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Products - Powerful, safe, natural, and undeniably effective! They will do exactly what we say they will and outperform the competition every time . . . Guaranteed!

Knowledge - Using our time-tested, science-based fueling protocols will provide you with the best possible performance . . . Guaranteed!

Service - Second to none, the best you've ever had! We treat you like you are important to us, because you are . . . Guaranteed!

Est. 1987

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Cale Reeder crosses the finish line for a 1st place AG at Pescadero Coastal Classic Road Race. Photo : Brad Goodson

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 per

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.

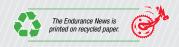
In reading this and future issues, please remember that the views expressed in this publication will always be biased in favor of a healthy diet and hard training that emphasizes quality over quantity, and prudent supplementation to improve health and performance. But above all, we at Endurance News 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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ETTERS Send your letters to letters@hammernutrition.com for possible inclusion in a future issue of Endurance News.

Hey Hammer team,

I'm just getting back from the Hammer Camp held in Wisconsin. It was a tough camp this time with 25,000+ feet of elevation gain in the backcountry hills of southwest Wisconsin.

I continue to follow the Hammer Nutrition fueling and supplement regimen that I detailed for you in my Endurance News #84 article. Hammer Nutrition products worked for me every time during the Wisconsin camp.

Fuel:

- Eat at least three hours before the ride.
- Consume Hammer Gel ten minutes prior to starting.
- Consume Perpetuem within 20 minutes of the start and continue with one scoop per hour.

 Consume Hammer Gel as needed every hour.

Supplements:

- Triple threat combo of Endurance Amino, Anti-Fatigue Caps, and Endurolytes every hour.
- The occasional Energy Surge when one of the those CAT climbs are coming up (and we had more than a few!)

These products are all I need, so long as I have recovered properly from the previous ride/day with Compex, Recoverite, and a solid, whole-food meal of complex carbs followed by Hammer Whey before bed.

Best Regards, Mike McDonald

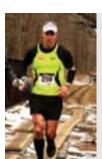
Hey Hammer Nutrition,

I just wanted to say thank you for the great feature in Endurance News #85! I am still relying on your products to help optimize my three weeks of training in the altitude of Colorado, preparing for a 17-week run of The Swordsmen show in Wisconsin and Ohio.

Again, thanks for the article about me in EN. My brothers' jaws dropped when they saw it, as did my local Hammer Nutrition retailer!

Cheers,

Douglas Mumaw, an "Atypical" Hammer athlete



CORRECTION:

In Endurance News #85 we inadvertently misspelled the photographer website on an athlete submission on page 90. Credit for the photo of Daniel Seiger should have been given as www.hillcrestphoto.com.

The editorial staff of Endurance News carefully reviews each issue in an attempt to ensure that all of the information presented is correct and complete. Occasionally, however, mistakes sneak past them and make it into print.



Welcome to the 86th issue of Endurance News.

espite trying to get outdoors as much as possible to enjoy the glorious summer weather, we've managed to put together 100 pages of action-filled content for you to absorb. As usual, the athlete contributions are my favorite pages of this issue, but there are many more informative articles to make your life more enjoyable. We also have a couple of interesting articles from Hammer Nutrition-sponsored pro athletes and longtime clients that you will find of value.

Be sure to read the article on protein—

this continues to be a challenging area in the diets of many endurance athletes. If you've been struggling with muscular recovery, fatigue, soreness, and/or low immune function, you may fall into this category. For many, consistently consuming 80-120 grams of protein each day is a challenge, for sure. The trends toward decreased meat consumption and vegetarian diets make getting adequate dietary protein even more challenging. This is why we offer several different proteins to augment your dietary intake. While I have always advocated getting as much of your daily protein from your diet, when that is not possible, using a

high-quality protein supplement is not just a good idea, it's essential.

Another must-read article is on sodium and salt stains. We are firm in our stance on sodium, and have science and decades of experience on our side-high dietary sodium intake is bad for your health and your performance in the heat. The high-sodium advocates can argue in self-serving circles until the end of days, but consuming a high-sodium diet, and consuming even more sodium while exercising is a good way to end up with salt stains all over and sub-par race results, but not much else. The key to beating the heat, and avoiding cramping and other unpleasant side effects, is to consume a low-sodium diet, hydrate effectively (not excessively), and consume moderate amounts of sodium while exercising. It may not be sexy, and it may not suit your salt-fried taste buds, but if achieving peak performance in the heat is truly your goal, this is the best and safest way to get there.

More new products

In this issue we are introducing two new products to our supplement line, both of which are key to your health and performance. EndurOmega is our take on EPA/DHA fish oil supplementation. It's higher in Omega-3's than most and is at the top of the purity chart. If you've been using the Carlson salmon oil, this will be a nice upgrade. If you've not been supplementing with fish oil, now is a good time to start.

The other new product, Phytolean, is one that will be beneficial to many of you who, like me, struggle with that extra bit of weight, despite many hours of exercise each week. Like most Americans, we suffer from excess consumption of calories in general, and starchy carbohydrates specifically. I see it in the mirror and I know many of you do toothose extra 5-10 pounds of adipose tissue (body fat) around our midsections and in other inconvenient locations. While moderating starchy carbohydrate caloric intake is the obvious solution, that is easier said than done. This is where Phytolean can help you win this "battle of the little bulge." Phytolean's two active ingredients help to block the absorption of starch and increase fat metabolism. Taking two capsules before lunch and dinner, or any other meal containing

starch, is all it takes. You can also use Phytolean as a preventative, as I did recently on my cycling trip to Italy. When they keep putting plates of amazing pasta in front of you after an eight-hour day in the saddle, it's next to impossible to push back. I made many valiant efforts to not overindulge, but knew that I'd have limited success. Phytolean to the rescue! I'd just take two or three capsules, depending on how hungry I was or how delectable the dinner offerings were going to be, and I knew I'd be blocking 200-300 grams of starch from being absorbed. It worked like a charm. While others were gaining weight, I was leaning down with each day. While I don't recommend using Phytolean as a crutch like this on an ongoing basis, it is a great feature. Steve's articles in this issue give you all of the features and benefits of these two products, so be sure to read on.

Moving on to summer fun, I hope you've been able to go on some adventures, see new places, and meet new people this summer. I was fortunate to be able to take a working vacation in Italy in the beginning of June. For the 11th time in the past 17 years, I joined Carlo Vanini, a few other Americans, and the merry band of Italians from the ASD Berti Cycling Club based in Varese. After a warm-up ride around Lago Maggiore, we took a short flight down to the tip of the toe of the boot and rode around Calabria and Compania for eight days. 500+ miles of pedaling and eating through the Italian countryside is my idea of a perfect week on the bike. Next year, they'll be riding in the north, probably in the Venetto region. They've asked me to recruit a few more Americans to round out the group, so pencil it on your calendar for next June and watch for more updates in coming issues of Endurance News.

Enjoy the rest of your summer and the read!

Brian Frank Proprietor

Brin Frek







Product Spotlight

Super Antioxidant and AO Booster

Superior support to fight free radicals

BY STEVE BORN

f the many factors that determine the quality of athletic performance and overall health, one of the most crucial is proper recovery after workouts. Three sayings regarding the importance of adequate recovery are definitely worth taking to heart:

- "When you've finished training, you're still not finished with training."
- "What you do in the first 60 minutes after exercise is as important as anything you did during the actual workout."
- "How well you recover today greatly determines how well you'll perform tomorrow."

Two key factors to ensure enhanced recovery are:

- "Refilling the tank" with high-quality carbohydrates and protein. Doing this ASAP after workouts allows the body to replenish and increase its stores of glycogen, while also supplying the amino acids needed to help rebuild the muscle tissue and support the immune system.
- 2. The consumption of antioxidant nutrients. Doing this helps neutralize the negative effects of free radical buildup, which is vital in terms of optimizing recovery and immune system functioning.

While number one is undoubtedly important, let's focus on number two, the intake of antioxidant nutrients, in particular two products that help fulfill this requirement superbly—Super

Antioxidant and AO Booster. First, however, let's discuss what free radicals are and why antioxidant supplementation is so important.

Free radicals and antioxidants

Louis Pasteur, recognized as the father of modern medicine, once said, "The key to medicine is host resistance" and this is where antioxidants excel. Antioxidants strengthen our immune system, increasing our resistance to many types of toxins, bacteria, viruses, and degenerative diseases. They accomplish this primarily through the neutralization of excess amounts of free radicals. Over half a century ago. Dr. Denham Harman first proposed the theory of free radicals and the role they play in age-related diseases. Back then, when aging was primarily believed to be more of a mechanical issue, due simply to many years of wear and tear on the body, Harman's theory on free radicals was... well, radical. Now, however, while there are many factors that contribute to the aging process, the Free Radical Theory of Aging is widely accepted as one of the primary, if not THE primary concept as to the cause of accelerated aging and/or age-related diseases.

Researchers Bradford and Allen write, "A free radical is simply a molecule carrying an unpaired electron. All free radicals are extremely reactive and will seek out and acquire an electron in any way possible. In the process of acquiring an electron, the free radical will attach itself to another molecule, thereby

modifying it biochemically."
[1] Other nutritional scientists, Leibovitz and Siegel, state:
"However, as free radicals (FR) steal an electron from the other molecules, they convert these molecules into FRs, or break down or alter their chemical structure. Thus, FRs are capable of damaging virtually any bio-molecule, including proteins, sugars,

Dr. Bill Misner writes:

fatty acids, and nucleic acids." [2]

Free radicals are the major cause of aging and degenerative disease in our society. They are continually formed in the body as part of normal biological processes; however, other factors contribute to an overload of free radicals, such as pesticides, cigarette smoke, pollution, alcohol, and foods that are fried at high temperatures, or burnt. If free radicals are not neutralized by on-site antioxidant body stores immediately, tissue damage occurs to absolutely every cell membrane touched by these imbalanced molecular wrecking machines.

Antioxidants have the ability to

The Super Antioxidant **Formula**

Superoxide Dismutase (SOD) is an enzyme and one of the powerful endogenous (that which occurs naturally in the body) antioxidants. It is responsible for neutralizing the most common free radical known as superoxide. It also aids the body's utilization of the minerals copper, zinc, and manganese. The enteric-coated form in Super Antioxidant allows the nutrient to pass intact through the stomach to be absorbed in the small intestines.

Grape Seed Extract has a high content of compounds known as oligomeric proanthocvanidins (OPC), flavonoids that are believed to be several times more potent than even vitamin C and E. OPCs are responsible for neutralizing three types of free radicals. In addition, the OPCs in Grape Seed Extract help strengthen and repair connective tissue and are excellent anti-inflammatories.

L-Glutathione is a molecule that is produced in the liver from three specific amino acids. Along with the mineral selenium, it forms the enzyme glutathione peroxidase, which, along with SOD, is one of the body's endogenous antioxidants, and arguably the most important one of all. Glutathione is also part of another enzyme, glutathione reductase, which has liver protecting qualities. Glutathione

protects individual cells as well as the tissues of nearly the entire body and is an important nutrient in helping with the prevention of cancer, particularly liver cancer.

Ginkgo biloba is an herb best known for its ability to enhance circulation and increase the supply of oxygen to the entire body. This allows it to help relieve muscle pain in addition to its antioxidant benefits. A potential benefit of increased circulation is the ability to speed delivery of antioxidants throughout the body in addition to helping eliminate metabolic wastes more quickly.

Gotu Kola is another herb that has antioxidant capabilities as well; aiding in increasing circulation. It is helpful in decreasing fatigue and neutralizing blood acids and is useful for optimal heart and liver function.

Vinpocetine is chemically related to and derived from vincamine, an alkaloid found in the periwinkle plant. Studies with vinpocetine indicate that it can dilate blood vessels, enhance circulation in the brain, improve oxygen utilization, make red blood cells more pliable, and inhibit aggregation of platelets. Vinpocetine also has antioxidant properties.



or twice daily.

"I recently added Super Antioxidant to my daily supplementation. WOW . . . so awesome!

I can really tell a difference with the recovery and also my increased energy **levels."** - Jeremy J.





\$32.95 - 60 Capsules

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

counteract the damaging effects of these everyday physiological processes; they play a vital role in preventing the onset of numerous chronic diseases such as cancer, stroke, heart disease, Alzheimer's disease, Rheumatoid arthritis, cataracts, and more.

Who's at risk?

Free radicals never take a day off; athletes and non-athletes are constantly bombarded by them. However, free radical production is even higher in people who:

- Exercise beyond 90 minutes duration
- Exercise above 80% VO2 Max
- Have a high body fat percentage (above 15% males, above 20% females)
- Eat animal meats and dairy products
- · Are 40 and older
- Weigh more than 200 lb

The take-home message is that free radical production occurs at ALL times, simply through the process of energy production. In addition, as Dr. Misner mentioned earlier, there are a number of other factors that contribute to free radical production. In fact, stress itself—not just oxidative stress, but just plain old stress—creates free radicals. As one medical professional once wrote, "A stressful life mass-produces free radicals."

If you fit into any of the above categories your body is creating even more free radicals. As an athlete, you consume huge amounts of oxygen and metabolize far greater amounts of calories than sedentary people. This means that you're generating free radicals on the order of 12-20 times more than non-athletes. It should be clearly evident that you need to take action!

The solution

If there were only one or two types of free radicals negatively affecting our bodies, we'd be able to get by with one, maybe two, antioxidants such as vitamin C and vitamin E. The truth, however, is that there are several different free radicals, both water-soluble and fat-soluble, which is why a wide variety of antioxidants is necessary. Additionally, not only do

antioxidants work on a specific type (or types) of free radical, a large majority of them work synergistically supporting, augmenting, and enhancing the effects of other antioxidants. The saying, "The whole is greater than the sum of the parts" is quite appropriate when talking about antioxidants and how they work in the human body.

Super Antioxidant and AO Booster supply a wide range of both watersoluble and fat-soluble antioxidants. Along with the antioxidants supplied in Premium Insurance Caps, Race Caps Supreme, and Mito Caps, these two products provide even more "coverage" against the damaging effects of free radicals. At this time of year, with training volume at its peak, free radical production and accumulation will be extreme. As a result, excess free radical neutralization is crucially important, especially with those "A" races coming up soon. Incorporating Super Antioxidant and AO Booster in your arsenal of recovery products is most definitely a wise strategy. **HN**

References available upon request



The AO Booster Formula

Tocopherol/tocotrienol blend – The vitamin E "family" has eight "members"—four tocopherols and four tocotrienols. Studies suggest that optimal health benefits are obtained via intake of a mixture of tocopherols and tocotrienols versus "regular" vitamin E (d-alpha tocopherol) only. One researcher writes, "While alpha tocopherol has long been known as an important antioxidant, research has now shown that the complete vitamin E team is much more effective. The different vitamin E forms have complementary effects as free radical scavengers. Together they can fight a wider spectrum of free radicals than alphatocopherol alone."

Lutein – This carotenoid is a potent antioxidant, with a particular affinity for eyes and skin, helping protect them from ultraviolet (UV) damage. In regards to eye health, not only does lutein provide the macula and lens with protection from sunlight's UV rays, it is suggested to decrease the risk of developing Age-Related Macular Degeneration (AMD). Lutein aids in protecting the skin from UV and free radical damage, it helps reduce inflammation and redness in the skin, and may even be a powerful ally for the prevention of skin cancer. In addition,

studies indicate that lutein and other carotenoids (a class of natural fat-soluble pigments) may have protective benefits against breast cancer. Lutein is also purported to help prevent or slow down atherosclerosis, a condition that causes the arteries to clog and often leads to cardiovascular disease.

Astaxanthin – This carotenoid, most often derived from the microalgae Haematococcus pluvialis, is suggested to be ten times stronger than beta-carotene and 100 times stronger than vitamin E in regards to its antioxidant capabilities. Japanese research suggests that mice supplemented with astaxanthin appeared to burn fatty acids for fuel more efficiently, were able to exercise longer, and had greatly decreased fat accumulation compared to mice not receiving astaxanthin. Other research has shown that astaxanthin reduces oxidative damage from strenuous exercise in the skeletal and heart muscles of supplemented mice. Research also suggests that astaxanthin may improve human cardiovascular health and prevent cancer, among other potential benefits, including anti-inflammation.

Complete your recovery cocktail!



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



\$32.95 - 60 Capsules \$28.95 - 3 or more

- Supreme fat-soluble antioxidant support
- Reduce post-workout muscle soreness and inflammation
- Eye and skin-specific benefits

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FREE BONUS!

Purchase a bottle of AO Booster and receive a FREE packet of Recoverite in each flavor. Ad code EN86AOB. Offer expires 9/12/13. Valid while supplies last.





Don't run on empty when it comes to this health essential

BY VANESSA GAILEY

ut out high-fat meats. Increase your daily intake of plantbased foods. Exercise more. Eat less. All of these sound like good advice on the road to endurance success, but without careful attention and monitoring, it's also the same road that leads many to a protein deficiency. Training sessions result in fatigued muscles in need of repair, and protein is a necessity for this reparation process, thus increasing the need for protein supplementation to reach full recovery and maintain overall health.

Fortunately, Hammer Nutrition's Whey, Vegan, and Soy protein powders make this easy and convenient. The first step is to determine your daily protein intake requirements and recognize any possible signs of protein deficiency. The second step is to select the protein that best meets your needs and dietary preferences.

Daily protein requirements for athletes

Follow this simple equation or see the chart on the next page to determine if you are consuming enough protein daily (total from all sources). Create a daily protein intake journal and monitor your

eating habits over the course of a normal training week. If you aren't getting enough protein, the time to start is now!

Body weight in kilograms X 1.4 to 1.7 (depending on your exercise intensity) = amount of protein in grams that you should consume on a daily basis. To convert from pounds to kilograms, divide by 2.2.

Warning signs of protein deficiency

It is highly recommended that you speak with a physician in diagnosing a protein deficiency, but the following list will provide some indicators to watch for.

Long-term weight loss. This is not a subtle change from day to day, but a recognizable decrease in body weight long-term not associated with changes in diet or workout volume.

Hair loss and brittle or ridged nails.

If you notice hair loss or brittle nails, this is a potential indicator. Ridges running from the top to the bottom of the nails can be a signal that the body is suffering an ongoing protein deficiency.

Extreme fatigue and sleepiness.

If you're tired when you shouldn't be, inadequate protein intake could be to blame.

Decrease in muscle mass not due to decrease in workouts. Despite regular workouts, if your muscles decrease in size, your body is most likely cannibalizing itself for necessary protein.

Overall weakness during workouts. Without enough protein for repair, your

muscles may not have fully recovered from the previous day's workout.

Choosing the protein supplement that is right for you

Like so many alleged sports nutrition products that are garbage-filled and lack actual performance benefits to the consumer, there are a plethora of protein powders on the market that have plenty of unnecessary fillers and a fairly low percentage of actual protein. Before you can select the right protein, learn to recognize ingredients to avoid:

Casein - Based solely on its bioavailability rating, casein is a poor protein source for recovery. In addition, casein can be responsible for allergy onset and increased cholesterol. Casein also contains gluten and may exacerbate the symptoms of autism.

Acesulfame K, sucralose, and other artificial sweeteners - These ingredients offer no health benefits and may even impact long-term health negatively. The debate still rages on as to whether or not Acesulfame K is safe to consume, and sucralose is a synthetic disaccharide that is so chemically processed, the end result is a molecule that does not occur in nature.

High fructose corn syrup (HFCS) -

With numerous studies conducted over the past few decades indicating that consumption of HFCS is connected with a wide range of health concernshypertension, elevated triglyceride levels, and increased risk of developing type 2 diabetes, to name just a few—this is possibly the worst substance that you can put in your body. Avoid it at all costs!

Which protein is right for me?

We recommend a combination of healthy protein powders, used at separate times, to provide the most comprehensive

support for an endurance athlete's diet. Just as you wouldn't consume only one kind of vegetable to meet your daily requirements, protein needs are best met by consuming a balance of healthy sources also.

However, to meet specific dietary needs or restrictions, each of the Hammer Nutrition protein powders provides specific benefits:

Hammer Vegan Protein – Hammer Nutrition's newest addition to the protein line is a unique dairy-free, soyfree blend of 100% plant-based proteins.

- Packed with 20 grams of protein per scoop
- Virtually carbohydrate-free with no added simple sugars or artificial
- Nearly fat-free (a mere one gram per scoop)
- Completely devoid of saturated fats and cholesterol

USES: As part of a pre-race meal, mixed with HEED to create long-distance soy-free fuel, as an additive to a protein smoothie, or as a vegan, soy-free recovery drink.

Hammer Whey Protein – Whey protein is the ideal way to enhance the recovery process and is recommended as essential during heavy training and race season.

18 grams of 100% micro-filtered whey protein isolate per scoop

- No added fillers, sugar, or artificial sweeteners or flavoring
- Virtually lactose- and fat-free
- Contains 6 grams of the amino acid glutamine for muscle recovery and immune system support

USES: Perfect for protein smoothies, recovery drinks, and boosting protein anytime, with the exception of prior to exercise. Hammer Whey Protein should not be consumed prior to exercise due to the added glutamine, which creates excess ammonia and can result in premature muscle fatigue.

Hammer Sov Protein - It's hard to beat soy for general health benefits. Soy protein contains multitudes of healthenhancing phytochemicals, which are believed to be beneficial for helping to support cardiovascular health, optimal cholesterol levels, osteoporosis prevention, and possibly even cancer prevention.

- 23 grams of the highest quality, 100% GMO-free soy protein isolate
- No added fillers, no refined sugar, and no artificial sweeteners or preservatives
- Sweetened only with natural vanilla flavor and stevia

USES: Mix in water for a lightly flavored protein booster, add to fruit smoothies for meal replacement, stir into batter when making pancakes or waffles, or include as part of a pre-race meal. HN

Daily Protein Intake Chart Weight Off-season and/or In-season and/or light workouts* long workouts* 100-110 lbs (aprx.45-50 kg) 64-70g 77-85g 120-130 lbs (aprx. 54-59 kg) 76-83g 93-100g 140-150 lbs (aprx. 63-68 kg) 89-95g 108-116g 160-170 lbs (aprx. 72-77 kg) 102-108g 124-131g 180-190 lbs (aprx. 81-86 kg) 115-121a 139-147a 200-210 lbs (aprx. 91-95 kg) 127-134g 155-162g 140-146a 220-230 lbs (aprx. 100-104 kg) 170-178g 153-159g 185-193g 240-250 lbs (aprx. 109-113 kg) *All measurements are shown in grams needed per day.

"Hammer Vegan Protein takes the edge off my hunger and speeds my

- Superior, unique blend of plant-based proteins
- GMO-free, gluten-free
- Dairy-free, soy-free
- Rich source of amino acids



Caloric intake

Proper amounts during endurance exercise

(As copied from the 9th Edition of *The Endurance Athlete's GUIDE to SUCCESS*, pages 56-60.)

ndurance and ultra-endurance athletes require all three forms of fuel that the human body uses for energy: carbohydrate, protein, and fat. A major factor for optimal performance is using the right fuel, at the right time, in the right amount. Like every aspect of success in endurance events, proper nutrition requires planning, practice, and training to reap the benefits on race day.

As all athletes know, "carbs are king" when it comes to fueling the body for any endurance exercise. That does not mean, however, that any carbohydrate at any time will keep you going. Carbohydrates can either help or hinder performance, depending on what kind you use, how much you use, and when you use them. Far too many misinformed athletes continue to use energy products loaded with simple sugars, or they use complex carbs, a superior choice, but at the wrong time and in the wrong amounts. These practices will actually impair, not help, your performance.

Simple sugars, maltodextrin, and osmolality

Most dietary sugars are simple molecules known as monosaccharides and disaccharides. The shorter the chain length of a carbohydrate source, the higher it will raise a chemical measure known as osmolality when dissolved. In solution, simple sugars can only attain

about 6-8% concentration or they will sit undigested in your stomach, as the osmolality will be incompatible with the digestive juices. Products containing simple sugars, typically sucrose, fructose, and/or glucose (dextrose), must be extremely diluted to match body fluid osmolality (280-303 mOsm). This weak of a concentration presents a problem to athletes because it cannot provide sufficient calories (perhaps only 100 cal/ hour, at the most) to working muscles. To obtain enough calories from a weak 6-8% solution, an athlete would have to consume two or more bottles of fuel per hour, which means excess fluids, increasing the risk of fluid intoxication. Using simple sugar-based "energy drinks" is not a wise strategy.

"Well then," you might say, "I'll just mix a stronger concentration." But this approach also fails. Making a double or triple strength mixture from a simple sugar-based carbohydrate fuel won't work because the concentration of that mixture will exceed 6-8%, far too concentrated to match body fluid osmolality. It will remain in the stomach until sufficiently diluted, which may cause substantial stomach distress. Drinking more water to dilute your overconcentrated concoction puts you back in the original condition of increased risk of overhydration and all the problems that causes, so it's not a good option. But if

you
don't
drink
more, your body
will draw fluids and
electrolytes from other
areas that critically need them (like
blood and muscle) and divert them to the
digestive system to lower the osmolality
of your over-concentrated simple sugar
drink. This will also result in a variety
of stomach distresses, not to mention
increased cramping potential and other
performance-trashing issues.

