we’re great! Thanks Bob Miller with Speed Concepts for your guidance as always with the training and most of all to Hammer Nutrition for having amazing products to fuel and recover me right!”  
Photo: Bob Miller

For the last thirty years, our athletes have been the heart and soul of Hammer Nutrition. Our mission to bring a unique line of effective and healthy endurance fuels and supplements to the market was founded on the desire to empower athletes and help them reach peak performance. Our “From Our Athletes” section features submissions from athletes at every level, ranging from elite pros who have been competing for decades to beginners completing their very first race. This is just a small cross section of the thousands of Hammer athletes around the world who are establishing Hammer’s reputation for having safe, natural, and performance-proven results. Congratulations to everyone here on their accomplishments. We look forward to hearing from everyone else as they hammer strong in 2017. Best wishes to all!
**Updates from Our Athletes**

**Lincoln Murdoch**
USA Triathlon Sprint National Championships

*I came out of the water in 10th place and 2:23 down to the leader. I fought back during the bike and run and moved to 1st for the National Championship win! Hammer plays a huge role with the fuels and supplements that are second to none! 20 years and counting for me.*

Photo: Bill Vander

**Robert Koldziejczak**
Lake Erie Duathlon

“As always, Hammer products give me the edge I need in training and racing. This time the role did change just a bit, I am also trying to recover from an Achilles issue. Steve Born has been a huge help with that. My normal every day use of Hammer goes like this: AG Booster, Mito Caps, Tissue Rejuvenator, Essential Mg, and Race Caps Supreme.”

Photo: Amanda Salky

**Quentin Sims, Matt Trethric, and Jon Ornstill**
San Ardo Road Race

Hammer Nutrition Sponsored Athletes Quentin Sims, Matt Trethric, and Jon Ornstill dominated the RR Men Master 55-99 Cat 1/2/3 division at the San Ardo Road Race in San Ardo, California, sweeping the podium.

Photo: Hunter Ziesing

**Martin Criminale**
Bigfoot 100K

“For a 100K (really 110K) this run this took a LONG time. The terrain was extremely rugged and there was 14k of elevation gain. Showing up rested, fueled and maintaining a consistent energy level throughout was the key to my success. I have started carrying almost all of my nutrition and it really is paying off. That small weight penalty is far outweighed by my ability to sustain my pace.”

Photo: Courtesy Martin Criminale

**Corky Semler**
Musseman Triathlon, Aqua-Bike Sprint

“Photo: Trent Welst, T Welst Photography”

**Joel Kinnunen**
Post Falls Sprint Triathlon and Duathlon

Photo: Stephanie Kinnunen

**David Larpentour**
Lake Union 10K

Photo: Andy Larpentour

**Alex Forte**
2017 Dirty BikeneetCrit

Photo: Chris Howell

**Connie Inks**
2017 Iowa Senior Games & Iowa Games

Photo: William Allen

**Robert Kolodziejczak**
Lake Erie Duathlon

“AG Booster, Mito Caps, Tissue Rejuvenator, Essential Mg, and Race Caps Supreme.”

Photo: Amanda Salky

**Gia Madole**
Black Hills 100

**Race Recipe**

**Gia Dawn Madole**

Black Hills 100

*Gia Madole smiles on her way to a first place female finish at the Black Hills 100 in South Dakota. Photo: Amy Madzelenski*

Daily Regiment:
- 3 Mito Caps
- 3 Race Caps Supreme
- 3 Endurance Aminos
- 4 Anti-Fatigue Caps
- 2 Essential Mg

60 Mins prior:
- 4 Tissue Rejuvenator

During:
- Fueled with Hammer Bars between aid stations
- 50 Mile Mark:
  - Tissue Rejuvinator, Mito Caps, Endurance Amino, Anti-Fatigue Caps
- Immediately After:
  - 4 Tissue Rejuvenator, 2 scoops of Vanilla Recoverite
- 2 Hrs After:
  - 4 Tissue Rejuvenator, 2 scoops of Vanilla Recoverite

RESULTS

“I wanted to push myself at this race and see what I could do. My original goal was a sub 24 hour finish. When I reached the turn-around in about 9.5 hours I was excited to think a 22 hour finish was a real possibility. I am confident my daily Hammer regimen helped me toe the starting line of the Black Hills 100 feeling strong and healthy.”

**Talking Points**

- **Endurance News 107** Celebrating 30 Years of Endurance!
- **Updates from Our Athletes**
- **Race Recipe**
- **RESULTS**
Real Endurance Fuel
NOT SUGAR!

- Premium, natural ingredients
- Free of added sugars
- 100% Made in the USA

If all the latest sugar-based products haven’t worked for you, make the switch to Hammer and enjoy sustained energy without the sugar crash or side effects. Hammer Nutrition has the products, knowledge and experience to guarantee your fueling success at any distance.

Call, go online, or stop by your favorite retailer &
Start hammering today!

hammernutrition.com 800.336.1977

Happy 30th Birthday Hammer!
Thirty years in, and the adventure goes on! Brian’s at the wheel and the team is all in. Get onboard and hold tight—big things are in store...see you in 2018!
LONG LASTING ENERGY
No Sugar Crash

- Reduces cramps
- Buffers lactic acid
- Promotes oral health

Our Customers Say It Best
“I’ve been using HEED for less than a year and I think it has really improved my activity level. I’m very active and HEED really helps with cramping, energy, and endurance. It is great for replenishing electrolytes.”
-Online reviewer