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ENDURANCE NEWS

APRIL/MAY 2014
#89

**Prerace
Meal Menu**

**NUTRIENT
NEEDS**

Female vs. Male

NEW!
**KEG storage
vessel and
insulated
Purist bottle**



HYDRATION
what you need to know

Product Spotlight : Endurolytes Extreme, Nasol, and Clear Day



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ON THE COVER

Runner and elite cyclocross racer Marne Smiley hits the dirt roads and hills of Barrington, IL, near Chicago.
Photo : Ali Engin



The Hammer Nutrition Promise of Satisfaction

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Kelly Agnew looking strong during Moab's Red Hot 55K. Photo : Myke Hermsmeyer

ENDURANCE NEWS

The informed athlete's advantage since 1992

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Our Mission

The objective of *Endurance News* is to provide you, the serious endurance athlete, with a valuable resource that you will find informative, educational, thought provoking, and helpful in your ongoing pursuit of optimum performance and health.

Endurance News features insightful articles on diet, nutrition, training, and other topics of interest for endurance athletes - written by our staff as well as professional and elite amateur athletes and other experts in the area of nutrition and exercise.

In reading this and future issues, please remember that the views expressed in this publication will always be biased in favor of a healthy diet and hard training that emphasizes quality over quantity, and prudent supplementation to improve health and performance. But above all, we at *Endurance News* believe that there are no shortcuts and that success can only come from hard work.

Back issues available at www.hammernutrition.com

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Endurance News is
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LETTERS

Send your letters to letters@hammernutrition.com for possible inclusion in a future issue of *Endurance News*.

Hi Hammer Team,

I just wanted to say THANK YOU for everything!

In 2009 I attempted my first 100-miler; I ran for 30 hours, but only 71 miles. I was beginning to think that ultras weren't for me—that I wasn't cut out to be an ultra runner. Then, in 2011, I met a runner who used Hammer Nutrition products and suggested your book, *The Endurance Athlete's Guide to Success*. It turned out that a big part of my problem was using fuels that caused crashing!

When I used the right training strategy and Hammer Nutrition products, I again saw 30 hours, but this time ran 100 miles—without crashing!

I also use many of your race and daily essential supplements, and I feel and see the big difference! So a big "thank you" for not only improving my health but also for helping me reach my dream of running 100 miles in 30 hours!

Have a great racing season,
Su-Lai Hamilton



Mike Ott with some Hammer Gel at the finish line of the Via Marathon. Photo : Cindy Ott

Dear Hammer Nutrition,

I have been using Hammer Nutrition products for at least four years now. When I started paying attention to what's added to sports nutrition products to supposedly help your performance, I discovered that Hammer Nutrition products are hands down the best!

What I really love about Hammer Nutrition is that you give athletes a library of educational information and then say, "YOU choose what fuels are best for your body." I have read through your website library twice and still find myself returning to it for advice. Every time that I feel bad during exercise, it's because I'm not following your advice. (Liquid intake was my biggest issue!)

When I wasn't performing well, I wrote a letter to Hammer Nutrition, and someone responded with what I needed to do . . . since then, I stopped taking hundreds of calories a couple hours before my rides and have had no problems. In my opinion, Hammer Nutrition loves to give you the best and let your body decide what's best for it. My five-time Texas State Champ daughter and I fuel solely with Hammer Nutrition.

Thanks,
Michael Winders

Hi Hammer Nutrition,

I just completed my first marathon using Hammer Nutrition fuels and advice. Everything (Hammer Gel, Perpetuem, plus your recommendations and advice) worked perfectly and definitely helped me run a successful race. I recommend Hammer Nutrition products and fueling advice to every athlete I talk to.

Thanks so much for such quality products and knowledge. They work!

Sincerely,
Mike Ott

Welcome to the 89th issue of *Endurance News*.

Springtime is here, or is just around the corner, for most of us. It's time to get in gear for the big season ahead. We're blasting into our 27th year with exciting new products that are sure to meet your approval and fulfill previously unmet needs. Our new 2013 products, Phytolean and Peanut Butter Hammer Gel, have been such big hits that we've struggled to keep pace with demand, but we're now well stocked and ready for summer.

This issue is also filled with great contributions from athletes—real people like you, doing real things and enjoying themselves more because they're using Hammer Nutrition fuels and adhering to our "Less is best"™ fueling protocols.

Speaking of our philosophy on fueling, be sure to check out the two updated fueling articles in this issue: one for long-duration training and events and the other for shorter efforts. Both are very worth the read, for the first time or as a refresher. You'll also find at least half a dozen other articles that will help you be healthier and perform at your best more often. Certainly, this is one of the best issues of *Endurance News* that we've ever assembled . . . but then again, I've said that a time or two before as well.

New product highlights

Clear Day and Nasol – I'm excited about these two products because they represent a new product category for us, Well Being. They address significant



Brian Frank kicks off spring with some sunshine and warm weather. Photo : Soni Frank

issues that a portion of us must manage, seasonally or on an ongoing basis. While not everyone must deal with nasal congestion and allergies, for those of us who do, it can be a really big deal. As we did with the introduction of our body care products, we looked around and found nothing else on the market to relieve these two problems in a natural, holistic way. That represented an unmet need that we felt compelled to address. If YOU deal with these conditions, I'll be very eager to hear your feedback on either or both products. You can also read more about them in the following pages.

Endurolytes Extreme - I hesitated to introduce this product for a number of years, but decided that now is the time. As much as I don't want to encourage excess salt consumption, I also recognize that, during exercise, some situations might warrant higher levels. This might occur if you aren't properly acclimated to the heat, or if you simply want the convenience of being able to take 1 capsule per hour instead of 3. Of course, this also alleviates the scenario of a misinformed athlete, who has erroneously consumed high volumes of salt in the days before a hot effort, then requiring high salt dosages of 3,

4, or even 6 capsules per hour during the event to avoid cramping. This simply is not feasible with the original Endurolytes formula. Considering that I just saw a new "hyper" hydration salt-loading formula with 1,700 mg of sodium chloride per 40-calorie serving, Endurolytes Extreme is still a relatively "low" salt electrolyte supplement.

Acidity, cause for concern

Also new in this issue is the first article to address the little-known and infrequently discussed condition that most athletes experience, at least on a temporary basis (and in some cases continuously): acidosis. If you aren't familiar with the term or condition, my article should provide an introduction. Calling your attention to this condition is not a gimmick or red herring to sell a product. It's the reason we don't use citric acid in our products (even though everyone else does), and it's one of the many reasons we do not add sugar, in any form other than what occurs naturally in the fruit content of our gels, to any of our products.

It's also the reason why some of you do not like the taste of HEED. It's not

- continued on page 5

- continued from page 4

tart or, more accurately, it lacks a tart finishing taste in contrast with a sweet initial taste—which all other energy drinks have. Avoiding excess acid in a formulation is worth the compromise in flavor for me, both as a user and a seller. It is my sincere hope that as you become more aware of acidity levels in your body, you will make food and supplement choices to counteract the high levels of acid created during exercise. The positive effects of lowering overall acidity in the body are profound and far-reaching. Give these food and supplement choices a try for 30 days; I'm sure you'll be pleasantly surprised with the results.

Quality at our core

Before I go and let you get to enjoying this issue, I want to talk about Core Values for a minute. This term has become popular recently and I fully embrace the idea of stating them, in writing, and being held accountable to them by you. The new website, scheduled to launch in April, will have a complete "core values" page, but I wanted to give you a sneak peek of one that is so important to me that I separated it out from all of the rest: Quality.

Providing you with the highest quality products possible and never cutting corners on the sourcing of raw materials, manufacturing practices, or packaging has been my priority since day one. You can read more about this in Steve Born's article on page 24 and on our new website. We've been so intent on stressing the U.S. origin of our apparel and accessories that we forgot to shout from the rooftops that *all* of our consumable products are U.S.-made. You can rest assured that we use only premium raw materials from the most reputable suppliers; they are tested and re-tested, and produced only in Good Manufacturing Practices (GMP) facilities in the United States employing U.S. citizens. They are regulated by the FDA, state, and county health departments—and a few more.

Since 1987, I've had a policy of not using Asian-sourced raw materials—instead, we use more costly U.S.- and E.U.-produced ingredients. Certainly I could save several hundred thousand dollars a year by changing this policy, but it will never happen. Besides the fact that I care about what you put in your body, I use all of my products myself, as do my children and family.

There'll be more on my Core Values in upcoming issues of *Endurance News* and on our new website. In the meantime, get out and enjoy some sunshine and spring weather.

To your health,



Brian Frank
Proprietor

Note: The opinions expressed here are my own, and not intended to serve as medical advice. For medical advice, consult your licensed health care specialist.



Acidosis:

A term you should know

BY BRIAN FRANK

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's. 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 blocks/chomps/chews, or effervescent 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

- continued on page 66, including lists of acid- and alkaline-forming foods

MY 2014 REBUILD

Taking Appestat and Phytolean to jump-start my weight loss goals

BY REILLY SMITH

I am not a small athlete. At 6' 4" and with a 2013 race weight of 204-209 pounds, I'd be willing to guess I'm one of the biggest "fast" age-groupers in any field. I had some good races in 2013: 1st AG at both Ironman Texas 70.3 and Vineman 70.3, finishing in 4:11 and 4:12, respectively. But as the season wore on and temperatures climbed, I found my performances slipping for various reasons.

The biggest was that my body was not equipped to handle conditions of the two Ironman World Championship courses. Las Vegas 70.3 was hot, dry, and hilly. By the time I got to Kona, I was hanging by a thread. (Prior to Vegas, I'd competed in Abu Dhabi International Triathlon, Ironman California Oceanside 70.3, Texas 70.3, St. George 70.3, Hawaii 70.3, Boise 70.3, Vineman 70.3, and IM Zurich.) I raced too much, and relied on a big body. Both helped hobble me the last 19 miles of Kona. It was a humbling day at the end of an eye-opening season.

After Kona, I ate everything I wouldn't consider in-season and didn't exercise much. I hit 220. I did this knowing what had to come—a change of body during the off-season.

On November 1, I started taking Hammer Nutrition's Appestat and Phytolean, and returned to my nutritional roots, focusing on fruits, vegetables, nuts, and lean protein. I was committed and consistent. Appestat and Phytolean helped curb cravings and slow carbohydrate absorption as my body began its transition. With patience, the pounds began to drop.

In the morning after workouts, and early evening with an all-vegetable dinner, I had a protein shake with one scoop Hammer Whey, one scoop Hammer Vegan Protein, frozen fruit, banana, and almond milk. This staple dinner was filling, indulgent, nutrient complete, and relatively low in calories. The shakes have helped me recover and remain strong as the intensity of my workouts has escalated.

New year, new body

On January 30, I weighed in at 186 pounds. At my most fit in 2013, I weighed 204 pounds. This season, my goal is to race at 184. With Hammer Nutrition products on my side, I have had a nutritionally sound process of weight loss. I now feel lighter on my feet and on the bike, and better equipped to handle longer, high-intensity efforts.

Remarkably, I haven't lost strength, as often results with significant weight loss. Power numbers on my bike are actually up, and my 1-mile run PR is down significantly. I look forward to dusting off the cobwebs and putting this new body to the test. See you all out there, and Hammer on! **HN**



Photo : Greg Smith



Photo : Katherine Ryan

Spring is in the air!

“Phytolean has worked for me! I’ve lost 6 lbs.!” - Randy B.

“I typically put on the ‘winter weight,’ but by using Phytolean, I maintained my end-of-season weight instead of gaining a few pounds each month!” - Armand

It's time to get lean and stay lean with Phytolean . . .

- Effective weight loss
- Higher energy levels
- Natural, plant-based formula

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MSRP
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MOAB'S RED HOT 55K



Recap from Jen Richards

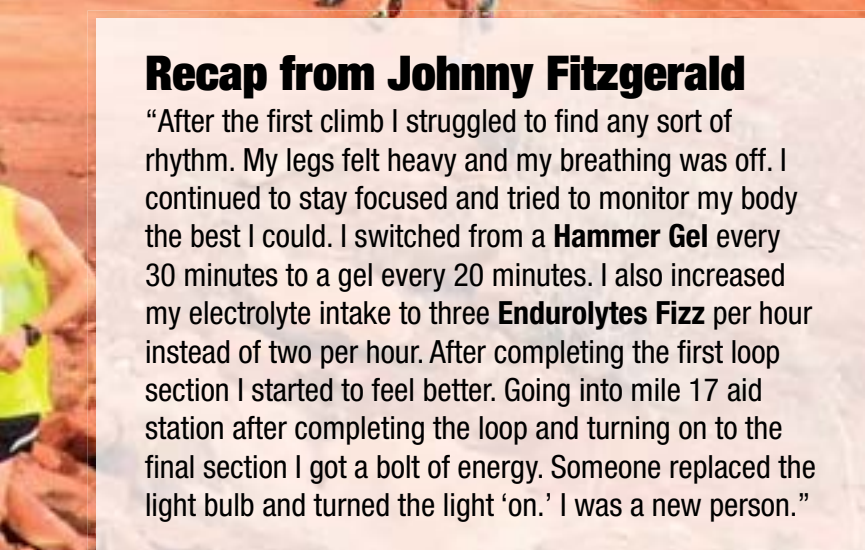
"I used a Hydrapak 7-oz. soft flask filled with a serving of Perpetuem. I took in half of the **Perpetuem** during the race along with four **Hammer Gels**."

Photos : Myke Hermsmeyer



Recap from Kelly Agnew

"I want to thank Hammer Nutrition and Myke Hermsmeyer. Myke is a great guy, an excellent photographer, and an amazing partner at Hammer Nutrition. Those guys do a lot to support me in my racing and it's greatly appreciated."



Recap from Johnny Fitzgerald

"After the first climb I struggled to find any sort of rhythm. My legs felt heavy and my breathing was off. I continued to stay focused and tried to monitor my body the best I could. I switched from a **Hammer Gel** every 30 minutes to a gel every 20 minutes. I also increased my electrolyte intake to three **Endurolytes Fizz** per hour instead of two per hour. After completing the first loop section I started to feel better. Going into mile 17 aid station after completing the loop and turning on to the final section I got a bolt of energy. Someone replaced the light bulb and turned the light 'on.' I was a new person."



Product Spotlight

Endurolytes Extreme

Support supreme for the extreme!

BY STEVE BORN

No matter how you define “extreme,” there are times in your training and racing when you’ll need greater amounts of specific electrolytic minerals. Instead of increasing your hourly dosage of original Endurolytes capsules, you now have a convenient, more effective solution: Endurolytes Extreme.

Bolstered with a hefty 300 mg of sodium chloride (salt) and 75 mg of potassium per capsule—three times more than the original Endurolytes formula, yet still in a balanced 4:1 ratio—Endurolytes Extreme is guaranteed to resolve even the toughest electrolyte replenishment challenges. In addition, each capsule of Endurolytes Extreme contains 10 mg of ginger root, well-known for its anti-inflammatory benefits and its ability to ease digestive problems.

When to use Endurolytes Extreme

- 1. If you’re competing in an unusually hot-weather event** – Some events—such as the Ironman Kona—are held in hotter and/or more humid conditions than anything most of us will ever experience. On these extraordinary occasions, “normal” electrolyte replenishment plans need to be altered drastically. That’s where Endurolytes Extreme shines. You’ll be able to fulfill your body’s exceptionally high electrolytic mineral needs more completely with Endurolytes Extreme, while taking fewer capsules than you would with Endurolytes.
- 2. If you’re not acclimated to the weather conditions** –

When the weather is hotter than you’re used to, you must alter a few things to succeed in your workout or race. First, you must slow down; you simply can’t do “business as usual,” pace-wise. Equally important, you must lower your caloric intake, while conscientiously increasing your fluid and electrolyte intake. Endurolytes Extreme takes care of the latter in ideal fashion.

- 3. If you consume a high-sodium diet** – We’ll never stop advocating the health and performance-enhancing benefits of a low-sodium diet. We continue to urge you to limit your dietary sodium intake to 1,500-2,300 mg a day (that’s 3,750-5,750 mg of salt). The less sodium (salt) you consume, the less sodium your body will lose during exercise.

As you transition to a lower-sodium diet, you will need to replenish with more sodium during exercise, using Endurolytes Extreme to fulfill your electrolyte requirements. Several weeks after you’ve faithfully adhered to a low-sodium diet, you can go back to using Endurolytes. Of course, if you continue to eat a high-sodium diet and/or if you “sodium load” in the days prior to an event (a practice we don’t advocate), you’ll want to stick with Endurolytes Extreme.

- 4. If you are “physiologically predisposed” to cramping** – Some athletes have cramping problems, even after following our fluid and electrolyte replenishment recommendations, which consistently work for the overwhelming majority of athletes. For example, we have a few clients who, due to their

unique physiology, need to take 6 or more Endurolytes capsules hourly—even under mild weather conditions—or they experience cramping problems. Athletes who have unusually high sweat rates (which means higher-than-normal sodium losses as well) also fall into this category. If either or both describes you, Endurolytes Extreme is a must-use product.

- continued on page 11



Suggested Usage:

Take 1 capsule per hour during prolonged exercise. Hot weather may warrant higher dosages.



5. **If you are just beginning early season training** – The less fit you are, and especially if your early season training is intense and/or long in duration, the more sodium, chloride, and potassium you will lose. Until your fitness level increases and your body becomes more efficient, Endurolytes Extreme is your go-to electrolyte replenishment product.

Summary

With Endurolytes, and now Endurolytes Extreme, a tremendously wide range of superior, full-spectrum electrolyte replenishment support is now available.

- No matter what your physiological makeup may be
- When training demands exceed your fitness levels
- However hot and humid the weather conditions are
- If you're not acclimated to those conditions

... Endurolytes Extreme has you covered, guaranteed to resolve even the toughest electrolyte replenishment challenges. If these situations describe you or your circumstances, Endurolytes Extreme is the product you need!

HN

Suggested Usage:

- Shake bottle well before use (very important).
- Spray once into each nostril and then breathe into nasal cavity.
- For allergies, use up to 12 times a day.
- For sinus problems, use 6-12 times a day for 10-14 days.
- Nasol is nonaddictive and has no harsh side effects.



Product Spotlight

Nasol

Spray away sinus problems fast!

BY STEVE BORN

With no pun intended, having a stuffy nose just blows! Nasal congestion—whether from colds, allergies, or other reasons—not only makes exercising more difficult and less enjoyable, it can disrupt your daily routine and interfere with getting sufficient amounts of quality sleep. What you want is quick relief. What you want is Nasol. The all-natural, non-addictive, fast-acting Nasol formula relieves congestion and keeps nasal passages moist. Nasol will clear up your sinuses quickly so you can breathe freely.

Just as impressive, Nasol is highly effective at relieving migraine, cluster, sinus, premenstrual, and tension headaches. No matter what the cause, when you have a brain-throbbing headache, you want the pain to subside as quickly as possible. Nasol does just that; you no longer have to wait for slow-acting medications to begin working.

The potent, all-natural Nasol formula

Eucalyptus Oil – Eases nasal congestion

Aloe Barbadensis Extract – Helps relieve pain and soothes skin inflammation

Rosemary Extract – Helps kill bacteria, while also acting as a natural product preservative

Sea Salt – Cleanses and helps drain sinuses

Capsaicin 4X – Natural ingredient derived from the pepper plant that desensitizes sensory neurons, dilates constricting blood vessels, and alleviates pain

Vitamin C – Helps fight infection and promotes healing

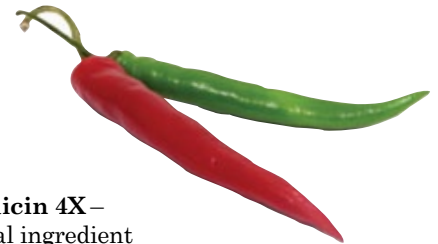
How to use Nasol

Shake the Nasol bottle well before each use (very important). Spray once into each nostril and sniff up into nasal cavity. For allergies and headaches, use Nasol liberally up to 12 times a day. For sinus problems use 6-12 times a day for 10-14 days. Relief will occur 2-20 minutes after each use. Cover the Nasol bottle after each use.

NOTE: Nasol contains an extract from the chili pepper plant. When using the product for the first time, you may experience a light burning sensation that lasts for 2-5 seconds. This reaction actually relieves your sinus and allergy condition and will subside quickly, similar to when you eat spicy foods.

Summary

Nasol is your potent, safe, and highly effective weapon for fast relief of headaches. Nasol is the perfect complement to Clear Day, helping to alleviate unpleasant symptoms caused by allergies. As soon as you feel the first hint of allergy-related problems coming on, take a dose of Clear Day and give each nostril a spray of Nasol. Rapid relief is on the way! **HN**



Making a splash around Bora Bora



Left, Alex poses with his Bora Bora swim support crew. Above, Alex goes the distance. Photos : Steve Childers

BY ALEX KOSTICH

On December 6, 2013, I became the first person to complete an unassisted swim around the island of Bora Bora. I was really excited about the opportunity to tackle this feat, although I had never swum that distance (16 miles) before. My longest previous distance was 12 miles around Key West, and that was more than 10 years ago.

Nevertheless, I went to Tahiti with a suitcase full of Hammer Nutrition products and my fingers crossed. I had done the required training, putting in 50,000 meters a week at my local pool for the better part of a year. But I was still anxious about the attempt as I had no idea what to expect, and the only reference I had for my predicted course was a Google maps printout.

On the morning of my swim I awoke early and—as usual—before

an endurance event—refused to eat. I prefer to swim on an empty stomach.

Throughout the swim I made sure to refuel with Hammer Nutrition products every 30 minutes. I would alternate between a Hammer Gel on one stop and one of the Hammer Nutrition powdered sports drink mixes on the next. On the fifth hour of my swim, I had two Hammer Gels during one stop since I knew I was close to the finish and deserved a treat.

I really felt a spike in my energy with each feeding stop! I've done past events when the products I used had little discernible effect, so I was really happy to feel the Hammer boost when I needed it most.

I ran up on the same beach a little more than six hours after I began—and rather than flop down on the sand, I did three honest push-ups, undoubtedly from the extra energy I had left, thanks to Hammer Nutrition! **HN**

No matter how you define “EXTREME”



NEW!
3X

the amount of sodium chloride (salt) and potassium as the original Endurolytes electrolyte formula—in the same, balanced 4:1 ratio



Available in two sizes!

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\$14.95 - 60 Capsules
\$24.95 - 120 Capsules

Zandy Mangold defines “extreme” with a desert training run in Death Valley, CA. Photo : Hernan Garcia



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FREE HEED!

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TRI TIPS: Swim leg training and race-day preparation

BY BRYAN BROSIOUS, Hammer Nutrition sponsored athlete and 2013 National Congress of State Games Athlete of the Year



Bryan Brosious wins the Big Sky State Games Triathlon.
Photo : Cheryl Davis

Training for and completing your first triathlon is equal parts physical and mental. Oftentimes, the swim portion is the most intimidating leg for firsttimers. Most don't come from a swimming background, and the hustle and bustle atmosphere at the pool or the thought of cold, deep, open-water can deter new triathletes.

I find it helpful to separate the challenge of completing the swim into two important segments: preparation before race day and the actual race.

Training

This is the most important aspect of your first triathlon swim. You are building the foundations for mental and physical performance, strengthening both your muscles and mind. When you prepare adequately, completing the swim on race day is much more manageable and enjoyable.

This is also the opportunity to perfect your nutrition. I used Hammer Gel in my very first triathlon over 10 years ago and still use it, including prior to my swim workouts. A Hammer Gel 15 minutes before a workout or race, followed by HEED or

Perpetuem during is a sound strategy. Follow your workouts with Hammer Whey or Recoverite. Nutrition is your key to having the energy to train consistently and recover properly.

The vast majority of triathletes practice their swim in a pool, even if their race is in open water. Everything from being in your swimsuit to navigating circle patterns in a lane with other swimmers, can cause some anxiety. By overcoming those apprehensions and actually committing to going to the pool, you can become more comfortable.

Triathlon training should be enjoyable. The race is the highlight, but most of your satisfaction should come from your daily training and from making your mind and body healthier. This is true when training for your first triathlon swim—disregard the time goal and simply complete the swim distance on race day. Having fun in the training and race should be your goal for your first triathlon.

Generally speaking, the fastest and most efficient swim stroke for triathlon is the front crawl, often referred to as "freestyle." Other strokes such as the breaststroke, backstroke, or even side-stroke are permitted in triathlon, but the speed and

- continued on page 15

- continued from page 14

efficiency of those strokes are less than that of the front crawl. If you need to improve your swim stroke, your first step is to find a coach, swim club, or friend to help you.

Train for the front crawl, but also make time to vary your training sessions. Some possibilities include: butterfly, backstroke, or breast stroke; swimming with fins and/or hand paddles; swimming short sprint-type workouts; or swimming longer, relaxed workouts. This expands your comfort zone, which on race day is beneficial. If your first tri is in open water, make time for training in open water in your race kit and wetsuit.

In my experience, three has been the magic number for swim sessions per week. Three sessions provides a good mix of consistency and training load, while still avoiding over-training and injury. When you have taken that first step to commit to swimming and complete your swim workouts, you will be surprised at how much fun swim training is, and how much confidence you gain as a triathlete and person.

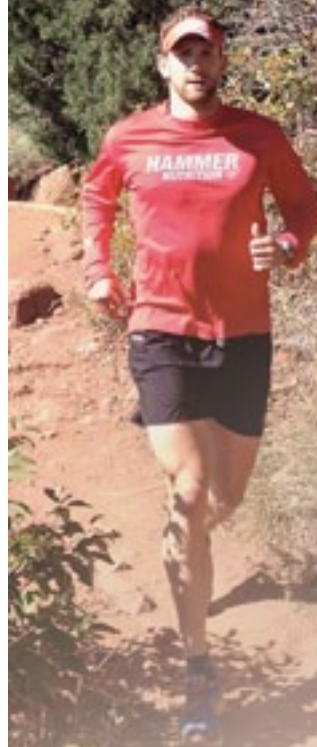
Race day

You can take several steps on race day to make your first triathlon swim go smoothly and enjoyably:

1. **The first is a big one: Arrive early.** Allow plenty of time to check in, set up your gear, get dressed, and warm up. I prefer to arrive two hours before the start, at minimum. Nothing is more stressful than hurrying through your preparations. When setting up your gear, try to minimize the clutter and remove all items you don't need during the race. Have what you need: helmet, sunglasses, shoes, etc., but keep it organized so you can navigate through transition efficiently. Practice your transitions a couple times before the race so you know where essentials such as your race number and Hammer Gel flask will be.
2. **Nothing new.** This means avoid doing anything new on race day. If you haven't done it when preparing for the race, don't do it on race day. For example, don't use a new wetsuit, goggles, or nutritional item without having tested them first in training.
3. **Always warm up.** I like to be in the water at least 20 minutes before the swim start. I usually have a Hammer Gel right before I get into the water. Make sure your swim cap fits and your goggles don't leak or fog. Calm your nerves and warm your muscles before you go to the start line. Easy-paced swimming with a few short, race-pace intervals works well for a warm up.