The same problem occurs when an athlete combines a simple sugar fuel with a complex carbohydrate fuel. Consumed together or within close proximity of each other, simple sugars and complex carbohydrates increase the solution concentration beyond the efficient digestion level for either component. This will compromise energy production and promote the likelihood of a variety of stomach issues. In the words of Dr. Bill Misner, "Adding simple sugar fractions (any of the carbohydrates ending in "ose") to complex carbohydrate fractions (maltodextrins) may double the osmolar pressure of the solution to hypertonic values. When a 6-8% simple sugar solution is added to a 15-18%



complex carbohydrate solution, the osmolality of the combined solutions is simply not absorbable in the human gut." Molecules that contain many sugar units chained together are called polysaccharides, known familiarly as complex carbs and starches. One of these, maltodextrin, can make up to an 18% solution concentration and still match digestive system osmolality. This allows very efficient passage from the digestive tract to the liver, which converts some of the maltodextrin to glycogen for storage and some directly to glucose for immediate use by the muscles. With polysaccharides you get much more energy from stomach to liver, thus providing maximal amounts of energy to be produced in a form that your body can efficiently process.

Based on caloric delivery alone, complex carbohydrates such as maltodextrin are far superior to simple carbohydrates (simple sugars). But that's not all.

Simple sugars, even in small amounts, can incite a condition known as "insulin spike." This sudden recruitment of insulin causes a subsequent dramatic drop in blood sugar, which can take blood sugar levels even below the fasting level! This "flash and crash" type of energy typically results in the dreaded "bonk," something every athlete wants to avoid. However, complex carbs, which enter the bloodstream at a 15-18% solution, do not promote this wild fluctuation in blood sugar levels. Even though a maltodextrin might have a high GI (see next page) and rapidly elevate blood sugar levels (a desirable effect), during exercise your body processes them with far less insulin fluctuation, most likely due to the steady release and breakdown of glucose from its polymeric source, and other hormonal factors. You never get the below-baseline drop in blood glucose that simple sugars cause.

Some athletic nutritionists disregard osmolality, but we do not believe its importance can be overstated. As Dr. Misner states, "when osmolality goes above 303 or below 280 mOsm, the gut must pull minerals and fluids . . . to mediate a narrow 280-303 mOsm range for immediate calorie absorption." Both simple sugars and complex carbohydrate maltodextrins are absorbed at equal rates if the solution concentration matches body fluid osmolality (280-303 mOsm). Simple sugars meet this criterion only when they are mixed in calorically weak 6-8% concentrations; digestion slows down or ceases at higher concentrations. When athletes make a double or triple strength simple sugarbased drink, trying to increase caloric input, they usually develop problems such as gastric distress, bloating, flatulence, vomiting, and muscle cramps.

On the other hand, the maltodextrins (complex carbohydrates) used in Hammer Nutrition fuels match body fluid osmolality even when mixed in concentrations as high as 15-18%. This presents a distinct advantage because your body is able to digest, and thus convert to energy, a greater volume of calories from complex carbohydrates than it can from simple sugars. HN





LEFT: MB Bergamo CEO Marco Saggia and I display a freshly made Hammer Nutrition jersey.

BOTTOM LEFT: The new retail showroom in the MB Bergamo factory in Castano Primo is scheduled to open January 2014.

BELOW TOP: Shiny new digital sublimating machines complement the existing equipment in the main manufacturing area.

BELOW MIDDLE: The sewing room where all of the garments are stitched after the material is digitally sublimated and cut to size.

BELOW BOTTOM: A bin of recently finished garments. The Hammer Nutrition bibs just happened to be in there—honest!



BY BRIAN FRANK

e started offering the MB clothing about eight years ago, because of their superlative quality and fit, without the premium price typical of other European-made cycling clothing. I was able to stop by the MB factory in June on my way out of Milan, after the conclusion of the 2013 Giro Calabrese. I visited with Marco, and of course had an espresso before he gave me a tour to view their new showroom and see all of the updates to their manufacturing facility since my last visit. To this day, my Bergamo bibs are a must for eight-hour or longer days in the saddle. The fit is like a custom tailored suit—perfect. For more information, check out their website www. marcellobergamo.it/. HN



Ride for Hammer Nutrition!

If you race "unattached" in USAC events, we can help!

- Buy one or more of our race clothing kits (Hammer Nutrition or 53x11 Coffee).
- Have USAC change your license to reflect your chosen Team Hammer Nutrition membership.
- Receive discounted race entry fees!
- Find other Team Hammer Nutrition members at your race and work together!

If you are an active member of Team Hammer Nutrition, you are eligible for a discount on Hammer Nutrition racing kits. Purchase a short sleeve jersey and cycling shorts or bibs and receive 15% off the retail price. Additional kit items will also be discounted. More pricing information will be available to you when you order.

If you would like to take advantage of this offer, make sure you appear on USAC's Hammer Nutrition club member list or fax us your current license signifying Team Hammer Nutrition. To order your kit, call us at 800.336.1977 with your order.





PRODUCT EDUCATION



Take 2
capsules 30
minutes prior
to a meal,
especially if
high in starchy
carbohydrates.



Phytolean

Helping you to get lean and stay lean!

BY STEVE BORN

e are extremely excited to announce the arrival of Phytolean, a truly remarkable product and the ideal complement to Appestat, designed to help you lose weight and keep it off. If you're struggling to get your weight down and keep the weight off, especially if you're a "carb junkie," Phytolean is a product that we guarantee will work for you. Put Phytolean to the test and see for yourself just how powerful this new weapon in the weight-loss war really is. We have absolutely no doubt that you will be VERY pleased with the results!

In a nutshell, Phytolean:

- Helps to increase your body's fatburning potential
- Aids in reducing fat absorption
- Blocks the digestion and absorption of starchy, complex carbohydrates

All of these effects help you to lose weight, maintain ideal blood sugar levels, and achieve optimal body composition. I was one of the test subjects who used Phytolean, and I have lost significant weight and have kept it off, without any side effects such as those that can occur from stimulant-based weight-loss products. All of us who have used Phytolean have seen dramatic body composition improvements, and we guarantee that you will as well!

The Phytolean formula and how it works

Every two capsules of Phytolean contains the following ingredients:

400 mg of Razberi-K® raspberry ketone – This is a major aromatic found in red raspberries. There are two mechanisms by which raspberry ketone helps with weight reduction:

- Increasing fat metabolism The chemical structure of raspberry ketone is similar to the structures of capsaicin and synephrine, two compounds known to exert antiobese actions and alter the lipid metabolism in favor of fat weight loss. Raspberry ketone increases a process known as norepinephrineinduced lipolysis. Supplementation with raspberry ketone also appears to result in a higher secretion of adiponectin, a hormone. Both of these effects-increased norepinephrineinduced lypolsis and higher levels of adiponectin—enhance the breakdown ("burning") of fat.
- Decreased fat absorption and storage – Raspberry ketone assists in inhibiting a primary step in the absorption of fat, trioleoylglycerol hydrolysis. Additionally, not only does an increase in adiponectin result in increased metabolism of fat, it also is associated with a decrease in fat storage.

1000 mg of Fabenol Max^{TM} Phaseolus Vulgaris L. – The extract from the white

kidney bean is commonly referred to as a "starch blocker" or "carbohydrate blocker." This "blocking" effect is due to its ability to reduce the activity of an enzyme known as alpha amylase, which is involved in starch breakdown and sugar absorption. When less of the alpha amylase enzyme is available, there is a greater potential for more carbohydrates (primarily starchy carbohydrates) to be excreted from the body instead of being assimilated into sugars and stored as body fat. This effect may also support healthy blood sugar levels.

The research – Raspberry Ketone & Phaseolus Vulgaris L.

Morimoto et al [2005] performed a study to clarify whether raspberry ketone helps prevent obesity and activate lipid metabolism in rodents. To test the effect on obesity, they designed two in vivo experiments:

- Mice fed a high-fat diet including 0.5, 1, or 2% RK for ten weeks.
- Mice given a high-fat diet for six weeks and subsequently fed the same high-fat diet containing 1% RK for the next five weeks.

Raspberry ketone prevented the highfat-diet-induced elevations in body weight and the weights of the liver and visceral adipose tissues (epididymal, retroperitoneal, and mesenteric). Raspberry ketone also decreased these weights and hepatic triacylglycerol content after they had been increased by a high-fat diet. Raspberry ketone significantly increased norepinephrineinduced lipolysis associated with the translocation of hormone-sensitive lipase from the cytosol to lipid droplets in rat epididymal fat cells. They concluded that RK prevents and improves obesity and fatty liver. These effects appear to stem from the action of RK in altering the lipid metabolism, or more specifically, in increasing norepinephrine-induced lipolysis in white adipocytes.

Researchers examined a dietary supplement containing 445 mg of Phaseolus Vulgaris L. extract derived from the white kidney bean, previously shown to inhibit the activity of the digestive enzyme alpha amylase, on body composition of overweight human subjects. Celleno et al [2007] conducted a randomized, double-blinded, placebocontrolled study on 60 pre-selected, slightly overweight volunteers whose

weight had been essentially stable for at least six months. The volunteers were divided into two groups, homogeneous for age, gender, and body weight. The test product containing Phaseolus Vulgaris L. extract the placebo was taken daily for 30 days before a main meal rich in carbohydrates. Subjects body weight, fat and non-fat mass, skin fold thickness, and waist/hip/thigh circumferences were measured. After 30 days, subjects receiving Phaseolus Vulgaris L. extract with a carbohydrate-rich, 2,000-2,200-calorie diet had significantly greater reduction of body weight, body mass index (BMI), fat mass, adipose tissue thickness, and waist/hip/thigh circumferences, while maintaining lean body mass compared to subjects receiving placebo. The researchers concluded that Phaseolus Vulgaris L. extract produces significant decrements in body weight and suggest decrements in fat mass in the face of maintained lean body mass.

Dr. Bill Misner's case report

A single 56-year-old female and 69-yearold male were recruited to test this product with the instructions that they should to take two capsules prior to normal-calorie meals or as many as three capsules prior to higher caloric meals for up to three months. Both subjects lost significant body fat weight with no reported negative side effects.

Summary

While weight-loss products usually come with numerous promises, the overwhelming majority are unrealistic at the very least. That's not the case with Phytolean. All of us who have used Phytolean have seen noticeable weight loss. Even better, continued use of Phytolean has definitely helped us keep that weight off.

I have used test samples of Phytolean since January 2013. Along with some adjustments in my diet, more consistent exercise, tweaking my supplement program a bit, and daily use of Phytolean. I have lost a whopping 40 pounds! Yes, I still had to put in the work and exercise more frequently, but thanks to the help of Phytolean, I'm in the best shape I've been in years.

Losing weight and keeping it off is never an easy proposition, but with Phytolean you have a truly powerful and safe ally that will help you get to your target weight and stay there. It's safe, natural, and downright effective. Order a supply and give it a thorough test . . . you won't be disappointed, we guarantee it! HN

References available upon request

Phytolean

Q: How is Phytolean different than Appestat?

A: Appestat's primary functions are to help suppress appetite, reduce sugar cravings, help maintain ideal blood glucose and insulin levels, and to support thyroid gland function for optimizing metabolism. Phytolean helps increase fat metabolism, decrease fat absorption and storage, and blocks the digestion and absorption of carbohydrates.

Q: Can I use Phytolean with Appestat?

A: Yes, both products can be used in tandem. Keep in mind that Appestat is designed for short-term use, primarily during the off season, and in a "three weeks on, one week off" cycle. Phytolean can be used all year long, if necessary and desired.

Q: When would be the most ideal time to use Phytolean?

A: You can use Phytolean before any highcarbohydrate meal, especially one that contains lots of starchy carbs.

Q: How many capsules do I need to take?

A: We suggest taking two capsules 30 minutes prior to a meal. If the meal is excessively high in carbohydrates, a third capsule may be taken if desired.

Q: Is there any time that I wouldn't want to use Phytolean?

A: During periods of high-volume training, you will need to maintain adequate daily carbohydrate intake, especially in the first few hours after your workout. At this time, you don't want to disrupt the digestion/absorption of carbohydrates because they'll be needed for replenishment of glycogen stores. Therefore, we don't recommend taking Phytolean with your post-workout Recoverite or with your next sit-down meal. If, however, you are overloading on carbohydrates—especially late in the evening—taking Phytolean at that time will help you maintain your ideal body weight.



NEW PRODUCT

Endur0mega

A superior source of essential omega-3 fatty acids

BY STEVE BORN

fter thoroughly reviewing a seemingly endless number of possibilities for raw materials that were both high in quality but affordable in price, an official Hammer Nutrition omega-3 essential fatty acid product has arrived—EndurOmega! The key word here is "essential," not just in describing what omega-3 fatty acids are, but even more so in emphasizing why EVERY single person—athlete and non-athlete alike—needs to take this product daily. Yes, EndurOmega—a highly potent fish oil supplement sourced from Atlantic menhaden—is that essential for you.

EndurOmega supplies your body with concentrated amounts of pure and ultrahealthy omega-3 essential fatty acids. Because these specific fatty acids are so vital for both athletic performance and overall health, we highly recommend a dose of two softgels of EndurOmega two to three times daily, every single day, whether you're training or not. This is simply a "must have, must use" product, and we absolutely guarantee that you'll reap significant benefits the more consistently you take EndurOmega. No doubt about it, EndurOmega is a serious product that provides serious benefits!

Essential fatty acids – Why they're so crucially important for you

Omega-3's and omega-6's are essential fatty acids (EFA) that everyone needs for

life itself. Life itself? ABSOLUTELY! Not only are these fats a key component in the structure of numerous parts of your body, including your brain, eyes, ears, reproductive organs, and more, they're an integral part of the membranes that envelope and protect every cell in your body. That's right, every single cell! And if your body doesn't have an adequate supply of these essential fatty acids, most every bodily function that you can think of ends up deteriorating. That's why it's no exaggeration at all classifying these fatty acids as "essential."

However, three issues exist when it comes to EFA:

- Our bodies cannot make omega-3's or omega-6's; we have to obtain them from dietary sources.
- 2. Nearly everyone is consuming far more omega-6 fatty acids than is necessary or healthy, while coming up woefully short on omega-3 fatty acid intake (we'll discuss this more in a bit).
- 3. Consumption of certain types of fish such as wild-caught salmon, mackerel, and sardines two to three times a week, while being an excellent strategy to boost omega-3 intake, is simply not possible for most of us.

This is precisely where EndurOmega comes in. For the aforementioned

reasons, plus the plethora of health benefits it provides, EndurOmega should most definitely be a part of your daily supplement program.

EndurOmega's potent & wide-ranging benefits

In regards to athletic performance, the fish oil that comprises the EndurOmega formula greatly enhances endurance because it increases the absorption rate of the fat-soluble nutrients Coenzyme Q10 (CoQ10) and idebenone, the two key substrates in Race Caps Supreme that are intimately involved in energy production. In addition, the essential fatty acids found in EndurOmega support improved lung function (including alleviating asthma symptoms) and the utilization of oxygen, both highly desirable benefits for enhanced athletic performance.

For general health purposes, the fish oil in EndurOmega provides one of the absolute strongest defenses against cardiovascular disease. Every day, more and more research comes out confirming that fish oil is a powerful ally against atherosclerosis, angina, heart attack, arrhythmias, stroke, and congestive heart failure. Fish oil helps to lower blood pressure, reduce elevated blood triglyceride levels, maintain arterial wall elasticity, and prevent blood clotting . . . it really is the heart's "best friend!"

Research shows that fish oil has a positive influence on brain function and mood, including the alleviation of anxiety, insomnia, mental fatigue, stress, depression, and more. Fish oil is beneficial for your eyes as well, helping to improve vision and aiding in the prevention of age-related macular degeneration. Helping maintain healthy skin and bones are additional benefits attributed to fish oil. Omega-3 fatty acids also play an important role in metabolism regulation and weight management (yes, to burn fat you have to eat fat . . . the right kind of fat, however!)

Lastly, omega-3 fatty acids from fish oil have been shown to provide impressive anti-inflammatory benefits by reducing specific pro-inflammatory cytokines and Series 2 prostaglandins, while increasing the level of anti-inflammatory Series 3 prostaglandins. In fish oil, inflammation has met its match!

EndurOmega is rich in the two well-known, highly researched omega-3 fatty

acids, DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid), that are responsible for all of these extraordinary benefits. Additionally, EndurOmega also contains DPA (docosapentaenoic acid), an intermediate fatty acid between EPA and DHA, not often found in other fish oil supplements. DPA helps increase blood concentrations of both EPA and DHA (primarily EPA), while providing its own unique benefits, especially for heart, muscle, and kidney tissue health.

The importance of tipping the scales in favor of omega-3's

Research clearly shows that an approximate 1:3 omega-3 to omega-6 ratio is ideal; however, estimates of today's diet reveal that the omega-3 to omega-6 ratio averages around 1:20, obviously way out of the optimal range. Clearly, some omega-6's are necessary for optimal health; avocados and nuts are undeniably good food choices. However, excessive amounts of omega-6 fatty acids, typically found in our diets today, are a major culprit for numerous diseases, such as cardiovascular disease, many types of cancer, and inflammatory and autoimmune diseases. Conversely, a diet that contains higher amounts of omega-3 EFA, and where the balance of omega-3 to omega-6 is closer to the ideal 1:3 ratio, helps reduce the risks of these negative health consequences.

Culprits for the too-high amounts of omega-6's in our diets are numerous, with oils that have a high omega-6 to omega-3 ratio—primarily canola, corn, cottonseed, sesame, sunflower, and soybean—leading the way. Even if you don't cook your meals with these particular oils, a lot of restaurants do, so if you eat out a couple of times a week, there's a good chance you're consuming an awful lot of omega-6's. These oils are also found in most processed and packaged foods (undesirable hydrogenated fats as well), which is a prime reason to avoid them completely. Traditionally raised meatsbeef, chicken, and pork—are also loaded with omega-6's. If you're a die-hard "meat-a-tarian" and can't cut it out from your diet altogether, a better option is to consume fewer amounts of meat and only those that are raised exclusively on grass or free-range diets—these meats contain a better ratio of omega-3's to omega-6's than traditionally raised meats.

Why not get omega-3 from flaxseed oil?

In the world of fats it's hard to beat

flaxseed oil; it's got an attractive EFA "makeup" with a composition of 54% omega-3 (from alpha-Linolenic acid, or ALA), 14% omega-6 (linoleic acid), with the rest being comprised primarily of various monounsaturated fats and a small percentage of saturated fats. However, considering that most diets are already overloaded with omega-6 fatty acids, the omega-6 in flaxseed oil is not necessary. In fact, for highest absorption rates, omega-6 fatty acids should not be consumed with omega-3 fatty acids as they utilize a common enzyme for absorption. Moreover, unlike the omega-3 EFA from fish oil, omega-3 from ALA is a couple of metabolic steps away from becoming the primary "end products" of omega-3 metabolism, docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA). Additionally, only a small percentage of ALA is readily converted to DHA and EPA, which means that you end up with almost nothing in terms of these essential fatty acids.

Summary

After reading this article, it should be blatantly obvious that we all need less omega-6's and more omega-3's in our diet, fish being the ideal source of these essential fatty acids. However, consuming sufficient amounts of high-quality fish on a regular basis is not only a difficult task to fulfill (if it can be at all), it's expensive as well.

That's why adding EndurOmega to your daily supplement regimen is not only a good idea, it's essential! You get so many health benefits from EndurOmega without breaking the bank (not even close). Every two EndurOmega softgels contain 200 mg DHA, 300 mg EPA, and 30 mg DPA from molecularly distilled and deodorized Atlantic menhaden, regularly tested via third-party, independent laboratories for potency and purity, using AOAC international protocols and ICP-MS testing methods.

We guarantee that you'll be completely satisfied with EndurOmega. Two softgels, two to three times daily is a superior way to obtain all of the benefits that omega-3 fatty acids have to offer. This is one of the most important products we've ever come out with. It's available now, so take a HUGE step in the right direction health-wise and order your supply of EndurOmega today. **HN**



BY DR. GARRET ROCK

hermoregulation is the ability of an organism to maintain a body temperature within certain boundaries, even when the surrounding temperature is very different. Basically, this refers to your ability to stay warm in cool environments, and cool in hot environments. A physiological example of thermoregulation is sweating.

The concept of thermoregulation is important to endurance athletes because it directly correlates to performance. The inability to control temperature swings results in a decrease in performance, and can put an end to your race day altogether. This decrease in performance is hardly negligible, just look at the following statistics from a study on marathon times.

- In elite pro runners, for every five degrees over 41 degrees Fahrenheit, times slow by 0.4%. On a 77-degree day, an elite pro will expect to run 5% slower than on a 41-degree day.
- The rate of slowing increases with slower run times.
 For example, in this study, they found that a three hour

marathoner will be around 12% slower on a 77-degree day compared to a 41-degree day. This brings their finish time from three hours flat to three hours, 21 minutes.

Fortunately, there are small steps we can take to battle the performance deficits that come with hot temperatures. Here are four of the most effective methods for avoiding over-heating during training and racing.

Hydration

Hydration is your first line of defense in thermoregulation. Although on the surface hydration seems simple, how you hydrate and what you hydrate with can actually have a big impact on thermoregulation and hydration status.

Laboratory-based tests conclude that hyperhydration is an effective strategy for maintaining a slightly lower body temperature during endurance exercise

in hot temperatures in shorter duration events (1-3 hours). Hyperhydration, put simply, is preventatively taking in fluids, or drinking when you are not thirsty. This effect seems to be due to a faster onset of sweating and improved "sweating efficiency." Exactly how effective this strategy is in improving performance is yet to be determined at these distances, but theoretically benefits do exist, as research definitely shows improved thermoregulation through hyperhydration.

During exercise, plain water is poorly absorbed in the intestines. Including carbohydrates in a fluid replacement drink is crucial for optimal fluid absorption in the intestines. In fact, research shows that combining a carbohydrate such as maltodextrin improves intestinal fluid absorption up to six times!

Action: I recommend using a sports drink such as Hammer Nutrition's HEED as your primary hydration source during racing and training. Prior to racing, drink 17 oz. of water per hour in the two hours prior to the race. Be sure to use Endurolytes as directed during the race to ensure adequate electrolyte levels. Take Race Caps Supreme 30-90 minutes prior to your training session or race with the water.

Water Dousing

There is not much science to be found on the effect of water dousing on core temperature during exercise; however, anecdotal "evidence" strongly supports frequent water dousing during a race in the heat. Fortunately, many races in hot environments now provide sponges and cups of ice for dousing.

Action: At each aid station be sure to douse yourself with water and/or ice. This is typically only needed during running, as the wind during biking is usually enough to evaporate sweat quickly.

Clothing Choices

Your choice of clothing impacts thermoregulation. Sweating is the body's natural cooling method. However, in order for sweating to be effective, the sweat must evaporate. It is the evaporation of sweat that cools the body. The ideal clothes for training and racing in hot weather allow for air to flow through them. On sunny days, protecting the skin from the sun is beneficial to staying cooler. Sunscreen can interrupt both sweat production and evaporation. Although dark colors do absorb more heat when the sun is out, in a short race this is unlikely to result in hotter core temperatures. However, in a long race, opting for the lighter color is likely the wiser decision. On sunny days, wearing a visor to protect from the sun and save on sunscreen use is the wiser choice.

Action: In a running race, wear light, loose clothing. If the sun is out in force, choose light colors. In a triathlon or cycling race, choose a kit made of breathable material. The Hammer Nutrition kits by Voler and Bergamo are excellent choices.

Pre-Cooling

On hot days, pre-cooling appears to mildly improve performance in endurance races. For long and ultra races (Ironman, 70.3) this may not provide much performance enhancement. However, in shorter duration races (marathons, half marathons, 10K's, 5K's, sprint tri's, and olympic tri's), pre-cooling appears to benefit performance and thermoregulation on hot days. Pre-cooling may include staying cool in the water prior to a triathlon (if chilly), wearing a cooling vest during your warm-up, or sitting in a cool environment. Basically, be chilled just prior to the race. But don't neglect an appropriate muscle warm-up.

Action: Either perform your pre-race warm-up in a cooling vest, or perform your pre-race warm-up, then find a cool environment to sit in and get chilled (air conditioned car or building close by). Since you'll be sweating, the cool air will evaporate the sweat well and result in rapid cooling. **HN**

Dr. Garret Rock is a Hammer Nutrition-sponsored athlete, Chiropractor, Exercise Physiology Specialist, and a Certified Sports Nutrition Specialist.





Testing training in a hard half in New Hampshire

BY BRENDAN HALPIN

n June I competed in my first race on the east coast, the White Mountains Triathlon in New Hampshire. I heard about the race because it was a Hammer Nutrition sponsored event with Hammer products on the course. It was also a first-year event and would be a great opportunity to see where my fitness was. I had a few crazy weeks of travel prior to it—training had been intermittent and swimming was non-existent, but I have learned a few tricks that help me maintain fitness, nutrition, and a strong immune system while traveling. (See Brendan's Tips on page 23.) Despite my lack of training, I knew that I needed a jumpstart in preparing for Ironman Lake Placid.

The small local race in New Hampshire was a fun scene. The venue was beautiful and Echo Lake, a small mountain lake, served as the swim venue. It was a two-loop course and I was able to swim the course the day before the race to see if I still knew how to swim. Fortunately I did, and I actually felt decent. The bike course had lots of climbing with 3,000+feet, and the run was equally difficult, although I did not find this out about the run until I was racing it. I went through my normal race routines and after a delicious cup of 53×11 Coffee, I was ready to take on the challenge. Coffee makes

everything more enjoyable, even getting up at 5 a.m. to eat some food three hours before the race start. I was now ready to rock and roll!

The race had a few waves, and I was grouped in the 40 and under category with about 60 The author cruises to a first place other racers. The gun went off finish at the White Mountains and I had a good start, but triathlon. Photo: Matt Burt Photo one of the swimmers took off like he was shot out of a cannon! I felt good on lap 1, but on lap 2 I started to fatigue and knew that my lack of swimming was beginning to show. I exited the water in 31 minutes, which was 8 minutes behind the dude who apparently shot out of a cannon. Once out onto the bike I was flying. The first half of the bike course was a net elevation loss, and I made up some time on the leader; I was really pushing the pace. At about mile 40 we hit the real hills and the race had a "King of the Mountain" on a short 10%+ grade, which had a \$100 prime. I dug in and went hard up the hill, although my efforts fell short and I had the second fastest time. The effort left me a little fatigued and I quickly regretted the choice to sprint up the hill because the rest of the course offered many more short steep hills. I struggled for the last 16 miles and did not make up any more time on the leaders. My legs felt heavy! I was hitting a wall and nearly cramping. First things first: I washed down a few

Endurolytes with a swig of HEED to ward off muscle cramping. I kept myself focused with a few Espresso Hammer Gels, and managed to hit the transition a couple of minutes behind the leader.

I set out at a good pace and began fueling with a flask of Hammer Gel. (For my race flasks, to create a super easy-to-consume consistency, I add four servings of Hammer Gel and fill it the rest of the way with plain water.) At the first turnaround I found myself right behind the leader. Shortly after, I moved into 1st place and held strong until the finish. The hilly two-loop course took its toll. I started to slow down during the last four miles of the run, but still hit the finish line as the overall winner in 4:46 with a 31-minute swim, 2:38 bike, and 1:31 run.

the White Mountains Triathlon was probably the hardest half Ironman course that I have ever raced. I highly recommend this race to anyone looking for a good challenge or the perfect tune-up race for Ironman Lake Placid. I was happy to win but even happier to find out exactly where my fitness was. I knew that I still had a lot of hard work before Lake Placid, and since the race I have been buckling down and hitting training hard.

I have been in New Hampshire for a little over two weeks and I have learned a valuable lesson. Humidity is the real deal and it will slap you in the face if you are not prepared. Upping electrolyte replenishment with Endurolytes or Endurolytes Fizz is key, along with drinking plenty of water. Until next time, good luck in your races and Hammer On! HN

Brendan's Tips

Traveling across multiple time zones and traveling often can become very difficult. Here are a few Hammer Nutrition tips that I have learned along the way:

- 1. Premium Insurance Caps as an effective daily multivitamin.
- 2. REM Caps to improve the quality and length of sleep.
- Hammer Bars as quick, healthy nutrition during travel.
- Compex electrical muscle stimulator as a quick fix for muscle recovery and getting rid of travel legs.

The combination of these four items allows me to keep myself somewhat fit and healthy, even during extensive travel across time zones.

NATE'S CORNER

A little early, but that's OK

his tip has to do with efforts during long training or long races. One piece of sage advice: Keep your effort low and steady. Avoid ANY above-aerobic effort (above 78%) until the final stages of the race. If you are feeling strong at the end, then there is little risk of imploding if you start to push the pace. Do it too soon, and . . .

I did a solo 95-miler yesterday with ample climbing. I averaged 21+ mph for it, so the overall effort was strong. That wasn't the problem. I rode out to a race course for next weekend's race and completed a couple of the 17-mile loops. It was about 30 miles out there, so by the time I got to the final leg of the race on the second lap—a 4-mile false flat followed by a 5-minute steep grunt followed by about 5 minutes of a pancake flat to the finish line—I was already 55 miles into my ride. I figured it was a perfect time to push those final 20-25 minutes as hard as I could like I would probably be doing in the race. Good strategy, right? Wrong!

That effort was great; I felt strong and got the heart rate up to 180 at times, which is where it will be at the end of the race, etc. However, those final 30 miles home were, for the most part, awful. My legs were on fire and internally I felt like crap. I finished the ride in 4:30, so it was fine overall. But, it shows that in an iron distance triathlon, half-iron, or ultra race, any—and I mean ANY—time spent above aerobic is a performance killer.

If you are racing an iron distance triathlon, for example, and it's a hilly bike, stay aerobic. If you take the attitude of "Oh, a few minutes spent in the 80-85% range won't kill me" then

you will be sorely mistaken. Think of your energy as a campfire, with burning embers, kindling, and a log or two. But, the key is that you don't have any extra fuel to stoke the fire. It will burn until all of the logs and kindling turn to embers and then die out. It could be an hour or two, or could be all night.

Now, think of going anaerobic during an ultra-distance event as taking a bucket of gasoline and pouring it on the fire. What happens? You incinerate the logs and the kindling and "all of a sudden" your fire is smoldering and goes out an hour later. It's dead. Just like your energy stores.

So, that's my "lesson learned" for the day. Anyone can feel like a rock star the first couple of hours. The goal is to feel like one after 5, 10, or 24 hours. Play the role of the tortoise, not the hare.

Happy Training, Nate Llerandi *HN*



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.

Team Kenda/ Felt:

"Smart" food on the road to races

BY CHRIS MAGERL

acing season has been quite productive for the Kenda/Felt Pro MTB Team so far this year. We have traveled to several states as well as Argentina, Germany, and the Czech Republic, and the busy season has not even started! Team rider Mitch Hoke had successful outings early in the Pro XCT Series, including a podium in XC and victory in the overall (XC, Short Track, and Super-D) in Fontana, California. Mitch currently sits in the top ten of the XCT, and the Kenda/Felt Team is ranked 4th.

Mitch and Colin Cares competed internationally in April as two-thirds of the Elite Male squad for Team USA at the Pan American Championships in Argentina. Mitch was the highest-placing US Elite Male. He and Colin also raced in the first two World Cups, in Germany and the Czech Republic. At the end of the first two rounds, Mitch is the highest ranked US Elite Male in the World Cup standings.

Drew Edsall had a hot streak in May. In consecutive weeks he won the Missouri State XC Championship and the Syllamo's Revenge 125K in Arkansas, and finished 5th overall at the Tran-Sylvania Epic, a weeklong mountain bike stage race in central Pennsylvania. Drew also won the weeklong Enduro competition at the TSE.

With so much time on the road, eating well becomes quite the task. Our athletes have years of experience with this, and have some proven strategies to fall back on. No time for anything but a brief stop at a gas station while driving to the





next race venue? There are items there for racers. Our guys look for healthy fruit juices, almonds or other nuts, and beef jerky for a fast, protein-filled snack.

Recoverite is a constant, whether we are training at home or finishing up a race overseas. Strawberry and Chocolate live in the team van. Miles Frank gave us some good ideas about delicious Chocolate Recoverite variations last year, including mixing with soy milk or doing a Chocolate/Strawberry mix.



Fizz makes weird-tasting water delicious."

Even though Drew is frequently traveling in his RV, Fizz is an important part of his travel routine, too. "I always travel with a good stash of Endurolytes and HEED. I really like the Fizz. I can throw it in any cold water and it adds in the electrolytes my body needs."

The hotel room with no kitchen can still be a pretty comfortable place to eat good pre-race meals, assuming that you can find a microwave. "If at a race with few restaurant options and no kitchen, I'll often microwave a sweet potato and make a salad with avocado," says Colin.

"If you are stuck in a hotel with just a microwave, you can plastic wrap a yam and cook it for about four minutes and it is a pretty delicious superfood," Mitch suggests. Drew is a potato fan too. "I try to resort to a lot of fruits and veggies whenever possible. They are easy to come by and have an abundance of nutrients in them. I always have a few microwavable sweet and regular potatoes to keep the good carbs rolling also."

Things get a bit more challenging when you travel abroad with different customs, languages, and unfamiliar foods, but a lot comes down to your outlook. "I actually love not knowing exactly what food will show up," says Mitch. "Pasta and rice seem to be pretty easy to translate in languages and are pretty good pre-race foods. The hardest thing is to find salad in foreign countries. It is a very American thing to have super diverse salads. The best thing is to just embrace the experience and not worry about it. For example, Europeans tend to eat a lot more bread than we do. This seemed alarming at first, but the bread over there is much better. It is made fresh daily with ingredients that are really easy on your stomach."

Colin has years of international racing experience, having raced the mountain bike World Championships as part of Team USA for six years. "I've found that rice can be your best friend traveling abroad. It's a good fuel, found almost everywhere, and hard to cook poorly. I like to eat more exotic, local specialties after the race, but keep it fairly bland and reliable before."

Keep it simple on the road, and be sure to carry all of your favorite Hammer Nutrition products for race-day fueling AND for high-quality meal replacements to ensure that you have familiar, healthy options easily accessible. Good luck with all of your race-related travel. See you out there! **HN**

Everyone loves to complain about flying, but it is a part of the job for us. Hammer Nutrition makes it a bit more bearable. "Domestic flights can be long these days with no food," says Mitch. "I like to pack some Chocolate Chip Hammer Bars for the flight so I don't get too hungry and remain friendly with the flight attendants."

recovery that is familiar and effective.

Hammer Bars are also a part of the travel strategy for Colin. "I always travel with a box of Hammer Bars and fistfuls of Endurolytes Fizz. In addition to being good for hydration,

EMSIncorporating it into your training

EMS Q&A

with Hammer Nutrition EMS Expert Levi Hoch



As Hammer Nutrition's in-house EMS consultant, I help customers get the maximum benefit out of their EMS unit, whether it is for speeding training recovery, amping up training to achieve a PR this summer, or addressing a specific injury that they are recovering from. While some of the folks I talk to are looking to create very specific, highly detailed training programs for a particular strength or movement (such as a pedal rotation), most of the Hammer Nutrition athletes I speak with share the same, common questions about basic EMS operations. Hopefully some of the following FAQs will help clear up any questions you have concerning getting started with EMS.

Q: Which model should I get?



This is one of the most commonly asked questions, understandably. The programs can't be upgraded or added, so whichever model you select is what you will be limited to.

• THE EDGE model has three programs: Endurance, Resistance, and Active Recovery. Here are their respective program descriptions (more details on each available in the Compex Program Guide at http://www.hammernutrition. com/downloads/Compex-Program-Guide. pdf):

Endurance – Targets slow-twitch muscle fibers. Increases capillarization of the muscles and establishes a working regimen for developing the oxidative power of the endurance muscle fibers.

Resistance – Targets both slow and fast twitch muscle fibers. Builds muscle size, strength, and density.

Active Recovery – Produces a muscle twitch. Clears lactic acid, increases blood flow, promotes muscle relaxation, and enables a faster recovery. Active Recovery is probably the most popular program featured on all three models and is probably the one that gets the most use.

• If you are looking for additional training options beyond what the Edge provides, the PERFORMANCE U.S. includes all of the programs on the Edge plus Strength and Pre-Warmup:

Strength – Targets fast-twitch muscle fibers. Increases sheer strength and works the muscles at maximum power with less risk of injury to joints and tendons, with virtually no cardiovascular or mental fatigue.

Pre-Warmup – Produces a muscle twitch. Runs at a low frequency, increases blood flow, and oxygenates the muscles prior to a workout or competition.

 For the maximum in training, pre-race warmup, and recovery options, SPORT

ELITE gets you all of the programs on the Edge and Performance U.S. plus Recovery Plus, Massage, Explosive Strength, and Potentiation.

Recovery Plus - Produces a muscle twitch. Runs at a lower frequency, clears lactic acid, increases blood flow, and promotes muscle relaxation when muscles are fatigued after a vigorous workout or competition. Recovery Plus is similar to Active Recovery and is sometimes preferable if the muscles are very sore or sensitive, or if used when the muscles are "cold" with a margin of time between exercising and running the Compex. This is because it runs warm-up frequencies before going into the higher frequencies that are best for flushing metabolic waste and creating maximal circulation. Active Recovery is still preferable for immediately following exercise because it starts with the higher, most beneficial frequencies first, but for applications where muscles are very tender or sensitive, Recovery Plus is a phenomenal program.

Massage – Produces a muscle twitch. Runs at the lowest frequency possible to relax muscles that are severely fatigued after a workout or competition. Massage is a 20-minute program that only runs at low frequency for the ultimate in relaxation and endorphin release. Massage is perfect for loosening up tight or inflamed muscles and is a good program to use for sensitive areas such as the back, shoulders, or neck.

Explosive Strength - Targets fast twitch fibers located in large muscle tissue. Improves jumping, sprinting, or "explosive" muscle movements. Explosive Strength is a program that would benefit athletes who do explosive type activity such as track athletes, cyclists who race criteriums or time trials, ball players, etc.

Potentiation - Optimizes muscle potential before a workout or competition. Especially effective for sports requiring speed and velocity. Should be used ten minutes prior to activity. Potentiation is a vigorous but very short warm-up that preps the muscles for a fast start in a hard workout or race.

Q. What energy level should I turn an EMS unit up to during recovery programs?

Active Recovery and Recovery Plus should be run between 100-120 energy levels for best results. There is no need to exceed 120 energy levels during the recovery programs, and it's not recommended because it could fatigue the muscles unnecessarily. Massage is frequently used to loosen tight or inflamed muscles, and can be run at a comfortable energy level below 120.

). How often can I run the recovery programs?

You really can't overuse the recovery programs. In fact, the more you use them the better. Use them daily if you have the time and even multiple times per day if you're very sore or are using it for injury recovery.

More Q&As on page 28

Q: How often can I run the training programs?

A:

You should run them 2-3 times per week for a muscle group to see maximal gains, but it's important to allow at least 48 hours of recovery time between sessions on the same muscle.

Q: Can EMS help patients with Multiple Sclerosis?

A:

Although we don't make claims that it will, there have been MS patients who have benefited from EMS.

Q: What do the highlighted letter abbreviations mean at the bottom of the pad placement diagrams?

A:

They stand for the program names ("E" indicates Endurance, "R" indicates Resistance, etc.) and are in relation to the body position of the figure in the corner of the illustration. The muscles should always be trained in an isometric fashion. Therefore, you must fix the extremities of your limbs securely. In this way, you provide maximum resistance to the movement and prevent any shortening of the muscle during the contraction, which could create the discomfort of muscle cramps and/or serious stiffness after the session.

For example, when stimulating the quadriceps, the user should be in a seated position with the ankles fixed with straps to prevent extension of the legs. The pad placements used for training programs will also work for recovery programs, but the recovery programs aren't highlighted in the same diagram because you should be in a comfortable, relaxed position instead of maintaining the isometric, elongated muscle position.

These are just a few of the many Compex questions I field daily. If you have questions about getting started with EMS, or want to schedule an appointment for a more in-depth consultation about how to take your EMS training to a new level, give me a call at 1.800.336.1977.

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Levi Hoch, EMS expert

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- Understand how the science and technology of EMS makes the Compex a very powerful tool



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"I wouldn't consider leaving the Compex at home when going on a trip. The Active Recovery mode of Compex is so, easy to use and predictable in results. I have used it in the car on the way home from an event (as a passenger), turning car time into active recovery time." - Chris M.





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"I recently purchased a Compex and within minutes of receiving it, I started running strength, endurance, and recovery programs on my legs, abs, arms, and glutes. I discovered massive muscle imbalances in my calves, hamstrings, and glutes that affected my running form and power on the bike. Over a few weeks, I ramped up the intensity and also integrated some additional Explosive Strength Compex sessions into my training. Within two months, I had corrected all of my imbalances, improving my running stride and power on the bike, allowing me to smash my 3-year wattage records. My sprinting is at an all-time high—I can maintain my max effort about twice as long as I ever have! My core is stronger, and by running abs and lower back endurance programs I have helped my body adapt to my new training loads and wattage increases without strain or injury." - Loren P.

"Compex Sport Elite is a very crucial aspect of my recovery process. It's a great muscle recovery aid while relaxing in front of the TV. My wife has Parkinson's Disease and finds it to be extremely helpful for settling down her muscles. Thank you Hammer!" - Hubie K.

Choose the model you need to reach your athletic goals

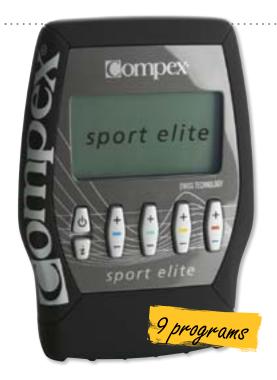
EDGE

Whether you're a competitive athlete, fitness enthusiast, weekend warrior, stay-at-home mom, or aging adult, Compex Edge can help you to achieve optimum health and fitness. When combined with your existing fitness routine, Compex Edge enables you to target your training and exercise more muscle in less time, so you can achieve peak performance and fitness. This unit provides a more efficient workout regimen, with less risk of injury to joints and tendons, and virtually no cardiovascular fatigue. Whether used for sports training, fitness workouts, muscle development, massage, recovery, or a warm-up, Compex enhances your muscle performance.

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Steve's faves: Chromemate

BY STEVE BORN

lthough it may seem that the obvious candidate for my favorite Hammer Nutrition product for this issue of EN would be Phytolean (and I definitely love that product and how it works), I've got to give the nod to Chromemate. The reasons are pretty simple—once the New Year arrived I made a resolution to lose weight, keep it off (finally!), and get back into the kind of fitness I once enjoyed. The problem is that I was a full-fledged "carb junkie" so I relied on Chromemate to help take the edge off of the carb cravings and to make sure that whatever carbs I consumed were properly metabolized and not so readily stored as body fat. 200 mcg of Chromemate prior to meals and 400 mcg of Chromemate prior to my main meal (the one with the highest carb content) really seemed to do the trick. The carb cravings diminished and my blood sugar levels felt much more stable after eating, which meant I didn't feel as though I needed to crawl under the table and take a nap, especially after lunch (the dreaded "2:00 p.m. fade").

Another reason why I relied so heavily on Chromemate was because I was working out more frequently and wanted to make sure that I was "refilling the tank" (e.g. replenishing glycogen stores) as efficiently as possible. Because I was starting closer to zero fitness-wise than I wanted to be or should have been. maximizing glycogen stores was crucial because I wanted and needed as much help as possible to get through the next day's workout. I remembered something Dr. Bill once wrote (paraphrased) and made sure to apply it every day:

Athletes who consume chromium polynicotinate with ample carbohydrates within two hours after exercise will experience a 300% increase in the rate of glycogen synthesis compared to athletes with no chromium supplementation. The twohour post-exercise window is needed for conversion of carbohydrates to muscle glycogen through the insulin (IGF) mechanism. This anabolic response will not completely take place in the absence of GTF (Glucose Tolerance Factor) chromium. If only a minute amount of GTF chromium is available, only a third of the amount of muscle cell refueling will occur.

So whenever I finished a workout, even one that wasn't truly "endurance" in nature, I made sure that I consumed a 200 mcg capsule of Chromemate along with Recoverite . . . I am convinced that doing so helped me recover more effectively and completely.

There are so many other benefits attributed to chromium, including:

- Helping lower LDL ("bad") cholesterol and increasing HDL ("good" cholesterol)
- Normalizing the body's production of insulin and increasing the number of insulin receptors
- Assisting in the reduction of triglyceride levels
- Alleviating anxiety and depression
- Aiding in regulating blood pressure
- Helping improve blood circulation

All of these reasons are why I made sure that I took Chromemate every day, and will continue to take it every single day. Perhaps the most profound benefit of all is the research presented at the 46th Annual Meeting of the American College of Nutrition back in 2005. In this study, ChromeMateTM brand chromium polynicotinate (which is the only type of chromium we use in our products)



demonstrated its ability to prolong the life span of test animals by more than 22%. According to the study, rats prone to aging were fed diets containing ChromeMate[™], which increased their average life span by +22% compared to rats fed the same diet without ChromeMateTM.

Now, you may be thinking, "Yeah, but this increased life span benefit only happened with rats." True, but I don't think I want to wait until too much more of my life has passed to enjoy this amazing potential benefit while it's still being confirmed in human studies. Besides, with all of the other aforementioned benefits attributed to Chromemate, and with the combination of Phytolean and Chromemate working together to help me finally get me back to the weight I wanted to be at, that's reason enough for me to make sure I take this inexpensive supplement each and every day.

If you're not taking Chromemate on a regular basis with meals, I honestly believe that you're missing out on enjoying some really significant benefits. If nothing else, take a 200 mcg capsule of Chromemate with your post-workout recovery. Like I did, I think you'll experience some noticeable improvements in the overall quality of your recovery. HN



Sam Schultz, a longtime friend of Hammer Nutrition staffers, is practically a legend in Montana. He is currently the reigning USA Cycling Cross-Country Mountain Bike National Champion and was a member of the 2012 U.S. Olympic Team, finishing an impressive 15th place in the Men's XC MTB event at the London Games. Sam, a pro rider with Trek Factory Racing Team, is a role model

for aspiring young mountain bikers across the state who get to ride the same trails that Sam once trained on.

After a busy 2012 season, Sam says he had time to reflect on his life and interests off the bike. "Last year was a blur," said Sam. "The build-up to the Games was intense and everything passed by at light speed. When the season finally wrapped and I could relax with family and friends over the holidays, I realized I wanted to expand my community involvement off the bike."

Within a few months, Sam had partnered with the Montana Food Bank Network to raise funding for the charity's statewide efforts of assisting hungry families, including more than 46,000 children, across the more than 150,000 square miles of Montana. He has shot several public service announcements since then for local Montana television networks, and spoke to a crowd at the Hammer Nutrition Missoula XC in June.

We're always proud when our longtime friends and fellow athletes reach beyond the scope of their lives as professional athletes and seek to give back to their community. Thanks for your hard work, Sam, both on and off the bike!





Where do you Hammer? Photo shoots and desert racing across the globe with Zandy Mangold

Interview & Intro by MYKE HERMSMEYER

A Brenza.

A Brenza.

A Diz Zana Cegasia

2012

constantly pushing himself physically through ever-changing conditions. Due to the distances he covers and the gear he carries, he often exerts himself just as much as the racers he's photographing, all in order to get that perfect shot. For races and photo shoots, Zandy relies Hammer Nutrition product

When choosing an athlete for our "Where do you Hammer?" section, we look for an

athlete who has sought out a challenge and pushed themselves to the limit in some interesting or exotic locale. When we first heard about Zandy Mangold and all of the adventures he's been on while fueled by Hammer Nutrition products, we didn't know where to start! Zandy is a professional photographer and ultra-runner from New York City. While his work in New York varies from covering everything from food to music and fashion, his true passion is covering ultra-running events—notably the weeklong

Zandy has shot races across the globe, from Antarctica to the Gobi Desert, and is

photo shoots, Zandy relies on Hammer Nutrition products to power through the challenges he takes on, both behind and in front of the lens.



stage races put on by Racing the Planet.

BACKGROUND PHOTO: Racing the Planet, Sahara Desert, Egypt. Photo: Zandy Mangold. FAR LEFT: Zandy competes in Racing the Planet-Atacama Crossing 2012. Photo: Scott Manthey. LEFT: Racing The Planet, Sahara Desert, Egypt. Photo: Zandy Mangold. TOP RIGHT: Racing The Planet, Atacama Desert, Chile. Photo: Zandy Mangold. BOTTOM RIGHT: Racing The Planet, Antarctica. Photo: Zandy Mangold



lifelong runner, my introduction to the world of adventure racing and ultrarunning was a result of a photography assignment to document Racing The Planet's 4Desert Series. The annual series consists of four, seven-day self-supported stage races in The Sahara Desert in Egypt, The Atacama Desert in Chile, The Gobi Desert in China and finally, Antarctica. While the work was exhilarating, I was not tempted to compete in an ultramarathon having witnessed the runners' struggles . . . that is, until Racing The Planet staged a seven-day self-supported race in Australia in 2010.

I had always wanted to visit the outback and go "down under" so my interest was piqued. At that time, my cousin and dear friend, Ulla Lerse, was diagnosed with stage-four lung cancer. Thus, I decided to use the race as an opportunity to fundraise for cancer treatment in her name. During the seven-day race, I endured heat stroke and dehydration, while keeping an eye out for deadly snakes, spiders and man-eating crocodiles. Inspired by my cousin's battle with cancer, I eventually finished—in last place. In spite of my race struggles, I managed to cram in a lifetime of indispensable nutritional knowledge.

Specifically, I learned how and what to eat before, during, and after strenuous activity to not only keep myself out of the emergency room, but excelling in races. Hammer Nutrition had everything to do with my newfound success as a runner. After returning from Australia I started using Hammer Nutrition products as recommended in Endurance News and achieved a lifelong dream of qualifying for the Boston Marathon. Relying on Hammer Gel, Endurolytes, and Recoverite, I ended up setting a personal record in the marathon!

After my Boston success, I took another stab at stage racing and entered Racing The Planet's Atacama Crossing in 2012. In preparation, I stepped up my regimen, consuming Sustained Energy, Hammer Gel, and Endurolytes Fizz during workouts and recovering with Recoverite, while regularly taking Tissue Rejuvenator and Race Caps

Supreme. I am not a scientist, but the results were in: I recovered faster from workouts and performance improved. After a last place finish in my first ultra, 150 mile stage race, I placed 4th overall (1st place American) in my follow-up and won my age group.

I have continued using Hammer Nutrition products, and not just when training or competing. I am a full-time photographer and due to the strenuous nature of my job, I rely on the supplements. If I am not vigilant with my nutritional requirements,

I will experience health problems, as would any runner or other athlete.

I have spent weeks at a time chasing runners all over the deserts of Jordan, China, Chile, Egypt, Antarctica, and even the foothills of the Himalayas. (Photos from Zandy's travels can be seen at www.zandymangoldnyc.com.) I now apply the same nutritional principles as if I were racing. Hammer Bars and Hammer Gel are an excellent source of quick, clean fuel while I am shooting, and Endurolytes Fizz balances my electrolyte profile while trekking deep into the Sahara Desert on

120-degree days.

The combination of traveling the world and photographing inspiring athletes in idyllic scenery is my dream job. I am grateful for that every day, and I am grateful that I found Hammer Nutrition products that help me make the most of my opportunities. **HN**







Cycling skills with Mike Freeman

Hold your line

BY MIKE FREEMAN

ne of the most important skills for cyclists to master, especially in a group situation, is riding in a straight line, aka "holding your line." This is also key for triathletes since the shortest distance between point A and point B is a straight line! Master this important skill, and you and everyone else in the group will be safer.