If you are apprehensive about being surrounded by other people, start at the back or side of your swim wave. In the rare case you need to stop, it's completely within the rules to stop and rest during the swim. Lastly, don't forget to have a Hammer Gel 15 minutes before the start, don't start too fast, stay relaxed, and have fun. This is your moment and your journey . . . enjoy it! **HN**

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Why I “Hammer”

BY DEVON JOHNSON



Photos : Aaron Johnson

About 10 months ago, my eyes were opened. I had just polished off a bag of Cheetos, only to have some great friends lovingly say, “Devon, do you even know what’s in those?”

That question was my wake-up call. I started learning about the ingredients of food (or what many consider “food”), and what I was putting into my body. I began making changes for my family that were challenging, but I stuck with it. Since then, we have changed our diet to include mostly real, whole, healthy foods.

Another thing I began to examine and evaluate was my running fuel/recovery. Years ago, I was clueless about what marathoners put into their bodies to keep going on long runs. I heard about some of the main sports nutrition brands and tried them out. They worked okay, but you really had to choke them down. They provided simple sugars and gave my body a little energy boost to get me through long runs and races.

Then a sponsored cyclist introduced me to Hammer Nutrition. She let me try her Recoverite after a long run, and I was surprised by the results—it curbed my typically insatiable appetite, help me avoid feeling lethargic, and helped my muscles recover quicker than ever before. I tried Hammer Gels instead of the other leading brands I had used. Loved them. Hammer Gel contains natural sweeteners instead of refined sugar, and complex carbohydrates instead of simple sugar.

Months into our clean-eating journey, I re-evaluated . . . Hammer Nutrition fuels are “processed,” I figured. They contain maltodextrin, stevia, and other ingredients that I wouldn’t eat in my whole-food diet. So I stopped using them for a while, instead using my food processor to make my own fuels. I even considered that I might be able to train my body to not need any fuel on long runs. Neither of these theories worked! The whole food gels I made were horrible, both in taste and consistency,

and they made it hard for me to get enough calories. (And I found out that I did indeed need to take in calories during longer runs!)

Then I talked to a colleague (who is a dietitian and competitive marathoner) about what she recommends. I was encouraged and went right back to using Hammer Nutrition products. After reading more about them, I’ve learned why they give me the boost that I need.

I’ve done my research—reading and experimenting, and I’m going to stick with Hammer Nutrition. It fits my running, it works with my body, and it has helped me achieve my goals. Hammer Nutrition is committed to healthy, all-natural fueling designed to help athletes perform their best. **HN**



NATE'S CORNER

Nate Llerandi, Hammer Nutrition-sponsored athlete and longtime ambassador, has been coaching endurance athletes since 1990. He draws from his extensive experience as a world-class triathlete, including ranking as Top American and 6th place in the prestigious ITU World Cup Series. Nate's most recent competitions include the Pike's Peak Marathon; and the Dead Dog Classic Stage Race and Sunshine Hill Climb Challenge road cycling events.

It's never too late

For some of us, the racing season has already begun. For others, it's about to begin. For all of us, key races are still ahead. As the year progresses, there always seems to be a point when an athlete thinks, "This is as good as my fitness is going to get this year." It's a common thought, but how accurate is it?

The answer is that there is always a way to improve your fitness. Every step of the way, every training cycle you complete, you need to take a look at the hard work you did, analyze it, and then plan your next cycle of training. That isn't necessarily as easy as stacking one building block atop another. If you peter out during your long rides, have you determined exactly why? Is it something nutritional or is something lacking in your training? During your 30-minute tempo runs, are you putting in a strong, consistent effort the whole time, or are you dragging by the end of the 30 minutes? If you're dragging, why?

The answer might be as simple as moving on from your base training to your interval work. But different intensities and varying lengths of

intervals will build different results. Do you need to work on your power or your ability to hold a steady effort at or near your lactate threshold (LT)?

And, if you're in the middle of your interval work, maybe the key to getting faster won't be to do more interval work, but rather to take a break from interval work to focus on another aerobic-centric cycle of training. If your raw speed is there but you can't sustain a high-intensity effort, your aerobic capacity could be lacking, for example.

What I'm getting at is that your training progression may very well NOT be linear. Wouldn't things be easy if it were? But, usually, it's not. We try like heck to make our plans linear because that makes them easy to implement and follow. Just make sure you have the vision to change things on a dime if you find yourself bumping up against a wall in your training and/or racing. Identify the wall, and then give yourself the tools to break it down.

Happy training,
Nate Llerandi
HN

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Ariette Gogdes preps for US Swimming Master's Nationals. Photo: headleyphotography.com



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OUR ATHLETES SAY IT BEST



[A sampling of the unsolicited feedback we receive from athletes enjoying the benefits of Hammer Nutrition.]

Photo : Kasey Clark



"I cannot tolerate solid food before a race, but sometimes prerace nutrition is definitely needed. The Whitefish Wag 15K, for instance, did not start until 11 a.m. so I had one of my new favorite prerace meals.

Hammer Vegan Protein three to four hours before a race takes the edge off my hunger, and also seems to speed my recovery. I

finished as 1st place female and also broke the course record!" - Lori Buratto

"I've always been into working out but it wasn't until a few years ago that my focus shifted to being fit.

I've dropped 45 lbs. and counting, and Hammer Nutrition products have helped me along the way. I've been a loyal Hammer customer since day one. Great stuff!" - Anisa Parra

"Hammer Nutrition has been key to my racing success and overall well-being. I have been using a full complement of Hammer products for many years, and the results speak for themselves. Recently I went to Tucson for the 2013 Duathlon National Championships. I was very happy to win a National Championship for the second time!" - Bruce Balch

Photo : B. Balch



*“After a total hip replacement, I was cleared to get back on my bike. **It felt really good to be back in all my Hammer Nutrition gear!** The clothes do not make the man, but sometimes they give a woman the lift she needs . . . especially when they say Hammer Nutrition. **We treated ourselves to a mix of Strawberry and Chocolate Recoverite after the ride!**”*

- Sheila Carpenter-van Dijk

Photo : S. Carpenter-van Dijk



“All of the Hammer Nutrition fuels and supplements I take have been incredibly effective for me on the bike.

Endurolytes and Sustained Energy continue to make both the ride and the ‘after ride’ hours a great deal more pleasant!”

- Clark Shaffer



*“Hi from the Arctic Ocean Expedition! **At a balmy -30°F, Montana Huckleberry Hammer Gel turns into the most amazing taffy (but doesn’t freeze!).***

Hammer on!” - Chris Latta

Photo : C. Latta





ASK DR. BILL

Real Athletes, Real Results!

"I'm allergic to cats and was exposed to some dander. My eyes watered, my nose ran, and I itched all over. I took a dose of Clear Day and within the hour my symptoms were gone." - Kelly P.

"I woke up with a pounding headache and after a few hours of struggling with it, I used Nasol. It wasn't long until the headache had subsided and I felt great." - Anne S.

Question

Can Nasol and Clear Day be used together?

ANSWER

Yes! Nasol can be used in tandem with Clear Day to provide immediate and long-lasting allergy relief.

Nasol: A fast-acting micro-spray dose immediately available through nasal epithelial passages

Clear Day: A long-lasting macro-dose taken orally and available through first-pass metabolism

While Nasol gives immediate sinus passage relief, Clear Day may take 20-40 minutes to provide noticeable airway relief. Clear Day contains olive leaf extract, quercetin, resveratrol (from Japanese knotwood), and bromelain.

Each of these is reported to reduce allergic reactions to airborne substances in a sustained manner. Based on the half-life survival time of:

- Oleuropein (12 hours)
- Quercetin (16-17 hours)
- Bromelain (6-9 hours)
- Resveratrol (9 hours)

... Clear Day should provide relief that lasts for 6-9 hours after you take it orally. The effect of taking Clear Day will vary between subjects and with the severity and type of allergenic reaction. **HN**

Photo : Julia Teeters



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IN WITH THE NEW



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The atypical [Hammer] athlete

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

Photos : Leah Jensen Photography

[The Swellers]

Touring in a band is hard work. The reality is that it means driving ourselves from town to town (not in a tour bus, but in a van and trailer, and sometimes overnight), unloading and setting up our own gear, playing until late at night, and getting up in the morning to do it all over again. In addition, traveling with five other guys in confined spaces for months is a proverbial germ fiesta. Being on tour for nearly eight years now, I think I've finally figured out the secret to not getting sick on the road: eat well and often, exercise, and take your vitamins.

Hammer Nutrition and their awesome line of vegan products (oh yeah, I'm a vegan) really helped me this last tour. You don't need to be a triathlete or ultra cyclist to benefit from these products. Every morning I start out with Premium Insurance Caps, easily the best multivitamin I've ever taken. My band mates depleted my stash of various Hammer Bars. Protein bar, snack bar, meal replacement bar, whatever you want to use them for, they're delicious and nutritious. I'd grab one in the morning if I didn't have a great breakfast readily available, or after a workout to encourage muscle growth and recovery. Our box of Hammer Bars did not last long. I should have kept them a secret.

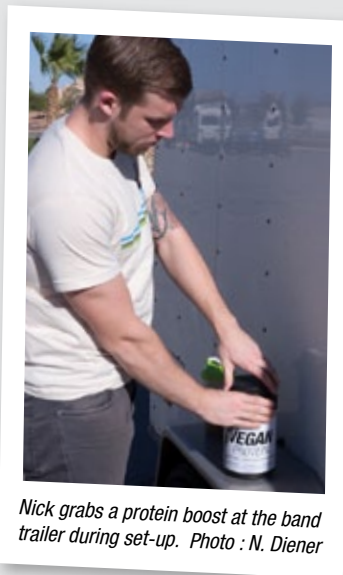
The most important product I use on tour is Hammer Vegan Protein powder. I didn't have many chances to make my shakes in anything other than a shaker bottle with some water, but luckily the

Chocolate is super tasty. I was hitting a gym four or five times a week on this tour, and if I couldn't get to a gym I'd set up my free weights and bench outside in the parking lot of wherever we were playing that day. Between that and playing our high-energy, sweaty shows, some extra protein/good stuff was more than welcome.

I can't forget Endurolytes Fizz. After a particularly sweaty or draining show, replenishing electrolytes is crucial. I don't like all the sugary, salty sports drinks out there, so Fizz are perfect to toss into a glass of water. I also took Chromemate and Phytolean tablets. When I knew I was about to eat a really starchy meal, my mind was at ease knowing that the Phytolean was going to help me block those carbohydrates.

I can't tell you scientifically how each of these products helps me, but one thing is for certain: I'd never felt this healthy in my entire life, even though traveling all the time and training hard. Thanks to Hammer and a newfound appreciation for fitness, I feel unstoppable.

Thanks Hammer Nutrition!
Nick Diener, The Swellers (punk band)



Nick grabs a protein boost at the band trailer during set-up. Photo : N. Diener



Photo : Mike Muir

[Thomas Maximus]

The Hanohano Huki Ocean Challenge is one of the biggest paddlesport races of the year here in Southern California and draws more than 700 paddlers. This year was no different with hundreds of Stand Up Paddleboard (SUP), outrigger, and surf-ski paddlers, as well as a few tandem SUP teams. I finished 1st place masters and 2nd overall in the SUP 5-Mile course, and finished 2nd overall SUP and 1st place OC-2 in the 9-Mile course.

I used Race Day Boost prior to the Hanohano, and for the day of racing I fueled with HEED, Hammer Gel, Endurolytes, Sustained Energy, and Anti-Fatigue Caps.

Thomas Maximus

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“Highest quality” from the start

Made in the U.S.A. by Natural Products Association-certified suppliers

BY STEVE BORN

Most companies tout their products’ “high quality,” but for Hammer Nutrition, those words are much more than a catch phrase. Our focus on “Highest Quality Control” has defined us for 27 years and counting.

Since day one, Proprietor Brian Frank and the entire Hammer Nutrition team have never lost sight of our goal to ensure that every Hammer Nutrition product meets our demanding standards for purity, quality, and efficacy. That’s why we confidently back them with our unwavering guarantee.

Made in the U.S. in top-tier facilities

Our focus on excellence starts with our sources. While many businesses outsource their production to overseas facilities to boost their bottom line, we’re proud to say that our products are made here in the U.S. That’s always been our standard (why would we want it any other way?), and it ensures you that our products are not tainted with unwanted—and possibly very dangerous—substances.

In addition, all Hammer Nutrition products have been, and will continue to be, produced only in facilities that are GMP (Good Manufacturing Practices) certified by the Natural Products Association (NPA). NPA is the forerunner in the nutritional field and highly respected for its rigorous standards, which include third-party inspection of the manufacturers it certifies.

We take quality personally

Our products’ safety and effectiveness matter to us. After all, we use these products ourselves every day. We’re athletes, too, and we care about our health. That’s why we choose our products: they’re of the highest possible purity, and they work! We want the same for you.

For detailed information on the extensive quality control procedures our manufacturers follow when making Hammer Nutrition fuels and supplements, check out our FAQ “What are your quality control procedures?” on the Hammer Nutrition website. **HN**

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The atypical [Hammer] athlete

[Olivia Mew] After the first day of windsurfing competition at the RS:X U.S. Nationals, I was the top Canadian female—a new first for me. I finished the regatta 12th overall and 2nd in my AG—and I got to test some new Hammer Nutrition products and flavors, which I loved. I found Perpetuem to be a great product for windsurfing, since it is an endurance event that lasts three days. The protein component really helped me stay strong and powerful throughout the event.

As a competitive windsurfer, I've tried many nutritional products and have yet to find a brand as great as Hammer Nutrition. A competitive windsurfer has about the same fueling requirements that a long-distance runner has, so I rely on Hammer products to provide the energy I need while also tasting great.

During training and racing I typically use Hammer Gel in a Hammer flask and Hammer Bars. I can slip the flask or bar into my lifejacket pocket to ensure I have energy on the water, no matter what. After windsurfing training or racing, I use Recoverite. I especially love it because our regattas last up to seven days, making the recovery process during competition vital for success. I also eat a Hammer Vegan Recovery Bar or have some Hammer Whey later, since I burn up to 8,000 calories a day and want to be sure I'm getting sufficient nutrition and protein.

At 17 years old, my goal is to become a member of Canada's National Development Team and represent Canada at the 2015 Pan Am Games, and eventually at the Olympics. I'll be trying new Hammer Nutrition products and adding them to my fueling strategy along the way!

Olivia Mew



Photo : Gabi Mew

Are you an atypical Hammer athlete?

Send us your story, and you might be featured in the next issue of *Endurance News!*
[athleteupdates@hammernutrition.com]

Be strong, clean, and green!

"I like Hammer Vegan Protein better than any other brand of protein powder I have tried!" - Tristan L.

Hammer Vegan Protein is your plant-based friend for training and recovery!

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Higher-powered training

A song of Ironman success

BY JASON MILLSAPS, Hammer Nutrition-sponsored athlete

I am a full-time music worship pastor who has a heart for music and people. I stand before large crowds every week, and I know that your health has an effect on the way you perform and in my case, sing. Two years ago I decided to get healthy, lose weight (50 pounds!), and set big personal goals. That's when I started training for my first full Ironman. I remember jumping into the water for the first time and only being able to swim 1 1/2 laps. I had a long way to go, but I was determined to succeed.

Soon after starting my new training routine I discovered Hammer Nutrition, which turned out to be a lifesaver. Having the proper fuels and nutrition has been a huge help in my training and recovery, and in my success toward becoming an Ironman. I've tried every diet, including many of the "hottest" and latest supplements, but nothing works like Hammer Nutrition. The best thing about Hammer products is that they are natural, which is by far healthier and, I believe, more effective.

My workouts last a minimum of 2-2.5 hours each day. HEED goes with me on my bike rides and long runs of one hour or more. I also use Hammer Gel in a Hammer Flask on my long bike rides and runs. On the "over 50-mile" rides I normally mix a little Sustained Energy and HEED together in my bottles. Before all workouts, I take Endurance Amino. After workouts, I always have Recoverite and/or Hammer Recovery Bars. And I'm seeing the results:

April 27, 2013 - John Tanner Sprint Tri 600m, 13.8, 5K (1:35:32)
May 19, 2013 - Florida Half-Ironman 70.3 (6:52:17)
July 4, 2013 - Peachtree Road Race 10K (48:45)
July 27, 2013 - Rio Rancho Disco 5K (21:10)
November 17, 2013 - Ironman Arizona (13:54:15)

Family, worship, triathlons, and Hammer Nutrition are now just a way of life for me! **HN**



Start your season strong!

"I always drink Recoverite immediately after a race or workout. Recoverite and Hammer Nutrition never let me down!"

- Kris K., 1st place AG, Running of the Bulls 5K



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Product Spotlight

Clear Day

Relief is just a capsule or two away!

BY STEVE BORN

Training and racing are strenuous enough. But having to deal with allergies at the same time makes things undeniably more difficult and much less enjoyable. Instead of breathing freely and easily, you're wheezing with nearly every breath you take. You're frequently blowing your stuffed-up nose as well. And instead of enjoying the scenery, you're constantly rubbing your burning, itching, watery eyes.

If you're fed up with that daily routine—and who wouldn't be?—it's time to put Clear Day to work for you! The unique and potent Clear Day formula helps prevent allergic reactions to airborne substances, while also providing fast and effective relief for allergy discomforts: stuffy and/or runny nose; eyes that are itchy, swollen and red; coughing and wheezing; and much more. Clear Day does all this without the potential side effects associated with pharmaceutical antihistamine and decongestant medications.

Numerous athletes who have field-tested Clear Day have reported to us that it is extremely effective, and we guarantee that Clear Day will work for you—not only during allergy season, but anytime that allergy symptoms arise, year-round. With allergy symptoms out of the way, you'll be able to train and race more productively, and exercise more enjoyably.

What causes allergies and how Clear Day works

In simplest terms, an allergy occurs when the body's immune system overreacts and attacks certain

substances that would normally be considered harmless. Airborne allergens include pollens, grasses, molds, and animal dander.

For many people, inhaling these substances causes no reaction; for others, these substances become antigens, triggering an abnormal immune system response. The compounds in Clear Day have a wide range of beneficial properties—antibacterial, antimicrobial, antioxidant, anti-inflammatory, and antihistamine—that help prevent airborne allergic symptoms while also alleviating air-borne allergic reaction discomforts you're already experiencing.

Olive Leaf Extract – Its main component is a chemical compound called oleuropein, which has anti-inflammatory, antioxidant, antibacterial, and antiviral properties. Oleuropein's anti-inflammation benefits alone would merit its inclusion in Clear Day, but it's the latter three that really boost the product's effectiveness. Oleuropein's antioxidant, antibacterial, and antiviral properties positively influence the body's ability to resist allergies—an "anti-antigen" type of property—similar to the way oleuropein positively influences the immune system.

Dr. Bill Misner writes, "When microbial load—bacterial or viral entities—is reduced, and when excess free radicals are neutralized, the presence of antigens is automatically reduced. Oleuropein inhibits harmful microbes from provoking the immune system to overreact to bacteria, virus, or harmless substances by blocking the inflammatory cascade." [1-5]



Suggested Usage:

Take 1-2 capsules every 4 hours.

Quercetin – This flavonoid is found in a variety of fruits and vegetables. In addition to having powerful antioxidant and anti-inflammation benefits—even antiviral effects according to some research—quercetin has the unique ability to inhibit the release of histamines, leukotrienes, and serotonin.

The main storage sites of these chemicals are mast cells (in the skin, connective tissues, and mucosal membranes) and basophils (in the blood), and they're responsible for the symptoms (runny nose, itchy/red eyes, etc.) you experience when you have an allergic reaction. Because quercetin has been shown to inhibit the release of these allergy symptom-causing chemicals, it has been touted as a natural antihistamine.

Lastly, quercetin increases the production of a substance (classified as a cytokine) known as interferon gamma, which helps inhibit the allergic reaction to antigens. [6]

Bromelain – Derived from pineapples, bromelain is a proteolytic enzyme, aiding in the digestion of protein. Especially when consumed apart from protein-containing foods, bromelain exhibits powerful anti-inflammatory and analgesic effects. Perhaps even more importantly, bromelain significantly increases the absorption of quercetin. [7-9]

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Resveratrol – Found in the skin of red grapes, berries, and in the roots of a plant known as Japanese knotweed, the compound resveratrol is a superb antioxidant and anti-inflammatory substance. It also exhibits powerful antihistamine effects. [10]

Summary

An estimated four out of ten endurance athletes suffer from seasonal allergenic reactions as a result of inhaling airborne substances. These allergies are not only unpleasant to deal with, but they hamper athletic performance as well. Researchers Komarow and Postolache state, “As a result of the increase in ventilation during exercise, athletes in particular experience significant symptoms of allergy triggered by exposure to aeroallergens. The allergic response causes nasal and conjunctival congestion, tearing, breathing difficulties, pruritus [itching], fatigue, and mood changes, which affect athletic performance.” [11]

There’s no reason to suffer with any of those unpleasant symptoms any longer . . . it’s time to give airborne allergies the ax with Clear Day! The all-natural Clear Day formula gives your body the ammunition it needs to tackle even the toughest airborne allergies safely

and effectively, and without the side effects associated with over-the-counter allergy medications. Clear Day has worked superbly for everyone who has tested it, and we guarantee that it’ll work just as well for you. **HN**

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Clear Day FAQ

Q: How do I take Clear Day?

A: We suggest 1-2 capsules every 4 hours, up to 8 capsules in a 24-hour period. For maximum benefits, Clear Day should be taken on an empty stomach, 60 minutes before or 3 hours after a protein-rich meal.

Q: How does Clear Day help prevent allergic reactions?

A: Primarily by its quercetin and resveratrol components; both of which have been shown to help prevent the release of histamines from mast cells and basophils. When the release of these chemicals is inhibited, the potential for allergy symptoms to occur is greatly diminished.

Q: Why do I need to take Clear Day apart from protein?

A: Bromelain is a proteolytic digestive enzyme that aids in the digestion of protein. Taking Clear Day with protein would diminish bromelain’s anti-inflammatory effects and its ability to increase the absorption of quercetin.

Q: How quickly does Clear Day work?

A: While response depends on personal physiology, as well as the severity of allergies, most test subjects experienced relief of numerous airborne allergy symptoms within 20-40 minutes after taking a dose of Clear Day.

Give airborne allergies the ax!

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WELL-BEING

60 Capsules

Allergy season ammunition without the potential side effects associated with pharmaceutical antihistamine and decongestant medications.

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◀ Running shirts

Wicking, quick-drying fabric with built-in odor protection. Back pocket for gels and other training essentials. **NEW** high-visibility colors available in both men's and women's!

Men's:

- \$27.95 - Short sleeve (Red, white, green, blue)
- \$29.95 - Long sleeve (Red, white)

Women's:

- \$27.95 - Short sleeve (Red, pink, white)
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Insulated Purist 23 oz. water bottle ▶

The most flexible insulated bottle on the market, and the only one featuring Purist technology to deliver that clear, pure water taste. The double-wall construction and proprietary insulating liner provides a radiant barrier, keeping your water colder for 20% longer than other insulating bottles.

purist | insulated

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◀ KEG for storage on the go

Storage on the bike is a cinch with the KEG—extra tools, patch kits, fuels, and even your smart phone fits! Constructed of 16 oz. durable plastic, this practically bomb-proof container also has a stash lid for all those extra small items you don't want to lose. Fits standard bottle cages.

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Moisture-wicking running caps ▶

For the athlete on the go . . . available in two sizes to ensure a great fit. Moisture wicking, double stitched, super lightweight, and low profile. This is your new favorite running cap!

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JACK RABBIT CAPS



Hammer Nutrition staffer Myke Hermsmeyer gets in a spring ride on the Lincoln Hills trails of Missoula, MT.
Photo : Cory Kaufman

The LONG run

6,000 days into a running streak

BY GRANT WOODMAN



Grant Woodman on his way to a 2nd place AG win at the Ice Cube Half Marathon. "My race day Hammer recipe was **Hammer Bar** and **HEED** for breakfast, **Anti-Fatigue Caps** and **Tropical Hammer Gel** during and **Recoverite** afterwards." Photo : Lori Hackett

Running is my outlet and my therapy. The daily continuation of my running streak is something I'm proud of because it's a healthy example of how hard work can turn into success. As of this morning [March 10, 2014], my streak is 6,000 days; my total career mileage is 78,950.

I've been running since 1989, when I was a sophomore in high school. I wanted to make it to the state meet in cross country and track, and my coach advised me that one way to get there was to be consistent and never have to start the season over. The next year I began my first running streak, which ended 861 days later due to a hip injury. My second streak ended at 1,892 days when I stepped in a pothole on a training run and shaved a piece of bone off the top of my foot. When I was fully recovered, I started my current streak.

I discovered Hammer Nutrition while training with Team Innovative Endurance coach Greg Mueller. He turned me on to Recoverite, and then I started using HEED during long runs. Since then, I have never used anything else. I've added Hammer Gel, Endurolytes, Anti-Fatigue Caps, REM Caps, and Xobaline to my fueling/nutrition strategy with great success. I love Oatmeal Apple Hammer Bars and Tissue Rejuvenator—they're a staple on my VIP order every quarter. Hammer products have helped me stay healthy as I get older (I will be 40 in December) and have helped me keep my streak.

The U.S. Running Streak Association defines a streak as running at least one mile without stopping or the aid of any devices (crutches, cane, etc.) within a 24-hour period/calendar day. If I need a rest day, I usually run two miles (15-16 minutes) and that recharges me. I have had little aches and pains but the consistency of the running has kept me injury free. Many people have said that I will ruin my knees or I will have arthritis, to which I respond, "I might—if I stop and have to start over!" **HN**

In the archives:

Flashback to 1995

Artificial sweeteners: ASPARTAME

BY BRIAN FRANK

In recent years the use of artificial sweeteners has risen dramatically with the advent of aspartame. Most of you are more familiar with the trade names NutraSweet® and Equal® found in almost all diet, reduced calorie, and “sugar-free” products sold today. But is this product really “a safe, low calorie alternative to sugar” as we have been told since it deposed saccharin as the artificial sweetener of choice several years ago?

First, a little background: For years science has been working on alternatives to sugar for several reasons, but mainly to provide a sweet substitute with few or no calories. Saccharin (Sweet ‘N Low®, Sweet 10®), a non-caloric petroleum derivative absorbed by the body and excreted unchanged in the urine, was thought to be the perfect sugar substitute. It has zero calories and is about 500 times sweeter than sugar. However, once further research found it to be carcinogenic, the search was on for a new artificial sweetener.

Next came aspartame (NutraSweet®, Equal®), which is a combination of the amino acids phenylalanine and aspartic acid. It has almost no caloric content, is several hundred times sweeter than sugar, and because of an absence of negative publicity, most consumers assume that it is completely safe as a food additive.

However, the statistics regarding aspartame tell a much different story. According to the FDA, more than 75% of all non-drug complaints received are about aspartame. This translated into almost 7,000 cases of adverse reactions as of early 1994. The complaints include vomiting, nausea,



abdominal pain and cramps, muscle cramps and spasms, mood changes, dizziness, and headaches.

These numbers may not seem high, but you must consider that very few people who experience these side effects think to associate them with an artificial sweetener or take the time to file an official complaint with the FDA. So, realistically, the above numbers could be multiplied exponentially to get a more accurate picture of how many people are being adversely affected by aspartame.

Another strike against aspartame is that it is 10% methanol (methyl alcohol). The poisoning effects of methanol, which can damage the optic nerve causing blurred vision and even blindness as well as other ailments, are cumulative. The more aspartame you eat, the more methanol builds up in your system. Additionally, the absorption of methanol is increased when aspartame is broken down, as is the case when it is heated or decomposes with age. Despite this serious problem, the FDA has approved aspartame for baked goods.

Whether you have ever experienced any of the symptoms relating to artificial sweeteners or not, you will be better off avoiding them. **HN**

FREE ON THE HAMMER NUTRITION WEBSITE:

For more information on the hidden dangers of artificial sweeteners, download the **FREE pdf publication, The Artificially Sweetened Times**, on the Hammer Nutrition website in the Bookstore section.

Hammerbuck\$ winners in 2014

Ian Mallams

Ironman Austin 70.3
1st 18-24 Men's
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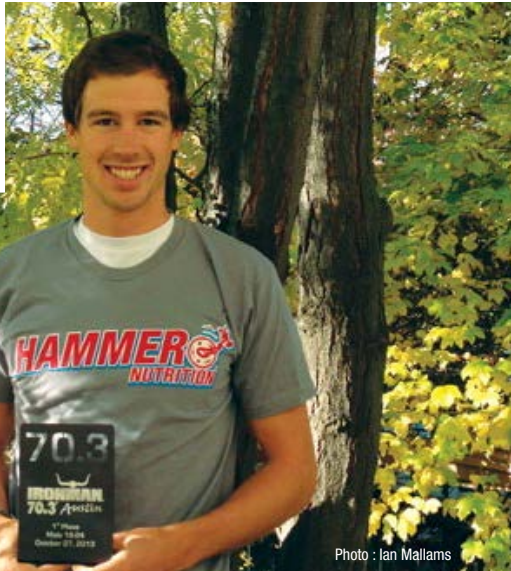


Photo : Ian Mallams

Glenn Gruber

2013 SPMS Short Course
Meters Championships
1st 60-64 Men's
\$100 credit

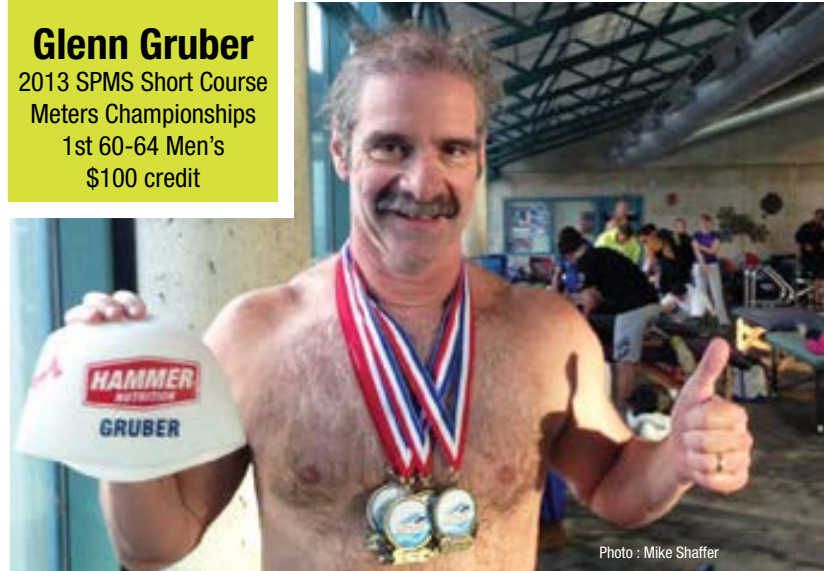


Photo : Mike Shaffer

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Photo : Janet Watson

Beverly Watson

Ironman World
Championship
Hawaii
1st 60-64 Women's
\$1,500 cash

About Hammerbuck\$

Hammerbuck\$ is a cash and credit contingency program that we began in 2008 as a way of rewarding athletes finishing in the top echelon in specific races who use Hammer Nutrition fuels and supplements and wear Hammer Nutrition logo clothing during the event and while on the podium.

Start winning today!

If you're ready to be a Hammerbuck\$ winner, go to www.hammernutrition.com/deals/hammer-bucks/ for complete details, including requirements, a listing of eligible events, prize payouts, and more.

"I love their versatility"

"I've used Premium Insurance Caps for a year now after switching from another multivitamin brand. They don't upset my stomach (even when empty), they provide more than adequate daily needs, and they allow for extra dosing, depending on daily exercising demands. I can even give them to my kids which is unlike other multivitamins. In short, I love their versatility."

- John M.



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multivitamin/mineral
supplement

Your *all-natural* performance foundation

- More energy all day
- Enjoy superior health
- Fill nutrient gaps in diet

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Receive two FREE tubes of Hammer Lips, one in each flavor, when you order Premium Insurance Caps. Ad code EN89PIC. Offer expires 5/8/14. Valid while supplies last.



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\$19.95 - 120 Capsules
\$34.95 - 210 Capsules



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Hydration

What you need to know

BY STEVE BORN

Easy does it: during exercise, drink just 16-28 ounces of water per hour.

Water is the most critical of all exercise fueling needs. It cools your body and transports nutrients. But many athletes have trouble gauging how much fluid to drink. Attempting to replace all of the ounces they've lost as sweat, they often over-hydrate—which can have harmful, even fatal, consequences.

The fact is, you can finish a race or training session with up to 2% weight water loss and still be okay. Forget advice to “drink to replace” or “drink even when you're not thirsty.” It's just plain wrong. Research has shown the optimal water intake for an average athlete during exercise to be about one water bottle (20-25 ounces) per hour. Body weight and climate conditions could make that amount *slightly* more or less. (See “How much fluid should you drink?” on page 37.) In addition, it's vital that you're well hydrated when you're *not* exercising. Here's the science behind these basic guidelines.

The numbers

Research suggests that while electrolyte needs for individual athletes can vary up to 1,000% (tenfold), fluid loss remains fairly constant. On average, you lose about one liter (approximately 34 ounces) of fluid per hour of exercise. Extreme heat and humidity can raise that amount to three liters in one hour.

With acclimatization and training, you can reduce electrolyte and fluid loss by up to 50%, but you can't replenish them at the same rate you deplete them during the event. Your body simply can't absorb as fast as it loses. According to Dr. Bill Misner in “LESS IS BEST—The right way to fuel,” “The endurance exercise outcome is to postpone fatigue, not replace all the fuel, fluids, and electrolytes lost during the event. It can't be done, though many of us have tried.” Our hydration goal is not to replace water ounce-for-ounce or pint-for-pint, but to support natural stores by consuming as much as we can adequately process during exercise.

In the most extreme heat and humidity, you can absorb a maximum of one liter (approximately 34 fluid ounces) of water per hour. Most of the time, however, you can absorb only about half or slightly more than that amount. Repeated intake of one liter (about 34 fluid ounces) per hour will ultimately do you more harm than good.

Photo: Ryan Hill

- continued on page 37

Can you drink too much?

Researchers have noted the dangers of excess hydration during events lasting longer than four hours. Dr. Tim Noakes collected data for ten years from some 10,000 runners participating in the Comrades Marathon. This 52.4-mile (84.33 kilometers) race, held each June (winter) in South Africa, ranks as one of the world's premier ultra marathons. Noakes showed that endurance athletes who consumed 16-24 fluid ounces per hour (approximately 475-710 milliliters) typically replenished as much fluid as is efficiently possible.

He also noted the prevalence of hyponatremia (low blood sodium) during ultra marathons and triathlons in runners who hydrated excessively. This condition can arise when sweat-depleted sodium stores are diluted by excess hypotonic (low electrolyte content) fluid intake. When blood sodium concentration becomes too dilute, you can develop severe cardiac symptoms leading to collapse. Lesser degrees of impairment occur frequently from excessive fluid intake.

You probably don't carry a scale or have regular access to weigh-ins along your training route. So how do you know when it's time to drink? Don't wait until you're down a quart: a good hydration regimen starts before you even get moving.

So how much, how often?

For regular daily (non-exercise) hydration needs, a fluid intake of 0.5-0.6 fluid ounces per pound of body weight should be adequate. Multiply your body weight in pounds by 0.5-0.6 to get the total number of fluid ounces you should aim for. That amount can include coffee, tea, and other liquids, but preferably pure, clean water—and it's in addition to the amount you drink during exercise.

For ultra events performed in hot weather conditions, Noakes suggests a fluid intake of about 17 ounces (500 milliliters) per hour. He believes drinking one liter (33.8 ounces) of hypotonic fluids per hour will likely cause water intoxication and dilutional hyponatremia.

Dr. Ian Rogers makes a similar recommendation. In the article "The Top 10—The biggest mistakes endurance athletes make," he suggests that about 17-25 ounces (500-740 milliliters) per hour will fulfill most athletes' hydration requirements under most conditions. "Like most things in life, balance is the key," says Dr. Rogers; "and the balance is likely to be at a fluid intake not much above 500 milliliters (about 17 ounces) per hour in most situations, unless predicted losses are very substantial." Other research suggests a similar consumption of 4.5-7.0 ounces (approximately 133-207 milliliters) of water every 15 to 20 minutes of exercise.

By hydrating properly, you'll attain peak performance with less fatigue, bloating, and cramping. And you'll feel better before, during, and after your workout or race. **HN**

How much fluid should you drink hourly during exercise?

DON'T DRINK TOO MUCH!

To avoid dilutional hyponatremia, fluid intake should not routinely exceed 25 oz/hr. Exceptions: heavier athletes, those exercising at extreme levels (prolonged periods at a high percentage of VO2Max), and during efforts in severe environmental conditions.

Heavier athletes or hotter temps

Up to 28 oz.
(approx. 830 ml)

Average athlete, average temps

20-25 oz.
(approx. 590-740 ml)

Lighter athletes or cooler temps

16-18 oz.
(approx. 473-532 ml)

GOOD NEWS for men

Get a good night's sleep and protect your prostate at the same time!

BY STEVE BORN

Results from research involving 928 men showed that those with higher melatonin levels were less likely to develop prostate cancer. In the Iceland-based study, which took place from 2002-2009, the subjects' morning urinary samples were examined regularly for 6-sulfatoxymelatonin. (Approximately 85% of the body's melatonin is secreted as 6-sulfatoxymelatonin in the urine, so this is a well-established method for determining total blood levels of melatonin). In addition, study participants provided information about their sleep patterns and other sleep-related factors via routine questionnaires.

Through 2009, a total of 111 of the participants developed prostate cancer, with 24 of them having advanced cancer. The men who reported sleep problems had lower melatonin levels than those who slept well.

Compared to men with lower urine melatonin levels (below the median of all study subjects), those with higher melatonin levels above the median of all study participants had nearly 33% lower

risk for developing prostate cancer and 75% lower risk for advanced disease.

Sarah C. Markt, MPH, doctoral candidate in the Department of Epidemiology at Harvard School of Public Health in Boston, states:

Sleep loss and other factors can influence the amount of melatonin secretion or block it altogether, and health problems associated with low melatonin, disrupted sleep, and/or disruption of the circadian rhythm are broad, including a potential risk factor for cancer. We found that men who had higher levels of melatonin had a 75 percent reduced risk for developing advanced prostate cancer compared with men who had lower levels of melatonin.

An easy way to supply the body with this all-important hormone is via REM Caps. Not only will it help you get to sleep more quickly and stay asleep more thoroughly, but it's also a powerful antioxidant. And for men, the melatonin in REM Caps appears to be another important way to support prostate health. **HN**



Take 1-2 capsules one hour before bedtime.

COMPREHENSIVE PROSTATE PROTECTION PLAN

For full-spectrum support of prostate health, we recommend the following Hammer Nutrition products:

- REM Caps** – An excellent source of melatonin, shown to protect men against prostate cancer. *Dose: 1 capsule at bedtime*
- PSA Caps** – Eight powerful, all-natural nutrients work synergistically to prevent prostate enlargement and maintain healthy prostate-specific antigen (PSA) levels. *Dose: 1 capsule in the morning and 1 capsule at night*
- Boron** – More than 10 years of research shows this trace mineral can reduce the risk of prostate cancer. *Dose: 1 capsule daily*
- EndurOmega** – Rich in EPA and DHA—essential fatty acids in fish known to decrease the risk of prostate cancer. *Dose: 2 softgel capsules, two to three times daily*
- A0 Booster** – Provides all eight components of vitamin E, with an emphasis on gamma tocopherol, shown to significantly protect against prostate cancer. Also contains astaxanthin, which decreases levels of harmful dihydrotestosterone (DHT). *Dose: 1 capsule twice daily*

Get your
TLL'S



“Thank goodness for REM Caps! I have to train in the evenings, which makes it hard to get to sleep afterward. REM Caps really help!”
- Greg C.

REM Caps helps you reap the health and performance benefits of sound, productive sleep . . . guaranteed!

- Improve quality of sleep
- Enhance growth hormone release
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\$17.95 - 3 or more

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Short-duration races

Countdown to more personal bests

BY STEVE BORN

A lot of athletes competing in races lasting two hours or less don't pay much attention to their fueling, believing that since their race isn't "ultra" they can get away with pretty much anything. Guess what? They're flat-out wrong, and they're blowing their opportunity to achieve top performances. The race might be shorter, but that just means there's less time for error. Make no mistake, proper fueling prior to and during short-duration events is absolutely critical.

We've helped thousands of athletes who regularly compete in shorter-length races—Nordic skiers, mountain bikers, cyclocross riders, and many others—consistently experience tremendous success. Our products and fueling guidelines are time-tested and proven, and we guarantee they'll work for you. The countdown to your best season ever—enjoying better race results and setting personal bests more frequently—starts now. Here's what you need to do:

In the months leading up to your race

Make sure that you replenish your body with an adequate supply of carbohydrates and protein within 30 minutes after EVERY workout. The first fuel your body will use when you begin a workout or race is the glycogen stored in your muscles. The more muscle glycogen you have available, the better your performance will be, simple as that. Train consistently and "refill the tank" ASAP after all of your workouts and you'll eventually have a 60-90 minute reservoir of fuel ready to serve you when your race begins. That represents a HUGE advantage over your competition, who either disregarded post-workout refueling or postponed it for too long. Recoverite, Hammer Whey Recovery Bar, and Hammer Vegan Recovery Bars are ideal post-workout fuel options to maximize muscle glycogen stores.

- continued on page 41

In the couple of days prior to the race

Don't consume extra fluids, calories, and salt, thinking that you're getting a head start on your fueling requirements for the race. Consuming more than is necessary—deviating from what got you there in the first place—puts a massively unnecessary burden on your body (what's it supposed to do with all of this excess?) and ends up ruining your race.

The night before the event

Eat until you're satisfied, but no more. True "carbo loading" is what you did in the first 30 minutes after all of your workouts in the weeks leading up to the race. It is NOT, as many athletes mistakenly believe, stuffing yourself with food the night before the race. The enzyme that controls glycogen storage is not active at this time, so any excess food you eat won't be stored in the muscles for use when the race begins. Instead, it's stored as fat, which is just extra (dead) weight you have to carry during the race.

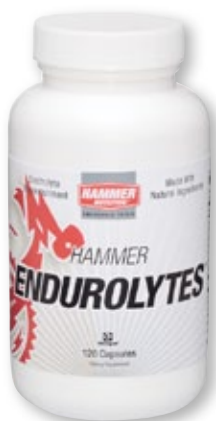
Race morning

Get your pre-race meal calories and timing correct. You've worked long and hard to maximize your muscle glycogen stores, putting in a lot of training and being super consistent with immediate post-workout refueling. Muscle-stored glycogen is going to be your primary fuel for the vast majority of the race, so you'll want your body to use it as efficiently as possible. Here's how to ensure this happens:

- If you choose to eat a pre-race meal, 200-400 calories are all that's needed, and it should come primarily from complex carbohydrates and a small amount of protein.
- Finish your pre-race meal three hours prior to the start. This allows insulin and all of its hormonal influences to return to baseline levels. This is exactly what you want because it puts your body in the right physiological state to use its finite stores of muscle glycogen most efficiently. If you eat sooner than three hours prior, your body will accelerate the rate at which it burns muscle glycogen, and that will hurt your performance.

10-15 minutes before the start

Take a dose of Endurolytes, 1 capsule for every 50-60 pounds of body weight. Providing your body with these important minerals before the gun goes off will save you time and energy. In races 60 minutes and shorter, this dose will fulfill your electrolyte requirements for the entire race. For longer races, you've got your first-hour electrolyte needs covered, and instead of having to reach for a bottle of Endurolytes Fizz or a capsule dispenser of Endurolytes, you'll be able to concentrate on getting into a nice, smooth rhythm.



During the race

If your race is 60 minutes or less, you don't need any calories at all; a maximum of 20-28 ounces of water will be completely sufficient. For races in the two-hour range, you'll only need a small donation of 100-200 calories. HEED is the ideal fuel choice, fulfilling fluid and electrolyte requirements, and providing adequate amounts of easily digested calories to augment muscle glycogen stores.

Summary

While it's a mystery that more athletes doing short-duration events don't make the effort to fuel properly, getting your fueling dialed in isn't a mystery at all. In fact, it's easy! Apply these simple tips and we guarantee you'll enjoy higher-quality workouts and better race results. This season, personal bests will no longer be the exception, they'll be the rule!

For more detailed information on these and other aspects of fueling, download your free copy of *The Endurance Athlete's GUIDE to SUCCESS* from the Hammer Nutrition website. **HN**

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HAMMER NUTRITION

Globus AND Compex – More EMS options!



BY LEVI HOCH, Hammer Nutrition EMS expert

EMS technology is incredibly easy to use. In fact, the most difficult piece of the EMS puzzle is determining which unit is right for you. At Hammer Nutrition, we offer a variety of options to suit your EMS needs, AND we provide hands-on assistance for helping you select the right brand and unit.

Globus and Compex are two of the world's leading EMS brands, and it's important to note first of all that both are excellent choices; you won't go wrong with either brand. Both use essentially the same technology with the same power output. The major differences between models—and the primary incentive to choose a higher end model—are the number of programs included.

Adhesive electrode pad connections

The hardware is similar, except Globus uses pin connection pads and Compex uses snap connection pads. Pin connection pads are less expensive when it comes time to replace them, but snap connection pads are easier to position in hard-to-reach areas like your back, for example. Snap connection pads can be positioned on your back with one hand by using a mirror; the lead wires can be connected once the pads are in place. Pin connections are too difficult to connect with one hand, so you'll need to connect them first and then position them without sticking the pads to the wires, though you get used to the technique and it's not that hard after several uses.

Backlit screens

In addition, some models have backlit screens and some do not. All Compex models have backlit screens, which is quite convenient in dimly lit environments. This comes in handy if you're running a recovery program while watching TV, or if you are a passenger in a vehicle traveling at night after a training session or race. Only the top-end Globus (Sport Plus) has a backlit screen.

Multi-user feature

Globus models have a Multi-User feature, so you can share the device with other users while keeping each user's setting and preferences unchanged.

Two programs simultaneously

Globus devices have a "2+2" mode that allows you to run two different programs at one time, with two channels dedicated to each program. An example would be running the Stretch Relax program (Sport Plus) on your lower back after a long bike ride, while simultaneously running Massage on your shoulders or triceps with the other two channels.

Split lead cable option

Split lead cables are available for the Globus units, which allow you to stimulate more muscles at one time and use up to twice as many pads as you can with standard cables on either brand.

Run-time parameters adjustment

The Globus Premium Sport Plus has a runtime parameters adjustment. During a training session, the (fn) button displays and allows adjustment of training parameters to individual needs. It displays a screen showing duration (in minutes), stimulation frequency (in Hz), phase-width duration (in μ s, i.e., microseconds) or chronaxie being used.

What's included?

Both brands are supported equally with a 3-year warranty, our knowledge base, consultations, free shipping, and 90-day money back guarantee. All models include adhesive electrode pads in the box from the manufacturer, plus Hammer Nutrition includes a FREE bonus with most units of two additional sets of pads. (The Compex Edge includes only the pads in the box from the manufacturer. The Globus Premium Sport Plus comes with four additional free sets.)

I highly recommend calling and talking with me or another Hammer Nutrition EMS advisor to help you determine which model best suits your needs. It truly depends on what your athletic goals are and what you wish to accomplish with EMS—both now and down the road in your athletic pursuits. I'd be happy to make a personal recommendation!

Each model of both brands fills a unique niche, and any one of them will greatly boost your athletic performance and recovery time. **HN**

Learn from the BEST so that you can be your BEST



Levi Hoch, EMS expert

EMS consultations with our experts!

The Primer - \$49.95 (FREE with purchase!)

30-minute consultation

Discover the benefits of EMS

To maximize the benefits and value of this powerful device, you'll need to become familiar with the basic functions of your EMS. That includes charging the device, and proper cable and pad connection. In addition, you will learn:

- Navigation through the various programs stored within your unit
- Placement of the electrodes over the muscles you plan to stimulate
- Proper starting level of stimulation for the programs you use daily

The Competitor - \$79.95

60-minute consultation

Integrate EMS into your daily training regimen

This extended consultation includes everything covered in the 30-minute consultation, plus you'll learn how to:

- Use all of the programs on your device
- Time weekly program use to benefit your sport
- Schedule your training utilizing an array of Compex programs to reach your peak at the right time
- Stack EMS workouts on top of conventional workouts to extend training efforts

The Expert - \$60.00*

60-minute consultation *Per hour

Become an advanced EMS user

After completing both the 30-minute and 60-minute initial consultations, you can purchase additional consultation time. You'll quickly become an advanced user and get the most out of your Compex device! With our advanced consultation, you'll learn how to:

- Tailor your Compex use to your unique needs
- Evaluate your progress and adapt your program
- Understand how the science and technology of EMS make the Compex a very powerful tool

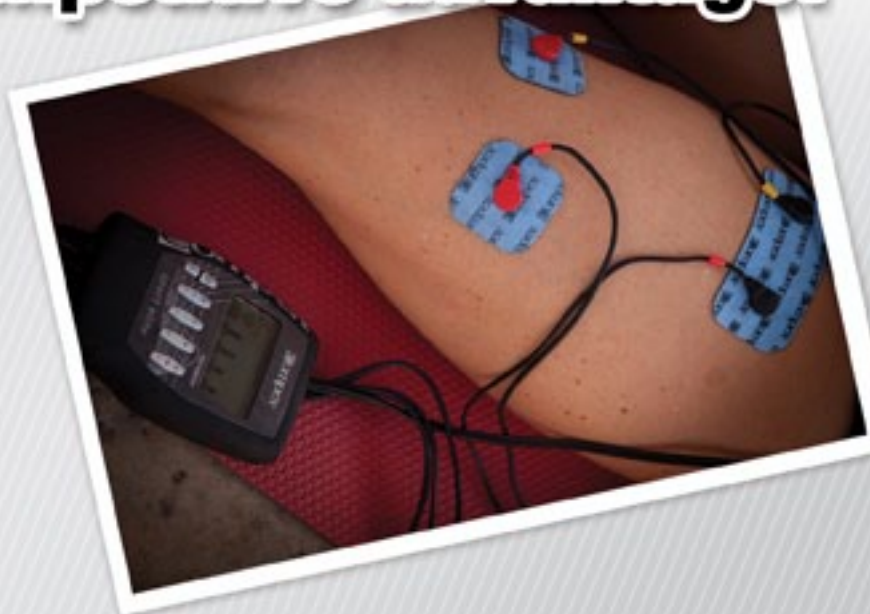
The ultimate competitive advantage!

"I ran a half marathon at 5:58 pace and then immediately used EMS on my quads, calves, and glutes afterward.

The next day my legs felt fresh. EMS is amazing!"

- Chris L.

"I trained pretty hard every day last week and used EMS after each ride. I still felt strong on Saturday!" - Andy B.



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\$750.00 - Premium Sport
\$850.00 - Premium Sport PLUS

COMPEX - MSRP
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- Dramatically increase muscular endurance
- Optimize muscle recovery (minutes instead of days!)

For more than 26 years, Hammer Nutrition has been the leader in educating athletes to fuel properly, and since 2006 has been the leader in EMS education in the U.S.

EMS technology is universally accepted and widely used in Europe for physical preparation, muscular recovery, injury prevention, rehabilitation, pain relief, muscular reinforcement, physical beauty, and more.

Whether you are a professional athlete, weekend warrior, or somewhere in between, EMS devices provide a potent tool to enable you to achieve, and even exceed, your highest athletic goals.



More benefits!

- Enjoy a “runner’s high” endorphin flood anytime
- Increase muscle power and strength, size if desired
- Accelerate rehabilitation and injury recovery
- Avoid loss of muscle fitness during periods of inactivity
- Get a massage anytime you want



David Tatum is all smiles at the Folsom Lake International Olympic Triathlon
Photo : Jennifer Tatum

Real Athletes, Real Results!

“Just when I was getting back into working out again, I rolled the same ankle and was back at square one for weeks. Needless to say, I have been getting my money’s worth from my Compex unit. I am finally back to about 90% recovered and am starting to work out on a regular basis!”

- David Tatum, Hammer Nutrition-sponsored athlete

Hammer Nutrition now provides a complete selection of the leading brands of EMS units!

Choose the unit you need to reach your athletic goals!



Globus Premium Fitness
PRICE
\$499.00

PROGRAMS

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- Warmup
- Active Recovery
- Endurance 1 & 2
- Massage
- Plus four more!



Compex Performance U.S.
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PROGRAMS

- Pre-Warmup
- Resistance
- Active Recovery
- Strength
- Endurance



Globus Premium Sport
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PROGRAMS

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- Warmup
- Resistance 1-3
- Active Recovery
- Sprint Prep
- Endurance Prep
- Endurance 1 & 2
- Max Strength 1-3
- Explosive Strength 1-3
- Massage
- Plus four more!