I ride with some very skilled cyclists, but there are always a few squirrelly riders to avoid who create problems and unfortunately crashes. This is why it's never a good idea to overlap wheels in a group. Unfortunately, their numbers seem to be growing—don't be one of these riders!

When you encounter such a rider, it's okay and necessary to offer some advice, but do so constructively. Approach the issue as a suggestion. "I'd like to point something out that will make you a

safer cyclist" may be met with a little less resistance. Take them aside; don't embarrass them in front of the group unless it's absolutely necessary, such as in a situation when they are being dangerous to those around them.

It's imperative to be predictable in a group situation. Safety is a major concern to all of us. No one wants a front wheel taken out or to be run off the shoulder of the road, which unfortunately is the most common cause of crashes in groups. Riding a straight line, all of the time, is the key and is a learned skill that requires practice and dedication.

These rules were passed on to me by an experienced rider/racer/coach from my first race team. I hope you will find these useful.

- continued from page 36

Rule #1. Regular practice, focus, and concentration are required to master this skill. Spend 10-20 minutes or more practicing every time you go out until you are a truly steady wheel.

Rule #2. Relax your arms and shoulders; the rest of your body will follow. Stay centered and balanced. Be light on your pedals, don't mash them.

Rule #3. Keep your head up. Look down the road. Don't look directly in front of your wheel. If you focus too close to the front wheel, you'll move around more. Use your peripheral vision instead of turning your head.

Rule #4. When you're riding, practice using the shoulder line, usually white or yellow, as your reference point. Ride directly on it, as well as just to the right and left of it. Any other straight line you can find will also work. **HN**

Advanced Tips

Looking behind you and staying in a straight line is also a developed skill that is critical to group safety as well as your own. Most riders will drift in the direction they turn their head. A conscientious effort must be made not to drift. Pointing your hand back in the direction that you want to look, putting your chin against your shoulder, reaching back and holding the side of your saddle, or reaching over and holding onto the shoulder of a buddy are all good methods to practice. These all work as long as you keep your head in the game and focus.

Removing your water bottle from the bottle cage can also cause you to drift or swerve. Learn to reach down, get your bottle, take a drink, and replace it in the cage without looking down. Practice this over and over while riding, staying on the white line at the same time.

When you have mastered these skills, you'll be a truly "steady wheel"—a safe rider and one who people feel confident riding in close proximity to.



Records fall with proper fueling

Report from 2013 USMS Nationals-Indianapolis

BY LAURA LEE LABELLE

he beautiful campus of Indiana University-Purdue University Indianapolis, the venue for many major swimming events including the Olympic Trials, Pan American Games, and Word Championships Trials, was well equipped for a USMS National Championship meet boasting the most participants ever. Over 1,600 swimmers ranging in age from 18 to 97 competed. The pool was fast, and many national and a couple of world records were not only broken, but also shattered. These records fell despite the previous use of the now banned "super swimsuits." How can this be possible? I attribute it to smarter training, better technique, and proper fueling.

The wonderful "wizard" of fueling and EMS, Steve Born, helped me poolside to fuel the entire meet with a myriad of goodies including HEED, Endurolytes Fizz, Recoverite, and of course, by far the most popular amongst swimmers at every meet, Hammer Gel.

I am always amazed at how many people come to me during national championship meets each year to say, "Thank you! I just went my best time ever thanks to Hammer Gel." So many, in fact, that I spent some time after this year's meet truly pondering this. I realized that by the time most competitors get to their event, they have not eaten for many hours. It can totally sabotage months or years of training to "put the gas pedal down" and have an empty tank by not fueling properly. Hammer Gel simply gives swimmers the fuel they need to meet the potential of their training!

I also enjoy the end of the day when people stop by to tell me how wonderful they feel after consuming Recoverite, when usually they would feel pretty sore after a day of swim meet events. Representing Hammer Nutrition products at these events is a joy because time and time again, people make a point to tell me of their successes and gratitude for the products. Essentially, the proof is in the pudding! **HN**

Niclas Ohman takes his mark for the 200 Freestyle. Photo : Laura LaBelle

38 August/September: Issue 86

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Salt stains and heat adaptation

BY STEVE BORN

uring the summer months we field questions such as this quite frequently: "I began my workout early in the morning and the temperature was already quite warm. As the day progressed the temperatures rose even higher, topping off above 100°F. I drank plenty of water and supplemented with Endurolytes every hour. I still had salt stains everywhere. Is this just what happens and not a problem or should I do something a little different? And how can I adapt to the heat better?"

Dr. Bill Misner responds: Generally, salt stains are an indication of (1) profuse fluid loss response to hyperthermia, (2) excessive dietary sodium intake above needs, or (3) a combination of 1 and 2. Sodium is stored in extracellular spaces, withholding fluids proportionate to dietary intake, though the kidneys filter out some of the serum circulating levels. If you notice in a pace line early on, some riders tend to sweat heavily while others seem relatively dry. The more profuse one perspires, the higher the rate of sodium excreted, hence salt stains relative to diet or rate of fluid loss. There are other mineral salts lost in sweat, but sodium and chloride are the two lost the most, with magnesium and potassium in lesser amounts.

As a rule of thumb, the 70-70 rule states that when the heat is above 70°F and 70% humidity, physiological adaptations occur within 8-14 days exposure at an aerobic pace for 90 minutes or more each day. Above 80°F, without attention to humidity, heat has an inhibiting effect on endurance performance for each degree beyond 80°F. You can prepare only so much for high heat, then deteriorated performance is bound to occur. The leaner the athlete, the more fit the athlete, the more acclimated the athlete, and the slower the pace rate/effort attempted, the better heat will be tolerated. Fluid and electrolyte loss is observed to be maximally efficient up to a point if the person possesses a combination of all of the aforementioned traits.

Once core temperature reaches 102°F, perspiration begins in an attempt to lower body temperature to 98.6°F. Temperatures of 107°F and higher have been recorded during extreme heat stress. Pace rate, multiplied by duration in temperatures not adapted to (by the necessary 8-14 day exposure incidences), tends to elevate heart rate, perspiration rate, electrolyte loss, and communicates to the body to begin developing more efficient distal capillary beds to cool the body, reducing core temperatures and fluid and electrolyte losses more efficiently.

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During adaptation to heat, the fluid and electrolyte loss may be at such a high rate that the deficiency is too much for the body to overcome. I am not sure that human metabolism can "efficiently perform" quality aerobic exercise in temperatures above 105°. Keeping the skin wet, increasing fluids, electrolytes, and relatively small amounts of long-chain carbohydrates, while lowering your pace effort, may be your only choice until those adaptations occur. The temperatures you rode in are very hot ones indeed, and even with time exposures and training in hot conditions, your physiology will adapt as far as it will within an 8-14 day heat-training exposure.

Tips to help you "beat the heat"

FLUIDS: Our basic recommendation is 20-25 ounces per hour, with many athletes needing no more than 16-20 ounces hourly to fulfill hydration requirements. When the temperatures get hot it may be necessary to increase fluid intake above the upper end of that recommendation. However, that doesn't mean that you can indiscriminately consume copious amounts of fluids; drinking too much will cause as many problems as not drinking enough. As hydration expert Dr. Ian Rogers states, "We can no longer assume that excess fluid taken during prolonged exercise will just be passed out in the urine. Like most things in life, balance is the key."

With that in mind, if the weather dictates that more fluid is necessary, you can increase your intake cautiously, up to 28 ounces per hour. If you're a larger athlete and the conditions are extreme, a fluid intake up to 30 ounces an hour may be merited. Just remember that:

- When you start flirting with consistent fluid intakes above 30 ounces of fluid an hour, serum sodium stores become overly diluted, resulting in hyponatremia, a clinical medical emergency.
- Increased fluid intake above what you normally consume requires that you increase your electrolyte intake.

ELECTROLYTES: 1 Endurolytes capsule or 1 scoop of Endurolytes Powder or ½ tablet of Endurolytes Fizz for every 50-60 pounds of body weight every hour is an excellent "starting point" dosage suggestion. When the heat cranks up, however, you'll most likely need more electrolytic mineral support. Therefore, you must be willing to increase your dose of Endurolytes as needed, when needed, especially if you've increased your hourly fluid intake. If you feel the slightest twinge of a cramp coming on, that's a definite "red flag" signal from your body, saying it needs more electrolytes right away. Don't wait until your body is knotted up in a full-fledged cramp! Take more Endurolytes immediately, even biting into capsules or tablets to get those minerals into your system FAST!

Athletes who rely solely on sodium (salt tablets, salty foods, etc.), would do well to heed Dr. Misner's words:

Sodium is not the only mineral the human body must monitor levels of when it is overheated, though it also is a survival chemical when volume is compromised. Endurolytes, with a broad spectrum of electrolyte mineral dose, helps keep mineral balances from triggering hormonemessenger alarms that contribute to muscle fatigue, spasms, cramping, and eventual failure. We know that consuming high amounts of sodium converts into high sodium loss in sweat and urine. We know that consuming low amounts of sodium converts into lesser sodium loss in sweat and urine. Therefore, replacement of lower amounts of sodium with other potentially depleting electrolytes predictably lowers sodium in sweat loss. This is because the body perceives low sodium transit as that which is unnecessary to excrete; electrolyte balances in moderation reduce the need to activate survival excretion pathways.

CALORIES: No matter what the weather is, exercising diminishes digestive system functioning as compared to when you're in a relaxed, resting state. When the weather gets hot, your body's ability to process calories decreases even more, which means that your hourly calorie intake may need to be lowered—sometimes drastically—from what you're normally accustomed to. Remember, you want to consume the least amount of calories required to keep your body doing what you want it to do hour after hour—the lowest amount necessary to keep energy levels where you want them. That's a good practice to follow no matter what the weather is; when you're training and racing in hot conditions it's necessary! Keep in mind that if you err slightly on the "not enough" side, that's an easy problem to fix; you simply consume more calories. Err on the "too much" side, especially in the heat, and that could spell disaster.

PACE: Unless you're completely acclimated to the weather conditions, it will be necessary to alter your pace in deference to the weather. Of course, no one wants to go slower, certainly not during a race, but doing so when the weather is hot—especially if you're not fully acclimated to the heat—is the wise thing to do. When the temperatures are higher than you're accustomed to, it simply can't be "business as usual." Pacing yourself accordingly will help you complete your race successfully (workouts too!). Going out fast and furious in a race, disregarding the weather conditions, usually results in a DNF and sometimes a trip to the medical tent, both of which you definitely don't want to have happen.

BODY: During the hottest weather conditions, sponging yourself off with cold water—keeping your head, neck, trunk, and quads wet—will provide significant relief from the heat.

CAFFEINE: Whether or not caffeine truly has diuretic properties (that debate has been going on for a long time), it's still a good idea to use it cautiously. If your physiology shows that caffeine does, in fact, have fluid-depleting properties, a hot-weather workout or race is not the time to find out. Additionally, with your heart arguably working harder in hot-weather conditions, you don't want nor need your heart rate to go up higher than it already is, which it will do courtesy of caffeine's stimulant properties. **HN**



BY CHRIS GAGNON

o, we are not talking about astronauts here. I'm addressing space in our schedules, as in time, something more and more of us struggle to find enough of during the week. There is a reason why competitive cyclists train on the bike 15 hours a week, and why a runner may go through a pair of shoes every two months. And there is a lot to be said for sport-specific training during race seasons; however, what happens when you simply do not have the hours in the week to dedicate to your sport?

As an elite endurance athlete for the past 10 years, I can tell you that training time is very precious. Bravo to those of you who are retired or compete professionally; however, most of us have to work a full-time job and schedule our workouts in the space around it. I started experimenting with crosstraining and nutrition supplements six years ago, in the hopes of increasing performance. Rather than hitting the bike for 3-5 hours at a time or 15 hours per week, I was adopting the "quality over quantity" method of training while staying regimented on Hammer Nutrition supplements: Race Caps Supreme, Anti-Fatigue Caps, Endurolytes, and most

importantly, Hammer Whey. Certainly the top professional endurance athletes who get paid to ride have all the time in the world, but the working professional looking to race against these guys at some competitive level needs leverage!

In 2009, after seeing growth in my performance, I implemented my experiments into a group exercise class for endurance athletes and fitness enthusiasts that I call CrossCycle®. Coupled with proper nutrition and rest, my focus was improving endurance strength performance in minimal time. The workout takes riders on and off the bike several times during class for a high-intensity endurance strength class like you have never seen—all in under an hour. Results have been consistently positive over the past four years with members improving core and upperbody strength, without sacrificing endurance. This CrossCycle® -type of workout, along with the added benefits of the proper Hammer Nutrition supplements, works well for athletes who have minimal time to train.

Rather than trying to explain what an endurance strength workout would look like, I have included a sample workout for you to follow on your own. Follow this format a few times per week, all while fitting in your long ride or run for the week on other days. Make sure to maximize your workouts with your

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favorite Hammer Nutrition supplements during and postworkout.

WARM-UP	EXERCISE/MOVEMENT	DURATION
Dynamic	Dynamic stretching	5 minutes
PHASE 1	EXERCISE/MOVEMENT	DURATION
Cycle	Time trial	6 minutes
PHASE 2 - Repeat 3x	EXERCISE/MOVEMENT	DURATION
Strength	squat jumps	20 seconds
Strength	Squats	20 seconds
Strength	Isometric squat	20 seconds
Strength	Mountain climbers	60 seconds
PHASE 3	EXERCISE/MOVEMENT	DURATION
Cycle	50x2sec sprint interval	10 minutes
PHASE 4 - Repeat x	EXERCISE/MOVEMENT	DURATION
Strength	Swiss ball chest	60 seconds
Strength	Swiss ball plank	60 seconds
Strength	Swiss ball tuck	60 seconds
Strength Strength	Swiss ball tuck Swiss ball pushups	60 seconds 45 seconds
Strength	Swiss ball pushups	45 seconds
Strength PHASE 5	Swiss ball pushups EXERCISE/MOVEMENT	45 seconds DURATION
Strength PHASE 5 Cycle	Swiss ball pushups EXERCISE/MOVEMENT Moderate/difficult	45 seconds DURATION 10 minutes
Strength PHASE 5 Cycle PHASE 6	Swiss ball pushups EXERCISE/MOVEMENT Moderate/difficult EXERCISE/MOVEMENT	45 seconds DURATION 10 minutes DURATION

TOTAL DURATION: 60 minutes

Be advised that nutrition plays a key role in my performance, as well as that of my clients and fellow class members. Endurolytes and Race Caps Supreme are always used before training and race efforts, followed by the benefits of a protein-based carbohydrate recovery drink such as Recoverite. To be honest, I follow up all of my training efforts with a berry smoothie later that day using Hammer Whey. Combining these nutritional efforts with the above cross-training methods will help develop overall strength and maintain aerobic/anaerobic performance without having to spend 15 hours a week.

Integrating cross-training into your workout routine will only net positive results if done correctly. Rest and recovery are just as important as effort, and in theory should be easier to come by with less time spent training—there is such a thing as overtraining across all training techniques, even cross-training. Save your hard days for the weekends when you typically have more "space" in your life, and integrate cross-training 2-3 times into your routine during the weekdays. Top all of this off with consistent use of Hammer Nutrition fuels and supplements, and you will be fit to compete against your personal best any day of the week throughout the year. **HN**

"Including Hammer Whey Protein in my post-workout meal really helps my recovery." - Greg S.



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- Immune system support

Try this: Just before bed, mix one scoop of Hammer Whey in 4-6 ounces of water and consume. This practice may safely raise hGH levels while you sleep by as much as 400% compared to the usual nightly spike. That's enough to have a noticeable effect on anabolic muscle building/maintaining activity in the body, a benefit to health and performance.

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Coffee and cycling:

For the love of the ritual

BY PHILIP HOWETH

o vou have a pre-workout ritual? Many athletes have a routine that they use to get their minds and bodies in the right state prior to an event. For some, part of their pre-event routine might involve eating a specific food, wearing a certain "lucky" clothing item, or listening to their favorite band. Rituals can be a little on the odd side too. Some professional athletes are just as famous for their pre-race routine as they are for athletic prowess. With all of the pre-race jitters an athlete can have, finding a ritual is a way to calm your mind, prepare your body for exertion, and help you feel grounded and confident.

Similar to a pre-race routine, countless citizens worldwide take comfort in having their morning coffee prior to the "race" pace of their day. We have a busy household, and early morning is our "pre-race" time when we carry out our ritual with the espresso machine. It is a time to collect our thoughts and take part in something together. It is when we find our calm before the storm . . . and something that provides a certainty in an uncertain day. There are many

traditions and routines that different people perform around the globe. For us, our ritual is the anticipation, preparation, and consumption of perfectly roasted, Fair Trade, organic 53x11 Coffee.

There is a good reason why coffee is the second most traded commodity in the world. People from all walks of life share the benefit and enjoyment from coffee. Many athletes, myself included, make coffee a part of the pre-race regimen. In fact, there have been studies showing caffeine consumption prior to an endurance event can aid in the use of fat as an energy source, while helping delay the depletion of muscle glycogen.

You can call me sentimental, but I find comfort in the fact that millions of people around the globe take part in the same ritual as I, day after day! Why not celebrate the passion of cycling and love of coffee with a cup that you can feel good about—knowing that the farmers behind 53x11 Coffee receive a fair wage, practice sustainable agriculture, and are building better, more stable communities. **HN**



Join the club

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New research seems to be tipping the scales in favor of coffee's beneficial effects, even as profound as a lower risk of death overall compared to noncoffee drinkers.

In an article published in the *New England Journal of Medicine* ("Association of Coffee Drinking with Total and Cause-Specific Mortality" - *N Engl J Med* 2012; 366:1891-1904), researchers from the National Cancer Institute examined the association between coffee drinking and risk of death in U.S. men and women.

What the researchers found was quite eye-opening: The association between coffee consumption and a reduction in the risk of death increased with the amount of coffee consumed. Compared to those who did not drink coffee, men who had 2-3 cups per day had approximately a 10% lower risk of death.

Women in the study experienced even better results, with about a 13% lower risk of death compared to non-coffee drinkers. Specifically, coffee consumption was linked to a decreased risk of dying from injuries, infections, stroke, and heart disease, though it was not linked to fewer cancer-related deaths.

For more information, read the article "Can coffee help you live longer? Maybe!" in *Endurance News*, issue 81. EN#81, and all other back issues of *Endurance News* can be found online at www.hammernutrition.com/knowledge/endurance-news/.

PIT ROW

Steve Jenkins

Steve Jenkins took 3rd in qualifying and claimed the second step on the podium during the Grand Touring 2 season opener at Blackhawk Farms Raceway.

"Hammer Nutrition products are literally "health food for athletes"—made with only wholesome ingredients and containing absolutely NO refined sugar,

artificial sweeteners, colors, flavors, preservatives, or chemicals. They are 100% gluten-free, diabetic friendly, and ideally suited for junior athletes. Besides being heavily used by traditional endurance athletes such as triathletes, bike racers, and runners, Hammer Nutrition products have become increasingly popular in the Paddock area of all forms of motor sports—from endurance racing to Baja 1000 to shifter karts—used while driving and in crosstraining to improve energy, endurance, and recovery." - Steve









Billy Mercier

Billy Mercier represented in a big way during the 2013 Mammoth Motocross event. In a stacked field with the best over-40-yearold riders in the world, Billy finished up the weekend in 2nd place on Saturday and 1st place on Sunday.

"I sipped Perpetuem throughout the day, and used Hammer Gel 5-10 minutes before each race. After my last moto of the day, I put down some Recoverite in preparation for the next day of racing!" - Billy

"I love my Hammer products, and had a great race this weekend thanks_to_Hammer_Gel!" Photo: Btosports.com



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really goes above
and beyond what I
would get from any
other company. This
is one reason why I
keep using Hammer
Nutrition products."
- Shelley K.

"Hi KC, you were most helpful and professional. Tell your coworkers there to keep up the good work. We trust Hammer Nutrition products and have been powered by them for a long time. They now are a permanent fixture in our kitchen cupboard. The 'knowledge' tab on your site and the articles included are illuminating, informative . . . elephantastic!"

- Paraskevas

"Thank you, Hammer, for the research you have put into your products. A special thanks to KC, who has been nothing short of a professional nutrition and training coach! Semper Fidelis!" - Shane

"Katey, thank you so much for the helpful information and for responding so quickly. It answered a lot of my questions! That really shows me how important your customers are to your company. As a runner, I need to know that the businesses I go to are going to be there if I have questions or need assistance with one of their products when it pertains to my running because it's important to me!" - Erica W.

"I had a small issue/question with my order, and Sam reached out right away. He was very helpful and professional. We resolved the issue in no time. When I opened my order, Sam had included a welcome kit. This far exceeds what anvone else in business does. You guys clearly get it, and all of the folks involved in mv order deserve credit. I would have no reservation in introducing your company to others. This is a very refreshing approach from beginning to end." - Lee



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Fordershitz Con. 40 Table Tab.	3 @ \$17.95	Appestat - 90 Capsules Boron - 90 Capsules	\$27.95 \$14.95	Hammer Balm 4.0 oz.	\$34.95
Endurolytes Fizz - 13 Tablet Tube	\$4.95	Chromemate - 100 Capsules		Hammer Lips 0.15 oz.	\$2.95
5 1 1 1 5 05 W 10' 1	3 @ \$4.75	•	\$13.95 \$16.95	Harris II a Flancia Mildham Markanish	6 @ \$2.75
Endurolytes Fizz - 25 Wrapped Singles	\$12.95	Digest Caps - 60 Capsules Endurance Amino - 120 Capsules	\$29.95	Hammer Lips Flavors : Wildberry, Wintermint	
	4 @ \$10.00	Endurance Amino - 120 Capsules Endurance Amino - 240 Capsules	\$52.95	Pelle Eccellente 0.3 oz.	\$3.95
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Hammer Soy Protein - 24 Servings	\$31.95	Tissue Rejuvenator - 120 Capsules	\$28.95		12 @ \$12.50
	3 @ \$29.95		3 @ \$26.50	Snap Electrode Pads (2X - 2"x 4")	\$14.95
Hammer Soy Flavor : Vanilla		Xobaline - 30 Tablets	\$9.95	Shap Electione Land (2x - 2 x 4)	6 @ \$13.50
Hammer Vegan Protein - 26 Servings	\$44.95		3 @ \$7.95		·
	3 @ \$42.95	iFlora - 60 Capsules	\$25.95	0.1.00.1.6.0	12 @ \$12.50
Hammer Vegan Flavors : Chocolate, Strawberry, Vanilla		·		Quick Start Guide for Sport Elite	\$14.99
Hammer Whey Protein - Single Serving	\$3.25			Quick Start Guide for Performance U.S.	\$14.99
	6 @ \$2.95	Kits		Multimedia CD for Sport Elite	\$14.99
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	3 @ \$37.95	Complete Powder Sampler Kit \$29		Belt Clip	\$9.99
Hammer Whey Flavors : Chai (24-serving only), Chocola	ite, Strawberry,	1 packet of each flavor of Recoverite, Sustained End	•••	SPORT CLASSIC & FITNESS CLASSIC AC	CESSORIES
Unflavored (24-serving only), Vanilla		(excluding unflavored), HEED (excluding unflavored)), wney (excluding	Charger	\$19.99
HEED - Single Serving	\$1.95	unflavored and chai), and Soy.		Battery Pack	\$39.99
	6 @ \$1.80	Hammar Cal Camplar Vit \$7	OF Comm 04 CF	Pin Cables (4)	\$39.99
HEED - 32 Servings	\$28.95		95 Save \$4.65		•
HEED - 80 Servings	\$54.95	1 pouch of each flavor, 9 total.		Snap-On Conversion Cables (4)	\$44.99
HEED Flavors : Lemon-Lime, Mandarin Orange, Melon, S.	trawberry, Unflavored	New Product Sampler Kit \$9.	OF Comm 00 45	Pin Electrode Pads (4X - 2"x 2")	\$9.99
(32-serving only)	,,		95 Save \$2.45		6 @ \$8.95
Perpetuem - Single Serving	\$3.25	1 packet of Vanilla Recoverite, 1 packet of Straw			12 @ \$7.95
	6 @ \$2.95	Chocolate Peanut Vegan Recovery Bar, 1 Almond	Cacao vegan	Pin Electrode Pads (2X - 2"x 4")	\$9.99
Perpetuem - 16 Servings	\$28.95	Recovery Bar.			6 @ \$8.95
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Perpetuem Solids - 6 Tablet Tube	\$3.95	1 jug of Huckleberry Hammer Gel, 8 pouches of H		GENERAL ACCESSORIES	. ,
	3 @ \$3.50			Electrode Placement Guide	\$9.99
Perpetuem Solids - 90 Tablets	\$37.95	packets of Sustained Energy, 6 packets of Perpet Recoverite, 1 bottle of Endurolytes,	иет, з раскеть от		•
Perpetuem Flavors : Caffé Latte, Orange-Vanilla, Strawb			la Draduat Llaga	Spectra Conductivity Gel (8.5 oz.)	\$7.95
Unflavored (16-serving only)	iony vanina,	1 Capsule Dispenser, 1 Flask, 1 Water Bottle, and	a Product Osage	Spectra Conductivity Gel (2 oz.)	\$4.95
Recoverite - Single Serving	\$3.25	Manual.		Drawstring Bag	\$19.99
5 5	6 @ \$2.95	Short Fueling Starter Kit \$74	1.95 Save \$15.70	30-Minute Consultation	\$49.95
Recoverite - 32 Servings	\$54.95	1 jug of Huckleberry Hammer Gel, 8 pouches of		60-Minute Consultation	\$79.95
Recoverite Flavors : Chocolate, Citrus, Strawberry, Vanil		packets of HEED, 3 packets of Recoverite, 1 bott	,	Advanced Consultation	\$60.00/hour
Sustained Energy - Single Serving	\$3.25	1 Capsule Dispenser, 1 Flask,	io oi Liiuurviytes,		
	6 @ \$2.95	1 Water Bottle, and a Product Usage Manual.			
Sustained Energy - 15 Servings	\$32.95	i viatoi bottio, and a ribuuct osaye ividiludi.			
Sustained Energy - 30 Servings	\$54.95	1-Month Daily Essentials Kit \$94	1.95 Save		
Casamoa Energy Oo Oor villigo	3 @ \$51.50	\$11.90	cave		
Sustained Energy Flavor : Unflavored	υ 😊 ψυ1.υυ	1 PIC (210), 1 Race Caps Supreme, and 1 Mito C	Cans.		
When ordering multiple single-serving sizes of a	product you may	(2.0),			
mix and match flavors.	orouuoi, you illay	3-Month Daily Essentials Kit \$26	69.95 Save \$50.60		
ппл ани таки начить.		3 each of PIC (210). Race Caps Supreme, and M			

3 each of PIC (210), Race Caps Supreme, and Mito Caps.

1 each of Race Day Boost capsules, Energy Surge, and Anti-Fatigue Caps

\$49.95 Save \$4.90

Race PR Kit

2013 Price List continued

ZUIS Pri	CE	LIS	t contint	lea				
Voler Men's Cycling /	Tri Clotl	hina	Headwear			53x11 Coffee		
Sleeveless Jersey	\$39.95	s-xl	Pace® European Cycling Cap	\$12.95	OS	The Big Ring 2 oz.	\$2.95	
Short Sleeve Jersey	\$39.95	s-xl	Pace® Mesh Helmet Liner	\$12.95	0S	The Big Ring 12 oz.	\$13.95	
Long Sleeve Jersey	\$59.95	s-xl	Race Ready® Mesh Cap	\$12.75	OS	The Chain Breaker 12 oz.	\$13.95	
Wind Vest	\$43.95	s-xl	SweatVac® Ventilator Cap	\$13.95	OS	The Down Shift 12 oz.	\$13.95	
Wind Jacket	\$69.95	s-xl	SweatVac® Winter Beanie	\$19.95	0S	The Early Break 12 oz.	\$13.95	
Thermal Vest	\$72.75	s-xl	Halo Headband	\$12.95	0S			
Thermal Jacket	\$99.95	s-xl	Halo Headband II	\$12.95	OS	53x11 Brew Essentials		
Cycling Shorts	\$68.95	s-xl	Halo Protex	\$21.95	OS	Porcelain Coffee Brewer	\$19.95	
Cycling Bibs	\$72.95	s-xl	Halo Antifreeze	\$16.95	08	Bistro Electric Coffee Grinder	\$34.95	
Compression Bibs Cycling Skinsuit	\$89.95 \$99.95	s-xl s-xl	Baseball Cap	\$19.95	08	Bistro Electric Water Kettle	\$44.95	
Arm Warmers	\$29.95	s-xi s-xi	Headsweats® Visor Reversible Knit Beanie	\$14.95 \$12.95	08	Chambord French Press	\$49.95	
Giordana Cycling Gloves	\$23.95	s-xi	Latex Swim Cap	\$3.95	OS OS	53x11 Coffee Mug	\$12.95	
Aero Shoe Covers	\$19.95	s-l	Silicone Swim Cap	\$9.95	0S	Natural Brown Filters (40) Single Cup Top Brewer	\$2.95 \$4.95	
Thermal Booties	\$29.95	s-l	omoono owim oap	ψ0.00	00	Single Cup Top Brewei	Φ4.9 3	
Downhill/BMX Jersey	\$45.95	s-xl	Swimwear			53x11 Cycling Clothing		
Cyclocross Skinsuit	\$124.95	s-xl	Men's Briefs	\$34.95	28-34 even	Short Sleeve Jersey	\$39.95	s-xl
Tri Top	\$42.95	s-xl	Men's Jammers	\$34.95	28-34 even	Long Sleeve Jersey	\$59.95	s-xi
Tri Shorts	\$42.95	s-xl	Women's Swimsuit	\$59.95	28-36 even	Wind Vest	\$43.95	s-xl
Tri Skinsuit	\$98.50	s-xl				Wind Jacket	\$69.95	s-xl
Dargama Mania Cuali	an Clath	ina	Tents			Thermal Vest	\$72.75	s-xl
Bergamo Men's Cycli	ng Cloth	•	Racing Team Tent	\$675.00		Thermal Jacket	\$99.95	xs-xl
Hot Weather Short Sleeve Jersey		s-xl	Semi-Custom Tent	\$795.00	10'x10'	Cycling Bibs	\$72.95	s-xl
Hot Weather Long Sleeve Jersey	\$59.95	s-xl	Acceptation			Arm Warmers	\$29.95	s-xl
Premium Cycling Bibs Knee Warmers	\$89.95 \$18.95	s-xl s/m, l/xl	Accessories	004.05		Cyclocross Skinsuit	\$124.95	s-xl
Leg Warmers	\$21.95	s/m, l/xl	Hammer Gear Bag	\$64.95		Cycling Gloves	\$23.95	s-xl
Leg Warners	Ψ21.33	3/111, 1/ //	Bike Mount Flask Holder Double Clip Flask Holder	\$12.35 \$10.75		Premium Wool Socks	\$12.50	s-xl
Voler Women's Cyclin	a / Tri C	lothing	Blender Bottle	\$10.75 \$7.95				
Short Sleeve Jersey	\$39.95	s-xl	Fizz Water Bottle	\$2.95	21 oz.			
Long Sleeve Jersey	\$59.95	s-xl	Hammer Water Bottle	\$3.50	24 oz.	53x11 Tri Clothing		
Wind Jacket	\$69.95	s-xl	Nalgene Bottle	\$8.95	32 oz.	Tri Top	\$42.95	s-xl
Cycling Shorts	\$62.75	s-xl	Polar Water Bottle	\$10.95	24 oz.	Tri Shorts	\$42.95	s-xl
Cycling Bibs	\$66.95	s-xl	Small Purist Water Bottle	\$8.95	22 oz.			
Arm Warmers	\$29.95	s-I	Large Purist Water Bottle	\$10.95	26 oz.	53x11 Casual Clothing		
Tri Top	\$42.95	s-xl	Hammer Flask	\$1.95		Red Tee	\$14.95	s-xl
Tri Shorts	\$42.95	s-xl	Gel-Bot Soft Flask	\$9.95		Black Tee	\$14.95	s-xl
Voler Kid's Cycling / 1	ri Clothi	ina	Tattoos	\$0.35				
Cycling Jersey	\$27.95	s-xxl	Wrap Pack	\$8.35		53x11 Headwear		
Cycling Shorts	\$27.95	s-xxl	Hammer Patch	\$1.45		Euro Cycling Cap	\$12.95	OS
Tri Top	\$27.95	s-xxl	Sticker Pack HEED Cooler	\$0.50 \$39.95	E gol	Helmet Liner	\$14.95	OS
Tri Shorts	\$24.95	s-xxl	Pint Glass	\$3.75	5 gal.	Mini Cycling Cap	\$14.95	OS
	4 =		Sport Towel	\$2.95		Headsweats® Visor	\$19.95	OS
Socks			Beach Towel	\$29.95				
Men's Cycling Socks	\$5.95	m-xl	Hammer Sack	\$8.95				
Women's Cycling Socks	\$5.95	s-l	Hammer Banner	\$25.95				
Unisex 4" Compression Socks	\$13.95	s-xl	Bike Mount Tri Box	\$14.95			.	_
Unisex 12" Compression Socks	\$24.95	s-xl	Bike Mount Seat Bag	\$14.95		Hammer Nutrition and 5	3x11 Cof	fee
Running Gear			Gel Pump	\$5.95		Clothing Return Policy		
Cool-Tee	\$27.95	s-xl	Capsule Dispenser	\$0.50		Aside from trying on an item for fit (with protective u	ndarnarmente) all	clothing
Long Sleeve T-shirt	\$29.95	s-xl	Quick Coin	\$0.95		returns must be in new and salable condition, with o		
Singlet	\$24.95	s-xl	Large Capsule Organizer	\$4.35		enclosed in the original packaging. Clothing items d		
Trail Shirt	\$24.95	s-xl	Small Capsule Organizer Zip-Lock Capsule Bag	\$2.95		exchange if they have been used, washed, or had th Note: Swimwear will be fully inspected upon receipt		
Men's Running Shorts	\$29.95	s-xl	Zip-Luck Gapsule Bay	\$0.10		may not be granted, at the discretion of management	ıt.	
Women's Short Sleeve	\$27.95	s-xl	Books					
Women's Running Shorts	\$29.95	s-xl	Endurance Athlete's GUIDE to S	SUCCESS	\$7.95			
Women's Running Skirt	\$49.95	xs-xl	Fuels & Supplements	OCCULOC	\$4.95			
	ψ43.33							
Occupi Wood	ψ43.33		Consumer Education Guide					
Casual Wear	ψ+3.33				\$2.95 \$1.00			
Men's Est. 1987 Hooded			Consumer Education Guide Product Usage Manual Food Is Your Best Medicine		\$2.95 \$1.00 \$7.95			
Men's Est. 1987 Hooded Sweatshirt	\$39.95	s-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain		\$2.95 \$1.00 \$7.95 \$11.95			
Men's Est. 1987 Hooded Sweatshirt Men's Est. 1987 Long Sleeve	\$39.95 \$19.95	s-xl s-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain Healthy Bones		\$2.95 \$1.00 \$7.95 \$11.95 \$11.95			
Men's Est. 1987 Hooded Sweatshirt Men's Est. 1987 Long Sleeve Men's Est. 1987 Short Sleeve	\$39.95 \$19.95 \$14.95	s-xl s-xl s-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain Healthy Bones Killer Colas		\$2.95 \$1.00 \$7.95 \$11.95 \$12.95			
Men's Est. 1987 Hooded Sweatshirt Men's Est. 1987 Long Sleeve Men's Est. 1987 Short Sleeve Men's Baseball Short Sleeve	\$39.95 \$19.95 \$14.95 \$14.95	s-xl s-xl s-xl s-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain Healthy Bones Killer Colas Suicide by Sugar		\$2.95 \$1.00 \$7.95 \$11.95 \$12.95 \$12.95			
Men's Est. 1987 Hooded Sweatshirt Men's Est. 1987 Long Sleeve Men's Est. 1987 Short Sleeve Men's Baseball Short Sleeve Men's Retro Surfer Short Sleeve	\$39.95 \$19.95 \$14.95 \$14.95	s-xl s-xl s-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain Healthy Bones Killer Colas Suicide by Sugar Treat Your Own Back		\$2.95 \$1.00 \$7.95 \$11.95 \$11.95 \$12.95 \$12.95 \$9.95			
Men's Est. 1987 Hooded Sweatshirt Men's Est. 1987 Long Sleeve Men's Est. 1987 Short Sleeve Men's Baseball Short Sleeve	\$39.95 \$19.95 \$14.95 \$14.95 \$14.95	s-xl s-xl s-xl s-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain Healthy Bones Killer Colas Suicide by Sugar Treat Your Own Back Treat Your Own Neck		\$2.95 \$1.00 \$7.95 \$11.95 \$12.95 \$12.95 \$9.95 \$9.95			
Men's Est. 1987 Hooded Sweatshirt Men's Est. 1987 Long Sleeve Men's Est. 1987 Short Sleeve Men's Baseball Short Sleeve Men's Retro Surfer Short Sleeve Women's Est. 1987 Hooded	\$39.95 \$19.95 \$14.95 \$14.95 \$14.95	s-xl s-xl s-xl s-xl s-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain Healthy Bones Killer Colas Suicide by Sugar Treat Your Own Back		\$2.95 \$1.00 \$7.95 \$11.95 \$11.95 \$12.95 \$12.95 \$9.95			
Men's Est. 1987 Hooded Sweatshirt Men's Est. 1987 Long Sleeve Men's Est. 1987 Short Sleeve Men's Baseball Short Sleeve Men's Retro Surfer Short Sleeve Women's Est. 1987 Hooded Sweatshirt Women's Est. 1987 Long Sleeve Women's Est. 1987 Short Sleeve	\$39.95 \$19.95 \$14.95 \$14.95 \$14.95 \$35.95 \$19.95 \$14.95	s-xl s-xl s-xl s-xl s-xl s-xl s-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain Healthy Bones Killer Colas Suicide by Sugar Treat Your Own Back Treat Your Own Neck		\$2.95 \$1.00 \$7.95 \$11.95 \$12.95 \$12.95 \$9.95 \$9.95			
Men's Est. 1987 Hooded Sweatshirt Men's Est. 1987 Long Sleeve Men's Est. 1987 Short Sleeve Men's Baseball Short Sleeve Men's Retro Surfer Short Sleeve Women's Est. 1987 Hooded Sweatshirt Women's Est. 1987 Long Sleeve Women's Est. 1987 Short Sleeve Women's Yoga Pants	\$39.95 \$19.95 \$14.95 \$14.95 \$14.95 \$35.95 \$19.95 \$14.95 \$24.95	S-xl S-xl S-xl S-xl S-xl S-xl S-xl S-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain Healthy Bones Killer Colas Suicide by Sugar Treat Your Own Back Treat Your Own Neck		\$2.95 \$1.00 \$7.95 \$11.95 \$12.95 \$12.95 \$9.95 \$9.95	ununu homene	autrition o	nom 51
Men's Est. 1987 Hooded Sweatshirt Men's Est. 1987 Long Sleeve Men's Est. 1987 Short Sleeve Men's Baseball Short Sleeve Men's Retro Surfer Short Sleeve Women's Est. 1987 Hooded Sweatshirt Women's Est. 1987 Long Sleeve Women's Est. 1987 Short Sleeve	\$39.95 \$19.95 \$14.95 \$14.95 \$14.95 \$35.95 \$19.95 \$14.95	s-xl s-xl s-xl s-xl s-xl s-xl s-xl	Consumer Education Guide Product Usage Manual Food Is Your Best Medicine Healing Back Pain Healthy Bones Killer Colas Suicide by Sugar Treat Your Own Back Treat Your Own Neck		\$2.95 \$1.00 \$7.95 \$11.95 \$12.95 \$12.95 \$9.95 \$9.95	www.hammer	nutrition.c	com 51

Apparel Sizing Charts

VOLER / Men's Cycling and Tri Clothing					
Height	Waist	Inseam	Chest	Weight	Size
5'4" to 5'8"	29-31	9	35-37	120-145	Small
5'7" to 5'11"	32-34	9.5	38-40	145-170	Medium
5'10" to 6'2"	35-37	10	40-42	170-190	Large
6'1" to 6'5"	38-41	10.5	42-44	190-220	XL
6'3" and up	42-45	11	44-46	220-250	XXL

VOLER / Women's Cycling and Tri Clothing					
Height	Waist	Hips	Bust	Weight	Size
5'2" and under	22-24	31-32	30-32	95-115	XS (0-2)
5'1" to 5'5"	25-27	34-36	32-34	110-120	Small (4-6)
5'4" to 5'8"	27-29	36-38	34-36	120-145	Medium (8-10)
5'7" to 5'11"	30-32	39-41	36-38	140-165	Large (12-14)
5'10 and up	33-35	42-44	39-41	160-185	XL (16)

Voler Team Apparel offers "European" sizing, which is smaller than U.S. sizing. When choosing Voler racewear, you should go up one size if you are unfamiliar with the smaller European sizing. Likewise, if you are between two sizes, choose the

VOLER /Kid's Cycling and Tri Clothing						
	Small	Medium	Large	X-Large	2X-Large	
Age	6-8	8-10	10-12	12-13	13-14	
Waist	18-20	20-22	22-24	24-26	26-29	
Weight	55-65	65-75	75-85	85-100	100-120	
Height	40-45"	45-50"	50-55"	55-60"	60-65"	
Chest	25-27	27-29	29-31	31-33	33-35	
Inseam	7	7.5	8	8.5	9	

GIORDANA / Cycling Gloves					
Size	Measurement				
Small	7-7.5"				
Med.	8-8.5"				
Large	9-9.5"				
XL	10-10.5"				

Measure around the widest part of the hand, not including the thumb.

DEFEET / Cycling Socks					
Sock Size	Men's Shoe	Women's Shoe			
Small	NA	6-8			
Medium	7-9	8 1/2 - 10 1/2			
Large	9 1/2 - 11 1/2	11 - 13			
XLarge	12+	NA			

SWIFTWICK / Compression Socks					
Sock Size	Men's Shoe	Women's Shoe			
Small	3-5 1/2	5-7 1/2			
Medium	6-9 1/2	8-10			
Large	10-13	10 1/2-14			
XLarge	13 1/2-16	14 1/2-16 1/2			

RACE READY / Men's (Unisex)					
Waist	Chest	Size			
26-29	34-36	S			
30-33	37-39	M			
33-35	40-42	L			
35-37	43-45	XL			

RACE READY / Women's						
Dress Size	Waist	Size	Unisex			
Size 4-5	24-27	S	XS			
Size 6-8	27-29	М	XS or S			
Size 9-12	29-31	L	S or M			
Size 12-14	32-34	XL	M or L			

BERGAMO / Premium Bibs and Jerseys						
	Chest			Size		
67.5-69.5	34.5-36	30-31.5	34-35.5	Small		
69-70.5				Medium		
70-71.5	38-40	33-34.5				
71.5-73	40-41	34.5-36	38.5-40	X-Large		

Bergamo garments fit a little snug. If you're not sure what size to get or if you're between sizes. please order the next size larger.

AMERICAN APPAREL / Women's Yoga Pants						
	S	M	L	XL		
	0-2	4-6	8-10	12-14		
Waist	25-26	27-28	30-32	33-35		
Inseam	30	32	33	34		

American Apparel garments fit snug to flatter almost any body type. If you're not sure what size to get or if vou're between sizes, please order the next size larger.

DISTRICT THREADS / Women's Sweatshirt						
	S M L XL					
Size	3-5	7-9	11-13	15-17		
Bust	30-32	33-35	36-37	38-39		

BELLA / Women's Tee Shirts						
	S	M	L	XL		
Size	0-4	4-8	8-10	10-12		
Bust	31-33	34-36	37-39	39-41		

AMERICAN APPAREL / Men's Tee Shirts						
	S M L XL					
Chest	39-41	41-43	43-45	45-47		
Pant	30-31	31-32	33-34	34.5-35		

HARDCORE SPORTS / Women's Swimsuit						
	28	30	32	34	36	
Size	5/6	5/6	7/8	9/10	11/12	
Bust	33	33	35	36 1/2	38	
Waist	25	26	27	28 1/2	30	
Hips	35	36	37	38 1/2	41	
Torso	58	61	63 1/2	66	68 1/2	

Bust: Measure the fullest part Waist: Measure of chest going over shoulder

narrowest part

Hip: Measure around Torso: Start at high fullest point of the hip point of shoulder, run keeping tape parallel tape through legs and to the floor. back to starting point.

HARDCORE SPORTS / Men's Brief and Jammer						
Waist	28	30	32	34		
Brief	28	30	32	34		
Jammer 30 32 34 36						

Waist: Measure about 1" above the natural waist or just above the hip bone.

Jammers: The jammers are made to fit snug and add compression to the thigh.

We're here... Whitefish, Montana 2-4 Days 3-5 Days 4-6 Days 6-9 Days

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Shipping Information

Time in transit for packages shipped via ground delivery will range from 2-9 business days, depending on the carrier and distance in transit. If you must have your package by a certain date, call or email to determine whether ground shipping or one of the air delivery options will work best for your

Special Shipping Notes

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Military Addresses

APO, AE, AP, etc. are sent via USPS mail service. USPS Priority Mail rates will be charged for these shipments.

In a Hurry?

3-day, 2-day, and overnight delivery are available, calculated based on package weight and zone of delivery address, and will be billed at published rates.

International Orders

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Select one of our sport-specific kits:

- cycling jersey and shorts
- tri jersey and shorts
- running top and shorts
- swimwear with a swim cap and a large towel

Ask a Client Advisor for more



What is it?

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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.

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 Katey 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 softgoods item of your choice, up to \$20 in retail
- 5 FREE goodies on every future shipment as well.
- **6** Discounted pricing, exclusive offers, and much, much more!
- 7 FREE ground shipping on all automatic shipments and one fill-in order per quarter.

*Sorry, international clients are not eligible for these programs; only valid for

**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. See website or ask your Client Advisor

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Soba salad with avocado miso dressing



1 bunch kale, curly or flat 1/2 large cucumber

1 package buckwheat soba noodles

Dressing

1 avocado

1 garlic clove

1 tablespoon extra virgin olive oil

3 tablespoons white miso

Juice from half of a lime

3/4 cup water

Combine all dressing ingredients in blender or food processor. Adjust amount of water for desired consistency.

Optional garnishes:

Sesame seeds **Paprika**

Preparation:

Follow the instructions on the soba noodle packaging to cook the noodles. While the noodles are cooking, remove the stems from the kale and cut the leaves into small pieces or ribbons. Chop cucumber into small, thin semicircles or ribbons. When noodles are cooked, drain and rinse with hot water. In a large bowl, combine kale, cucumber, noodles, and avocado miso dressing.

Garnish with sesame seeds and/or paprika, and serve with a wedge of lime. This can be served warm or chilled for one hour prior to serving.

Busy bee smoothie

- 2 cups almond milk (can substitute milk, soy, or hemp)
- 1 scoop Vanilla Hammer Whey or Hammer Vegan protein powder
- 1 tablespoon almond butter
- 1 ripe banana
- 1 teaspoon honey
- 1 teaspoon lecithin

Blend all ingredients and enjoy!

Meat marinades, courtesy Hammer Staffers

Greek marinade

1 lemon, juiced

1/4 cup olive oil

1/4 cup low sodium soy sauce

1 teaspoon dried oregano

3 cloves garlic, crushed

Mix all ingredients and pour over pork tenderloin or chicken breasts. Refrigerate for up to 24 hours. Discard marinade and grill meat until thoroughly cooked. (Goes great on veggies too!)

Ginger-garlic lime marinade

1 tablespoon ginger, peeled and minced

1/4 cup lime juice

2 garlic cloves, minced

1/4 cup olive oil

1 tablespoon honey

1/2 tablespoon crushed red pepper flakes

1/2 teaspoon fresh thyme, chopped

Pepper to taste

Mix all ingredients thoroughly. Place salmon, shrimp, or fresh vegetables in a shallow dish and cover with marinade. Cover and refrigerate for one hour. When ready to grill, discard marinade. Serve grilled meat with lime wedge as garnish.

JENNY COOK'S RECORD FINISH RECIPE

For four days leading up to the race:

Race Day Boost

Pre-workout

1-2 Race Caps Supreme

Post-workout

Hammer Whey Protein shake

1 Super Antioxidant



RESULTS

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UC-Irvine Masters LCM Meet dash National record in the 50 breaststroke

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FROM OUR ATHLETES



Drink to win

'Fizzy' hydration for sailing

BY CAROL CRONIN

Above: Hammer Nutrition athletes Kim Couranz (L) and Carol Cronin (R) sail in the Snipe DonQ Regatta off the coast of Miami. Photo: John Payne Photography - johnpaynephoto.com. n June I achieved a personal best, finishing 2nd overall at the 2013
Snipe Colonial Cup in Annapolis,
MD. And in addition to thanking my teammate Kim Couranz, I have to send out a very special and heartfelt thank you to one of our longtime sponsors, Hammer Nutrition.

I love sailing with Kim. She's smart, funny, and knows me so well that she can tell when I'm about to do something really stupid. We've both realized that usually it's because I'm a little behind on electrolytes (no, really). So between races, she's always telling me to "drink."

Small sailboat racing can be very intense at times and very boring at other times, but our hands are almost always busy. While racing, it's usually impossible to grab even a sip of water; we're too busy adjusting sails and keeping the boat going in the right direction. When it gets hot and humid, like it did in Annapolis, I'm usually a bit behind on electrolytes by the time we finish our first one-hour race. After two races, my mouth is dry; after three races, I've got the beginnings of a headache. And if it's a four-race day like last Saturday, I'm usually not much fun to sail with by the end of the day.

Dehydration really does make me

stupid—ask any of my three teammates about day two of a certain World Championship back in 2003, and they'll tell you how badly I sailed after not hydrating well on day one. Even before I have any other obvious symptoms, my split-second decision-making ability deserts me. And since most of our races involve a constant stream of such choices, that can make for a very disappointing day, which is why I was so excited to discover during the Snipe Colonial Cup that Hammer Nutrition's Endurolytes Fizz can actually catch me back up again once I get a little behind.

I've used Hammer Nutrition products for 15 years, and HEED was a great step forward for me from water and other less effective sports drinks. But once behind, I wasn't ever able to catch up again.

Last summer I discovered Endurolytes capsules, which was the first time I'd ever felt a dehydration headache dissipate so quickly . . . but Endurolytes Fizz seems to be even more effective for my needs in sailing. Best of all, they're easy to carry and consume; last weekend I stashed a tube of Fizz tablets in my lifejacket pocket and between races, I'd drop one into my water bottle. In seconds, I had a great-tasting beverage—and I swear that with each sip, I could feel the storage tank of each individual brain cell filling up.

Kim and I discussed whether Endurolytes Fizz works better because it tastes so good and encourages me to drink more fluid. All I know is that I don't have to worry about competing in hot climates anymore. What used to be a real personal weakness has turned into a strength. Thank you, Hammer Nutrition!