Compex Sport Elite
PRICE
\$849.00

PROGRAMS

- Pre-Warmup
- Resistance
- Active Recovery
- Strength
- Endurance
- Potentiation
- Explosive Strength
- Recovery Plus
- Massage



Globus Premium Sport Plus
PRICE
\$850.00

In addition to what the Globus Premium Sport model offers, this model includes two Ultra Endurance programs as well as a Stretch Relax program.



Compex Edge
PRICE
\$399.99

This model is an entry-level option offering programs for Resistance, Recovery, and Endurance.

All Compex models include a muscle stimulator, battery charger, user's manual, instructional DVD, electrode placement guidebook, drawstring bag, electrode lead wires (4X), and gel electrodes.

All Globus models include a muscle stimulator, carrying case, four lead cables, battery charger, four reusable adhesive electrode pads 2" x 2," four reusable adhesive electrode pads 2" x 3.5," and a user's manual.

Both Globus and Compex are cleared by the FDA.



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- 3-year warranty
- Ongoing tech support

**Compex Edge model excluded.*



Ashley Wojtowicz, an Ironman finisher and accomplished age group athlete, models the 2014 women's tri kit.
Photo : Trade Winds Photography/ Tracy Tegarden

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New women's clothing for 2014



NEW!

53x11 Coffee Bibs

WOMEN'S BIBS: In pursuit of the most comfortable ride

Cycling bibs aren't just for men anymore! You'll understand what all the hype is about after only one training ride. Hammer Nutrition women's cycling bibs are made in the USA by Voler, with a women-specific chamois, slightly shorter inseam, and a low-cut T-back bib top to provide comfortable support.

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MSRP
\$66.95



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MSRP
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- Rebuild muscle tissue
- Restore muscle glycogen

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32 Servings	\$56.95

Flavors: Chocolate, Citrus, Strawberry, Vanilla



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- Made with real fruit
- Versatile & economical

SIZE	PRICE
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12 or more	\$1.25
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3 or more	\$17.95

Flavors: Apple-Cinnamon, Banana, Chocolate, Espresso, Montana Huckleberry, Orange, Peanut Butter, Raspberry, Tropical, Unflavored (26 servings only), Vanilla



The #1 sports drink

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- Buffer lactic acid
- Help prevent cramps

SIZE	PRICE
Single Serving	\$1.95
6 or more	\$1.80
16 Servings	\$17.95
32 Servings	\$29.95
80 Servings	\$54.95

Flavors: Lemon-Lime, Mandarin Orange, Melon, Strawberry, Unflavored (32 servings only)



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Product	Flavor	Size	Price	Qty.	Amount

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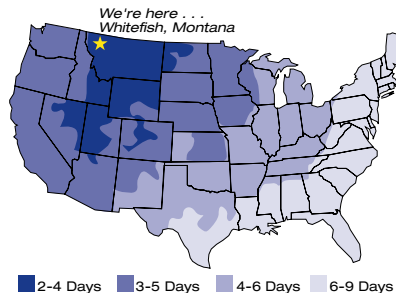
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\$100+	FREE!

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City, State, Zip : _____

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Method of Payment (circle one)

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Endurance Fuels



RECOVERITE

Single Serving \$3.50 6 @ \$2.95
 16 Servings \$32.95
 32 Servings \$56.95

Recoverite Flavors: Chocolate, Citrus, Strawberry, Vanilla



HAMMER GEL

Single Serving \$1.40 12 @ \$1.25
 26 Servings \$19.95 3 @ \$17.95
 Hammer Flask \$2.39

Hammer Gel Flavors: Apple-Cinnamon, Banana, Chocolate, Espresso, Montana Huckleberry, Orange, Peanut Butter, Raspberry, Tropical, Unflavored (26 servings only), Vanilla



HEED

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 16 Servings \$17.95
 32 Servings \$29.95
 80 Servings \$54.95

HEED Flavors: Lemon-Lime, Mandarin Orange, Melon, Strawberry, Unflavored (32 servings only)



HAMMER WHEY

Single Serving \$3.50 6 @ \$2.95
 24 Servings \$39.95 3 @ \$37.95

Hammer Whey Flavors: Chai (24 servings only), Chocolate, Strawberry, Unflavored (24 servings only), Vanilla



HAMMER BAR

Hammer Bar \$2.50 12 @ \$2.40

Hammer Bar Flavors: Almond-Raisin, Cashew Coconut, Chocolate Chip, Chocolate Chip, Cranberry, Oatmeal Apple



Sam

Questions?
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Endurolytes - 4 Capsule Sample	\$1.05	
Endurolytes - 120 Capsules	\$19.95	3 @ \$17.95
Endurolytes Powder - 150 Servings	\$19.95	3 @ \$17.95
Endurolytes Extreme - 60 Capsules	\$14.95	
Endurolytes Extreme - 120 Capsules	\$24.95	
Endurolytes Fizz - 13 Tablet Tube	\$4.95	3 @ \$4.75
Endurolytes Fizz - 25 Wrapped Singles	\$12.95	4 @ \$10.00

Fizz Flavors: Grape, Grapefruit, Lemon-Lime, Mango

Hammer Whey Recovery Bar \$3.50 12 @ \$3.25

Hammer Whey Recovery Bar Flavor: Peanut Butter-Chocolate

Hammer Vegan Recovery Bar \$2.95 12 @ \$2.75

Hammer Vegan Recovery Bar Flavors: Almond Cacao, Chocolate Peanut

Hammer Soy Protein - Single Serving \$2.95

Hammer Soy Protein - 24 Servings \$31.95 3 @ \$29.95

Hammer Soy Flavor: Vanilla

Hammer Vegan Protein - 26 Servings \$44.95 3 @ \$42.95

Hammer Vegan Protein Flavors: Chocolate, Strawberry, Vanilla

Perpetuem - Single Serving \$3.25 6 @ \$2.95

Perpetuem - 16 Servings \$29.95

Perpetuem - 32 Servings \$49.95

Perpetuem Solids - 6 Tablet Tube \$3.95 3 @ \$3.50

Perpetuem Solids - 90 Tablets \$37.95

Perpetuem Flavors: Caffé Latte, Orange-Vanilla, Strawberry-Vanilla, Unflavored (16 servings only)

Sustained Energy - Single Serving \$3.25 6 @ \$2.95

Sustained Energy - 15 Servings \$32.95

Sustained Energy - 30 Servings \$54.95 3 @ \$51.50

Sustained Energy Flavor: Unflavored

When ordering multiple single-serving sizes of a product, you may mix and match flavors.



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Endurance Supplements



RACE CAPS SUPREME

90 Capsules \$48.95 3 @ \$44.95



PREMIUM INSURANCE CAPS

120 Capsules \$19.95
210 Capsules \$34.95



TISSUE REJUVENATOR

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120 Capsules \$29.95 3 @ \$27.50



MITO CAPS

90 Capsules \$24.95



PHYTOLEAN

120 Capsules \$34.95 3 @ \$29.95



Anti-Fatigue Caps - 90 Capsules	\$19.95	3 @ \$17.50
AO Booster - 60 Capsules	\$33.95	3 @ \$29.95
Appestat - 90 Capsules	\$27.95	
Boron - 90 Capsules	\$14.95	
Chromemate - 100 Capsules	\$13.95	
Clear Day - 60 Capsules	\$22.95	3 @ \$19.95
Digest Caps - 60 Capsules	\$16.95	
Endurance Amino - 120 Capsules	\$29.95	
Endurance Amino - 240 Capsules	\$54.95	
EndurOmega - 60 Softgels	\$12.95	

EndurOmega - 180 Softgels	\$29.95	
Energy Surge (ATP 100) - 30 Tablets	\$17.95	3 @ \$15.95
Nasol - 30mL / 200 Sprays	\$24.95	
Phytomax - 90 Capsules	\$22.95	3 @ \$19.95
PSA Caps - 60 Capsules	\$24.95	3 @ \$22.95
Race Day Boost - 64 Capsules	\$19.95	
Race Day Boost - 32 Servings	\$22.95	
REM Caps - 60 Capsules	\$19.95	3 @ \$17.95
Super Antioxidant - 60 Capsules	\$33.95	3 @ \$29.95
Xobaline - 30 Tablets	\$9.95	3 @ \$7.95



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Kits MADE IN USA

Complete Powder Sampler Kit **\$36.95** Save \$11.30
 1 packet of each flavor of Recoverite, Sustained Energy, Perpetuem (excluding Unflavored), HEED (excluding Unflavored), Whey (excluding Unflavored and Chai), Soy.

Junior Powder Sampler Kit **\$19.95** Save \$4.45
 1 packet each of Vanilla and Strawberry Recoverite, 1 packet each of Strawberry and Caffè Latte Perpetuem, 1 packet each of Lemon-Lime and Mandarin Orange HEED, 1 packet each of Vanilla and Chocolate Whey.

Hammer Gel Sampler Kit **\$9.95** Save \$4.05
 1 pouch of each flavor, 10 total.

New Product Sampler Kit **\$9.95** Save \$4.35
 1 pouch of Peanut Butter Hammer Gel, 1 packet of Vanilla Recoverite, 1 packet of Strawberry Whey, 1 Chocolate Peanut Vegan Recovery Bar, 1 Almond Cacao Vegan Recovery Bar.

Long Fueling Starter Kit **\$84.95** Save \$22.44
 1 jug of Raspberry Hammer Gel, 8 pouches of Hammer Gel, 3 packets of Sustained Energy, 6 packets of Perpetuem, 4 packets of Recoverite, 1 bottle of Endurolytes, 1 tube of Endurolytes Fizz, 1 Capsule Dispenser, 1 Flask, 1 Water Bottle, 1 Product Usage Manual.

Short Fueling Starter Kit **\$69.95** Save \$25.19
 1 jug of Raspberry Hammer Gel, 9 pouches of Hammer Gel, 8 packets of HEED, 4 packets of Recoverite, 1 bottle of Endurolytes, 1 tube of Endurolytes Fizz, 1 Capsule Dispenser, 1 Flask, 1 Water Bottle, 1 Product Usage Manual.

Body Care MADE IN USA

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Cool Feet 2.7 oz.	\$15.95	Pelle Eccellente 2 oz.	\$19.95
Hammer Balm 0.3 oz.	\$4.95	Pelle Eccellente 4 oz.	\$32.95
Hammer Balm 1.5 oz.	\$21.95	Seat Saver 0.3 oz.	\$2.95
Hammer Balm 4.0 oz.	\$34.95	Seat Saver 2.0 oz.	\$12.95
Hammer Lips 0.15 oz.	\$2.95	Seat Saver 4.0 oz.	\$19.95
Hammer Lips 0.15 oz.	6 @ \$2.75	Soni-Pure 2.0 oz.	\$9.95

Hammer Lips Flavors: Wildberry, Wintermint

53x11 Coffee

The Big Ring 2 oz.	\$2.95
The Big Ring 12 oz.	\$13.95
The Chain Breaker 12 oz.	\$13.95
The Down Shift 12 oz.	\$13.95
The Early Break 12 oz.	\$13.95

All 53x11 Coffees are available in ground or whole bean!



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 1 Premium Insurance Caps (210), 1 Race Caps Supreme, 1 Mito Caps.

3-Month Daily Essentials Kit **\$269.95** Save \$56.60
 3 Premium Insurance Caps (210), 3 Race Caps Supreme, 3 Mito Caps.

Race Performance Kit **\$49.95** Save \$7.90
 1 Race Day Boost (capsules), 1 Energy Surge, 1 Anti-Fatigue Caps.

Hammer Bar Kit **\$7.95** Save \$4.55
 1 of each flavor of Hammer Bar (Almond Raisin, Cashew Coconut Chocolate Chip, Chocolate Chip, Cranberry, Oatmeal Apple).

Hammer Recovery Bar Kit **\$5.95** Save \$3.45
 1 Almond Cacao Vegan Recovery Bar, 1 Chocolate Peanut Vegan Recovery Bar, 1 Chewy Peanut Butter-Chocolate Whey Recovery Bar.

Hammer Bar Sampler Kit **\$13.95** Save \$7.95
 1 of each flavor of Hammer Bar, 1 of each flavor of Vegan Recovery Bar, 1 Whey Recovery Bar, 8 bars total.

Note: Kits containing multiples of packets and/or pouches will include various flavors of that product. Please call or see website for details.

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Globus Premium Sport Plus	\$850.00
Compex Sport Elite	\$849.00
Compex Performance U.S.	\$579.99
Compex Edge	\$399.99

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Battery Pack	\$49.99
Snap Cables (4)	\$59.99
Snap Electrode Pads (4X - 2" x 2")	\$14.95 6 @ \$13.50 12 @ \$12.50
Snap Electrode Pads (2X - 2" x 4")	\$14.95 6 @ \$13.50 12 @ \$12.50
Quick Start Guide for Sport Elite	\$14.99
Quick Start Guide for Performance U.S.	\$14.99
Multimedia CD for Sport Elite	\$14.99
Multimedia CD for Performance U.S.	\$14.99
Belt Clip	\$9.99

SPORT CLASSIC & FITNESS CLASSIC ACCESSORIES

Charger	\$19.99
Battery Pack	\$39.99
Pin Cables (4)	\$39.99
Snap-On Conversion Cables (4)	\$44.99
Pin Electrode Pads (4X - 2" x 2")	\$9.99 6 @ \$8.95 12 @ \$7.95
Pin Electrode Pads (2X - 2" x 4")	\$9.99 6 @ \$8.95 12 @ \$7.95

GENERAL ACCESSORIES

Electrode Placement Guide	\$9.99
Spectra Conductivity Gel (8.5 oz.)	\$7.95
Spectra Conductivity Gel (2 oz.)	\$4.95
Drawstring Bag	\$19.99
30-Minute Consultation	\$49.95
60-Minute Consultation	\$79.95
Advanced Consultation	\$60.00/hour

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Call our 800# to have one of our friendly Client Advisors help you select the correct Hammer Nutrition fuels and supplements to meet your needs and goals. We'll then ship your products every 90 days (free ground shipping!) without you ever having to pick up the phone again.

An advisor will also call or email you approximately ten days before your scheduled ship date to see if you'd like to add anything to your order to take further advantage of free shipping and discounted pricing.

Call a Client Advisor to sign up for the Hammer VIP Program and start saving today!

What do you get?

- 1 - A special team of advisors assigned to your account and special access to our experts.
- 2 - Automatic resupply of products every 90 days.
- 3 - On your first VIP order, we'll send you a clothing kit for FREE. Ask your advisor for details.
- 4 - On your second VIP order, you'll receive a FREE Hammer tee shirt.
- 5 - FREE goodies on every future shipment as well (our choice).
- 6 - Discounted pricing, exclusive offers, and much, much more!
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Maximizing your potential: HEMOGLOBIN

BY DR. GARRET ROCK



The author completes his aggressive May race schedule with a solid performance at The Original Growler mountain bike race. Photo : Matt Burt Photo

Marginal gains. The term “marginal gains” is being heard more and more since Mat Steinmetz, a well-known science-based triathlon coach, introduced it to the world of triathlon. The concept of marginal gains is simple. What are the little (marginal) things you can improve that cumulatively can result in big overall improvements?

My job as a performance adviser to many of the world’s top endurance athletes is to identify where marginal gains can be made physiologically. One focus is oxygen availability, and a key player in that is hemoglobin, a protein in red blood cells. Hemoglobin is a micro-sized protein that has macro-sized effects on performance. And what you eat on a daily basis can affect hemoglobin levels.

Put simply, endurance exercise is largely characterized by a simple requirement: sustaining repeated muscle contraction. This criterion is fulfilled via two basic functions—the ability to consume enough oxygen and adequate fueling. Regarding fueling, if you are reading this, hopefully you have taken advantage of the many resources Hammer Nutrition offers to nail your fueling. If you haven’t, everything you need to know is available to you through Hammer Nutrition. Regarding oxygen, the process is a bit more complex.

Muscles require oxygen to convert sugars into energy. If oxygen isn’t replenished, muscles reach complete exhaustion in just a few minutes. Endurance athletes require a constant delivery of oxygen to muscles, and it is hemoglobin that carries the oxygen.

Hemoglobin picks up oxygen in the lungs and delivers it to the tissues of the body, most notably your muscles. Hemoglobin levels have a direct impact on endurance exercise performance. Lower levels of

hemoglobin cause decreased efficiency of oxygen delivery to the muscles. This results in more rapid muscle fatigue, decreased VO₂max, and higher heart rates. If you have ever exercised at a high altitude, you know what it feels like to have less oxygen delivered to your muscles.

Certain micronutrients are essential in the formation of hemoglobin. Endurance athletes have a higher turnover rate of red blood cells and hemoglobin than the average person does, so their dietary requirements for these micronutrients are higher. Failing to replenish them can result in a decrease in hemoglobin production, and thus performance.

Iron, folate, and vitamin B12 are directly involved in hemoglobin formation. Other micronutrients, such as vitamin B6, vitamin C, copper, and vitamin A, are indirectly involved in hemoglobin formation. Although you should strive to replenish micronutrients through your diet, many athletes require supplementation at some point in the season.

To put this in an easily understood context, let me share a real-life case study:

A pro triathlete has transitioned over the last nine months from the ITU circuit to the Ironman 70.3 and Ironman distances. She has been tolerating the training well and does not have complaints, but wants routine monitoring. Being new to the higher volume she does not know what to expect.

Her blood work revealed low-normal hemoglobin (12.0), hematocrit (36.2), small platelets (MPV 6.5), and borderline large red blood cells (MCV 99.7). These findings are consistent with her prior test results during training. Test results for micronutrients revealed a mild

functional folate deficiency (within the low limits of the “normal range,” but given the high turnover rate of folate in a female endurance athlete, her levels indicated a deficiency).

Intervention included significantly increasing dietary intake of folate and two weeks of supplementation. Follow up tests were performed each week for the following four weeks.

Follow-up #1: Folate 16.2, Hemoglobin 12.4, Hematocrit 37.7
Follow-up #2: Folate 18.8, Hemoglobin 12.7, Hematocrit 38.2
Follow-up #3: Folate >20.0, Hemoglobin 13.1, Hematocrit 40.4
Follow-up #4: Folate >20.0, Hemoglobin 14.2, Hematocrit 44.8 (following 5 days of taper)

There is little doubt that the 15% increase in hemoglobin achieved in the case study above will result in improved performance, and this particular athlete’s performance last year confirms this. This big change was the result of making an adequate amount of micronutrients available to keep pace with the high turnover of red blood cells, and thus hemoglobin.

As an endurance athlete, your dietary requirements for certain micronutrients are increased.

For optimal hemoglobin levels, iron, folate, vitamins B6 and B12, vitamin C, copper, and vitamin A are critical for endurance athletes.

Be sure to eat ample amounts of foods

- continued on page 53

- continued from page 52

high in these micronutrients. Doing so will not only aid in the delivery of oxygen to your muscles, but also help you perform at your highest potential.

The following table lists foods high in each of these essential micronutrients:

Iron

Red meat
Egg yolks
Dark, leafy greens
Dried fruit
Beans and lentils
Tuna

Vitamin B6

Bran
Pistachios
Garlic
Fish
Sunflower seeds
Sesame seeds
Hazelnuts

Folate (Vitamin B9)

Beans and lentils
Dark, leafy greens
Asparagus
Broccoli
Romaine lettuce
Avocado
Oranges
Tropical fruits

Copper

Sunflower seeds
Sesame seeds
Nuts
Cocoa powder
Sundried tomatoes
Calamari
Lobster
Dried herbs

Vitamin B12

Fish
Red meat
Cheese
Eggs
Yogurt
Milk
Fortified vegan products

Vitamin C

Peppers (chili and bell)
Dark, leafy greens
Broccoli
Cauliflower
Fruits
Thyme
Parsley
Pine teas

Vitamin A

Carrots
Sweet potatoes
Dark, leafy greens
Butternut squash
Cantaloupe
Dried apricots

Bio:

Dr. Garret Rock specializes in Exercise Physiology, Biomechanics, Sports Chiropractic, and Sports Nutrition at South Pointe Clinics in Lafayette, CO. He is also the Medical Director for 51 Speedshop (www.fiftyonespeedshop.com), and serves as a performance adviser to many of the world's top endurance athletes, including over 70 professional triathletes. An avid triathlete and mountain bike racer, he races for Hammer Nutrition (www.hammernutrition.com) and Fezzari Bikes (www.fezzari.com). He authors a popular triathlon blog at scienceoftriathlon.blogspot.com. **HN**

Iron-clad info about iron supplementation

Dr. Garret Rock mentions the mineral iron numerous times in his informative article "Maximizing your potential: hemoglobin." But based on our communications with clients, many people are uncertain about their need for iron. Two questions we receive frequently:

- Why don't Premium Insurance Caps contain iron?
- Do I need to take iron supplements?

Here's the lowdown:

As Dr. Rock explains in his article, iron is an extremely important nutrient, especially for endurance athletes. An iron deficiency can negatively affect oxygen transport and impair energy production. Premium Insurance Caps do not contain iron, however, because most Americans already consume sufficient amounts of iron from their diet, and taking in too much iron can cause serious health problems.

The Optimum Daily Intake (ODI) for iron is 15-25 mg for men and 20-30 mg for women; and that's easy to reach from a balanced diet alone.

If an athlete consumes excessive amounts of iron above Recommended Daily Allowance (RDA) levels—8-27 mg daily, depending on gender and age—he or she could experience premature fatigue or, potentially, more serious health problems. According to one source, "Most people have too much iron in their body. Excess iron generates massive free radical reactions. Human epidemiological studies show that those with high iron levels are far more likely to contract cancer and heart disease. A growing body of evidence implicates iron in neurological disorders such as Parkinson's disease."

Regarding iron supplements, Dr. Rock states, "I only advise iron supplementation under very specific circumstances (rapid recovery needed, absorption issues unresolved by food pairing, and underlying unidentified issues) and only under close blood monitoring so as to not exceed the necessary dose to get an athlete/patient where they need to be. At this time, it is dietary management."

If you aren't sure about your iron status, a Complete Blood Count (CBC)/Chemistry Profile blood test will determine whether supplementation is necessary.

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- Enhance muscle repair
- Support cardiovascular system



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Gravel grindin' after an epic winter

BY BRAD LAMSON, HAMMER NUTRITION STAFFER

Snowmageddon . . . that's what my coworker Phil predicted for this past winter, and it turned out he was right. I should have put more faith into his prophecy, but instead I decided to pick this spring as the one year I would commit to Trans Iowa, pedaling my bike 333 gravel-grinding, self-supported miles at the end of April.

I assumed, erroneously, that Northwest Montana would have a mild and below-average precipitation year, and that I would have great opportunities to put in early season road miles to get ready for Guitar Ted's Trans Iowa V10. I figured the ride's tenth anniversary would be a good time to join the club and find out what the excitement surrounding the Midwest gravel grinding scene was all about.

The weather had other plans for me, however. Throughout Phil's "snowmageddon," I skied an abundance of powder snow, but as of early March I still have only been able to roll on the pavement once. With the call of such epic winter skiing, I haven't spent time on the stationary bike either—it really isn't my idea of fun.

Did I mention that the ride has no aid stations or support crew, and you have to carry everything you will need to finish the ride? I'm hoping that the muscles and fitness attained through skiing translates to strength and endurance on the bike. At least I have a solid Hammer Nutrition fueling plan in place—I'll be following it to a T. I'll be stocking up on plenty of Hammer products prior to the ride!

The original Trans Iowa crossed the state from west to east. The current

editions start and finish from a designated point, usually a different town each year, and cover the distance in a loop. What makes Trans Iowa so unique is that it uses the state's gravel roads to make up the course, thus the term "gravel grinder." As if 333 miles of gravel roads were not challenging enough, Ted has thrown in ten sections of "B" roads this year. A B road is basically an unmaintained gravel/dirt road that may be impassable. I've been told you'll have to push your bike some considerable distances if these are not rideable.

When you show up for day one of Trans Iowa, you still do not know the actual route. Apparently you receive a "queue sheet" at the prerace meeting directing you for the first 50 miles or so to the first checkpoint, where you will receive another queue sheet that will take you the next 100 miles and so on. These will include turn-by-turn directions based on mileage and road names. It is really going to pay off to pay attention!

Whatever the outcome, I've bought my plane ticket and made travel reservations to get to the start line. As I write this, it is snowing again. Looks like I'll have to go powder skiing with Phil again (aka a training session).

Cheers and happy gravel roads,
Brad

For more information, I suggest visiting www.transiowa.blogspot.com.

*In the next issue of Endurance News, look for my post-ride report including set up, bike, clothing, accessories, and fueling strategy. **HN***

Top: training partner Phil Grove puts in a hard day in the "gym." Photo : Brad Lamson.
Above: Riders grind away at the miles during a previous edition of Trans Iowa. Photo : Courtesy of Guitar Ted Productions

Phytolean Nutrition Plan *feedback*

Dr. Bill's article in the last issue of Endurance News generated lots of client comments and questions. Here's his informative response to one client's question about adopting his Phytolean dietary protocol.

Q: I wanted to start your Phytolean Nutrition Plan to shed 25 pounds. I am 5'7" and currently weigh 200 pounds I run four times a week—2 x 4-miles, 1 x 3-miles, and 1 x 5-miles. If I start the Phytolean Nutrition Plan without eating meat, will this be sufficient for these activities?

A: The Phytolean Nutrition Plan has been tested in both exercise and sedentary routines for a 30-42 day period, resulting in loss of 17-30 pounds of body weight. The ingredients in Phytolean, taken before lunch and dinner, block complex carbohydrates and their effect of elevating insulin and blood sugar. By eating the grains, fruits, and vegetables listed in this plan, you should lose 2-5 pounds each week.

Please keep in mind that Phytolean does not block simple sugars or fat calories; therefore, you should limit foods high in sugar or fats. Later in the evening, you might experience slight hunger, a sign that your body is metabolizing fat into the energy cycle.

If you follow this plan for 30 days, you will lose weight; however, the exact amount is difficult to predict, since metabolic rates are highly individual. All forms of meat have growth factors that will prevent weight loss. The plant-based food groups in the Phytolean Nutrition Plan are protein-rich and more than sufficient for good health. **HN**



Speak up, we're listening!

Make your opinion heard on the Hammer Nutrition website

With so many online resources, it's hard to know which sites you can trust. That's why consumers today rely so heavily on third-party consumer review ratings for insight on businesses and products. These are the "star ratings" you see next to products when you Google them. We applaud this trend and now have this service available for you to review your favorite Hammer Nutrition products.

We've enlisted the services of Bazaarvoice, the leader in the field of online reviews, to make it even easier for you to be heard. You can submit a product review and feedback via our website anytime. Simply go to www.hammernutrition.com; on every product page you'll find a link for you to submit your product review and comments. After placing an order, you may

also receive an email from us asking you to review a product.

You can also review Hammer Nutrition on Google+. To do this, visit <https://plus.google.com/> and search for "Hammer Nutrition." Under the About tab on our Google+ page, you will be able to post your review. (You must have a Google account to post a review.)

As you head into spring training season, check out the Hammer website to see what other athletes recommend as their favorite Hammer Nutrition products. Your fellow Hammer athletes can also learn from your successes in fueling with Hammer. So please submit a review and send us your feedback today . . . speak up, we're listening! **HN**

Protect your brain with AO Booster

BY STEVE BORN

Members of the vitamin E “family” help prevent cognitive decline and reduce the risk of developing Alzheimer’s disease, according to a recent study in the journal *Experimental Gerontology*. Researchers from Finland and Italy evaluated 140 participants in the Cardiovascular Risk Factors, Aging and Dementia (CAIDE) study. Blood samples of test subjects were analyzed for all four tocopherols, all four tocotrienols, and total cholesterol (the latter because it may affect vitamin E levels in the blood).

The results: Higher serum levels of gamma tocopherol, beta tocotrienol, and total tocotrienols were each associated with a significantly lower risk of cognitive impairment. Additionally, the subjects whose gamma tocopherol-to-cholesterol ratio was in the middle third of all the subjects, had a nearly 75% lower risk of cognitive impairment as compared to subjects in the lower third. Head researcher Dr. Francesca Mangialasche stated, “Higher levels of gamma tocopherol, beta tocotrienol, and total tocotrienols seemed to protect against cognitive impairment, even after different adjustments for cholesterol.”

AO Booster is Hammer Nutrition’s full-spectrum vitamin E supplement, containing all four tocopherols and tocotrienols—alpha, beta, delta, and gamma—with especially high amounts of the gamma tocopherol fraction (each capsule contains 150 mg of Gamma E Tocopherol Complex, 40% of which is gamma tocopherol). Based on the results of this study, protection against cognitive impairment can be added to the already established benefits of full-spectrum vitamin E supplementation. Additionally, AO Booster contains two other fat-soluble antioxidants that provide a wide range of recovery and general health benefits – lutein and astaxanthin. No doubt, AO Booster isn’t just for enhancing recovery; it’s definitely a “use daily” supplement! **HN**



Take 1-2 capsules daily with food.

What’s so great about gamma (tocopherol)?

When it comes to vitamin E supplementation, the oft-used saying “the whole is greater than the sum of its parts” is 100% applicable. Without taking anything away from the long known, multiple benefits of “regular” vitamin E (d-alpha tocopherol), the gamma tocopherol fraction may be as important, if not more so. Research has suggested that supplementing with just the alpha tocopherol fraction (often the only form in many supplements) may actually lower the body’s gamma tocopherol level significantly. While all forms of tocopherols are potent antioxidants, gamma tocopherol has unique chemical properties that allow it to be a more effective scavenger of reactive nitrogen oxides. The accumulation of these specific free radicals in the body plays a key role in the cause of several degenerative diseases, which is one reason why having sufficient bodily supplies of gamma tocopherol is vital. Get complete vitamin E “coverage” with AO Booster!

JIM DONALDSON'S COMPLETE HAMMER NUTRITION RACE-DAY KIT

CLOTHING KIT FOR 30°F RACE CONDITIONS:

Hammer Wind Jacket
Hammer Cycling Shorts
Hammer Thermal Booties
Hammer 12" Compression
Socks

(All brought to the race in a
Hammer Gear Bag)

PRE-RACE MEAL 3 HOURS PRIOR TO START:

Hammer Bar
Perpetuem

RACE FUEL:

HEED/Endurolytes Fizz mix
Hammer Gels taped to top tube
of bike

COMPLETE RECOVERY AFTER THE FINISH:

Hammer Whey Recovery Bar
Endurolytes
Race Caps Supreme
Premium Insurance Caps
Mito Caps
Super Antioxidant
AO Booster
Tissue Rejuvenator
Active Recovery session with
my Compex EMS unit

RESULTS

"Another successful completion of the Iceman Cometh Challenge. (I've been competing in it since the 1980s!) I am a Hammer Man! Thanks for all of the great products. I don't think I would be where I am today at age 70 if I wasn't using Hammer Nutrition products." - Jim Donaldson



Photo: JC Prater/American MultiSports



Enhance your recovery big time

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

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

MSRP
\$3.50
\$3.25 - 12 or more

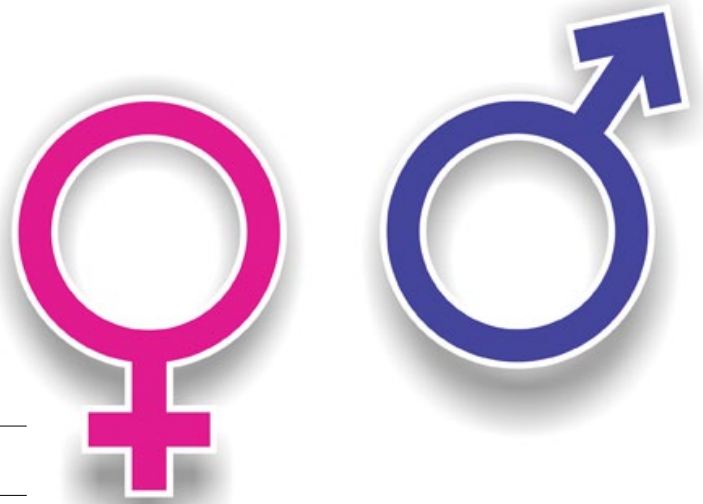
Flavor:
Peanut Butter-Chocolate



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Nutrient needs Female vs. Male



BY STEVE BORN

A client recently emailed us with this intriguing question: “Do female athletes performing at levels similar to males have the same nutrient requirements?” I replied, saying that my position is that a person’s vitamin/mineral needs are determined more by body weight, activity level, and other factors (such as having a specific health issue) than by gender.

Generally speaking, there is very little if any difference between a female athlete’s nutrient requirements and a male’s, aside from the non-gender variables just mentioned. Two nutrients that many women—athlete and non-athlete alike—*may* need more of than male athletes are:

- **Calcium** – The Optimum Daily Intake (ODI) for both men and women is between 1,000 and 1,500 milligrams (mg) per day. If a woman—especially one over the age of 50—consumes an amount at the upper end of that range, she will meet her daily calcium needs. The only difference in calcium needs (for men vs. women) that I’ve noted is the National Institute of Health’s recommendation for ages 50-71: 1,000 mg for men and 1,200 mg for women.
- **Iron** – Because women lose iron through menstruation, most premenopausal women need to take in more iron than men. Ditto for pregnant women. Men tend to absorb iron more efficiently, and store it more thoroughly, than women. That’s why the ODI is within a range of 15-25 mg for men and 18-30 mg for women age 50 and younger. Lactating women and those

51 and older need less than these amounts.

All this said, the overwhelming majority of people—male and female—consume far more than the ODI amounts of iron from their food. Consuming too much iron is particularly problematic because excess iron generates massive free radical reactions. According to one source, “Human epidemiological studies show that those with high iron levels are far more likely to contract cancer and heart disease. A growing body of evidence implicates iron in neurological disorders such as Parkinson’s disease.”

So while iron is indeed a very important nutrient, too much of this mineral can present some very serious issues. That’s why Premium Insurance Caps (and most other multivitamin/mineral supplements) do not contain iron. It’s also why we do not recommend taking iron supplements unless a blood test reveals a deficiency. More information on this important topic can be found in the article “Iron – yes or no?” at www.hammernutrition.com/knowledge/iron-yes-or-no.5574.html.

When you compare the nutrient percentages of a 7-capsule dose of Hammer Nutrition’s Premium Insurance Caps to the Daily Value (DV) amounts, you’ll see that most exceed this standard. This is because we don’t calibrate the product to the minimally needed DV amounts (or RDI/RDA amounts), but rather ODI amounts, which we believe are more appropriate. This is detailed in the following section from the article “Supplementation – A Necessity for Athletes” (<http://www.hammernutrition.com/knowledge/supplementation-a-necessity-for-athletes.8940.html>):

The Recommended Daily Intake: Recommended for what?

The Reference Daily Intake standard (formerly known as the Recommended Daily Allowance, or RDA) doesn’t take into account the higher needs of endurance athletes. Dr. Misner states, “Researchers have established that athletes tend to deplete vitamins, minerals, enzymes, coenzymes, and other substrates more than sedentary people do.” It’s not just more calories that endurance athletes need; it’s the whole nutritional bag.

Moreover, conventional standards are tuned to deficiency avoidance rather than optimal health, so it’s questionable whether anyone should rely on them. In *The Real Vitamin & Mineral Book: Using supplements for optimum health*, 4th ed. (New York: Avery Publishing Group, 2007), Shari Lieberman, Ph.D., and Nancy Bruning devote a chapter to outlining the benefits of using a higher-dose vitamin/mineral supplementation regimen. I think the title of this particular chapter, “The RDIs – The Minimum Wages of Nutrition,” pretty much says it all. No one spells it out better than Lieberman and Bruning in their book, one that I highly recommend:

Just like the RDAs, the RDIs have three basic problems: (1) you cannot get all of the nutrients you need from today’s food; (2) RDIs reflect amounts that are adequate to prevent nutrient-deficiency diseases, and are not tailored for individual needs; and (3) RDIs do not address or consider optimum health or the prevention of degenerative diseases such as cancer and heart disease.

- continued on page 59

- continued from page 58

In another chapter, “The Optimum Daily Intakes (ODIs),” they write:

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. To distinguish them from the lesser amounts characteristic of the RDIs, I have called these amounts the Optimum Daily Intakes, or ODIs. The need for ODIs is based on six factors:

1. *The RDIs are generally based on an amount that simply prevents overt deficiency diseases.*
2. *The RDIs do not take into account preventative or therapeutic levels of nutrients.*
3. *We cannot meet the RDIs even if we eat the “perfect” diet.*
4. *Because of many factors, including the loss of nutrients through shipping, storage, and processing, the foods available to us do not contain the amounts of vitamins and minerals they should contain.*
5. *Owing to the constant bombardment of stress factors, from pollution to emotional stress, we require higher levels of vitamins and minerals than originally thought.*
6. *We do not absorb 100% of the vitamins and minerals in foods and supplements.*

Are you convinced yet that you need to supplement? Remember, Dr. Lieberman has regular human welfare in mind, and not the even higher demands of endurance athletes.

Additional nutrient needs for men and women

When reviewing the Premium Insurance Caps label for nutrients in a 7-capsule dose, you’ll notice that the amounts of **calcium** and **magnesium** are lower than the DV recommendations. This is simply because the DV values are so high that it’s not practical (or even possible) to fit this much calcium and magnesium into a reasonably sized capsule. So for these two minerals, I believe supplementing with calcium and magnesium from another product can be worthwhile.

Also, while 7 capsules of Premium Insurance Caps contain 500 mg of vitamin C (834% of the DV), I always supplement with more vitamin C—an

additional 1,000-2,000 mg daily in divided doses—on a daily basis.

Same thing for **vitamin D**. Although the amount of vitamin D in a 7-capsule dose of Premium Insurance Caps (500 IU) is 125% of the DV, a huge, ever-growing body of research suggests that much more than that is needed for optimal health. That amount ranges from 1,000 IU to 10,000 IU or more per day. The general consensus is 1,000 to 2,000 IU of vitamin D per day.

To measure your body’s vitamin D level (and help determine how much more you might need to take), you can have a 25-hydroxy vitamin D blood test. Dr. Michael Holick, arguably the premier nutritional scientist on all things vitamin D-related, states: “I think you need to maintain your 25-hydroxyvitamin D level above 30 ng/mL. For my patients and for me personally, I like for it to be between 40-60 ng/mL of 25-hydroxyvitamin D to guarantee vitamin D sufficiency and its health benefits.”

Summary

Aside from the few nutrients we’ve discussed, male and female nutrient needs are very similar. Body weight, activity level, and specific nutrient needs for addressing health issues are the primary factors for determining how much nutrient support you require. Formulated with Optimum Daily Intake (ODI) amounts, Premium Insurance Caps covers the wide-ranging needs of both male and female athletes and other active people, and much more thoroughly than multivitamin/mineral products that contain extremely low Reference Daily Intake (RDI), Recommended Daily Allowance (RDA), or Daily Value (DV) amounts of nutrients. **HN**



The advertisement features a background image of a female cyclist in a white and black jersey with 'HAMMER NUTRITION' and '91' on it. In the foreground, a white bottle of 'HAMMER PREMIUM INSURANCE CAPS' is shown. The bottle has a blue and white label with a hammer logo and text: 'HAMMER PREMIUM INSURANCE CAPS DAILY ESSENTIALS 120 Capsules'. A yellow circular seal on the bottle says 'gluten free'. Below the bottle, the text 'GIRL POWER' is written in large, bold, pink letters. Underneath that, it says 'More calcium, folic acid, and selenium than most women-specific vitamins!'. A list of benefits follows: 'Formulated for an active lifestyle', 'Stay strong all year long', and 'Ultimate nutrition foundation'. At the bottom, the MSRP is listed: '\$19.95 - 120 Capsules' and '\$34.95 - 210 Capsules'. There is a 'MADE IN USA' logo. The Hammer Nutrition logo is at the bottom, with the text 'ORDER TODAY!' and the phone number '1.800.336.1977 / www.hammernutrition.com'.

Steve's Faves: Phytolean

BY STEVE BORN

Around Thanksgiving of 2011, I weighed an obscenely high 229 pounds—more than 45 pounds over my weight when I was competing in ultra cycling races. Needless to say, I looked and felt terrible.

Even when training double-digit hours every week, I still had some trouble keeping my weight where I wanted it. (I'm a naturally big guy.) But letting myself go off the deep end to such a degree was a real low point for me, especially after knowing how good it feels to be fit.

For the past couple of years I had resolved to get back on track, clean up my diet, and exercise more. I'd make it stick for a few weeks before letting my "back in shape" plans derail, placing the blame on a number of things, but never accepting ownership for my laziness and apathy; I had lots of good excuses but no truly valid reasons.

The winter months were especially tough because I was even less active and tended to eat more. And as the weather got colder, my body just wanted to insulate (i.e., pack on the pounds). I used to joke about it, saying "I don't even have to eat the food; just looking at it makes me to put on a few pounds!" But at 229 pounds, it was no longer a laughing matter. I had to lose weight, not just for performing better and suffering less when I rode my bike, but more importantly to regain my health.

Not wanting to wait until the New Year to get the ball rolling, I made a serious vow the first week of December, knowing I could no longer afford to blow it off. I cleaned up my diet—making wiser choices about what I ate, while also

eating less in general—and I started working out more. Starting over from "ground zero" wasn't easy, but I had no other choice . . . I really had fallen that far.

The other big change I made was that I began to consistently use the prototype of the product now known as Phytolean, prior to each meal. After realizing just how much starchy foods I had been eating (I was a full-blown "starch-o-holic"), I truly hoped this new product would deliver on its purported effects—blocking starch and minimizing fat absorption—and thus help me to lose weight.

I can honestly say that it did. After taking Phytolean, modifying my diet, and exercising more regularly and wisely, the weight started coming off, and faster than I thought it would.

By the end of February, I had dropped more than 16 pounds, by early May I had another 16 pounds, and by summer I had lost a total of 43 pounds. The best part is that, with the help of Phytolean, I've kept off that weight. Even through the winters I've been able to stay within my target weight range, so when it's time to start riding outdoors, I'm ready to hit the roads without carrying excess baggage.

Now, did Phytolean in and of itself cause this weight loss? No, of course not; I had to change my lifestyle and decide to make it happen. Phytolean didn't give me carte blanche to eat whatever and however much I wanted. Nor was it a substitute for getting off my lazy butt and exercising more.



Take 1-2 capsules one hour before bedtime.

"Phytolean is not a crutch. It is, however, a weapon, and an extremely potent one that I can honestly say has made a definite positive impact on my life."

I am healthier, and I feel better. The consistent use of Phytolean has unquestionably played a major role in making that happen. It's simply a great product that, when used consistently and in conjunction with sensible weight-loss strategies, works well . . . really, really well. **HN**

WENDY SKEAN'S 6-HOUR RACE RECIPE

RIGHT BEFORE THE START:

One Hammer Gel

FUEL DURING THE RACE:

Lemon-Lime HEED and
Orange-Vanilla Perpetuem mix

SUPPLEMENTS TAKEN EACH LAP:

Endurance Amino
Anti-Fatigue Caps
Race Caps Supreme
Mito Caps
Xobaline
Tissue Rejuvenator

IMMEDIATELY AFTER THE RACE:

Chocolate Recoverite

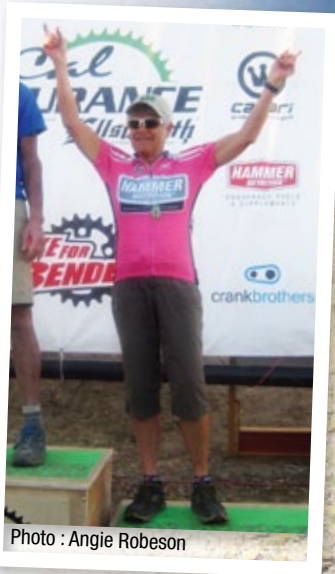


Photo : Angie Robeson



Shoreline Trail, Turquoise Lake, CO
Photo : Jeff Wolfe

RESULTS

6 Hours of Temecula, 3rd place Coed AG

"This was a tough race. I felt like I was doing interval training! But my laps were consistent through the race thanks to Hammer Nutrition products. The next day, I wasn't even sore!" - Wendy Skean

Joint health nutrients that work!

"I take Tissue Rejuvenator daily as I increase my miles.

It helps me ensure complete recovery so that my body can take the necessary 'punishment' of the road." - Todd B., 1st place AG, XTERRA 15-Mile Trail Race, McDowell Mountain Park, AZ

- Strengthen joints
- Help heal lingering aches
- Get ready for an injury-free season

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\$29.95 - 120 Capsules
\$27.50 - 3 or more

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DRINK UP!

Coffee associated with decreased risk of type 2 diabetes

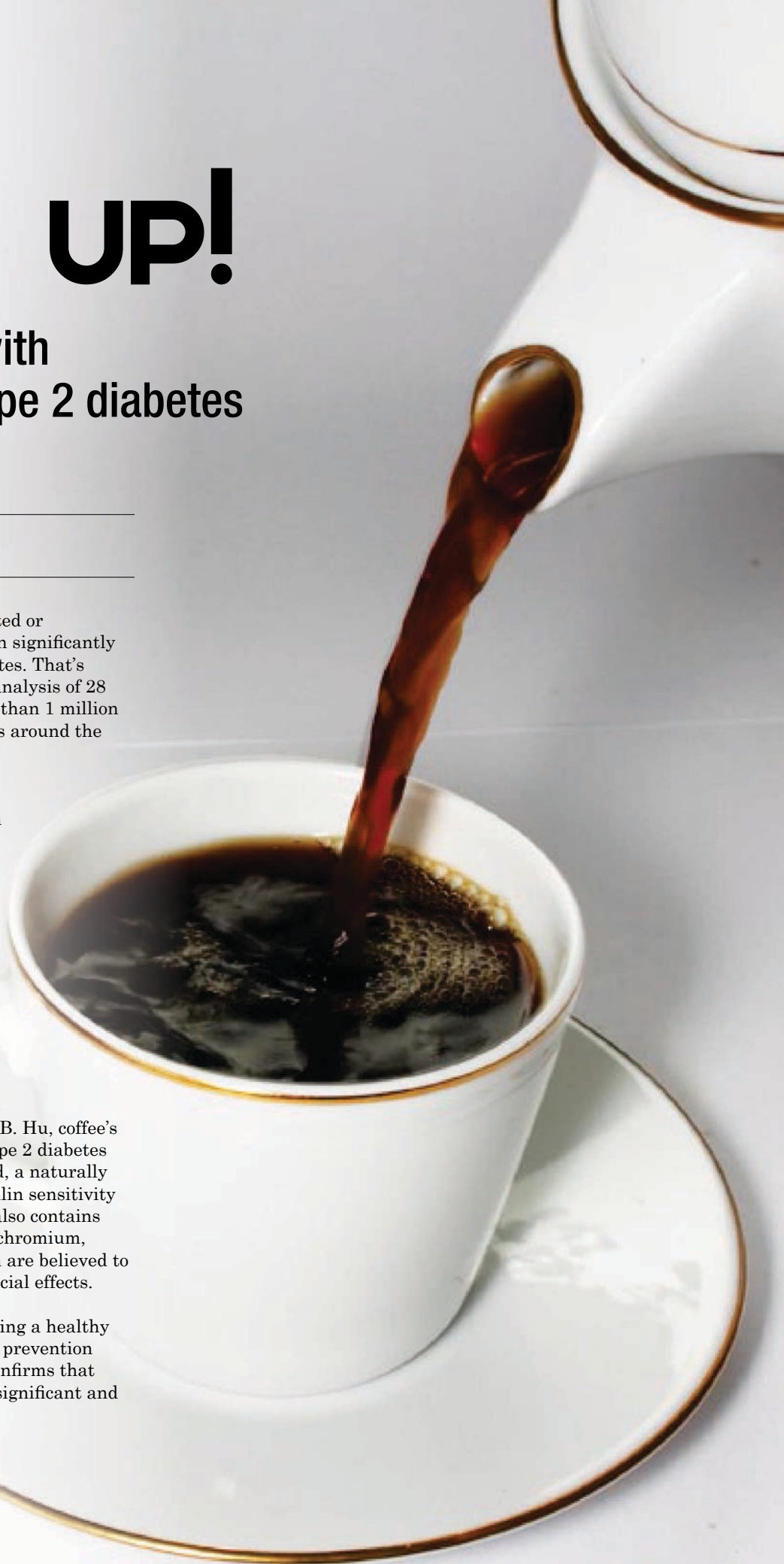
BY STEVE BORN

Whether you prefer yours caffeinated or decaffeinated, drinking coffee can significantly reduce your risk for type 2 diabetes. That's the conclusion of a recent meta-analysis of 28 studies involving a total of more than 1 million male and female participants from countries around the world, conducted from 1966 to 2013. This new review, published in *Diabetes Care*, further confirms earlier meta-analyses that linked coffee consumption with a decrease in risk of type 2 diabetes.

Compared to minimal to no coffee consumption, drinking one cup of caffeinated coffee per day is associated with a 9% reduction in type 2 diabetes; drinking one cup of decaf daily reduced risk by 6%, according to the data. The rate of reduction increased in tandem with an increase in the number of cups of coffee consumed—three cups daily reduced risk by about 20%, while six cups daily reduced risk by 33%.

As explained by head researcher, Dr. Frank B. Hu, coffee's protective effect in decreasing the risk for type 2 diabetes possibly can be attributed to chlorogenic acid, a naturally occurring compound that helps improve insulin sensitivity and inhibits blood sugar absorption. Coffee also contains other antioxidants (polyphenols), as well as chromium, magnesium, and other minerals, all of which are believed to work synergistically to impart coffee's beneficial effects.

While eating right, exercising, and maintaining a healthy weight all remain critically important to the prevention of type 2 diabetes, this new meta-analysis confirms that drinking coffee, caffeinated or not, makes a significant and healthy contribution. **HN**



Good coffee.

Plain and simple.

Fair Trade Certified, 100% organic 53x11 Coffee blend is micro-roasted daily to our exact specifications and immediately shipped to you to insure maximum freshness and flavor.



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ESPRESSO



SUMATRA

DECAF

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

FREE!

Purchase any 2 bags of coffee and receive your choice of a FREE 5-pack of reusable single-serving coffee filters or a FREE bag of coffee! For the FREE filters, mention ad code EN89CF. For the FREE bag of coffee, mention ad code EN89CB. Offer expires 5/8/14. Valid while supplies last.



Join the Coffee of the Month Club and get monthly shipments delivered automatically!

- Select how many bags you would like to receive.
- Receive a FREE "Perfect Cup of Coffee" travel kit, valued at \$14.95.
- Enjoy delicious coffee every morning, plus HUGE discounts on 53x11 cycling and tri clothing, casual clothing, and other 53x11 gear!

*The "Perfect Cup of Coffee" travel kit consists of a travel mug, mug-top brew unit, and filters.

ORDER TODAY!

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THE RACE FOR FLAVOR

Time is of the essence

BY VICKI HACKMAN

Freshly roasted, great-tasting coffee sounds like a simple request, but the truth is, relatively few Americans have actually experienced really fresh coffee. Whether ground or in whole bean form, the vast majority of coffee sold in supermarkets, coffee chains, and even most specialty coffee shops is already far beyond its prime—several months old, and quite possibly a year old!

For the ultimate coffee experience—maximum flavor, aroma, and health benefits—fresh coffee is essential. Coffee connoisseurs know the “window of freshness” stays open just weeks—not months—after coffee beans have been roasted. That concept of quality coffee, promptly delivered to your door within days of roasting, is fundamental to the vision of organic 53x11 Coffee.

Why freshness matters

Compounds in the coffee beans give the beverage its characteristic aroma, complex rich flavor, and powerful health benefits. Almost immediately after the beans have been roasted, coffee’s volatile compounds begin to oxidize. Over time, the beans steadily lose flavor, eventually becoming rancid. You know the signs: weak aroma and a bitter, insipid, metallic, or “off” flavor—reminiscent of reheated two-day-old brew.

To help ensure freshness, many people buy whole beans and grind them

themselves, just before brewing. That’s a good move, because grinding exposes the coffee to more oxygen, further hastening its breakdown and loss of flavor.

Unfortunately, that extra step (grinding just before brewing) can’t turn back the clock for coffee packaged months earlier. Even if those beans haven’t yet turned rancid, you can be sure their flavor is but a pale ghost of the freshly-roasted original.

Freshness on demand

For the freshest possible coffee, the award-winning artisanal roaster for 53x11 Coffee roasts its beans to order in micro-batches, explains Philip Howeth, 53x11 spokesperson. 53x11 Coffee does not roast bulk quantities of beans to fill wholesale-size orders. Instead, the coffee is packaged in small individual bags by the roaster immediately after roasting and shipped directly to homes. “Our goal is to have the coffee packaged and shipped within one to two weeks of roasting,” says Howeth.

Packaging is important to freshness too. “53x11 bags have a valve that allows carbon dioxide to escape—but keeps oxygen out,” Howeth says. That valve is an excellent indicator of freshness since coffee beans emit carbon dioxide for only two weeks after they’ve been roasted. Coffee in vacuum-packed containers is generally not fresh: the tight packaging usually is a sign that the beans are stale.