There are two other Hammer Nutrition products I've used for over a decade: Hammer Whey Protein and Recoverite. The first gets me going in the morning, and the second makes sure I'm ready to go the next day too. In between, I now know I can keep going in any temperature/humidity combination, thanks to Endurolytes Fizz.

So now when Kim tells me to "drink," I know what I'll be slipping into my water bottle! **HN**



planned my trip to Italy around seeing stage 20 of the Giro d'Italia and getting in some good riding. I thought that late May would be a warm time of year to ride there, but when we arrived in Cortina d'Ampezzo it had just snowed in the higher elevations. My big question was, were they still going to finish on top of the Tre Cime di Lavaredo? It seemed doubtful, being that 50 cm of snow had fallen and stage 19 had been cancelled. Luckily, though the route was changed, they were still finishing on top of the Tre Cime.

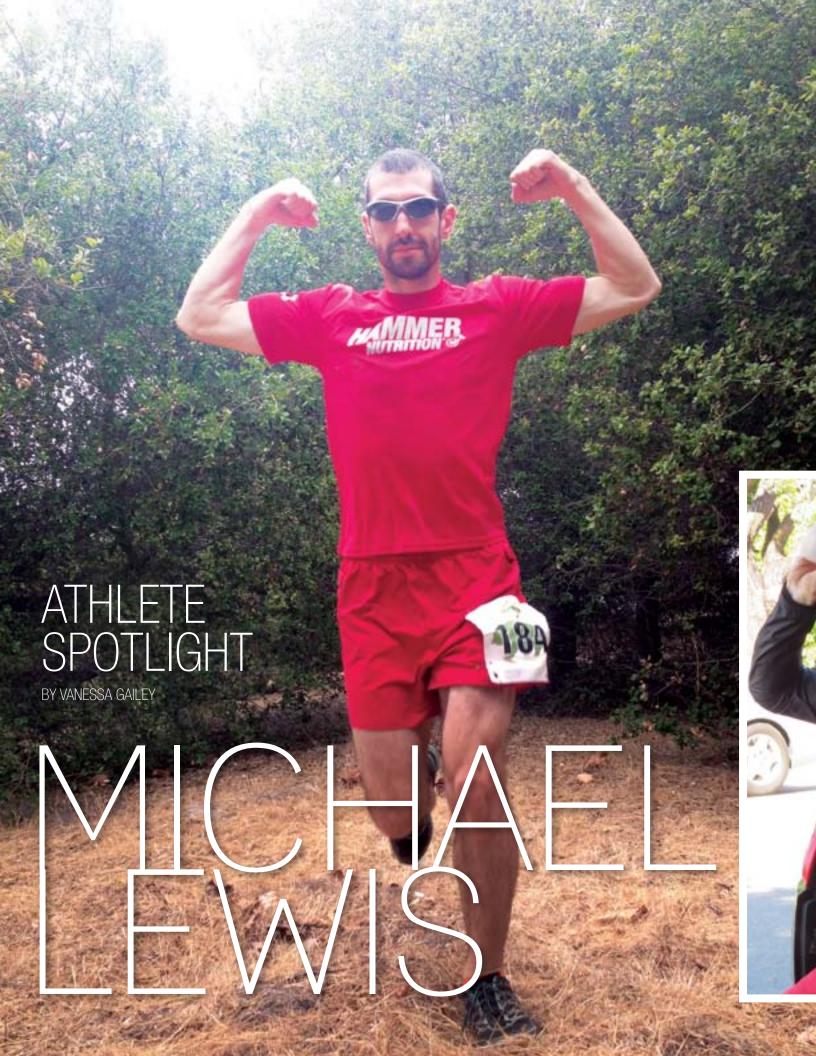
I put on what warm clothes I had plus my Hammer Nutrition cycling wind jacket, mixed some Perpetuem, and rode my way up to the finish line. The ride up was cold and the roads were wet, but the snow was not sticking to the pavement. Once the last rider crossed the line, I began my way down the hill, which was slow going due to the wet roads and the mass of people walking down. At the bottom of the road I took a right onto a road that was closed to cars; all of the team buses were parked along it. I rode past the buses and saw many of the riders. I was the only cyclist on the road, and it wasn't long before the first team bus passed me, then the second, third, and so on. They all got to see a lone Hammer Nutrition cyclist pedaling down the road in the driving rain! By time I got back to town I was soaked, but my core was still warm and dry (thumbs up on the wind jacket!).

In the end, it turned out to be an epic trip to Italy with some great rides. All of my epic rides have one thing in common: I always have Perpetuem with me!

"No more struggling on long rides.

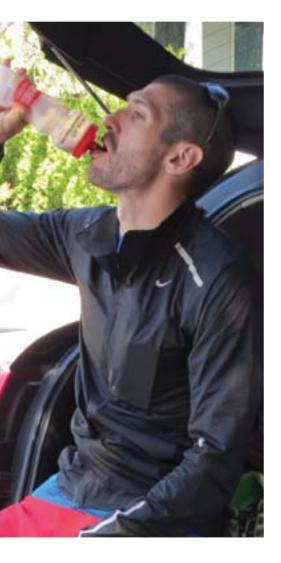
Perpetuem is delicious, functions like a liquid meal, and is so good I am tempted to chug the whole bottle after the first turn of the pedal." - Joe T.





very year the number of sponsorship applications we receive increases exponentially, and the accomplishments and passion of our applicants grows more impressive. We hear from athletes of all walks of life, and in a surprising array of sports disciplines and competitive levels. So how does our Sponsorship Team select the sponsored athletes who will represent Hammer Nutrition for the coming year? It all comes down to a balance of accomplishment, ambassadorship in a chosen sport(s), a passion for Hammer Nutrition products, and recognizing results from proper fueling and nutrition.

Michael Lewis commented in his application last year that "I was the nail in 2011, but now I am the Hammer!" It was his fiercely active lifestyle and competition in challenging events, made possible by recent changes in his diet and fueling philosophies, that captured our attention. Now Michael is a good friend to the sponsorship department, and we always look forward to hearing his race results and news of his adventures as he continues to grow as an endurance athlete.



EN: Since becoming a Hammer Nutrition sponsored athlete, you've gotten to know many of the local bike and running shops in your area. What do you think, after chatting with these shop owners and employees about fueling, is the most common misconception about sports nutrition?

MICHAEL: The first misconception is that most people identify sports fuels as "sugar." I often hear phrases like, "Gotta get some sugar," and I cringe. The second misconception is that all products are created equal. This couldn't be further from the truth. If more shop sales staff understood how to help choose the right products, then perhaps the athletes wouldn't be compelled to buy sugary sports nutrition.

EN: In the last year or so, you've adopted a whole new approach to your daily diet and also to your fueling regimen for training and racing. What has changed, and are you seeing success from this new routine?

MICHAEL: I found myself plateauing and felt that there was a conflict between my training and my lifestyle. So I made an effort to make training my lifestyle. A year ago I stopped drinking alcohol, and a little before that I phased out meat. I still eat the occasional piece of bacon and I eat fish a couple times a week,

but my diet is mainly vegetables, fruits, and unprocessed foods. This gives me a strong foundation for a healthy immune system and ample energy for training. I started using Hammer Nutrition products for my training and recovery, and found that I was able to train longer and recover faster. The results speak for themselves. I've been finishing in the top 1% of some of my races and am constantly breaking personal records. I feel great and haven't plateaued in a long time!

EN: You train and compete in several sports disciplines. Which is your favorite, and why?

MICHAEL: First and foremost, I love to run. I do 90% of my running on trails and occasionally hit the streets for a quick 5K. I cross-train with rowing, cycling, and ultimate Frisbee, and am starting to work swimming into the mix. I've been competing in Spartan races for the past year as well, but if I had to choose just one of the above, it would have to be good old-fashioned trail running. It's so simple and yet so rewarding. There is no end to how much I can improve, and there's a never-ending variety of places to run and explore.

EN: What are your tricks for recovering quickly to be able to train hard multiple days a week?

MICHAEL: A lot of water, ample sleep, and knowing when it's time to back off. My body will give me four days a week of extreme training, and for the other three I have to back off into a more normal routine. There is also a lot to be said for Recoverite. I have it immediately after I finish training, and I'm not sore or drained the next day.

I find that when I am sleep deprived, travel too much, don't adhere to a proper fueling strategy, and/or don't drink enough water, I burn out faster. I can tell when I don't recover right, so I try very hard not to let that happen.

EN: Give us a glimpse of your typical weekly training schedule.

MICHAEL: Every week is dynamic in that it changes depending upon how I feel, so I came up with a list of all the things I need to do each week. I make sure I check them all off. A normal week starts on Saturday and will be a 10- to 20-mile

- continued on page 60

- continued from page 59

trail run followed by spin class, upper body workout, and then a stretching and foam roller session.

Sunday: Trail running intervals with a weighted vest (3-4 miles), car pushing (yes, I push my SUV 30 yards 5-6x), and spin class

Monday: AM rest, PM rowing session and 300 push-ups

Tuesday: AM weight training, PM upper body, stretching, and foam roller session

Wednesday: AM core workout, PM cycling and 300 push-ups

Thursday: Trail running intervals with a weighted vest (3-4miles), PM squats **Friday**: AM rowing, PM beach or trail run, jump rope, and 300 push-ups

I mix it up from week to week, and also include stadiums or swimming occasionally.

EN: Which Hammer Nutrition products are your favorites?

MICHAEL: Recoverite (Chocolate) is my favorite. It has a warm place in my heart because it makes sure that I am able to train hard every single day. I also love Perpetuem (Caffé Latte) because it keeps me steady while on those longer runs. Tissue Rejuvenator keeps me operating at a high level and recovering.

EN: What's your most grueling endurance feat to date? Would you do it again?

MICHAEL: To date, it is a series of runs I did before I knew anything about proper race scheduling and before I was recovering properly. I ran my first marathon a week before a 15-mile Spartan event, and then tackled another obstacle race a week later. After the third race I hurt more and more, and each step was torture. What's interesting is that now I know how to recover, so I wouldn't hesitate to try it again. Next month I am going to tackle a run up 14,505-

foot Mt.

Whitney, which will be my most intimidating feat to date.

EN: Next on your schedule for 2013?

MICHAEL: Mt. Whitney, as I just mentioned, plus the Marin Ultra Challenge 50K, Spartan races in Portland, New Jersey, and Vermont, and the North Face Gortex 50-Miler in San Francisco.

EN: I know we'd all appreciate an insider tip from a Hammer Nutrition-sponsored athlete. What "survival" items do you always take on your long trail runs?

MICHAEL: On warmer days I carry more water than I think I need and bring a Hammer Bar for emergency calories. A small knife and extra laces are tiny enough for a pouch and always handy.

The most essential thing is something I don't bring, it's something I leave. If running alone, I leave a note or notify someone of where I am going, the route, and when I should return. Happy trails and safe running! Hammer on! **HN**



"Honestly, my legs would hate me without Recoverite!"

"Putting the right things in my body has allowed my legs to take me where I want to go. Without Recoverite, I wouldn't be able to 'Hammer on' as frequently." - Sandi N., 2nd place overall, Cayuga Trails 50

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- Rebuild muscle tissue
- Restore muscle glycogen







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Flavors: Vanilla, Citrus, Chocolate, Strawberry



IN THE KNOW

Workout to boost workday productivity

Morning exercise might just be the key to a productive workday, according to findings from a recent study from the *International Journal of Workplace Health Management*. The study showed that those who exercise either before or during their workday were 23% more productive on those days than on business days when they didn't workout.

The recommendation is to exercise sometime before clocking in or during a lunch break, and to obtain an aerobic level of activity, which study results showed to provide an even bigger boost to productivity than moderate, lowintensity exercise. **HN**

Hammer Tip:

Start the day with a shot of Hammer Gel followed by 30-60 minutes of aerobic exercise, and then eat a healthy breakfast to get the most out of your day

[Choose Espresso Hammer Gel and get a boost to your morning exercise!]





[EndurOmega is Hammer Nutrition's ALL NEW Omega-3 supplement! Available in two sizes, see page 18 for more information.]

Omega-3s may aid in health effects of mental stress

If you're feeling overwhelmed and a bit stressed lately, don't forget your daily dose of Omega-3s. Fish and fish oil supplements may have a protective effect on cardiovascular system function during periods of mental stress, according to a recent study printed in the *American Journal of Physiology - Regulatory, Integrative, and Comparative Physiology.*

Researchers from Michigan Technological University found that people who supplemented with fish oil for over a month performed better under stress in regard to cardiovascular health tests, including heart rate, blood pressure, blood flow, and muscle sympathetic nerve activity. Their findings suggest that fish oil can have a profound effect on cardiovascular function during mentally stressful situations. **HN**

Hammer Tip:

Take two EndurOmega softgels daily to protect your heart!

Diet soda as bad for your teeth as crack cocaine

The highly acidic nature of diet soda is to blame for the cavities, erosion, and overall negative dental health ramifications of consistent consumption of this popular beverage. A study reported in *General Dentistry* compared the teeth of meth addicts, crack addicts, and daily diet soda drinkers; the three were nearly identical, researchers said. All result in an overly acidic environment where bacteria thrives. Symptoms included rotting, discolored, and destroyed teeth. **HN**

Hammer Tip:

Skip the diet sodas, and definitely limit kids' consumption of these beverages. Instead, try HEED, a naturally sweetened sports drink that contains xylitol, which is especially beneficial for helping promote oral health, or Endurolytes Fizz, a minimal calorie sugar-free healthy electrolyte option. HEED or Endurolytes Fizz as a cold, refreshing beverage is a much better choice than soda or diet soda!



Study shows stomach inflammation from genetically modified grain

The debate continues over the possible health impacts of genetically modified foods and crops. A team of Australian scientists published their findings in the June 2013 issue of *Journal of Organic Systems*, after working with U.S. researchers and Iowa farmers to determine the effects of GM corn and soy on newly weened pigs.

After 22.7 weeks, 32% of the animals on the GM diet showed a high rate of severe stomach inflammation, as compared to only 12% of the non-GM fed pigs. In addition, GM-fed pigs had uteri that were 25% heavier than non-GM fed pigs.

While this study isn't conclusion as to the detrimental impact of GMO, its findings certainly suggest that additional long-term studies are necessary, and that consumption of foods that contain GMO should be avoided.

While this study isn't conclusive as to the detrimental impact of GMO, its findings certainly suggest that additional long-term studies are necessary, and that consumption of whole foods that contain GMO should be avoided. Keep in mind that this pertains to whole foods only. Certain components of a food source, such as maltodextrin, may come at least on occasion from a genetically modified food source; however, the meticulous refining process that takes place from food source (corn) to final product (maltodextrin) eliminates any GMO residues. Routine PCR (polymerase chain reaction) GMO detection tests done on the maltodextrins used in Hammer Nutrition products have repeatedly come back with a "negative" reading. **HN**

Hammer Tip:

Hammer Vegan Protein and Recovery Bars, Hammer Whey Recovery Bar, Hammer Soy, and Hammer Bars are GMOfree. In addition, Perpetuem and Sustained Energy both contain GMO-free soy protein.





All Hammer Nutrition products are gluten-free!

Whether you adhere to a gluten-free diet for medical reasons or just aim to minimize your intake for optimal health, you can rest assured that all Hammer Nutrition fuels and supplements are 100% gluten-free and can be consumed by even the most gluten-intolerant of individuals!



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FROM OUR ATHLETES





Greg Rittler's journey from fat to fit

BY GREG RITTLER

he older I get, the more I realize how important every moment is. At 39 I had a simple gallbladder removal surgery that turned out to be not so simple. The surgeon gave it to me straight when I woke up, "Greg, keep going the way you are going and you'll be looking at a liver transplant within a few years."

I hadn't reached 40 yet and I was overweight, my blood pressure was high, and my liver was damaged. Four days after surgery, I watched the 2010 Ironman World Championship and was just as much in awe of the iron athletes on the screen as I had been when I watched it as kid. A switch flipped inside of me in that moment, and I knew I needed to change.

I didn't go from 260 lb to 175 overnight. It's taken a long time. A week after

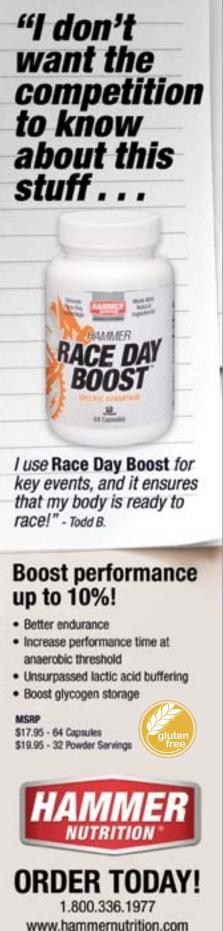
the surgery I was on the treadmill and I haven't looked back. I exercise consistently and also learned a valuable lesson—there is no way for me to address losing weight without dealing with the quantity and quality of the food I eat. Period. And this extends to the fuels and sports nutrition I use while training and racing.

Since the beginning of my fat to fit journey I've used Hammer Nutrition products. This highly average, everyday athlete is honored by the assistance I've gotten from the folks at Hammer Nutrition as I try to be the fittest, 41-year-old, ex-fat guy I can be. I now love endurance racing and have at least one race scheduled each month this summer. My fueling is dialed:

- A Hammer Bar and cup of coffee on race morning.
- A shot from a one of my Hammer Gel flasks within 15 minutes of race time.
- Only liquid or gel during the race. I've tried a lot of different things and found this to be the most reliable way to fuel and also saves as much time as possible on the bike. I drink Perpetuem throughout the ride and take a shot of gel each hour from my Hammer flask filled with Espresso Hammer Gel . . . super simple and gives me what I need.
- At aid stations with drop bags I simply swap out Hammer Gel flasks and dump a pre-measured baggie of Perpetuem into water.
- After the race I drink a dose of Recoverite within 15 minutes or so of finishing, and another after an hour if I haven't eaten yet. I find this greatly reduces my tendency to seriously binge after the race.

I've completed the Mohican 100 MTB, Wildcat 100 MTB, numerous other long-distance cycling events, several marathons, and ultra cross races. I'm not the fastest guy out there. At the end of the day, endurance events keep me healthy and motivated. That's really the end goal for me. Every moment matters. String together a few (with a lot of hard work in between) and life can change dramatically. Keep moving forward! **HN**







Joe White trains on Lake Erie in Sheffield Lake, OH.

The atypical [Hammer] athlete

For 2013 we've introduced a new column to Endurance News, highlighting some of the less conventional ways athletes are using our products. From professionals in the firefighting business, to adventurers doing things the rest of us only dream about, Hammer Nutrition products are used far and wide. Beyond the bike and the running shoes, here are a few examples of the "atypical athlete."

[Joe White]

I've been racing kayaks for almost ten years now, and every year I try to get better. I compete in marathon races, which can last as long as three hours. I've gotten slightly faster year after year, but that wasn't good enough for me so I started looking around at what I could do to speed up my results.

I found Hammer Nutrition and started experimenting with Race Caps Supreme and Hammer Gel. This is my first full year training and racing with Hammer Nutrition, and I'd have to say that these products have sped up my results. I have been able to train longer and harder, getting more out of each practice. This has helped me win more races and be in better overall shape before, during, and after each race. I take one RCS on my non-training days and two before training or racing.

In June I competed in two races in one weekend, placing 5th overall on June 15 in the Tiadaghton Elm Canoe and Kayak Classic in Jersey Shore, PA. On June 16, I competed in the Loyalsock Flatwater Challenge in Montoursville, PA, and finished 3rd overall. On June 22, I placed 4th at the Ohio River Paddlefest. I have one more race this month, and I am confident that with the help of Hammer Nutrition I will be able to continue racing at my peak, without crashing or bonking. I will Hammer On!



[Mark — Matheson]

My focus for 2013 is the Molokai-2-Oahu Paddleboard World Championships. This will be my fourth time racing the Molokai, a 32-mile open ocean paddle from island to island.

For a longer paddle session, I carry two water bottles with a mixture of Sustained Energy and HEED, a three-liter hydration pack of water, one caffeinated Tropical Hammer Gel, a Cranberry Hammer Bar, and a flask of Raspberry Hammer Gel. I take the caffeinated gel two-thirds of the way through the paddle for a boost. I use the gel in the flask for the last downwind run in the last 30-60 minutes for another good boost of energy. When I'm done, I drink Strawberry Recoverite.

Editor's note: Mark, a 2013 Hammer
Nutrition sponsored athlete, has been
paralyzed from the chest down since
1993, when he was injured in an accident.
Mark grew up surfing and scuba diving,
and missed being in the water, so he
discovered the sport of paddleboard
racing. Since that time he has committed
to a full-time training schedule and epic
open water distance events, and is a
strong representative of Hammer Nutrition
in the world of paddleboarding.



[Ryan Hill]

Hammer Nutrition-sponsored athlete and tennis pro, Ryan Hill, has been enjoying the benefits of Hammer Nutrition fueling for almost three years. His introduction into the world of cycling unlocked a whole new world of proper fueling and nutrition that he was able to carry over into his life as a tennis player, coach, and educator. "I started applying everything I was learning on the bike to the sport of tennis, which I have played for the majority of my life. My world of fuel, hydration, and recovery changed forever."

Ryan has taken the time to translate the fueling regimen of a typical Hammer Nutrition athlete into the language of an atypical athlete and is proving that no matter where or how you Hammer, the most important thing is that you Hammer.

See Ryan's article, "Serving up some tennis fueling tips" on page 68.

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]



some tennis fueling tips

BY RYAN HILL, tennis pro and Hammer Nutritionsponsored athlete

physically or mentally. You are supposed to be the example of what your student wants to achieve, no excuses.

Hammer Nutrition is a name I heard almost three years ago when a trusted friend and seasoned cyclist introduced me to HEED. Before this, I really thought I had the nutrition and hydration thing sorted out—and I did to a point, but the equation was all wrong.

The more I got into cycling, the more I uncovered what I call healthy habits. There are a few basic things that ANYONE can do, with a simple three-part question you can ask yourself, and it isn't all mystical health voodoo that you need a nutritionist for either. "What am I doing before, during, and after my physical activity?" Fortunately, Hammer Nutrition addresses all three of those areas in very simple ways that anyone can follow. Hammer's "Little Red Book" has become my nutrition Bible. Talk about a resource! I wanted to dig deeper though, so I started applying everything I was learning on the bike to the sport of tennis, which I have played for the majority of my life. My world of fueling, hydration, and recovery changed forever.

Fast forward to now. It's all about healthy habits. I plan ahead as much as I can and follow some basic guidelines:

Before you start your activity, drink early if you can. I have a bottle of HEED and water that I sip prior to touching the court. I also make sure that if I eat ahead of time, I keep it easy to digest.

During your training or match, your level of intake will depend a lot on the type of day you are having. As a coach it can be absolutely brutal or a little more relaxed. Stay mindful of the heat and general activity. On-court temperatures are often 5-10

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degrees hotter because heat is stored and reflected up from the court's surface. My general rule, like on the bike, is one bottle per hour of water mixed with 1 scoop of HEED. (I love Mandarin Orange.) An hour on a bike could be comparable to one set on the court. If it's hot and you're thirsty, drink more! If I know the day is going to be absolutely brutal, I'll mix a scoop of Unflavored HEED and drop in one Endurolytes Fizz. (I like Mango and Lemon-Lime.)

Like cycling, tennis can very often extend past the two-hour point. Be mindful of your primary fuel at this point. When training or a match goes beyond the two-hour mark, I have Perpetuem Solids, which are amazing because they are stored in a tube and will stay dry. They are easy to measure and are small enough (like Hammer Gels) to fit in your tennis bag. If I know ahead of time that I'm going to have five hours of coaching, I will stick to the HEED/water combo but I'll also start consuming Perpetuem Solids when I hit hour one. This rule could also apply to tournament players who know they have multiple matches in a day. Plan for the total duration of the day, not just the match in front of you.

Hammer Gel is my secret weapon sometimes. There are always going to be days when you just didn't plan correctly, the weather changed on you, or you stayed out an extra hour to get in that last set. Not to worry! I always keep a few Hammer Gels onhand. (I like Tropical and Espresso.) Like Perpetuem Solids and Fizz, gels can be kept single-serving in a closed container. This triple combo (Perpetuem, Fizz, and Hammer Gel) is my secret lineup and fits easily into smaller compartments in my tennis

bag. No mess, no fuss, easy to measure, and you can monitor intake and timelines very easily.

After your activities are complete, recovery is the final step in the "Before, During, and After" triad. Hopefully you shouldn't feel dehydrated after your activity. If so, take a look at the type of workout you had and see if you could have made changes to your habits. I am constantly changing my regimen depending on my needs and as conditions dictate. There is a "magic window" of about 30 minutes when it comes to recovery. I drink Recoverite within 10 minutes and back it up with food within 30 minutes. (I love Chocolate and there are even single-serving packets available.) Recoverite is amazing and has real recovery results. I don't have "recovery" days in my line of work. Everyday is a "work" day and my off days are saved for the bike!

To recap . . .

BEFORE: Hydrate early and pack your tennis bag according to the type of day you will have, but keep a few "extras" in there just in case.

DURING: Keep drinking! Be mindful of your conditions and how they change, and adjust. If you hit the two-hour mark, switch fuels but KEEP DRINKING!

AFTER: Recover and do it quickly. Put back in what you took out. Don't forget to take a second to reflect on how you feel. Dehydrated? Adjust your "BEFORE" & "DURING" intake.