Tips for fresh flavor

Here are additional ways to ensure the freshness, flavor, and healthfulness of your coffee:

- **Buy small quantities, more often.** Order from a micro-supplier, like 53x11 Coffee, who roasts to order and can guarantee consistency.
- **Store coffee in a cool, dark, dry location.** A cool pantry or basement shelf is ideal if the conditions are dry. After you’ve opened the bag, seal it in a Ziploc-type bag, and then inside a canister with tight-fitting lid, if possible. Never refrigerate or freeze your coffee; refrigerating and freezing coffee can introduce moisture and other flavors, which will spoil your coffee.
- **Use pure, fresh water.** The impurities, chemicals, and minerals in water absolutely can change the flavor of your coffee, and not for the better. Use filtered water, and clean your coffee pot regularly.

With four delicious organic blends, all micro-roasted and delivered to your door within weeks of roasting, organic 53x11 Coffee is clearly the winner in the race for flavor! **HN**



Here at Hammer Nutrition, we pride ourselves on providing the best possible customer service around. We offer products that work, the knowledge to back them up, and most importantly, a friendly and knowledgeable staff ready and available to help you!

*"Thank you so much for calling me earlier today. It turns out that I was actually out training at the time and testing the products that I ordered from you. As you know, I am new to the world of Hammer Nutrition and **I really appreciate your efforts to ensure that your customers are educated about your products and maximizing their potential with proper nutrition.**"*

- Holly H.



***"I am very happy using and endorsing Hammer Nutrition. I love the customer service and professionalism of the company.** It is my hope to work with Hammer Nutrition in the future, building a partnership as I continue on my journey toward a professional career in triathlon."* - James Thorp



Josh

"Thank you to the Hammer Nutrition Client Advisors for taking the time to research some issues for me. The conversation I had with my advisor was very helpful! You sent me information regarding protein intake and general nutrition, as well as a recipe for vegan, soy-free versions of Perpetuem and Recoverite." - Tharisa L.

*"I have been enjoying the new Peanut Butter Hammer Gel for a while now, and I really love the flavor. What didn't occur to me, until I spoke with a Client Advisor about it, was that this flavor of Hammer Gel has protein and healthy fats to make it an ultra-fuel in comparison to the other gels. A Client Advisor then sent me a PDF of the article 'Peanut Butter Hammer (Ultra) Gel' from EN#87 highlighting this. **Thanks for going the extra mile!**"* - Kirk U.

Acidosis: A term you should know

- continued from page 5

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.

HN



The anti-acid diet

Prevent or alleviate acidosis by eating more alkaline-forming foods, fewer acid-forming foods.

Alkaline-forming foods

Almonds
Apples and pears
Asparagus
Avocado
Bananas
Bell peppers
Blackberries and raspberries
Broccoli and broccoli rabe
Brussels sprouts
Cabbage
Cantaloupe
Carrots
Cauliflower
Celery
Herbs (including coriander, dill, and parsley)
Cucumbers
Egg whites
Eggplant
Fennel
Feta and Parmesan cheese
Fruit Juice
Garlic
Ginger
Grapes
Honeydew melon
Kiwi fruit
Leafy greens (including endive, escarole, kale, lettuce, spinach, and Swiss chard)
Mango
Mushrooms
Nectarines
Onions and scallions
Oranges, lemons, and grapefruit
Papaya
Peaches
Plums
Potatoes
Pumpkin
Radishes
Raisins
Snow peas
Tea (black and especially green)
Tomatoes and tomato juice
Tofu (fermented)
Watermelon
Whey
Zucchini

Acid-forming foods

Alcohol (including beer, gin, rum, sherry, wine)
Baked goods (including breads, bagels, cake, cookies, muffins, pastries, and pie)
Beans and legumes (including black, kidney, lima; lentils)
Butter and margarine
Candy
Cereal and granola
Chocolate
Corn (including cornstarch, corn syrup, and popcorn)
Cream cheese
Doughnuts
Dried fruit
Flour
Fried foods
Hard cheese (except for feta and parmesan)
Ice cream and sherbet
Jams and jellies
Mayonnaise
Meats (including beef, chicken, duck, goose, lamb, pork, turkey, and veal)
Noodles and pasta
Pancakes and waffles
Pecans
Pickles
Pizza
Pudding
Relish
Rice
Seafood (including clams, lobster, mussels, salmon, smoked salmon, sardines, scallops, shrimp)
Soda
Sugar, honey, and molasses
Tacos
Wheat
Whole milk



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



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The numbers behind a successful century

BY VANESSA GAILEY, Hammer Nutrition staffer

Cycling is a numbers game. As cyclists we track miles, watts, time, and averages. We know the PSI in our tires and the weight of our bikes. Tracking numbers is what we do, and what can make us stronger riders.

One of the more monumental numbers most cyclists eventually conquer is 100. The century ride marks the milestone for many, from casual rider to setting a goal and committing to hours in the saddle. Four years ago, six months into my employment at Hammer Nutrition, I was motivated by coworkers and clients to sign up for my first. Since then, I've done century rides or longer several times per month every summer. I've learned that, like all numbers in cycling, a century ride is easily achievable—if you pay attention to your numbers!

1 day before the ride

Numbers will work against you if you try to load up on sodium, fluids, or carbohydrates the day before your ride. Excessive carbohydrates consumed the day before will simply be passed through the bowels or stored in adipose (fat) cells. And excess sodium will result in a higher rate of sodium loss in sweat during the event. Your evening meal should be a combination of complex carbohydrates, healthy protein, and little-to-no saturated fat. Drink approximately half your body weight in ounces to ensure sufficient hydration.

8 hours of sleep

Don't sacrifice sleep to allow time for a pre-ride meal. A better strategy than eating three hours prior to the race is to consume a serving of Hammer Gel five to ten minutes prior to the start. That tops off liver glycogen stores (the goal of the prerace meal)

and provides some calories to augment muscle glycogen stores. Begin fueling with Perpetuem or Sustained Energy shortly after the start, sipping lightly every 15 minutes or so. No early morning wake up necessary!

60 minutes of an easier pace

Start off at an easy pace for the first hour. If you hit an anaerobic pace right off the start, your body burns muscle glycogen in the absence of oxygen. And the most unpleasant byproduct of this is lactic acid and the resulting muscle burn and fatigue. By maintaining a slower pace in the beginning, you can tap into fatty acid stores as well for energy production and you'll be able to finish 100 miles strong.

200-250 calories per hour

During a century ride or longer, caloric intake numbers can make or break you. The bad fueling habits you practice for a two-hour ride will not get you through the hours necessary in the saddle to finish 100 miles. Consume 200-240 calories per hour of liquid or gel fuels. Your body has to work extra hard to digest solid foods, oftentimes burning almost as many calories in the process as the food might provide. Save your energy for your legs and lungs instead of your digestion!

20-25 oz. of water per hour

Lighter athletes might require a little less, heavier athletes a little more, but a good general rule of thumb is to drink a standard bike water bottle of water hourly. Pay attention to the numbers—monitor your hydration on an hourly basis to stay hydrated throughout the ride.



The author and her husband Chuck Gailey celebrate another 100-mile day at Huckleberry 100. Photo : Bill Sirl

0 calories from simple sugars

Beware of tempting aid station goodies, full of simple sugars and fats that can cause GI distress during efforts. I've found that nothing works better than Perpetuem. Mix in the appropriate concentration for your body weight, and carry Endurolytes or new Endurolytes Extreme capsules in a capsule dispenser for your electrolyte intake.

In addition to Endurolytes, my jersey pockets contain several Hammer Gels in a variety of flavors, and small ziplocs of Anti-Fatigue Caps and Endurance Amino. I also throw in a couple of Fizz for when the day heats up. Toward the end of the ride, switching to a lighter concentration of Perpetuem in one bottle and Fizz in the second bottle is refreshing and easy to digest when fatigued.

Supplement calories with Hammer Gels, and those last 20+ miles will roll by. You'll have the numbers (miles) to prove it! **HN**

LEONIE CAMPBELL'S PEAK BAGGING RECIPE

SUPPLEMENTS FOR THE TWO-WEEK TRIP:

Tissue Rejuvenator
Race Caps Supreme
Premium Insurance Caps
Mito Caps

FUEL FOR THE CLIMBS:

Hammer Bars
Perpetuem Solids
Hammer Gel

BEST "EMERGENCY" FUEL SHARED WITH FELLOW CLIMBER WHO WAS BONKING:

Hammer Gel and water

MOST ESSENTIAL FOR HIGH-ELEVATION CLIMBING SUCCESS:

Endurolytes Fizz

RECOVERY AFTER A LONG DAY OF SUMMITTING:

Hammer Recovery Bars

Leonie Campbell summits the Monch in Switzerland.
Photo : Knight Campbell

RESULTS

Two weeks of climbing and running in the mountains of Switzerland, including summiting the Monch and Breithorn.

"We experienced a slew of varying temperatures, as mountains tend to throw at you. Endurolytes Fizz was probably the most essential component to climbing success, ensuring proper hydration and electrolyte balance at altitude." - Leonie Campbell

"Drop a Fizz in and go! My new favorite electrolyte drink!"

I put two in a bottle of water, and it gives me the sodium, potassium, and other electrolytes I need without the calories." - Christopher R.

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CHEMICALS

WARNING!

If you use another effervescent electrolyte product, read the label! The product may contain one or more of the following chemicals: PEG (polyethylene glycol), acesulfame-K (consists of methylene chloride, a carcinogen), sucralose (a synthetic chemical with a chlorinated core), or other artificial sweeteners, flavors, or colors.

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WEIGHT LOSS HOT TIP

Mix 1 scoop of Hammer Whey in 8 ounces of water and drink prior to your main meals

- 1. Loaded with branched chain amino acids (BCAAs) –** Research in the *Journal of Nutrition* shows a link between an increased intake of BCAAs and a reduced risk of obesity and becoming overweight. Each scoop of Hammer Whey contains a bountiful 3,380.5 mg of BCAAs (l-leucine, l-isoleucine, and l-valine). No other protein source comes close.
- 2. 6,000 mg of added glutamine –** Among its numerous benefits, glutamine is well-known for its ability to significantly reduce, even halt, sugar cravings. Glutamine fuels the brain, especially when blood sugar levels are low, and quells its “I want sweets and starchy carbohydrates” signal.
- 3. Only 80 calories –** The protein-fortified, minimal-calorie fluid you drink will take up space in your stomach and increase the feeling of fullness before you take the first bite of your meal. **HN**



STATIN DRUGS LINKED WITH INCREASED TYPE 2 DIABETES RISK

Elevated cholesterol levels are not to be taken lightly; they're a primary cause for heart disease. But taking a statin drug to treat high cholesterol is a decision not to be taken lightly either.

This is true now more than ever. Consider the results of a new study, published in *Diabetes, Obesity and Metabolism*, which suggest that using these types of medications could cause as much as a 34% increased risk of developing type 2 diabetes.

Diet plays an undeniably significant role in maintaining optimal cholesterol levels, as well as in the prevention of type 2 diabetes, so make sure you're eating as healthy as possible. You know the drill: lots of fresh fruits and vegetables, adequate fiber, and minimal sugar, saturated fat, and processed foods. Be sure to exercise regularly, too.

These Hammer Nutrition products contain nutrients reported to lower elevated serum cholesterol:

- **Race Caps Supreme** contains Coenzyme Q10 and trimethylglycine.
- **Mito Caps** contains acetyl l-carnitine.
- **EndurOmega** contains docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA).
- **Digest Caps** contains *Bifidobacteria longum* and *Lactobacillus acidophilus*.
- **Premium Insurance Caps** contains calcium, chromium (polynicotinate form), vitamin B3, vitamin B5 (pantothenic acid), vitamin B6, and vitamin C.
- **Chromemate, HEED, Perpetuem, Sustained Energy, and Recoverite** contain chromium (polynicotinate form).
- **Hammer Soy Protein, Perpetuem, and Sustained Energy** contain soy protein.
- **AO Booster** contains gamma tocopherol and gamma tocotrienol. **HN**

FOR HEART HEALTH, SUGAR ISN'T SO SWEET!

Consuming a lot of sugar has never been associated with good health . . . that's no surprise. Research links high sugar intakes with a number of risk factors for heart disease such as obesity, hypertension, and type 2 diabetes. However, "most of those studies focused on sugar-sweetened beverages and not total intake of sugar," states Dr. Quanhe Yang. In a recent study headed by Dr. Yang and published in the journal *JAMA Internal Medicine*, total amount of added sugar was the focus and the results were alarming: higher amounts of added sugar are correlated with a significantly increased risk of death from cardiovascular disease.

The World Health Organization recommends consuming less than 10% of your daily calories from added sugars; the American Heart Association's recommendation is approximately 7%. After reviewing several years of data involving nearly 12,000 participants in the National Health and Nutrition Examination Survey (NHANES), Dr. Yang and his team found that more than 70% of U.S. adults consume 10% or more of their daily calories from added sugars, with 10% of adults consuming a diet comprised of 25% or more from added sugars ("added sugars" was defined as sodas/other sweetened beverages, grain- and dairy-based desserts, candy, and other processed foods, but not naturally occurring sugar found in fruits and fruit juices).

Taking into account other heart-disease factors such as diet, weight, physical activity, high blood pressure, and total cholesterol, researchers examined the association between added sugar and an increased risk of death from heart disease. Their findings were dramatic and sobering:

- People who consumed between 17% and 21% of their daily calories from added sugar had a 38% increased risk of dying from cardiovascular disease, as compared to those whose diets contained less than 10% of its calories from added sugars.
- Diets containing more than 21% of their total calories from added sugars were associated with an approximately 50% greater risk of dying from cardiovascular disease.
- The risk of dying from cardiovascular disease nearly tripled for those consuming more than 25% of their calories from added sugar.

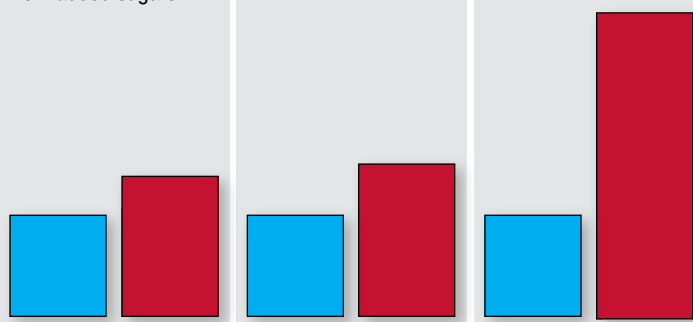
Summary

Dr. Yang's study and countless others confirm a simple truth—small amounts of sugar occasionally in the daily diet are okay, but a lot is not. For optimal health and longevity, pay attention to the total percentage of calories you consume from sugar, and make it a goal to adjust accordingly. If you're like most Americans, a significant decrease in your sugar intake is in order, and that shouldn't be a difficult decision to make or task to accomplish. After all, one of the sweetest things in life is a healthy heart and body, and the ability to continue participating in the activities you love. **HN**

People who consumed between 17% and 21% of their daily calories from added sugar had a **38% increased chance of dying from cardiovascular disease**, as compared to those whose diets contained less than 10% of its calories from added sugars.

Diets containing over 21% of total calories from added sugars were associated with an approximately **50% greater risk of dying from cardiovascular disease**.

The risk of dying from cardiovascular disease nearly tripled for those consuming more than 25% of their calories from added sugar.



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ATHLETE SPOTLIGHT

BY VANESSA GAILEY

Hayley Benson fuels with HEED during swim training at the Ridge Recreation Center in Littleton, CO.
Photo : Shawn Benson

Tri'n for
Worlds 70.3
with

Hayley Benson



Hayley Benson is a familiar face among the Colorado triathlon community, most likely recognized by her string of appearances on the top overall female finisher podium in recent years. Hayley represents Hammer Nutrition as a 2014 sponsored athlete, and we look forward to seeing her progress as she works toward 70.3 championships again this year. Her efforts took her to World 70.3 Championships last year in Las Vegas, where she finished 24th in her AG and finished in the top 15% of all female finishers.

One of Hayley's favorite quotes says it all about her philosophy on her sport. "Triathlon isn't just about the race. Rather, it's about what you learn from the race that you can apply to the rest of your life." Now she is applying her triathlon "lessons" to the challenge of juggling being a mother to her two-year old daughter Sierra, furthering her career in physical therapy, and training hard for the 2014 season.

EN: There aren't many women (or men!) who can say they finished ahead of you last year. You finished in the Top 3 among amateur females at seven races in Colorado, then kicked it up a notch by competing at World 70.3 Championships. What was it like to race at Worlds against such a tough field of competitors and what did you learn from the experience that will help you this year?

Hayley: Worlds were quite the experience! I awoke to torrential rain when I was expecting it to be hotter than hell out there. The swim start was nuts; everyone in that race had to have been in the top 3 in a 70.3 or an Ironman to have qualified, so it was super competitive. It really was quite violent at times—triathlon can be a contact sport, with people swimming over each other to get into position. The bike course was so wet, and there were quite a few crashes. I rode conservatively because I didn't want to DNF. The sun finally emerged on the run, turning all that water into a sauna-like effect. I went from being a little cold on the bike to dousing myself in ice water at every aid station.

As for learning in preparation for this year's Worlds, I'll expect the unexpected and not get psyched out by the competition. If I'm there in June, I will have earned my right to be there, and

I'm going to be ready to dig really deep as everyone there is fit and fast. With the help of Hammer Nutrition I'm going to put together an even better fueling plan. This year I'm shooting for a top 5 position.

EN: At what point in your life did you decide to pursue endurance sports? What first sparked your interest?

Hayley: My first real endurance race was the 2009 Pikes Peak Ascent. A friend commented that it was a brutal and unique race course, so I signed up. Despite being a newbie, I finished in 7th place fueled by Espresso Hammer Gel.

EN: What is it that drives you and keeps you motivated to get up so early in the morning to train and push yourself so hard?

Hayley: I know that I can go faster and get more PR's, and I'm curious to see just how fast I can go. That feeling of crossing the finish line at the end of a strong race is just addictive; you want to experience that success again and again.

EN: What is your fueling and nutrition strategy for keeping up the energy levels enough to have some left over for time with your family? Any workout recovery tips you can share with your fellow Hammer Nutrition athletes?

Hayley: I find that if I stay on top of calorie intake during workouts, I am not so tired afterward. I used to only fuel up if I needed it, but now I always fuel with Hammer Nutrition if I exercise an hour or more. Yes, I can do a 90-minute workout without any fuel, but I just feel better during the rest of the day if I haven't depleted myself calorie-wise. And of course there is always Recoverite after! I also have to admit that coffee is my vice. I think without caffeine nothing would get done.

EN: You're taking on a new challenge this year, ultra running. Why have you added this to your 2014 race schedule, and why do you think the sport has grown so much in the last few years?

Hayley: I just wanted the opportunity to do something a bit different. Eventually I am sure I will gravitate to the full Ironman rather than the 70.3 distance, but a 50K race seemed a bit more doable in terms of training time right now. I also think it will be a good opportunity to practice fueling my 70.3 races later in the season. Given the time it takes me to complete, it will be fairly similar to my 70.3 races. I've generally been a HEED and Hammer Gel gal, but I'm experimenting to see if Perpetuem and Hammer Gel will suit me better for a fuel plan.

- continued on page 74

Hayley Benson tackles the Pikes Peak Ascent and Marathon.
Photo : Bev Brown



- continued from page 73

I love the purity of ultra trail running . . . just put on your shoes and go. I think more and more people are seeking a way to escape our ever-increasing frenetic pace of life.

EN: What does a “normal” training day look like for a competitive triathlete who is also a mother to a toddler?

Hayley: There is nothing “normal” in my world right now. I have learned to be ultra-flexible since becoming a mom. I try to get one training session in by 7 a.m. I try to fit another session in during a break at work. On the days I take care of Sierra, when she takes a nap, I’ll sneak in a workout on my treadmill or bike trainer.

EN: Do you have any advice for mothers out there who feel they don’t have the time to train hard and pursue their own athletic goals? How do you fit it all in?

Hayley: It’s definitely a challenge to fit everything in, and until I find out a way to clone myself, it’s going to remain challenging. I certainly couldn’t do it without the help of my husband Shawn. My best advice is to get up early for training, as there is a limited opportunity for the workout to get derailed at 5 a.m. I also started working with a coach, though I was hesitant initially as I have a Sport and Exercise Science degree and I am a physical therapist, so I have a good working knowledge of what I should be doing. I discovered that a good coach will help you think more logically and sensibly when you are half out of your mind with sleep deprivation, and can prioritize what workouts are most important when you are crunched for time.

EN: Are you going to introduce Sierra to the sport? Any plans to get her into a Hammer Nutrition kid’s tri kit in the future?

Hayley: I will definitely introduce her to triathlon, and she’ll look very cute in her Hammer Nutrition kid’s tri kit! She already loves eating my Hammer Bars as snacks. However, I’ll introduce her to a range of sports, so she’ll be out there hopefully enjoying the things she loves when she gets older too. **HN**

Hayley Benson enjoys the scenery at Roxborough State Park, CO. Photo : Shawn Benson



from the kitchen of

Laura Labelle



Tuna, garden greens, and veggie salad

Ingredients:

1 can tuna packed in water
1 head Romaine lettuce
2 heads Belgian endive
1 bunch watercress (or arugula
or kale)

2 hardboiled eggs, peeled and sliced
1 cup cherry tomatoes
6 radishes
2 stalks celery
1 large carrot

Preparation:

Drain tuna and set aside. Cut the lettuce and endive into thin strips. Remove oversized stems from watercress. Place all of the greens in a large salad bowl. Chop the tomatoes, radishes, celery, and carrot, then add them to the bowl. Add the eggs and tuna.

Toss with your favorite dressing, or with the following:

3 tablespoons olive oil
1 tablespoon balsamic vinegar
Salt and pepper to taste

Sugar-free, gluten-free, vegan cookies

Ingredients:

3 ripe bananas, mashed	1/4 cup raisins
1/3 cup almond milk	1/2 teaspoon vanilla
2 cups oats	1/4 cup chopped nuts (optional)
1/4 cup shredded unsweetened coconut	Pinch of salt (optional)
1/4 cup coco nibs	

Preparation:

Preheat oven to 350°F. In a large mixing bowl, mix together all ingredients. Spoon out by rounded tablespoons onto a greased, non-stick, or parchment-covered baking sheet. Bake for 15-20 minutes. Allow cookies to cool before storing them in an airtight container. Enjoy as a healthy snack or delicious treat!

EGG-celent breakfast recipes

Protein scramble

Ingredients:

1 teaspoon ghee or olive oil
1 medium onion, chopped
1/2 cup mushrooms, chopped
1/2 pound ground chicken or turkey
1 small tomato, chopped
4 large basil leaves, slivered
6 egg whites

Preparation:

In a medium-size skillet, heat the ghee or oil. Saute the onions and mushrooms until they are lightly browned. Add the meat and cook thoroughly. Add the tomato, basil, and egg whites. Stir continuously a few more minutes until cooked.

Kale and eggs

Ingredients:

1 teaspoon ghee or olive oil
1 medium onion, finely chopped
1 large bunch kale, finely chopped
1/2 cup chicken or vegetable broth

8 large organic free-range eggs
2 teaspoons crumbled feta cheese
1 teaspoon ghee or olive oil

Preparation:

In a skillet, heat the ghee or oil, then brown the onion. Add kale and broth, then steam for 4 minutes. Remove skillet from the heat and set it aside.

In a small bowl, whisk the eggs until fluffy. Stir in the feta. In a separate non-stick pan, heat the ghee or olive oil, then add the egg-feta mixture. Gently stir and cook the eggs to your liking. Plate the kale and onion mixture, then spoon the cooked eggs into the center. Garnish with hot sauce or salt and pepper to taste.



Eating healthy with magnesium-rich foods

BY STEVE BORN

The importance of magnesium is hard to overstate. One nutritional expert calls it “the key to health and life.” Magnesium is involved in more than 300 enzyme systems in the human body, more than any other mineral.

This essential mineral is crucial for a long list of bodily processes, including muscle contraction, nerve conduction, blood clotting, carbohydrate metabolism, ATP activation, B vitamin activation, and protein synthesis. In addition, magnesium increases HDL (good) cholesterol levels and lowers serum LDL (bad) cholesterol levels while inhibiting the oxidation of LDL cholesterol. A deficiency in magnesium is associated with many ailments such as cardiovascular disease, hypertension, hypoglycemia and insulin resistance, type 2 diabetes, kidney stones, osteoporosis, asthma, and depression.

Optimal Daily Intake

The Optimal Daily Intake (ODI) of magnesium is 500-750 mg, with even higher amounts (upwards of 1,200 mg/day) occasionally prescribed, primarily to treat the above conditions. Magnesium toxicity is rare because, unless you have problems with kidney function, your body will eliminate excess amounts. A study printed in *Nutritional Disorders* in 1978 showed no evidence of magnesium toxicity with doses up to 6,000 mg daily. That’s an amount no one ever needs to approach.

Magnesium absorption decreases rapidly when more than 200 mg is consumed at one time. That’s why it’s best to take small divided doses during the day. High doses of magnesium have a laxative effect, and people who take excessive doses of magnesium can experience loose stools and diarrhea.

Unfortunately, while magnesium is contained in a variety of foods, the overall degradation of our food supply has caused the average American intake to decline to amounts significantly below ODI levels. Therefore, to ensure you’re obtaining adequate amounts of magnesium, select foods that contain substantial levels of this vital mineral, and augment your intake with additional amounts of magnesium via supplementation. **HN**

Magnesium-rich food sources

Nuts and seeds are excellent sources of magnesium, so it’s a good idea to include them in your diet. Two ounces of these particular foods provide the following amounts of magnesium:

Almonds – 156 mg
Brazil nuts – 128 mg
Cashews – 148 mg
Pine nuts – 132 mg
Walnuts – 114 mg
Pumpkin seeds – 304 mg
Sesame seeds – 64 mg
Sunflower seeds – 200 mg

Additional good sources of magnesium:

Artichoke (1 cup) – 101 mg
Avocado, medium – 70 mg
Banana, medium – 34 mg
Fig (4) – 44 mg
Spinach, boiled (1/2 cup) – 79 mg
Spinach, raw (1 cup) - 44 mg

Magnesium content of Hammer Nutrition supplements, measured as elemental magnesium per capsule

Anti-Fatigue Caps – approximately 30 mg
Endurolytes – 25 mg
Phytomax – approximately 3.5 mg
Premium Insurance Caps – approximately 18 mg
Race Caps Supreme – 17 mg
REM Caps – 20 mg



The 2014 VuMedi team grabs a photo op during a spring fueling seminar with Steve Born (53x11 red kit). Photo : Mike Freeman

VuMedi expands team program

BY AJ KENNEDY, Team Director

After a great start in 2013, Hammer Nutrition-sponsored Echelon Development / VuMedi Elite Cycling Team is expanding from 10 to 18 riders through the addition of U25 athletes. VuMedi finished 2013 ranked in the Top 3 in the Nor-Cal Premier Series, and their focus is to improve on that this year.