Don't forget . . . do work, have fun, and do your best! I always tell my students, "If it were easy, it wouldn't be worth doing." And when it all hurts, on the bike or on the court, I repeat Greg LeMond's famous words over and over in my head, "It never gets easier, you just go faster." **HN**



Adults worldwide eat almost double daily AHA recommended amount of sodium

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eventy-five percent of the world's population consumes nearly twice the daily recommended amount of sodium (salt), according to research presented at the American Heart Association's Nutrition, Physical Activity, and Metabolism/Cardiovascular Disease Epidemiology and Prevention 2013 Scientific Sessions.

Global sodium intake from commercially prepared food, table salt, and salt and soy sauce added during cooking averaged nearly 4,000 mg a day in 2010.

The World Health
Organization recommends
limiting sodium to less than
2,000 mg. The American
Heart Association
recommends limiting
sodium to less than
1,500 mg a day.

"This study is the first time that information about sodium intake by country, age, and gender is available," said Saman Fahimi, M.D., M.Phil., lead author and a visiting scientist in the Harvard School of Public Health's epidemiology department in Boston, Mass. "We hope our findings will influence

national governments to develop public health interventions to lower sodium."

Cardiovascular disease is the number one cause of death in the world; excess sodium intake raises blood pressure. High blood pressure is one of the major contributors to the development of cardiovascular disease.

Among women and men, average sodium intake exceeded healthy levels in almost all countries, researchers said. Kazakhstan had the highest average intake at 6,000 mg per day, followed by Mauritius and Uzbekistan at just less than 6,000 mg per day.

Kenya and Malawi had the lowest average intake at about 2,000 mg per day. In the U.S., the average intake was about 3,600 mg a day.

One hundred eighty-one of 187 countries, representing 99% of the world's population, exceeded the World Health Organization's recommended sodium intake of less than 2,000 mg a day, and 119 countries, representing 88% of the world's population, exceeded this recommended intake by more than 1,000 mg a day. All countries except Kenya exceeded the American Heart Association recommended sodium intake of less than 1,500 mg a day.

The researchers analyzed 247 surveys of adult sodium intake to estimate sodium intake, stratified by age, gender, region, and nation between 1990 and 2010 as part of the 2010 Global Burden

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of Diseases Study, which is an international collaborative study by 488 scientists from 303 institutions in 50 countries around the world.

ADDENDUM: Research presented earlier this year in the American Heart Association journal *Hypertension* states that "less sodium in the U.S. diet could save 280,000 to 500,000 lives over ten years."

Using computer simulations and models researchers projected the effects of small (about 5% of a teaspoon of salt per person per day), steady annual reductions of sodium consumption in the U.S. diet, reducing sodium consumption by 40% to about 2,200 mg/day over ten years.

Key findings include:

- This gradual reduction is projected to save hundreds of thousands of lives—up to 500,000 depending on the modeled assumptions.
- About 60% more deaths could be averted over this time period if these same reductions could be achieved more quickly (500,000 to 850,000 lives).

Three research groups contributed to the study, each using a different approach for their simulation. One approach used observational cardiovascular outcome follow-up data, while the other two based their projections on established evidence that salt reduction lowers blood pressure. These two groups inferred the cardiovascular effects of reducing sodium from data about the relationship of blood pressure to cardiovascular disease.

"The research groups used the same target populations and baseline death rates for each projection, and our study found that the different sources of evidence for the cardiovascular effects of sodium led to similar projected outcomes," said Pamela Coxson, Ph.D., lead author of the study and a mathematics specialist in the Department of Medicine at the University of California San Francisco (UCSF).

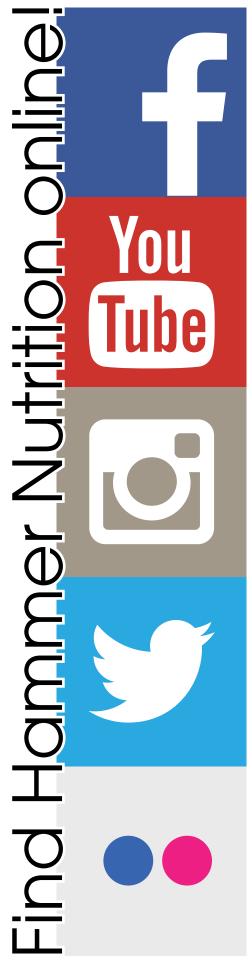
"It is helpful when three research groups use different approaches and come up with similar results," said Kirsten Bibbins-Domingo, Ph.D, M.D., senior author of the study and associate professor of medicine at UCSF and director of the UCSF Center for Vulnerable Populations.

The three approaches included a gradual reduction of sodium by 40%, instant reduction of sodium by 40%, or instant reduction of sodium to no more than 1,500 mg/day. According to the researchers, only the first scenario—gradual population-wide reduction of sodium by 40% over ten years—is a potentially achievable public health goal.

Currently the U.S. food supply makes it difficult for Americans to choose lower sodium foods and achieve recommended daily levels. Americans consume an average 3,600 mg of sodium a day, with about 80% coming from commercially prepared and processed foods, according to the researchers.

Excessive sodium intake contributes to high blood pressure, which increases the risk of heart attacks, strokes and other cardiovascular diseases. In the U.S, cardiovascular disease is the leading cause of death, and nearly half of these deaths are related to high blood pressure.

"These findings strengthen our understanding that sodium reduction is beneficial to people at all ages," Coxson said. "Even small, gradual reductions in sodium intake would result in substantial mortality benefits across the population." HN



No horsin' around when it comes to fueling right

BY JASMIN GAMMEL, Race Director



Photos: ©2013 J. Nowell, Remuda Photography

ong-distance riding (commonly called "endurance riding") is the fastest growing equestrian discipline in the country. In endurance riding, a horse and rider team navigates 25 to 100 miles within a set period of time (typically 6 hours for a 25-mile ride, up to 24 hours for a 100-mile ride).

Before, during, and after an endurance ride, the horses are meticulously evaluated and cared for by a staff of veterinarians and other personnel who monitor a variety of parameters including heart rate, hydration level, and muscle tone to make sure that the horses remain in good condition. The riders also focus their attention on their horses and treat them like the endurance athletes they are—assuring sufficient water intake, administering electrolytes, massaging muscles, etc.

While the condition of the horses is carefully monitored throughout the ride by qualified professionals, the condition of the riders is not. Newbie endurance riders quickly learn that they must take care of themselves as well as their horses if they are to finish the ride, particularly on days in which ride conditions are especially challenging. This year's annual Old Glory Endurance Ride on Memorial Day weekend in Valley Mills, TX, involved just

such conditions. Rain, heat and humidity, and technical trails involving numerous climbs and descents through beautiful canyons combined to test the riders' abilities and resolve.

This year, Hammer Nutrition was there to help, providing the riders with the fuels needed to take care of themselves: Hammer Gel, Endurolytes capsules, Endurolytes Fizz, Hammer Bars, plus Hammer Nutrition water bottles that fit neatly into saddlebags. Old Glory riders were delighted to have attention focused on their health for a change; in fact, some commented that this was the first time they had ever thought about using electrolytes on themselves!

Despite the challenging conditions, the ride was a great success, and so were the endurance products supplied by Hammer Nutrition. Old Glory's ride managers send a BIG thank you to Hammer Nutrition for its recognition of the endurance rider as an athlete in his or her own right! We believe, as do many of the riders who tried the products for the first time at the Old Glory ride, that Hammer Nutrition products will continue to play an important role in endurance riding events. **HN**

Everyone's talking about Hammer Bars!

"I am a GREAT FAN OF THE OATMEAL APPLE Hammer Bar. I enjoy them while working out or for quick energy fixes. - Gary F.

"The all-natural HAMMER BARS ARE LIFESAVERS. They have been a great asset to my fueling program!" - Russell B.

"A Hammer Bar makes THE BEST ON-THE-GO SNACK THAT I CAN FIND. They are awesome!" - Max K.





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

Flavors: Almond Raisin, Cashew Coconut Chocolate Chip, Chocolate Chip, Cranberry, Datmeal Apple \$2.50







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Purchase 12 Hammer Bars and receive two FREE Hammer Vegan Recovery Bars (one of each flavor). Ad code EN86FB. Offer expires 9/12/13. Valid while supplies last.

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Hammer Nutrition-sponsored teams



Off to a great start: Echelon Velo/VuMedi

BY AJ KENNEDY, Team Captain

Bike racing is a tough endurance sport that requires sacrificing personal ambitions for the good of the team. Teammates work together toward a single rider on the top podium spot. The team doesn't win, just one rider wins. As the captain of Echelon Velo/VuMedi, I have been thrilled to watch our riders become friends as well as teammates as they compete—and win—throughout the start of the 2013 season. It's important for young riders to develop friendships and respect for each other. If you respect the talent and character of your teammate, you're more likely to sacrifice your own chances for the benefit of that person, and you will have a long-lasting

relationship that goes beyond just racing together.

Echelon Velo is an elite cycling team based out of Northern California with a focus on U25 riders. Team owner and sponsor Robert Winder and I saw the need for a transition program for young riders leaving the junior ranks moving up to the elite level. Our focus for the 2013 season was to create the initial squad and build a core group of riders who would become the foundation for adding young talent each year.

Our goal is to compete as a top tier team in NoCal, including all of the Premier

"I could give you 100 reasons why
I use Hammer Nutrition products—
tastes the best, does not upset my
stomach, has fueling strategies for
pre-, during, and post-race, etc., but
the point is: Hammer Nutrition is
the best! PERIOD!" - Mark Marquez

Series events in hopes of an overall team placing in that competition. With a roster split between experience and youth, our results so far for 2013 go beyond what we could have hoped for as a first-year development programoverall victory at Valley of the Sun Stage Race, 2nd overall at San Dimas, and 3rd overall at Topsport Stage Race just to name some highlights. With these results, riders within our program have upgraded to Category 1 status. To date, we are ranked 4th in the Premier Series as a team and our riders have made 12 podium appearances in other events. As a team, we placed 4th at the State Team Time Trial Championships. Our success is directly related to having the best fueling products available, period.

I want to thank everyone at Hammer Nutrition for the tremendous support, and especially Brian Frank and Mike Freeman. Thank you for believing in our program and getting onboard! Hammer Nutrition has always provided athletes with a tremendous resource—athlete education. Our team fueling boxes are stocked with extra copies of "the little red book" (The Hammer Nutrition Product Usage Manual). I always encourage athletes at races to take a copy. I think it's so valuable to have this reference as a guide to map out your own successful fueling plan. That along with Endurance News and the Athlete Education Series are just three examples of what separates Hammer Nutrition from everyone else. Thanks Hammer, we are proud to be partners with you. HN

Echelon Velo riders' fueling favorites:

"Hammer Bars are excellent! They always stay moist on long rides, and they're incredibly easy to eat. Being gluten-free is also important and speaks to the quality of the product. Thanks Hammer!" - Robert Winder, team owner

"I've been using **Endurolytes Fizz** during all of my long races and training rides for the past two seasons, keeping me hydrated during some of NorCal's toughest events. They're so easy and convenient to use. I would recommend them to any cyclist." - Luciano Sponza

"The Chocolate Peanut Hammer Vegan Recovery Bar is my new secret weapon! Thanks for another tasty and powerful product!" - AJ Kennedy, team captain

"Recoverite is my go-to recovery drink after a hard ride. I use it after training and at stage races where recovery is critical." - Russ White

"I'm a big fan of **Endurolytes Fizz**. They are really convenient to bring on a long ride when you are going to have to refill your water bottles and you want to keep drinking something with electrolytes." - Greg White

"Endurolytes Fizz ensures that I don't deplete my electrolytes during a ride. In one particularly hot road race, everyone in the peloton knew that hydration would be key. The field zoomed past the feed zone every lap, making it nearly impossible to grab a new bottle. Luckily, just one Endurolytes Fizz tablet in each of my bottles allowed me to stay strong while the riders around me began to slow. By the end of the race, I was able to finish stronger than I had in any previous race that season." - Alex Freund

"Hammer Gel is the perfect last-minute fuel before a Crit, giving me energy before my race." - Daniel Farinha

"Perpetuem has become instrumental in my training and racing. At the Boggs 8-Hour MTB race I rode very consistent lap times, which I can only attribute to Hammer Nutrition products." - Alton Dunnigan

"I have Celiac Disease, and gluten-free Hammer Bars are perfect for me. My favorites are **Hammer Whey Recovery Bars** and **Cranberry Hammer Bars**." - Fiona Winder



Marian University Cycling aka the 2012-2013 Overall Team Omnium Champions

BY COACH NATE KECK

Marian University is one of the topranked collegiate cycling teams in the country, and to maintain that ranking, the rest of the coaching staff and I do our best to be sure that each athlete, regardless of their level of experience, has access to high-quality training, adequate rest and recovery, top-notch equipment, and the best fuels and supplements we can get our hands on. In the spring of 2013 we teamed up with Hammer Nutrition as sponsor in preparation for Nationals to help make proper fueling and recovery a reality.

The collegiate cycling season starts in August and culminates in early May, with five seasons and national championships in between: track, mountain bike, cyclocross, BMX, and road. With a team of 40 athletes, some racing three, four, or even all disciplines, there is always some activity on the team's schedule. Teams compete for individual podiums, but the goal is the title of Overall Team Omnium Champion (a culminating award factoring in all five disciplines of cycling across the whole year).

We came to the 2013 USA Cycling Collegiate Road National Championships in Ogden, UT, with 15 athletes, prepared to compete at the highest collegiate level across three days, each racer with their own individual fueling strategy and plan. Each athlete had spent three to four months in conference races, experimenting with fueling strategies to figure out exactly what worked best for them. For many, this included the use of

Hammer Bars and Hammer Gel during the longer road race day, and Hammer Gel for the shorter crits and team time trial efforts. Everyone used HEED or Perpetuem during races, as well as Recoverite afterward.

The first day of racing was team time trials, which Marian has traditionally been very strong in. Marian had a men's and women's team in the TTT, and both won national titles—a great way to start a long weekend of racing.

After victories in the TTT, we knew we would have targets on our backs. The crit men's and women's races were both highly contested with 130+ starters in the men's and 70+ starters in the women's, but Marian athletes were extremely aggressive all day. We captured 1st and 2nd places in both events, with Colton Barrett winning the men's race and Adam Leibovitz in second, and Coryn Rivera winning the women's race with Kaitie Antonneau right behind her.

A grueling road race ended the three-day event. Kaitie took top honors and Coryn placed 2nd out of nearly 80 starters. Adam took 2nd place (out of 165 riders) for the second day in a row, sealing up his individual omnium win. When all was said and done, Hammer Nutritionsponsored Marian University Cycling had secured the title of Overall Team Omnium Champions! HN

Hammer Nutrition-sponsored teams





Ayden Young at the Capital Stage Race. Photo: Shannon Young Photography

Rad Racing

BY VANESSA GAILEY

Spring and early summer racing has been fruitful for Hammer Nutrition-sponsored junior development team Rad Racing. In May, the team had four young riders on the podium at the Washington State Junior Road Race Championships in Wenatchee. Two weeks later, the team had several riders in the running for Overall Grand Champion titles at Enumclaw Stage Race. Aynslee King took the top GC podium spot for the weekend in her age group (10-12), and Lewis Whiley placed 3rd in the GC ranking in Senior Cat 5 category.

Rad Racers spent Memorial Day weekend competing 'round the clock in Spokane at 24 Hours Round the Clock MTB race. After a full day (and night) of riding, Rad Racing teams claimed 2nd and 3rd place in the Open Junior division. The next stop on their race schedule was Olympia, WA, for the Capital Stage Race, where they had Croix Cameron, Alex Walentynowicz, and Wyatt Mason on the top 3 podium spots in the Boys 13/14 Criterium, and Tyler Tangen placing 3rd overall GC in the Senior Cat 3 category. **HN**



Rad Racing team rider Annie Rosser, age 9, competed in the Olympia

age 9, competed in the Olympia
Bicycle Commuter Contest. In the
month of May, she commuted on
her cyclocross bike 301.5 miles.
Yes, you read that right, a 9-year-old
commuted 301.5 miles in one month.
The employees at Hammer Nutrition
have been inspired by Annie, and
with the warm summer mornings
finally here in Montana, pledge to
spend more commute time on our
bikes. Congrats, Annie, on your
training miles and for setting the bar
high for the rest of us!



Strive Racing: Swan siblings' nationally ranked pedal power

BY RICHARD SWAN

Five siblings, one team . . . as Strive Racing, the Swan family of cyclists is having unprecedented success this year, competing hard and fueling with Hammer Nutrition products. This team of four sisters and their younger brother races fast by using Hammer Gel, HEED, Sustained Energy, and Endurolytes. They recover correctly by using Revoverite, Hammer Whey, Tissue Rejuvenator, Endurance Amino, and Super Antioxidant. They stay healthy by taking Premium Insurance Caps. Based on their results, the products seem to be working quite well:

Strive Racing 2013 results through May

Number of events: 33

USAC State Team Overall Ranking: 6th out of 302 teams (with only four riders)

Number of wins: 24

#1 National Rankings: 6

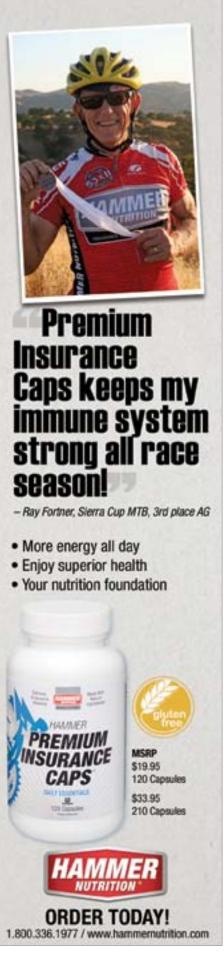
Number of podiums: 82

USAC State Team Junior Ranking: 2nd out of 48 teams (with only four riders)

Top 5 National Rankings: 12

Sisters Hannah (17), Rachel (16), Moriah (14), and Sarah (12) are all ranked in the top 5 in the nation in each of the three road disciplines (Road Race, Criterium, and Time Trial) for their age. In addition, as of June 1, each of them was ranked 1st in at least one of the three road disciplines. Hannah is currently ranked 1st in all three disciplines. Nine-year-old Luke has been watching his sisters for years, and beginning in 2014 will reach the USAC legal racing age of 10, ready to race and help Strive Racing in their continued success.

Hammer on, Strive on, Richard Swan, Team manager and coach



Australia

The results are in!

Hammer Nutrition is the top choice in the 'Land Down Under'

ach year at Australia's North Face 100 ultra trail
marathon, the team of athletes behind Ultra168.com
survey the participants to get a look at what products
are currently the most popular among this elite running
community. The votes have been tallied, and Hammer
Nutrition was selected as the fuel of choice. Dan Bleakman with
Ultra168 reported their survey results in his recent blog post:

"As the biggest single-entrant ultra marathon race in Australia, the North Face 100 is the benchmark race where we get to see what gear these athletes have decided to use. For the second year, we asked entrants to take part in a survey about the brands they choose. We feel it gives one of the best indications as to where the trail and ultra running community is with its purchasing.

In the food stakes, Hammer Nutrition continued its dominance, smashing the survey with 34% of the vote. Last year Hammer Nutrition was in the single figures, with "real food" taking the title as the choice of most entrants. This year, "real food" scored 15% of the vote.

We wanted to look a bit deeper at these results, basically why people buy the products and gear that they do. First, a company needs to make a great product. Sounds simple, but there's a lot of crap out there. Hammer Nutrition has great products that work. Much of what Hammer does and why it has such a strong showing in our survey is because of this. But it's no use just having a great product, you need great ambassadors too . . . Hammer Nutrition does this well, not just in trail running but across a number of different sports. One of the best ways to get a great product name out there is to have quality athletes from around the world use the products, get the results, and win races!"

Editor's Note: The overall winner of the 2013 North Face 100 was Hammer Nutrition-fueled Brendan Davies. (See article below.)

In the long run

Hammer Nutrition Australia trail runner Brendan Davies

Brendan Davies has come a long way since tearing up his bus ticket in high school, declaring that he would "rather run, thanks!" His 2012 season culminated with being named as the Australian Ultra Runner of the Year by AURA, the country's governing body of ultra running. And according to Brendan, his record-breaking win in May at The North Face 100 was a dream he has long pursued and finally achieved. We got to touch base with this Hammer Nutrition-sponsored runner after his win to see how he fueled for such an impressive day on the trails.

and won Australia's biggest ultra trail race, The North Face 100, in 9 hours, 16 minutes, 12 seconds. This is a course record time, beating the two-year course record held by none other than Kilian Jornet. It was a terrific result and Hammer Nutrition once again played an extremely important part in my results, fueling me all the way. I believe that everything I've done, every training run, race, and recovery session has led to that point, the pinnacle of my career thus far.

ood news! I came back home

For my race fueling, I decided to go for a





Australian Ironman

wo weeks before Ironman
Australia I suffered a pinched
nerve caused by osteo arthritis
in my hip and back. I emailed
Hammer Nutrition's Client
Advisor team for help and, thanks to
KC's good advice, started taking Tissue
Rejuvenator. I'm not experiencing the
pain as intensely as I was prior to taking
them. Thanks for the tip, KC! They are
gold!

Though my training was hampered by my injury, I still competed in Ironman Australia, using a Hammer Nutrition fuel "cocktail" that I like to call Fozz Fuel, plus HEED in my fuel belt and some Espresso Hammer Gel on the side just in case.

Brian Foster's Ironman Fozz Fuel

Strawberry-Vanilla Perpetuem Endurolytes Powder Espresso Hammer Gel, to taste

With the help of Tissue Rejuvenator, I am now on the mend, though running is limited. For now I am focusing on mountain biking and aiming toward enduro events and building up to a solo 24-hour race. Hammer on! - *Brian Foster*

Brendan feels strong on his way to his 1st place finish. Photo: Clark McClymont

much more minimalist plan. I decided to go with Perpetuem Solids for the first three legs, backed up with a flask of Hammer Gel. I started with 1,250 ml of water in the bladder and a small 350 ml bottle of water to use before I touched the bladder. The plan was to minimize weight and basically carry nothing unnecessarily at any point. I was popping one or more Endurolytes every 30 minutes, depending on the level of exertion and sweat loss, and eating my Perpetuem Solids every 40 minutes.

I was running the uphills well, and flat sections were a great opportunity to eat another Solid and drink some water. Each climb was tackled with just enough energy to stay under threshold; I was listening to my body instinctively. Once at the top I would whisper, "Now flush" as I could feel the lactic acid dissipate and leave my legs to perform the job they had to do on the next descent or flat section.

The second to last km seemed to go forever, but once I crossed Lilians Bridge I knew that this dance was drawing to an end. The final hill was all stairs but I wasn't going to walk now.

To recap what fueled me throughout the day \ldots

- Hammer Gels (Banana and Tropical)
- Chocolate Chip Hammer Bars
- Perpetuem (Solids and powder form)
- Endurolytes
- Bananas

And I recovered with . . .

- Recoverite
- Brendan Davies

Hammer Nutrition sponsored events

We're sponsoring a lot of great events in a variety of endurance sports in August and September. We have nearly 250 sponsored events on the calendar for mid-August through September, and by the time you read this, that number will have grown significantly as requests continue to pour in daily.

It definitely appears to be the peak of triathlon season; out of the nearly 250 events, 140 of them are triathlons! We're "tipping our hats" to the sport of multisport in this edition of Endurance News. Here are just some of the great tri's we're supporting in the upcoming weeks:



To stay up to date on what events we're sponsoring, go to www. hammernutrition.com/calendar. From there, you'll find more information about each event, including their website, specific location, and what Hammer Nutrition is providing.

	DATE	EVENT	LOCATION
	8/17	Young Life Triathlon	Detroit Lakes, MN
	8/17	Jordanelle Triathlon	Park City, UT
	8/17	Tri the Wildwoods Tri	North Wildwood, NJ
	8/17-8/18	West Point "TOUGHKids"	
		Triathlon/West Point Triathlon	West Point, NY
	8/18	WunderWoman Tri	Spokane, WA
	8/18	Pigman Long Course & Olympic Triathlon	Cedar Rapids, IA
	8/24	Vikingman Triathlon	Burley/Heyburn, ID
	8/24	Clear Lake International Triathlon	League City, TX
	8/24	Live.Love.Tri.	Rio Rancho, NM
	8/25	Cranberry Trifest	Lakeville, MA
	8/25	Michigan Titanium Full & Half Iron	
		Distance Triathlons	Plainfield Township & Grand Rapids, MI
	8/25	I TRI Youth & Junior Triathlon	Long Beach, CA
	8/31	The 505 Triathlon and The Little 505 Tri	Cochiti Lake, NM
	8/31	St. Croix Valley Triathlon	Hudson, WI
	8/31	Boulder Sunset Tri/Du/Run	Boulder, CO
	8/31	Titanium Man Triathlon	Richland, WA
	9/1	The Circle Triathlon	Ashland, NH
	9/1	Boyne City Triathlon and Duathlon	Boyne City, MI
	9/7	MTCC Garden City Triathlon	Frenchtown, MT
	9/7	Brett Robinson Alabama Coastal Triathlon &	0.1601
	0.7	Tri-It-On Sprint Triathlon	Gulf Shores, AL
2	9/7	Tugaloo Triathlon	Lavonia, GA
	9/7-9/8	Pumpkinman Tri Festival Half Ironman	South Berwick, ME
	9/8	Diamondman Challenge Half Iron Tri & Du	Bear, DE
2	9/8	Big Kahuna Triathlon Beach Blast Triathlon & Duathlon	Santa Cruz, CA
=	9/14		Mexico Beach and Port St. Joe, FL
Š	9/14	Crescent Moon Sprint Triathlon and Aquabike	Aurora, CO
Z	9/14	Kokopelli Triathlon	St. George, UT
Ž	9/15	Atlantic City International Triathlon	Atlantic City, NJ
	9/15	Fishers Area Sprint Triathlon	Fishers, IN
	9/15	NBX "Do It in the Woods" Off-Road Triathlon	Charlestown, RI
	9/21	ChesapeakeMan Endurance Festival	Cambridge, MD
	9/21	Oak Run Triathlon	Persifer Township, IL
	9/21	HITS Triathlons Hunter Mountain	Hunter Mountain, NY
l	9/22	Las Vegas Triathlon	Las Vegas, NV
	9/22	Buzzards Bay Triathlon	Westport, MA
	9/22	Anchor Splash Sprint Triathlon	Knoxville, TN
	9/28-9/29	Mightyman Montauk (Sprint, Olympic, Half Iron Triathlons)	Montauk, NY
	9/28-9/29	Atomic Weekend (Atomic Sprint Triathlon/Duathlon, Atomic Man Half Iron Triathlon)	Lenoir, TN
	9/29	Hammerhead Olympic Distance Triathlon	Starke, FL
	9/29	Fall JCC Scottsdale Adult & Youth Relay Sprint Triathlon & Duathlon	Scottsdale, AZ

HANNER NUTRITION® Official Nutrition Sponsor of Challenge Penticton!