“The strength in our program is a blend of experience that mentors our youth,” Team Director and Manager AJ Kennedy said. “We’ve assembled an amazing group of athletes for 2014 that will target the Premier Series calendar, Sea Otter Classic, USA U23/Elite State and National Championships, and the Cascade Cycling Classic.

“We’ve expanded our program to bring consistency to our stated aim of U25 development and to turn meaningful

experiences into stories of success. We have brought on board a number of riders from the Hammer Nutrition-sponsored Tieni Duro Junior program to help continue their development. Getting our riders racing across all of Nor-Cal at a variety of venues is key to giving riders the experience needed to develop. An additional goal for the program in 2014 is to showcase our riders and build a solid platform of brand ambassadorship for our sponsors who make this possible.

“Without sponsors like Hammer Nutrition, I can’t offer any of this to the riders,” continued Kennedy. “We have an inspiring group of riders who are eager to perform as a team and get results for themselves and our sponsors too.”

If you see us at a race or cycling venue, we urge you to come visit, get a Hammer Nutrition sample, and ask us, “How do we Hammer?!” **HN**

How VuMedi riders Hammer

FUELING

HEED – Strawberry, Lemon-Lime
Endurolytes Fizz – Grape, Grapefruit
Hammer Bars – All flavors!
Hammer Gel – Montana Huckleberry, Vanilla, Espresso, Apple-Cinnamon

RECOVERY

Recoverite – Citrus, Strawberry
Hammer Vegan Recovery Bar – Chocolate Peanut

Enough is enough Take your vitamins!

BY STEVE BORN

An editorial published in the *Annals of Internal Medicine* whipped mainstream media into a frenzy once again. With a no-punches-pulled headline, “Enough is Enough: Stop Wasting Money on Vitamin and Mineral Supplements,” and a doctor involved in the editorial stating, “Most supplements do not prevent chronic disease or death, their use is not justified, and they should be avoided,” front-page media coverage is guaranteed.

We, however, vehemently believe that this editorial’s broad-stroke condemnation of vitamins presents a distinctly one-sided and inaccurate viewpoint. In fact, we consider it a disservice to all individuals who wish to make educated decisions in their pursuit of enjoying optimal health.

These are our primary issues with this editorial’s blunt anti-vitamin/mineral stance:

1. The editorial is based primarily on the analysis of just two studies. It disregards a massive body of research that has clearly documented the benefits of vitamins, minerals, and other nutrients.
2. Participants in both studies averaged 65 years of age or older, which does not accurately represent the population as a whole.
3. Supplements are not intended to be a “cure all” for diseases, and, not surprisingly, they don’t prevent death. (Can you think of anything that does?)

Space limits us from listing all of the flaws of the two studies, but here is background on each, along with just one of the associated problems:

STUDY #1 – An analysis of the effects of vitamin supplementation on the cognitive function of about 6,000 male doctors, 65 years and older. At the study’s end, researchers concluded there was no difference between those who took vitamins and those who took a placebo.

PROBLEM – The standards in terms of adherence were far too relaxed! Study subjects who took the multivitamin just three-quarters of the time were deemed to have properly adhered to the study protocol. How can reliable conclusions about supplement efficacy be formed when a portion of the study subjects use the product only a portion of the time?

STUDY #2 – This study’s objective was to “assess whether oral multivitamins reduce cardiovascular events and are safe.” The 1,700-plus participants (who were an average age of 65 and had suffered a heart attack) were given either a multivitamin or a placebo, and were monitored for nearly 4.5 years for “cardiovascular events” such as a recurrent heart attack or stroke. At the end of the study, researchers concluded, “high-dose oral multivitamins and multiminerals did not statistically significantly reduce cardiovascular events in patients after MI [Myocardial Infarction] who received standard medications. However, this conclusion is tempered by the non-adherence rate.”

PROBLEM – The “non-adherence rate” is a ridiculously high number: 46% of the study subjects did not adhere to the vitamin supplementation regimen! How can any logical and definitive conclusions be drawn when nearly half of the study subjects don’t follow the protocol?

Summary

We do not believe that optimal health comes solely from a bottle of vitamins; a multi-faceted approach is needed. That includes regular exercise, the best possible diet, and stress management. Taking a handful of supplements can’t substitute for consuming the highest quality diet possible—yet we remain convinced that supplementation is a necessity, as the nutrients in vitamin/mineral supplements help bridge the gap between what our diets supply nutrient-wise and what we really should obtain for optimal health.

NOTE: The full text of this article can be found at www.hammernutrition.com/blog/. **HN**



JEFF MONTGOMERY'S FURNACE CREEK 508 RIDE RECIPE

CALORIC INTAKE:

200 calories per hour of Perpetuem

ELECTROLYTE INTAKE:

Endurolytes Fizz with plain water throughout ride, plus a regular dose of Endurolytes capsules

SUPPLEMENT INTAKE:

Anti-Fatigue and Endurance Amino

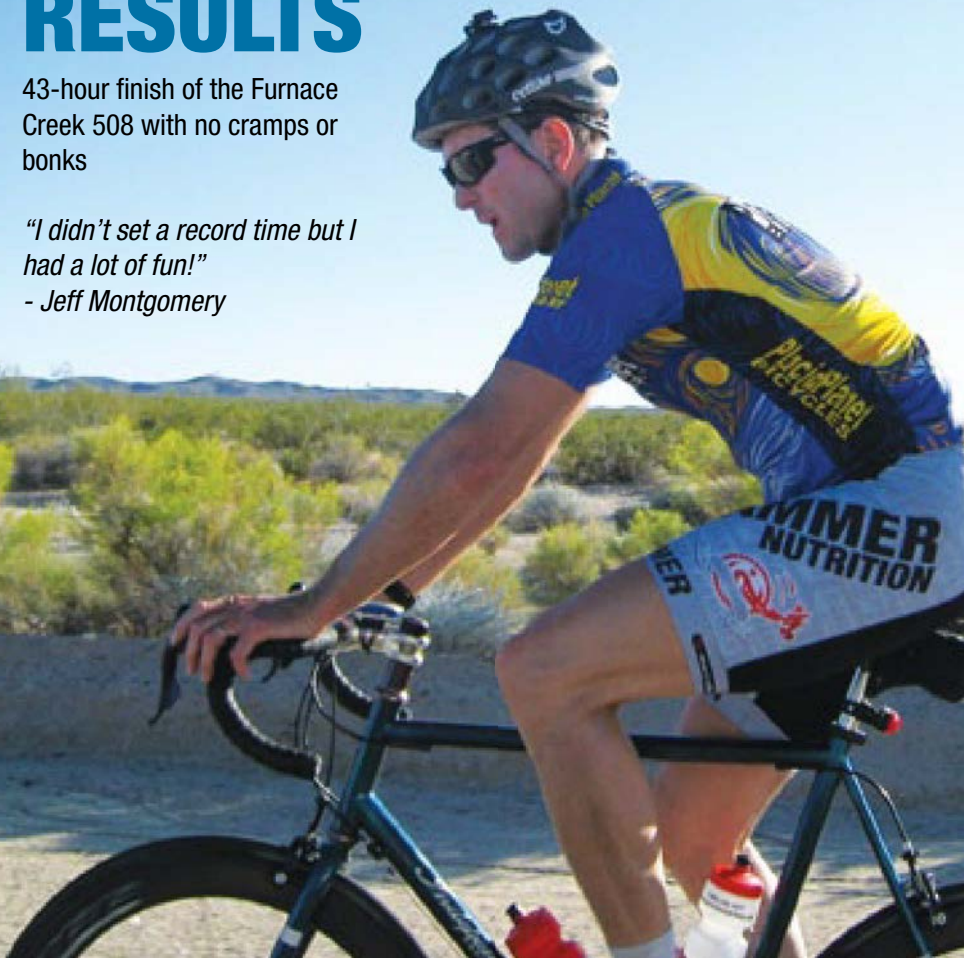
"Perpetuem was my major resource of calories. I targeted 200 calories per hour per Hammer Nutrition's Little Red Book's recommendation. Amazingly, I never cramped or bonked. I could not consume anything due to the high temps, and Perpetuem got me by perfectly. I also never had any bloating. I was very happy with my ride results, as I had really never done anything like this before!"

RESULTS

43-hour finish of the Furnace Creek 508 with no cramps or bonks

"I didn't set a record time but I had a lot of fun!"

- Jeff Montgomery



"Anti-Fatigue Caps worked like a charm!"

I finished 2nd in my age group in my first race this year!" - Grant W.



- Boost endurance for "ultra" efforts
- Reduce fatigue-causing ammonia
- Increase energy production



MSRP

\$19.95 - 90 Capsules

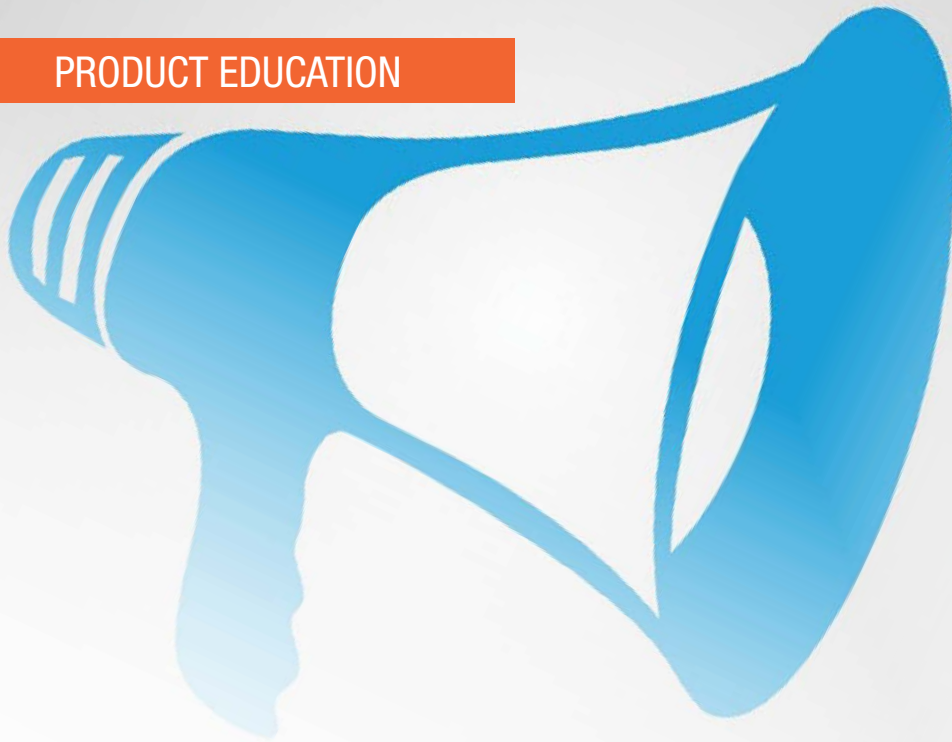
\$17.50 - 3 or more



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Now hear this!

Protect your hearing with beta-carotene, vitamin C, and magnesium

BY STEVE BORN



Among other essential vitamins, this powerful multivitamin/mineral supplement contains beta-carotene, vitamin C, and magnesium.

What's that, you say? A higher intake of beta-carotene, vitamin C, and magnesium is associated with a lower risk of hearing loss? It certainly appears to be the case, according to research published in the *American Journal of Clinical Nutrition*. Considering that hearing loss affects nearly one in five U.S. adults, this is good news indeed!

Researchers examined the intake of beta-carotene, vitamin C, vitamin E, and magnesium—both from food and supplements—of the nearly 2,600 participants in the National Health and Nutrition Examination Survey (NHANES). They also performed audiometric examinations to evaluate the participants' hearing thresholds at low (speech) and high frequencies.

The nutritional data was culled from dietary-recall interview responses of the study participants. Analysis of the results showed that higher intakes of beta-carotene, vitamin C, or magnesium—individually and in combination—were associated with better hearing at both speech frequencies and high frequencies. Lead researcher, Dr. Yoon-Hyeong Choi, stated, "Higher intakes of antioxidants and magnesium, individually and in combination, appear

to be associated with a lower risk of hearing loss."

While magnesium's role in helping prevent hearing loss is not completely understood, it is believed to minimize stress on the cells involved with hearing. High stress to these cells makes them more vulnerable to damage caused by intense noise. Beta-carotene and vitamin C—both powerful antioxidants—help prevent the formation of free radicals in the inner ear, considered a key mechanism for hearing loss.

Numerous vegetables—kale, carrots, spinach, sweet potatoes, squash, cabbage, cantaloupe, mangos, apricots, and more—are loaded with beta-carotene. Vitamin C is plentiful in many foods, primarily citrus fruits. For more information about magnesium, including a list of foods high in this important mineral, see the article "Eating healthy with magnesium-rich foods," on page 76.

Hearing loss has many cause, but this recent study indicates that a combination of beta-carotene, vitamin C, and magnesium—both from food and supplements—provides significant ear-protective benefits. To that we say, "Hear! Hear!" **HN**

THIS SEASON'S SPECIALS

BY VANESSA GAILEY

When it comes to smart prerace meals, there are lots to choose from. The trick is to select something that helps, not hurts, your race day performance. Several Hammer Nutrition sponsored athletes sent us their suggestions, and we've used them to put together a delectable prerace "menu." Whether you choose one of these meals or come up with a healthy recipe of your own, follow the Hammer Nutrition guidelines for race-day success.

- Eat at least three hours prior to your event to allow for complete digestion and the most efficient utilization of your body's finite supply of muscle glycogen.
- Stay in the 200-400 calorie range.
- Focus on complex carbohydrates, starches, and a little protein.
- Avoid consuming high fiber, simple sugars, and high fat.
- Supplements taken prior to the start of a race—such as Race Caps Supreme, Mito Caps, Anti-Fatigue Caps, or Endurance Amino—are okay to take on an empty stomach.
- Don't sacrifice sleep to eat—a better strategy than eating significant calories 1-2 hours prior to a long-duration race is to consume 1-2 servings of Hammer Gel 5-10 minutes prior to the start. Then begin fueling within 30 minutes after your start if possible.

Prerace Meal Menu

PB&J

1/2 white flour bagel
1 tablespoon peanut butter
1 serving Raspberry Hammer Gel

Cinnamon Swirl

Cream of Rice cereal
One serving of Apple-Cinnamon Hammer Gel

Hammer Snack

Cashew Coconut Chocolate Chip Hammer Bar
Lemon-Lime Endurolytes Fizz

K.I.S.S. (Keep it super simple)

Three scoops of Sustained Energy

The Wake-Up Call

2 scoops of Sustained Energy
1 serving of Espresso Hammer Gel

Java Juice

2 scoops of Caffé Latte Perpetuum
1 serving of Espresso Hammer Gel

Plant-Power Plan

Hammer Vegan Recovery Bar
Banana

Easy Campfire Breakfast

Cream of Rice cereal
Blueberries
1 teaspoon maple syrup
1 scoop of Vanilla Hammer Vegan Protein

Morning Refresher

One scoop of Mandarin Orange HEED
2 scoops of Sustained Energy

Healthy Monkey

1 cup active Greek yogurt
Banana

Half and Half

1/2 white flour bagel
1/2 cup active Greek yogurt

Protein Potato

1/2 baked potato (skinless)
1/2 cup active Greek yogurt



Meet the Team

First up: Darren Thompson!

"I've been distributing Hammer Nutrition products since 2006. What excites me about Hammer Nutrition is the company's values. Hammer doesn't compromise on product integrity. That's why I feel comfortable with my 7-, 4-, and 3-year-old sons enjoying what's available . . . except for the Espresso Hammer Gel, of course!

I have completed various triathlons, including the 2013 Challenge Penticton. I might not be fast but I keep going until I've finished the race. I believe a major part of who you are is based on the people you associate with, and I really enjoy the people I've connected with through Hammer Nutrition."

Favorite Hammer Product: Apple-Cinnamon Hammer Gel

Do you have a unique partnership in mind, or an event suggestion for our Big Rig tour this summer? Email me at darren@hammernutrition.ca.



BUYING MADE EASY!

We have expanded our distribution to include an Alberta and Ontario warehouse. Shipping times to all corners of the country have been *reduced*. And best of all, you can now purchase fueling packages and Canadian-branded clothing at www.shophammernutrition.ca

Sponsored Event Schedule

Some of the great events that we will be attending this summer:

May 10-11	Opus Spring Epic 8
May 31	Wine Capital Tri
June 1	Oliver Half
June 7	Binbrook Tri
June 14-15	Welland Half
June 21-22	24 Hour Summer Solstice
June 28-30	Fernie 3
July 2-6	Challenge St. Andrews
July 12	Gravenhurst Tri
July 19	Belwood Tri
July 20	Sylvan Lake Half
July 27	Bala Falls Tri
July 30-August 5	Ultraman Canada
August 9-10	Bracebridge Triathlon Weekend
August 23	Summer Epic 8
August 23-24	Toronto Island Tri
August 24-25	Challenge Penticton
September 6-7	Wasaga Beach Tri
September 13-14	Lakeside Tri
September 20	Mighty Niagara Half
September 27	Fall Epic 8

See our full event schedule and listing of Hammer Nutrition Big Rig stops at www.shophammernutrition.ca; **click on the Events tab.**



Hammer Nutrition US staffer Chad Baker "on tour" with the Big Rig at last year's Challenge Penticton.



Learn more about our athlete Ambassadors at www.shophammernutrition.ca/ambassadors



360 lbs. to triathlete

BY NICOLE FRANDBSEN,
HAMMER CANADA AMBASSADOR

I was overweight as a child and then morbidly obese in my 30s. My father was diagnosed as a diabetic, and the thought that I could become diabetic like my father frightened me enormously.

In 2007, I decided to have gastric bypass surgery. I researched everything I could about how to succeed with it, and everything I read addressed the importance of incorporating exercise into my life. I was able to begin jogging within a year and a half.

When I met my future wife in May 2009, she talked me into doing a sprint triathlon in August and I hadn't swum a lap since age 12! Needless to say, I survived that endeavour and my love of the sport was born. I continued building my fitness and discovered Hammer Nutrition. The manager of my local triathlon store suggested I give Hammer a try since I was suffering such gastric distress during events. Using Hammer Nutrition products allowed me to complete longer distance races and finish strong, without heading to the "porta potties" throughout!

I completed the 2011 Calgary 70.3 Ironman, the 2012 Ironman Canada Penticton, and the 2013 Challenge Penticton, as well as several 10Ks, shorter distance triathlons, and half marathons. I feel good. Being chosen as a Hammer Nutrition Ambassador means so very much to me. I hope to inspire others to make small changes to their lives that can yield huge results. You never know where you can go until you try!



HAMMER ICED CAPPUCCHINO

BY SCOTT MCDERMOTT,
HAMMER NUTRITION CANADA-SPONSORED ATHLETE

One of my favorite beverages made by a Canadian coffee company is an iced cappuccino. It's really delicious, has simple sugars and caffeine, which athletes love, but delivers 460 calories and 20 grams of fat. Ouch!

So I wanted to create something similar but less damaging to my nutritional plans. This Hammer version eliminates the sugar but keeps the caffeine, and has just 260 calories and no fat (assuming you use almond or coconut milk). Sounds like a WIN to me!

RECIPE

2 Espresso Hammer Gels

OR 1 Espresso Hammer Gel and 1 Chocolate Hammer Gel
1 cup almond milk or coconut milk (unsweetened)
1 cup ice (add more or less according to how thick you like it)

Blend away!

Drop to 260
calories!

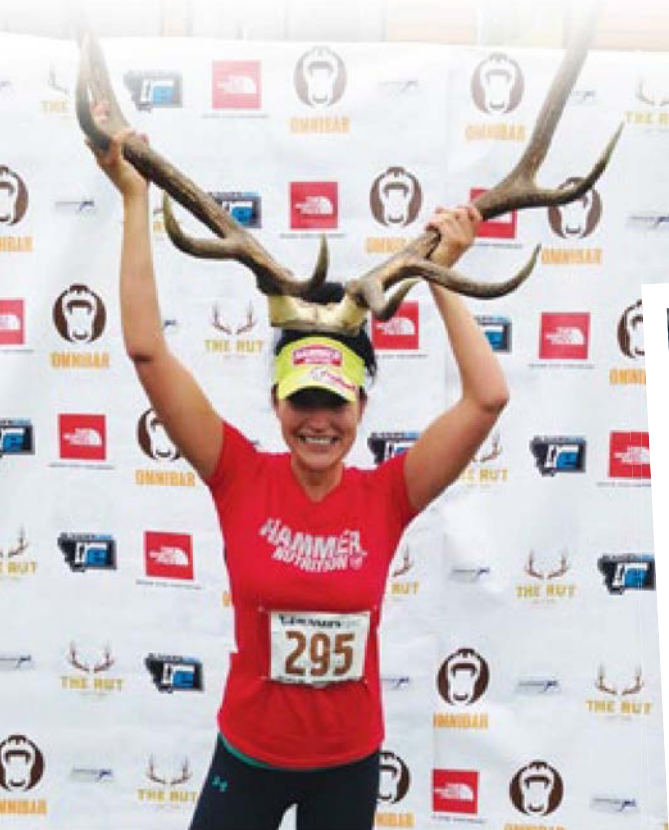


We support your sport!

For many athletes, April and May are usually considered the “early season” when it comes to racing, mainly because a lot of their “A” races occur later in the year. But when it comes to sponsoring events, there is no “off season” or “early season” for us . . . we’re ALWAYS busy!

With requests coming in fast and furious on a daily basis, 2014 looks like another banner year in terms of our support for endurance sports. **HN**

DATE	EVENT	LOCATION
4/12	Rage Triathlon	Boulder City, NV
4/12	Forget the PR, Mohican 50k & 25k	Loudonville, OH
4/13	Hammer Head 100	Ocala, FL
4/19	Mazda Escape From Ft. De Soto Triathlon	Tierra Verde, FL
4/19	Tri Color Triathlon	Fulshear, TX
4/26	Ouachita Trail 50 Mile	Little Rock, AR
4/26-27	HITS Triathlon Series	Marble Falls, TX
4/26-27	Trans Iowa	Grinnell, IA
5/3	12 Hours of Lodi Farm	Fredericksburg, VA
5/3	Collegiate Peaks Trail Run	Buena Vista, CO
5/3-4	Tour De' Bloom	Wenatchee, WA
5/4	TriZou Triathlon	Columbia, MO
5/10-11	STOKR-Scenic Tour of the Kootenai River	Libby, MT
5/10	Ice Age Trail 50	La Grange, WI
5/11	Jay Benson Triathlon	Albuquerque, NM
5/16-17	Rock/Creek Thunder Rock 100 Mile Trail Race	Copperhill, TN
5/17-25	Adirondack Brevet Week	Wilmington, NY
5/17	USMS 2.4 Mile Open Water National Championship	Chattanooga, TN
5/17	Rig Run Outrigger Canoe Race	Santa Barbara, CA
5/18	Gear West Duathlon	Orono, MN
5/18	Auburn Triathlon	Auburn, CA
5/25	Mountains of Misery	Newport, VA
5/31-6/1	24 Hours in the Canyon	Amarillo, TX
5/31	Troika Triathlon	Medical Lake, WA
5/31	The Grandman Triathlon	Fairhope, AL



Sarah Downey poses with elk antlers at The Rut.

"I never run without Sustained Energy and HEED. The amount of endurance energy I feel is amazing! Hammer Nutrition definitely improves my athletic performance!"
- Sarah Downey



Sarah Downey and Lisa Marr celebrate at the finish line of The Rut.

Photo : Finisherpix.com



Ironman at 18

BY CONNOR DISNEY, Hammer Nutrition sponsored athlete

For my senior high school year, I decided to push my body to its maximum limits and do a full Ironman. I registered for Ironman Cozumel 140.6 in December 2013 and got to work. I'd been doing triathlons since I was 12 years old, and had worked my way up to a half Ironman. I've also competed in high school MTB races, triathlon club, and swim team for several years. I knew my previous competitions would help me in Cozumel, but I also knew I would need to step up my training in preparation for the 140.6.

I drank Strawberry-Vanilla Perpetuem and Lemon-Lime HEED, and took Endurolytes hourly on my longer training rides. For running, I used Apple-Cinnamon Hammer Gel before and during. I also had a Almond Cacao Hammer Vegan Recovery Bar and Chocolate Recoverite after workouts. If I needed a little extra boost during a hard workout, I took an Energy Surge tablet.

I crossed the finish line at IM Cozumel in 12:14. Now I'm ramping up for IM Los Cabos. My new goal is to better my time. I'm very excited for the upcoming race season and can't wait to keep Hammerin'! **HN**

"Hourly Endurolytes are key during an ultra run!"
- Sioban M.

"Endurolytes saved my butt in a 50-miler on a 90-degree day! I Took them religiously on the hour and never cramped."
- Luke S.



MSRP
\$19.95 - 120 Capsules
\$17.95 - 3 or more



From our athletes

Catching up with the stars of tomorrow

Martin Rejmanek

Martin enjoys some Hammer Gel while his dad competes in the Red Bull X-Alps.

Photo :
Honza
Rejmanek

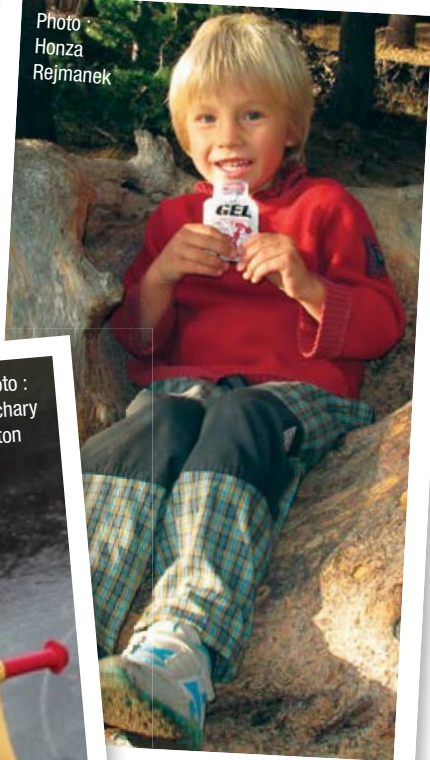


Photo :
Zachary
Hilton



Avery Hilton

Avery researches for her dad on how to fuel up for his 75-mile training ride in the Santa Cruz Mountains.



Noah Thompson

Noah (son of Darren Thompson, Hammer Nutrition Canada distributor) sprints to the finish of his first Lava Kids duathlon in Hawaii last November.

We want to know what your juniors are up to! Send your latest news to:
athleteupdates@hammernutrition.com



Photo :
Jim
Lipjanic

Jimmy Lipjanic

In his first triathlon ever, Jimmy Lipjanic raced to an outstanding 2nd place finish in his age group at the Youngstown Youth Triathlon. Jimmy uses HEED as his beverage of choice and loves his green racing kit! Hammer On, Jimmy!