In the early morning hours on Sunday, August 25, 1,500 triathletes will enter the water and begin their journey in the inaugural Challenge Penticton iron-distance triathlon, and Hammer Nutrition will be there! We're excited to announce our partnership with Challenge Penticton as the Official Nutrition Sponsor for the 2013, 2014, and 2015 editions of what is sure to be an epic event. Barb Haynes, Challenge Penticton's General Manager, states, "We are thrilled to be partnering with Hammer Nutrition for the next three years. Building upon our race plan for 2013 and ongoing, the addition of Hammer Nutrition as the official nutrition sponsor is great news for the whole Challenge Family, the athletes raceday needs, and their training preparation. Hammer Nutrition has worked impressively to establish their position of high quality fueling for our triathletes to ensure their workouts are of the highest quality and improved race results."

Before the race, we invite competitors, supporters, and race fans to come visit us at the expo, beginning on Thursday, August 21. The "impossible to miss" Hammer Nutrition Big Rig will be on-site. There will be plenty of Hammer Nutrition fuels to sample, and if you're competing in the race, Brian Frank and Steve Born will be available to answer any last-minute fueling questions you may have. On race day, HEED, Hammer Gel, Hammer Bars, and Endurolytes will be at the aid stations, ready to fuel Challenge Penticton competitors throughout the day, en route to a successful finish.

We're looking forward to being in beautiful Penticton, BC, and if you're in the area, please do come see us! Until then, we'll keep you updated via Hammer Nutrition Facebook's page. For further information on Challenge Penticton, visit www.challenge-penticton.com or www.facebook.com/ChallengePenticton, or follow @Challenge Pen on Twitter.







BY PHIL GROVE

f all the 2,700+ events that Hammer Nutrition sponsors each year, the Tran-Sylvania Epic, a 7-day MTB stage race in Pennsylvania, has been high atop my "Bucket List" of events for a long time. When I saw the TSE promo materials come into our office, I wanted to get out there even more. With this year's race starting about a week after my third year anniversary of employment at Hammer, I figured it was as good a time as any to take a week off and get out to Pennsylvania for what's billed as "mountain bike summer camp for adults." I can't think of a better tagline to get people to fly across the country for a mountain bike race.

Upon arriving at the Seven Mountains Scout Camp, I knew that Mike Kuhn and his merry band of fun purveyors have really nailed it with the TSE. The camp setting is almost like you are there to be part of a bike movie, rather than a stage race. The buzzing about of staff, racers, and an impressive amount of photographers and mountain bike journalists really made me think we were in for something special.

I went into the opening prologue about as fried as a guy could get from four modes of transport over two days to arrive at the venue. My only real goal for the day was to not run into a large rock or a tree from mental fatigue. I was riding fairly gingerly, trying to ease myself into these new trails, when my "30-second man"

motored right on through like I was standing still. In mountain biking it's always easier to follow than to lead, and I had another gear to click into, so I got on the gas and followed the rider who I later realized was Sam Koerber, who was flying through the rocks and trees like only an East Coast rider would know how to do. After what seemed like way too long in the pain cave following this guy, I drifted off a bit into "race/think about life" mode and dropped several minutes in the last few miles, but with 200 miles of racing on rad singletrack ahead of us I was pleased to just keep it upright.

The racing couldn't have gotten much better. With the trails around State College being so much fun, yet also quite challenging, I was very okay with the relief to be found on the dirt road sections. Each day ranged from about 2-3.5 hours for the winning time, long enough to be hard, but not long enough that you're just fighting for survival. I was grateful to find HEED and Hammer Gel at the aid stations. This allowed me to race each day with one bottle of a combination of HEED and Endurolytes Fizz, a capsule dispenser of Endurolytes, Endurance Amino, and Anti-Fatigue. I would just grab HEED bottles as needed from the aid stations. These "Fast 5" Hammer Nutrition products were immeasurable in how much they helped me out during this race.

- continued on page 83



Some of the racers I rode with during the stages were full-time pros, so staying with them was quite a chore, and it was very easy to have "the wheels fall off" after following them for an hour. Anti-Fatigue Caps and Endurance Amino helped avoid complete meltdown, and I really enjoyed having a flask of Hammer Gel to keep the energy levels up. A few of the days really started to creep up on the thermometer, but with the help of HEED and Fizz I felt no cramping whatsoever.

At the end of the week, I found myself in 6th place, one spot off the podium, but pretty satisfied with where I wound up. All the riders in front of me earned my respect for their abilities and great attitudes towards mountain biking—not to mention that nothing makes you want to go back next year like placing 6th in a race that pays five deep!

Mike Kuhn, Ray Adams, and their amazing support crew really have one of the best experiences on two knobby tires that you can find anywhere. Between the insane amounts of awesome singletrack at their disposal out there, a venue that makes you think you're starring in your own mountain bike movie, and some great people that tie it all together, I must say the Tran-Sylvania Epic went straight from my "bucket list" to "see you guys again next May!" **HN**

By the Numbers

BY MYKE HERMSMEYER, Hammer Nutrition sponsorship coordinator

ou see them everywhere. They're at your local triathlon, streaking across the country for Race Across America, running in the backcountry, at the X-Games, and everywhere in between. Hammer Nutrition-sponsored athletes have been coming out in force in 2013 with podium finishes across the country. We have representatives competing in sailing, open water swimming, tennis, rock climbing, rowing, paragliding—the list of sports disciplines goes on and on.

Every Monday, the Hammer Sponsorship email inbox is full of race reports from the previous weekend. These recaps and personal accomplishments are a great way to begin each week. Looking at our athletes' collective results by the numbers, it is indeed impressive, a true testament to the great effects of fueling right.

Whether you are a sponsored athlete or not, email us with your training and

race successes. Throughout the year we will be recognizing you all through "By the Numbers," celebrating Hammer Nutrition athletes who demonstrate our shared commitment to a healthy, fit lifestyle.

We're doing great so far in 2013 in meeting our goal of setting a yearly PR for our Hammer Athlete Podium count, thanks to all of you! \emph{HN}

STATS

Month Podiums AG wins Overall wins

YTD 579 203 120

May 122 34 26

June 192 56 38



Andrew Drobeck Ironman Coeur d'Alene 1st place amateur, 6th overall



Sandi Nypaver (left) Cayuga Trails 50 Mile 1st place



Anna Zielaski Ocean Blast Beach Trail Marathon 1st place

Send news of your successes to athleteupdates@hammernutrition.com

A fun, fast weekend at the Hanner Autrition Missoula XC

The Hammer Nutrition Missoula XC in June was the sixth stop on the USA Cycling Pro XCT tour, and Hammer athletes and teams were out in full force for all three days of the event, competing under Montana's Big Sky. Two Hammer Nutrition staffers toed the line, including client advisor and EMS consultant Levi Hoch, who claimed 2nd place in Men's Cat 2 XC against a deep, talented field of

riders. Phil Grove competed and held his own in the UCI Elite Men's category against professional riders from across the country. With riders from six Hammer Nutritionsponsored teams there and countless other Hammer MTB riders, it was a sea of Hammer Nutrition water bottles and cycling kits, all set against a backdrop of world-class single track racing.



FAR LEFT: Hammer staffer Levi Hoch rides to a 2nd place CAT2 finish. LEFT: 2nd place finisher in the Masters division, Tom Noonan of the Hammer Nutrition-sponsored Glacier Cyclery team. BELOW: The UCI Elite men take their spots on the Hammer Nutrition Missoula XC podium. All photos: Mike Hermsmeyer













HAMMERBUCK\$ Turn race day into payday!

Over \$21,000 in cash and credit awarded so far in 2013 . . .

you could be next!

www.hammernutrition.com/deals/hammer-bucks/

Hammer Nutrition athletes earned over \$3,900 in cash and credit at this year's USMS Spring Nationals!

Niclas Ohman, Men's 35-39
2nd 200 yard freestyle
2nd 100 yard freestyle
Hubie Kerns, Men's 60-64
1st 200 yard butterfly
2nd 100 yard breaststroke
3rd 300 yard breaststroke
Mike Shaffer, Men's 45-49
1st 200 yard butterfly
2nd 500 yard freestyle
1st 100 yard butterfly
Larry Raffaelli, Men's 70-74
3rd 1650 yard freestyle
3rd 500 yard freestyle

Beth Estel, Women's 55-59

1st 100 yard breaststroke

1st 200 yard breaststroke

2nd 200 individual medley

Mike Freshley, Men's 70-74

1st 100 yard breaststroke

1st 200 yard breaststroke

2nd 50 yard butterfly

Laurie Hug, Women's 45-49

1st 1650 yard freestyle

1st 400 yard individual medley

1st 200 yard butterfly

Glenn Gruber, Men's 60-64

3rd 50 yard butterfly

Bob Strand, Men's 65-69

1st 50 yard breaststroke NR

1st 100 yard breaststroke NR

1st 100 yard individual medley

James Elder, Men's 70-74

1st 100 yard freestyle

1st 50 yard butterfly NR

1st 100 yard individual medley NR

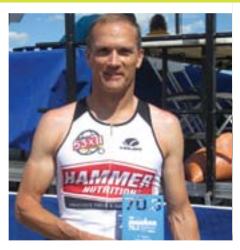
Diann Uustal, Women's 65-69

1st 100 yard backstroke NR

1st 50 yard backstroke NR

1st 50 yard freestyle NR

Hammerbuck\$ winners in 2013



Ross Freese
Ironman 70.3 Kansas
1st 50-54 Men's = \$1,000 cash



Joanne Furu Ironman 70.3 Florida 1st 60-64 Women's = \$750 credit



MANA IRON IN IRON AND IRON HAIVIVIER IRON IRON IRON

Beverly Watson

Memorial Hermann Ironman Texas / Ironman 70.3 Hawaii 1st 60-64 Women's = \$500 cash / 1st 60-64 Women's = \$750 cash

Andrew Loeb

EnduraFit Ironman 70.3 EagleMan 3rd 65-69 Men's = \$375 credit



Drew Edsall

NUE at Syllamos Revenge 1st Overall = \$500 cash



Reilly Smith

Ironman 70.3 Hawaii 2nd 30-34 Men's = \$750 cash



James Thorp

Ironman 70.3 Hawaii 1st 18-24 Men's = \$1,000 cash

. . . more Hammerbuck\$ winners



Doug ClarkEnduraFit Ironman 70.3 EagleMan
1st 45-49 Men's = \$1,000 cash



Mary Duprey
Ironman 70.3 Raleigh
1st 50-54 Women's = \$1,500 credit



Greg TaylorEnduraFit Ironman 70.3 EagleMan
1st 55-59 Men's = \$1,500 credit

Andrew Drobeck

Ironman Coeur D' Alene 1st 30-34 Men's = \$1,000 cash





William Allen

Ironman 70.3 Syracuse 2nd 18-24 Men's = \$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.

From our athletes

Catching up with the stars of tomorrow





Lilly Rueter

I thought you all would appreciate pictures of the beach robe my wife made out of Hammer Nutrition towels for our 16-month-old granddaughter, Lilly.

Regards, Ken Rueter

Jackson & Garrett Watts



Team River City Racers junior riders Jackson (right) and Garrett Watts (left) both raced to a 2nd place AG finish at the Nashville Kids Tri. They also competed in the Evansville Kids Tri with Jackson placing 1st and Garrett 2nd.





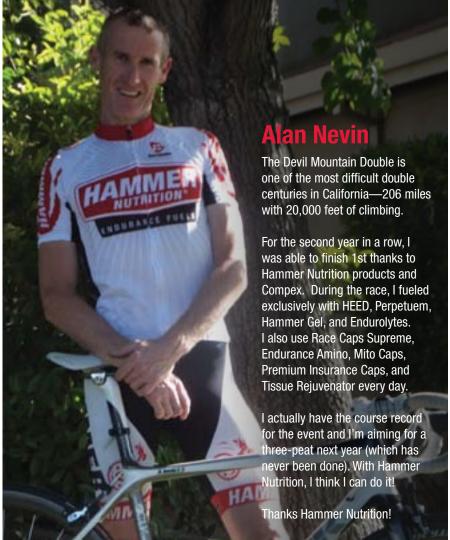


Hammer Nutrition-sponsored River City Racing riders Harry Roberts, Sarah Campbell, Lisa Muench, Paul Mayfield, David Flynn, Ronnie O'Bryan, and Scott Muench were fueled up and ready to lead the field at the Riding for a Reason metric century charity event in Henderson, KY.

Keith Hertel

My run went really well, and it's amazing how many fast runners there are at the Boston Marathon. I finished in 2:57:43. Pre-race nutrition had to be planned ahead of time because the buses took runners to the start 3.5 hours before the gun went off. I brought Hammer Gel and fluids. During the run I stuck to one Hammer Gel every 45 minutes plus took three Endurolytes at the halfway point. This strategy worked great and I felt like my race nutrition was right on.





Art Mathisen

I first used Hammer Gel in 2000 when I raced my first Ironman at IM Canada. Since then, I have tried just about every product from every company, and I have come to the conclusion that nothing works better than Hammer Nutrition products. Other triathletes ask me what I use for nutrition during 70.3 or full Ironmans, and they are often surprised when I tell them HEED and Hammer Gel. For Ironmans, I may also carry a Hammer Bar just in case I need something to chew. These products give me the energy I need, are not too sweet. and most importantly keep my stomach working properly. I don't care how fit you are, if your stomach starts shutting down, there's typically not much you can do and your day of fast racing is usually over!





I use Perpetuem on every long ride that I do—training or racing. I was nervous at first about ditching regular riding food (sandwiches, etc) for a more substantial drink mix, but now I'm hooked. It really does keep me fueled properly without any gastrointestinal upsets or bonking! I've used that in combination with HEED and Hammer Gel during races and hard training rides. The combination of carbs and protein, along with the electrolytes in HEED, kept me cramp-free and well-fed.



"Endurolytes is truly an amazing product!

I just finished a race in the Caribbean and the humidity was often 100%, with temperatures at 93° F. We worked hard to keep cramps at bay, which we did with Endurolytes, finishing in 1st place!" - Chris

MSRP

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



- · Healthy, chemical-free ingredients
- Superior cramp prevention
- Complete electrolyte support

ORDER TODAY!



1.800.336.1977 / www.hammernutrition.com



Siobhan Maize

Hammer Nutrition really helped me not only complete my first 50-mile ultramarathon, but also win it! I ran with a supply of Endurolytes and took two every hour. I also had Hammer Gels and Perpetuem with me. I made sure to drink Perpetuem throughout the first half of the race knowing how important nutrition is in long races, particularly protein intake (which I learned about on the Hammer Nutrition website!). I had also been told that it's easier to take in nutrition in the first half, compared to the second half. My plan worked, as I felt great the second half of the race and was able to pick up my pace. Overall I had a great experience and was ecstatic to bring home a win for my first 50-miler!

Send us your news today at athleteupdates@hammernutrition.com

Mark Gorris

I raced the 100-mile Lake Erie Duathlon and finished as the overall winner. On-course nutrition was HEED and Hammer Gel . . . nice to have a good friend over the course of 100 miles!



Trent Hesselschwardt and Cory Baden

With the help of Endurolytes and Fizz, Hammer Gel, HEED, and Perpetuem Solids and powder, we came across the finish line as the two-man team champions at the 50-mile Maumee Valley Tri-Adventure Race! On top of that, we also had the best overall time out of 306 participants! We could not have kept up the pace without Hammer **Nutrition!**



Greg Sabin

I live triathlon and love Hammer Nutrition products. I have my favorites, which are my life blood for triathlon . . . Perpetuem, Endurolytes, and Hammer Gel.



Lisa Dougherty

In addition to HEED, I consumed small amounts of food provided by the Santa Fe Century organizers at the SAG stops, which is okay for 100 miles, but not more than that. Once I was done with the century, I rode another 200 miles and used nothing but liquid Perpetuem. For serious athletics, Hammer Nutrition products are the best choice.



Blood, Sweat, & Gears Ride was a fun event. 103 miles, four Hammer bottles with HEED in each, six Hammer Gels, and one Hammer Bar got me to the line. (Sheila fueled on Perpetuem, HEED, and Tropical Hammer Gel.)

FROM OUR ATHLETES



Michael White

I was fortunate enough to place 2nd in my age group (40-44) and 6th overall in 3D's Big Fish Sprint Triathlon. But the best part was crossing the finish line with my boys. I had Sustained Energy for breakfast, a Hammer Gel just prior to the start, and Endurolytes and HEED on the bike and run. Thanks again for the great products, service, and race sponsorship.



Pat Peppler

I won the M60-64 age group at the Galena Triathlon. I use HEED and Hammer Gel during training and racing.

Next up . . . two 70.3 races and Ironman Wisconsin in September.



John Fitzgerald

Shadow of the Giants 50K - 2nd Place

I have been using Hammer Nutrition products for the past five years, and it has saved me so many times in training and during my 100-mile races. On my longer training runs, I like to pack a couple of Hammer Bars that keep me full and provide a steady release of energy while out for 5+ hours. I have one Hammer Gel per hour. Hammer Bars and Gel adds variety and seem to keep my stomach from getting upset.

Joe Stone

A year and a half ago I set a goal to become the first known wheelchair-using quadriplegic to complete an Ironman triathlon. After finding the right combination of Perpetuem, Hammer Gel, and Hammer Bars, I have discovered what is possible with sustained energy. The fact that it is all-natural is a huge bonus because it fits into my lifestyle perfectly. Hammer Nutrition is giving me the energy I need to tackle the training I have in front of me at a more intense level, and will carry me through to the finish line in Florida this November!





At a recent race, organizers had a party to celebrate my 80th birthday. They all want to be like me "when they grow up." I make sure they know what Hammer Nutrition supplements I use to help stay fit.

My training has shifted from power intervals to multi-hour endurance rides in preparation for the Leadville 100, so I've added a multi-hour bottle of Perpetuem to the HEED I still use in my hydration pack. As we're already experiencing 80-90 degree weather, I add Endurolytes Fizz to the bottle. It kicks the flavor up a notch and ensures that I get balanced electrolyte replacement. My wife, who's more calorie conscious than I am, uses Fizz in water for any ride less than 2-3 hours. She really likes the taste. We both use Recoverite after our rides.



This shot was taken by a neighbor on the rooftop of our apartment in Lakeview, Chicago. It was one of the few sunny days we got in May. My helmet was stolen and I couldn't go on the road. No problem . . . I decided to go for a two-hour training ride facing the lake.

I use many Hammer Nutrition products, whether for training or on race days, but I have come to depend on Endurolytes and HEED most of all. When I need something to sustain and refuel, that's easy on the stomach without an aftertaste or packed with sugar, I look to Hammer Nutrition. Not a ride, run, or swim without them!

Photo : Christopher Pare





Doug Davis

I raced triathlons from 1989-2006 using your products consistently and had lots of age group success. In March 2006 after winning the 45-49 Set Up Events South Carolina age group series championship and finishing 3rd in 45-49 age group at The Silver iron man triathlon in 2005. I had a severe cycling accident. The crank arm snapped in half while traveling at 30 mph. The result was numerous surgeries, and I pretty much had given up on ever competing again. After seven years of rehab and hard work with the help of Premium Insurance Caps, Mito Caps, Race Caps Supreme, AO Booster, Super Antioxidant, Xobaline, Recoverite, HEED, Hammer Gel, and Race Day Boost, I was able to place 2nd in the 55-59 age group at The 2013 Trybee Island Triathlon in Tybee Island, GA. Thanks for your products and support!



Ryan Smith

1st overall - Folsom International Triathlon (course record)

I finished my bottle of HEED while on the bike portion. One hour before the race, I took two Race Caps Supreme and two Endurance Amino. Everything went as planned and I had no issues with nutrition.

Recently, I started using Recoverite and it has been working tremendously. I have noticed that I am not fatigued or sore after hard workouts, and can push hard again the next day.

Carolyn Smith

I took 4th place overall at the 2013 Indian Creek XC, 1st in my AG. Fifteen minutes prior to the race I had a Raspberry Hammer Gel, two Endurance Amino, one Anti-Fatigue Cap, and one Endurolytes. I had a bottle with Perpetuem and HEED mixed pretty thick and drank it all! During the race I went through half a flask of Montana Huckleberry Hammer Gel and used Endurance Amino, Anti-Fatigue Caps, and Endurolytes every 45 minutes. The expenditure, heat, and altitude definitely had me going through fuel fast!

So, 3,409 vertical feet in 19.7 miles . . . it will be an easy day tomorrow as I recover. Thank goodness for Tissue Rejuvenator. It has been my "gold" lately!





"I wear Hammer Nutrition compression socks to travel, ride, and race. They work and look cool too!

- Susan Stevens

- Improve vascular performance and blood flow
- Reduce leg fatigue
- Speed up recovery

Bryan Brown

Nautica Malibu International Triathlon 1st place AG

"I have been using Hammer Gel, Endurolytes, and HEED during both training and racing, and I have never felt as good as I do this season. The natural ingredients settle well in my stomach while giving me the energy and electrolytes I need to put in long miles." - Bryan



Why we love the Hammer VIP



As part of the VIP program, all of the kids are sharing in dad's Hammer VIP membership.

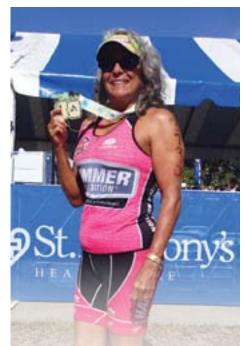
Hammer Nutrition was well represented by the McGowan Family at the Cassie Hines Cancer Foundation Run in Shelby Township, Michigan. "Using HEED and Recoverite along with quality running gear makes the training easier. Thanks Hammer Nutrition, and especially Katey, for the green jersey." - Jim McGowan

"I do century bike rides and was introduced to Hammer Nutrition almost a year ago. I have been trying different products to see what ones I like best. I find this hard because all of the Hammer Nutrition products I have tried have gone far and above expectations. I feel great, my times have improved, and I don't get that tired, dragging feeling afterward.

The customer service has been awesome, from getting my VIP program set up to adding product to an order.

to an order that was already placed but not shipped. Everyone has been very friendly and knowledgeable of the products. Keep up the great work, because I am a customer for life. Your products are top. Thank you very much!"

- Jody Cronk, VIP customer



"Hammer Nutrition products work! Before I discovered Hammer, I tried others, but since 2009, it's been Hammer all the way. The products worked at the beginning and they work now!

Being a member of the VIP program makes it easy to keep well supplied with my favorite, essential training and racing products. Helps me make sure I don't run out at an

Helps me make sure I don't run out at an inopportune time...such as right before a long training day."

- Sheila Carpenter-van Dijk, VIP customer



"I completed the Swim around Key West on June 22 . . . 12.5 miles in 5:58! This was a goal of mine after injuring my foot with a stress fracture last December and breaking it in March (I had too much fun running a bunch of ultras and endurance tris last fall . . . I am still in the boot now!)

I went Hammer Nutrition all the way for the race! I used Race Day Boost leading up to the event along with all my daily supplements. On race day I took Race Caps Supreme prior, and Endurolytes and Anti-Fatigue Caps every hour, along with a half of a bottle of water mixed with one scoop of Sustained Energy and one scoop of HEED. I wasn't hungry or dehydrated, and had NO stomach issues! (I had Hammer Gel ready to eat in the kayak, but never needed them!)

Thank you for all you do at Hammer Nutrition!

Post-race I donned my green Hammer visor that I received in my VIP shipment a week prior to the race! I raced in honor of Team Red, White, and Blue and couldn't be prouder to do so as an Army veteran myself!

- Mary Kreis, VIP customer

Get the VIP treatment

Join the Hammer VIP Program today!



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



Select one of our sport-specific kits: cycling jersey and shorts, tri

cap and a large towel. Ask a Client Advisor for more information.

jersey and shorts, running top and shorts, or swimwear with a swim

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.

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. See website or ask your Client Advisor for complete details.

> Call Katey 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 softgoods item of your choice, up to \$20 in retail value.
- **5** FREE goodies on every future shipment as well.
- **6** Discounted pricing, exclusive offers, and much, much more!
- **7** FREE ground shipping on all automatic shipments and one fill-in order per quarter.

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Phytolean

NOW AVAILABLE!

- · Effective weight loss
- · Enhanced fat burning
- · Decreased fat absorption

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Purchase a bottle of Phytolean and receive three FREE tubes of Perpetuem Solids. Ad code EN86PL. Offer expires 9/12/13. Valid while supplies last.

MSRP

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