Photo :
Brian
Kastner

Asher and Nora Kastner

Asher and Nora proudly show off Hammer temporary tattoos.

“Gluten- and grain-free. Easy to carry. Easy to eat!”

- Chris R.



MSRP
\$2.50 - 50g bar
\$2.40 - 12 or more

Flavors: Almond Raisin,
Cashew Coconut Chocolate Chip,
Chocolate Chip, Cranberry,
Oatmeal Apple

If you want an energy bar that tastes great, digests easily, and contains only wholesome ingredients, the Hammer Bar is what you're looking for!

- Delicious taste, moist texture
- Natural, all-organic ingredients
- No preservatives, GMO-free



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FROM OUR ATHLETES



Mark Frank

"Friends and I rode the three-day La Vuelta ride in Puerto Rico, circumnavigating the entire island. We used Endurolytes, HEED, Mito Caps, and Race Caps Supreme every day. No one in my group had any issues with energy levels or the 80-degree change in temperature (from frigid upstate New York to tropical Puerto Rico!)."

Friday: 155 miles with 4300' of climbing
Saturday: 85 miles with 3500' of climbing
Sunday: 135 miles with 4200' of climbing



Eric Bruce

Eric celebrates a 4th place AG finish at the Valentines-themed Run For The Chocolate.
Photo : Alex Gerberding

"The Hammer SweatVac® Beanie kept me warm and dry when temperatures were in the teens."



Sabrina Adams

"I did my first tri in August 2011 even though I couldn't really swim. I learned how to properly swim freestyle in February 2012 at the age of 37. Since then I have completed numerous triathlons including two half Ironmans. I am currently training for my first full Ironman, Mont-Tremblant. Love Hammer Gel for triathlon!"



Shawn Brumfield

Shawn races to 1st place at the 2014 Rockport Rampage CX.
Photo : Richard Dixon

"River City Racing primarily uses HEED, Recoverite, Hammer Gel, and a few of the supplements such as Race Caps Supreme and Anti-Fatigue Caps. I myself haven't ridden for years without my Race Caps Supreme!"

Solo success with Perpetuem!



Many thanks for making a fuel as ideal as Perpetuem. It sustained me through my solo English Channel swim. For 18 ½ hours, I relied on Perpetuem for every one of my 30-minute interval feeds. It worked brilliantly. I've never been so satisfied before with a product that I sent in feedback, but I am now!

My bi-hourly feeds were a water bottle filled with a Perpetuem mix. A Hammer Gel was attached to the bottle with a rubber band. I carried small flasks of Perpetuem and Hammer Gel in the pockets of my swim jammers.

I also used Hammer Nutrition products exclusively during all my training. I turned a few other distance swimmers on to Hammer. Since then, one of them crossed the Catalina Channel and another crossed the Maui Channel—both of them fueled with Hammer!

This was a truly life-changing achievement for me! All the best to the crew at Hammer Nutrition from a very happy customer.

- Kevin Shinnick



Ultra fuel for long distance efforts

- Super easy to digest
- Consistent, long-lasting energy
- Avoid the bonk!

MSRP

\$3.25 - Single serving \$29.95 - 16 Servings

\$2.95 - 6 or more* \$49.95 - 32 Servings

*Mix and match flavors.



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FREE!

Receive a FREE single-serving Recoverite when you purchase a 16- or 32-serving Perpetuem! Ad code EN89P. Offer expires 5/8/14. Valid while supplies last.

FROM OUR ATHLETES



Dolph Hoch

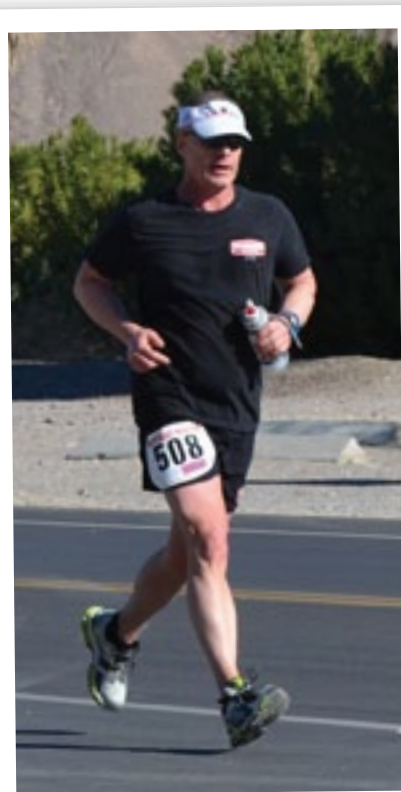
TRIPLE ANVIL TRIATHLON (3x Ironman Distance Race)

“My game plan for this 421.8-mile triple iron distance worked well. I had energy and never bonked. Four days before the race I started my preload with Race Day Boost. Before the 7.2-mile swim I had Endurolytes and Race Caps Supreme and during I had HEED, Hammer Gel, and Endurolytes. On the bike, I had HEED, Hammer Bars, Endurolytes, and Anti-Fatigue Caps. Plus, my mainstay was Perpetuem Solids! I had a Solid every 15 minutes. On the 78.6-mile run I fueled with HEED, Endurolytes, and Anti-Fatigue Caps plus continued the Perpetuem Solids. So easy on my stomach! At the end, Recoverite!”



Kris and Mindy Przeor

“At the the Lost Dutchman (marathon distance for Kris, 8K trail race for Mindy), we both finished 7th overall and 2nd in our AG in our races. This is how we Hammer!”



Todd Hine

“Hammer Gel and Endurolytes Fizz kept my pace steady throughout the Death Valley Half Marathon. I finished 5th in my AG.”

Photo : Debbie Hine

Send us your news today at
athleteupdates@hammernutrition.com

Ray and Anna Fortner

"First Hammer Nutrition order of the season has arrived! Team Fortner is now ready for the 2014 MTB and CX season!"

"I had a mini-training camp with my daughter Anna Fortner in Santa Barbara this winter, just six months after the birth of her daughter and my granddaughter. HEED and Hammer Gel kept us fueled, and Endurolytes and Anti-Fatigue Caps helped with the long base miles! Racing starts next month for us and we are ready to Hammer On!"



Frosty Freestyle

"Thanks Hammer Nutrition for your ongoing sponsorship of the Frosty Freestyle and Crazy Classic cross country ski races in Michigan!"



Craig and Stephanie Flinn

"My husband Craig and I completed the Walt Disney World Marathon in January. Craig attempted it last year but ended up in a medical tent with an IV due to dehydration. Not this year thanks to Hammer Nutrition products! (See my Hammer Gel tucked into my waist band!) My best running buddy Michelle Carter also finished strong using Hammer Nutrition."

FROM OUR ATHLETES

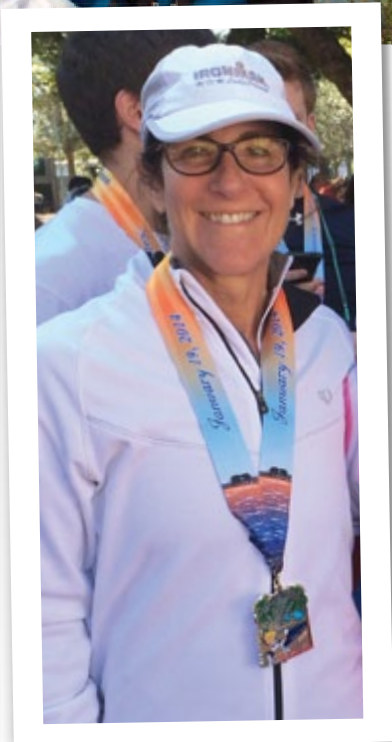


Dottie Hodges & Family

“Our family affair at the Secret City SUP Classic, Oak Ridge, TN: Hal Turner, 2nd Place Men’s Elite 7-mile 12’6” ; Kit Turner, 2nd Place Women’s Junior 2-mile; Dottie Hodges, 1st Place Women’s Elite 7-mile Surf Class; and Marshall, our cheering section!

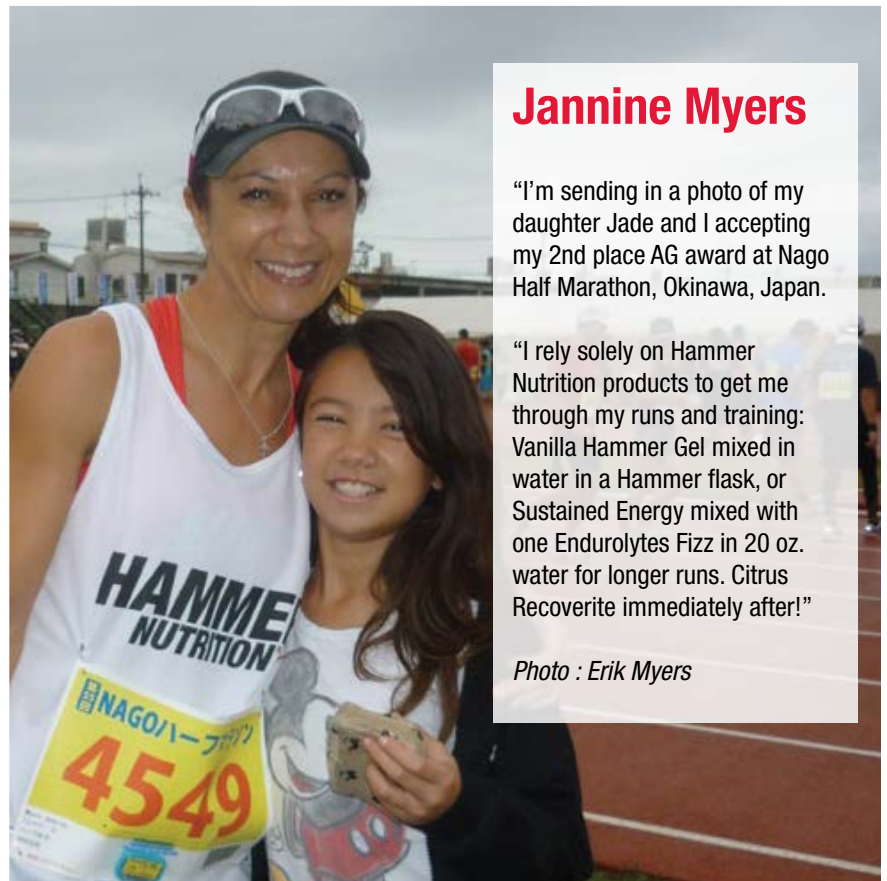
“My standby for elite course races is Endurolytes Fizz via hydration pack and a soft flask of Perpetuem paste. Works like a charm!”

Photo : William Brumley



Susan Olesky

“My year is off to a good start with a 6th AG place finish (out of 83 women) at the Naples Half Marathon 2014. I used Hammer Gel 20 minutes before the swim and during the run, and relied on Perpetuem during the bike. As always, Recoverite after!”



Jannine Myers

“I’m sending in a photo of my daughter Jade and I accepting my 2nd place AG award at Nago Half Marathon, Okinawa, Japan.

“I rely solely on Hammer Nutrition products to get me through my runs and training: Vanilla Hammer Gel mixed in water in a Hammer flask, or Sustained Energy mixed with one Endurolytes Fizz in 20 oz. water for longer runs. Citrus Recoverite immediately after!”

Photo : Erik Myers



Frozen Otter Ultra Trek

"A big thank you for your sponsorship of the Frozen Otter 2014! As usual, our participants were thrilled to have Hammer Gels, Endurolytes Fizz, and HEED to keep them going during their 64-mile trek." - Karen McLennan



Beverly Watson

Beverly charges to 1st place AG at Ironman Hawaii. Photo : Janet Watson

"Endurolytes are a staple in my fueling plan, especially for a long, hot race where you get robbed of electrolytes at a breakneck pace. Hammer Gels are always on my bike for fuel on the go."



Shayenn Thompson

Shayenn secures her 1st place AG at the Montana State Cyclocross Championships 2013.

"Endurolytes Fizz before races, and Hammer Gel during races!"



Brian Brothers

Brian finishes 2nd place overall at the 30K Grand Targhee Fatbike race. Photo : Millissa Melle

"I used Race Day Boost leading up to the race, which definitely gave me the edge I needed to compete with riders half my age."

FROM OUR ATHLETES



Nicolette Nordan

Nicolette finishes an early season marathon at the 26.2 with Donna race.

"Every hour I take Anti-Fatigue Caps, Race Caps Supreme, and Endurolytes. NOW for the best part and probably why I still keep torturing myself with endurance rides and runs . . . Perpetuem Solids. I LOVE THESE THINGS!

"They aren't too heavy on my stomach, and they offer just enough energy to keep me from crashing. I've found that having two every hour on my long runs and two before I start works great."



Maria Maslanka

"Hammer Bars are one of my favorites when out adventure racing. They are hearty, filling, and great tasting. I have consumed over a dozen of these in a 30-hour race once in Ontario, Canada, and I didn't get tired of them!"



Bailey Hinz

"Thank you so much for sending some Hammer Nutrition fuels my way to share with the Fond du Lac YMCA beginner tri group. We had 15 people total and they were SUPER excited about their goodie bags—their post-spin reward!"

Francisco Garza

"My finishing time at the Bandera 100K was 11:47:19, for an (unofficial) 1st place AG. Coming back from an injury in December, I registered at the last minute for this race but did not take the championship option, which would've earned me the 1st place for my age group. Hammer Gel, HEED, Perpetuem, and Endurolytes kept me going all day to have a successful race!"

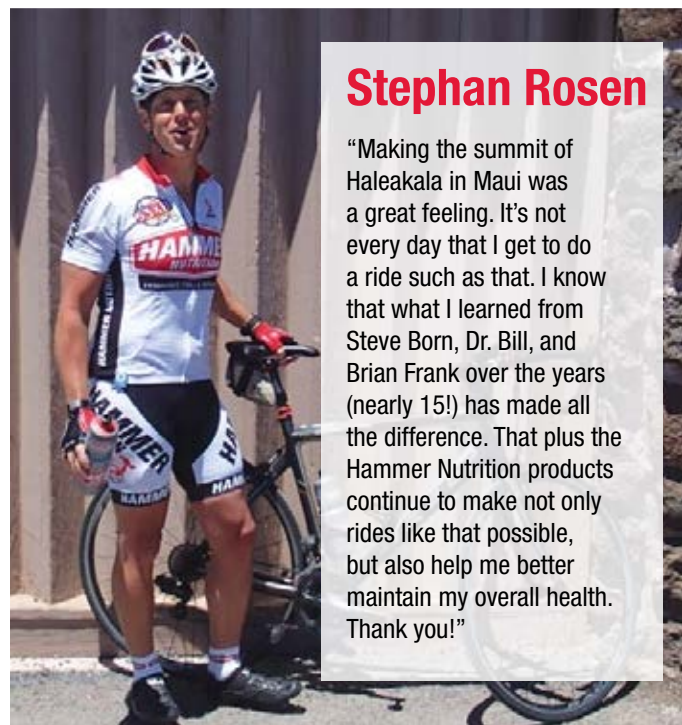
Photo : Joe Prusaitis





Dan Taylor and Josef Lemire

San Bruno Mountain Hill Climb was a great start to the year for the Hammer Nutrition Super Masters Team. Josef Lemire (left) claimed 1st place 65+ and Dan Taylor set a PR with a 45-second improvement over his last year's time, earning him the 3rd place podium spot.



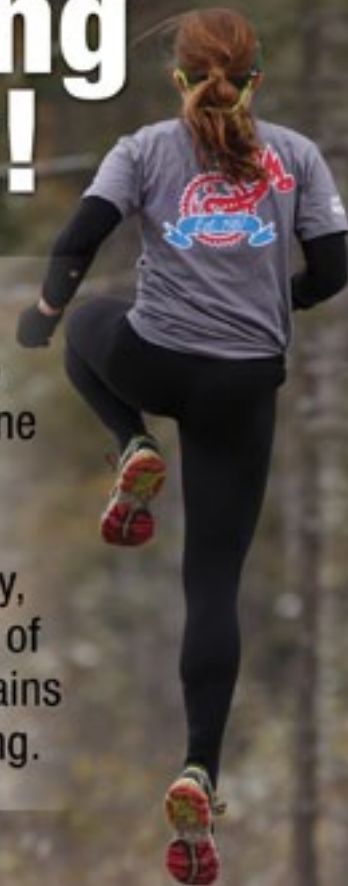
Stephan Rosen

"Making the summit of Haleakala in Maui was a great feeling. It's not every day that I get to do a ride such as that. I know that what I learned from Steve Born, Dr. Bill, and Brian Frank over the years (nearly 15!) has made all the difference. That plus the Hammer Nutrition products continue to make not only rides like that possible, but also help me better maintain my overall health. Thank you!"

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Make your training count!

Super antioxidant is designed to help protect your immune system, enhance circulation, and accelerate recovery, thus preserving all of the hard-earned gains you make in training.



Jamie Dittmar trains in the Minnesota Northwoods. Photo: Larry Mishkar

- Lessen muscle soreness
- Reduce free radical damage
- Improve circulation & cognition



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



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FROM OUR ATHLETES



Mary Duprey's spin room

"Thanks for the recent VIP order! We restocked our spin/training room and are ready to settle in for another epic training session."

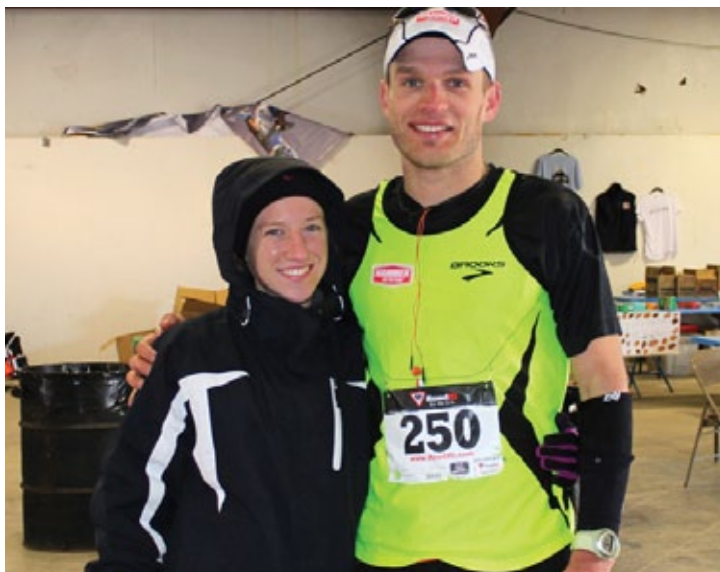


Russell DeBarbieris

Russell finishes a strong 'cross season with a 1st place Mens 60+ Texas State Cyclocross Championships.

Photo: Russell Carawan

"I concluded my 'cross season with seven wins, the last at the Texas State Championships. The stars aligned and Team Hammer prevailed!"



Daniel Seigers

Daniel celebrates his overall win of the 2013 New Jersey Ultra Fest 50-Mile.

"Of course, Hammer Nutrition was the fuel to a successful day. The fuel/supplements for my 50-mile race consisted of Endurolytes, assorted Hammer Gels, Strawberry HEED, and a couple of Cranberry Hammer Bars."

"Hammer Nutrition is incredible. I highly recommend your products!" - Matt J.



Siobahn Maize

“Post-race celebration with Recoverite of my 1st place AG finish at the Charlie Post Classic 15K!”



Ben Proko

Ben reaps the rewards of 1st place at Du the Bear Duathlon and 1st place at Fairfield Triathlon—two races back to back!

“About 45 minutes before my races, I used the Potentiating/Warm-up program on my EMS unit to help ready my muscles for prerace warm-up drills and run. And Hammer Nutrition fuels gave me that much needed advantage to claim overall victory! Thank you Hammer Nutrition!”

“Love, love, love Peanut Butter Hammer Gel!”

“I had Hammer Gel during the bike leg. What a difference it made going into the run!”

- Jennifer Reschke, 6th place AG, Bone Island Triathlon (Half Iron distance)

With Hammer Gel you get only what's good for you: complex carbohydrates and natural ingredients for reliable energy, not the “flash and crash” of sugar-loaded products.

FLAVORS: Apple-Cinnamon, Banana, Chocolate, Espresso, Montana Huckleberry, Orange, **NEW** Peanut Butter, Raspberry, Tropical, Unflavored, Vanilla

MSRP
 \$19.95 - 26 Serving Jug
 3 or more - \$17.95
 \$1.95 - 5-serving flask

\$1.40 - Single Serving
 12 or more - \$1.25



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Get the **ROYAL** treatment



Giorgio Casorati is crowned king of the 104K 4th stage of the 2013 Giro Calabrese.

Join the **Hammer VIP Program** today!

*"All the kids are sharing in Dad's Hammer VIP Program membership. **Using HEED and Recoverite along with quality running gear makes the training easier. Thanks Hammer Nutrition and especially Katey for the FREE green cycling jersey!**"*

- Jim M., VIP customer

*"I have been enjoying using all of the Hammer Nutrition products I have ordered, as well as the samples included with my orders. **I truly believe Hammer Nutrition products have made a big difference in my health and recovery from training.** I look forward to a long relationship with Hammer as I continue to challenge myself with my athletic goals."*

- Jim R., VIP customer

"I have been a Hammer VIP for more than three years now! I enjoy talking nutrition and training with the Client Advisors, and I like that I always get to talk with someone I know . . . all great perks of ordering from Hammer Nutrition. I was a loyal customer and wanted to start saving money on products and shipping, so I joined the VIP Program."

"Being a Hammer VIP makes my life easier, and I get some great Hammer accessories in return. Opening my package every three months is a special treat!"

***I never have to worry about running out of products, saving money on shipping, or receiving discounts.** Katey goes out of her way to make you feel like a VIP!"*

- Zachary Hilton, Hammer VIP



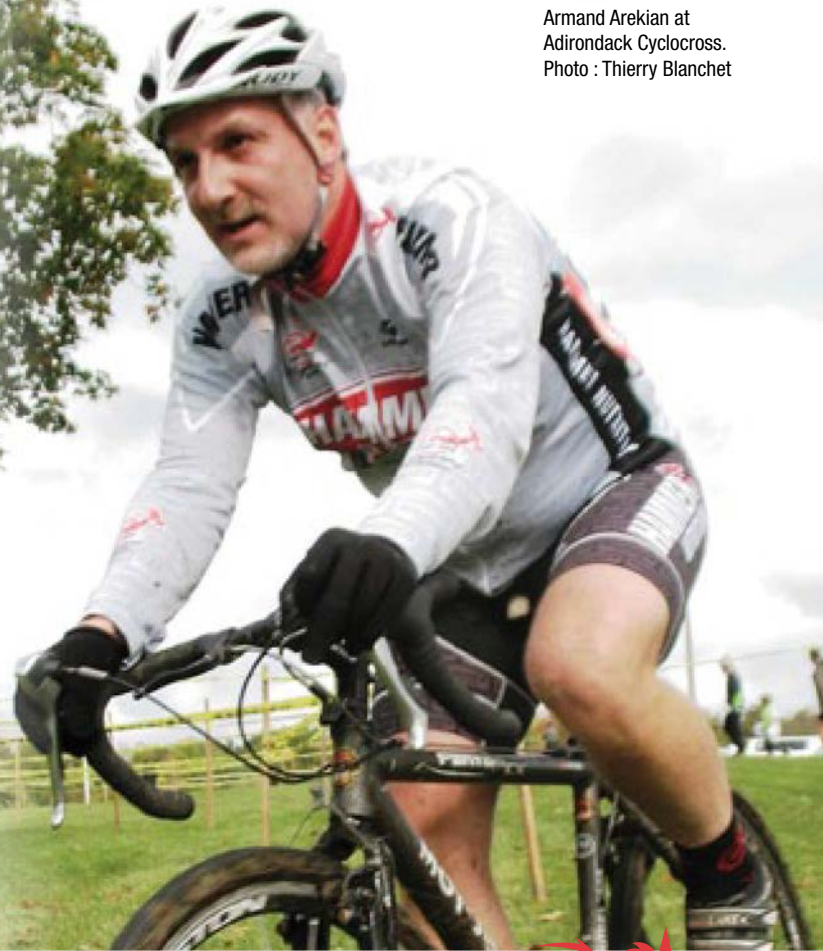
"I started using Hammer Nutrition products a few years ago, and I joined the Hammer VIP Program in 2012.

With the Hammer VIP Program, Hammer knows what I need and when I need it.

Since becoming a Hammer VIP, I've never run out of product. The customer service staff makes it very easy to adjust your order, or you can do nothing and it will automatically ship to your door. The best part is the wealth of knowledge the staff has to assist you with finding the right product for your needs . . . and I love the samples and freebies in each order too."

- Armand Arekian, VIP Customer

Armand Arekian at
Adirondack Cyclocross.
Photo : Thierry Blanchet



Take it to the next level

Join the Hammer VIP Program today!



What is it?

The HAMMER VIP Program offers the ultimate in convenience and VIP treatment with scheduled shipments and discounted pricing.

How does it work?

Call our 800# to have one of our friendly Client Advisors help you select the correct Hammer Nutrition fuels and supplements to meet your needs and goals. We'll then ship your products every 90 days (free ground shipping!) without you ever having to pick up the phone again.

What do you get?

- 1 - A special team of advisors assigned to your account and special access to our experts.
- 2 - Automatic resupply of products every 90 days.
- 3 - On your first VIP order, we'll send you a clothing kit for FREE. Ask your advisor for details.
- 4 - On your second VIP order, you'll receive a FREE Hammer tee shirt.
- 5 - FREE goodies on every future shipment as well (our choice).
- 6 - Discounted pricing, exclusive offers, and much, much more!
- 7 - FREE ground shipping on all automatic shipments and one fill-in order per quarter.



FREE clothing!

Receive a free Hammer Nutrition clothing kit with your first order! Select one of our sport-specific kits: cycling jersey and shorts, tri jersey and shorts, running top and shorts, or swimwear with a swim cap and a large towel. Ask a Client Advisor for more information.

An advisor will also call or email you approximately ten days before your scheduled ship date to see if you'd like to add anything to your order to take further advantage of free shipping and discounted pricing.

*Sorry, international clients are not eligible for these programs; only valid for U.S. residents.

**You are free to cancel your participation in this program at any time, however some limitations on the free gifts apply. Monthly shipments must be > \$50, quarterly shipments > \$150. VIP program pricing and benefits cannot be combined with ANY other offers, promotions or discounts. See website or ask your Client Advisor for complete details.

Call a Client Advisor to sign up for the Hammer VIP Program and start saving today!



Don't wait any longer, become a VIP today!

Call 1.800.336.1977



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Ed Hirsch refuels during a training ride in Moab, UT. Photo: Myka Hennemeyer

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