"Since starting on your products, my energy level has gone through the roof." - James R.
Thank You

2010 saw the fulfillment of a long-held dream to compete in the Baja 1000. My brother Steve and I have dreamed of racing in the biggest off-road race in North America since we were kids. Now, thanks to the generosity of Brian Frank and Hammer Nutrition, we were able to live that dream. An ultra long distance motorcycle race and Hammer Nutrition’s products are made for each other.

This year, the Baja 1000 this year covered 1,061 miles from Enscanada, Mexico to La Paz, Mexico at the southern tip of the Baja peninsula, through some of the most rugged and inhospitable terrain you could imagine. Rocky ravines, forests of unforgiving cactus, thigh deep silt beds, huge crowds of spectators, and miles and miles of relentless whoops; difficult riding at a sedate pace, but made that much more challenging at a full race pace. Five of us would ride one bike, relay style, non-stop the whole way. I had the honor of starting the race in Enscanada. In a flurry of camera flashes and a block party atmosphere, the green flag waved and I was off. I started passing riders one by one before I had left the city. Each bike leaves the line in 30-second intervals and I was making up time. I held a good pace and felt great. At each pit stop I would take some Hammer Gel and water while they gassed the bike and cleaned my goggles, all in about 45 seconds. Heading southeast toward San Felipe into a rising sun fighting dust from other racers and spectator’s cars on the course was a challenge but not unexpected. I managed to make up enough time to hand off the bike to our second rider, Chad Loyd, 45 minutes ahead of my scheduled arrival time. Chad picked up the pace from there, hitting speeds in the 90 mph range on his way to hand off to our third rider, Ted Thayer. Ted was the first on the team to race into the darkness of the Baja night. He did an expert job of navigating this abstract landscape at speed, in the dark. He kept the pace going and handed the bike off to Steve, who had the most difficult section made more difficult by the darkness and the fast-approaching car and truck classes. Imagine going 60 mph in the dirt, at night, and having a 6000 pound race truck go by at 100+ mph! Intense. With some last minute rescheduling between Steve and our final rider, Charlie Hobbs, to maximize our rider’s potential, Charlie crossed the finish line in La Paz 30 hours and 22 minutes after I had started. We ended up 6th in class out of 40 starters and only 26 finishers. Not bad for a bunch of 40-something’s with day jobs.

I must again thank Brian and Hammer Nutrition. Without their support, none of this would have happened. All of us on the team used and are using Hammer Nutrition’s products to train and race with. After I finished my part of the race, I was tired but not exhausted, then recovered quickly and felt great. Even without their generous support, I would still be using Hammer’s stuff.

Thanks again,
John Legate
Welcome to issue #73!

I’d like to start by welcoming all of our new readers. If you like what you see and read, I’d encourage you to read some of our back issues while you are waiting for our April issue to land in your mailbox. To our veteran readers, I’m glad to have you along and hope that you will agree that once again, this is our best issue ever. (At 100 pages, it certainly is.) I know I have said that about every issue since we changed our format at the beginning of last year, but it’s true. As you may have noticed, we revised our mailing calendar this year, flipping the distribution dates of the catalog and the first issue of Endurance News. I decided that a February, April, June, August, October, December mailing schedule would work better, because we’d get two summer issues and be able to report on the big fall races in a more timely fashion. I hope you like this schedule; at the end of the day, it’s still an issue every 60 days.

As usual, I am most impressed with the content you submit. I really appreciate each and every one of you who takes the time to send us a photo, story, or race update that we can include on these pages. I think it’s what makes this magazine so enjoyable and what I think is missing from the other mags. Remember the good old days of Triathlon Today—Lew Kidder was a visionary. Anyway, we want more reader content, so send it in. Also in this issue, you’ll find some great articles about our “working man” racers; remember, they work 40 hours a week or more and still throw down with the big boys. I’m partial to the article I wrote about the boys’ trip to France last September; as Steve has said many times, “It was one of the best trips of my entire life,” and I believe him. Which article will be your favorite? There are so many to choose from... read them all and see if you can decide.

2010 was a big year for us, and we could not have done it without your support. I say this every issue because it’s so true. In this economy, to achieve 22% growth, there is no other explanation. I know many other brands have seen their sales decline by that much or more. As I have always said, you vote with your pocketbook and if you like what we offer and the service we provide, then we get your vote. I’m thankful for your vote and consider it the necessary affirmation to keep doing exactly what I’ve been doing for nearly 24 years—with continual refinement and innovation, of course. That’s a lot of time to be doing the same thing, but I enjoy my work so much that I think I could do it for another 24 years. So, once again, thank you for your support and encouragement.

I’m hopeful that 2011 will be an exciting year for you and for all of us here at Hammer Nutrition. I’m most excited about the Hammer Kids initiative and being reunited with Compex. Both are the wave of the future, and I intend to be riding that wave: getting young athletes turned on to wholesome, natural products and helping them to understand the importance of a healthy diet, and helping you learn about and make the most of the greatest training/recovery/rehabilitation device on the planet. No joke, I use my Compex unit every day. In fact, I’m running a Resistance training routine on my quads (after doing a one-hour spin class) and then will follow that up with an Active Recovery routine. Why everyone doesn’t already have one of these highly effective little gadgets is a complete mystery to me. Please read my article on page 24 explaining the switch in brands. I also want to take a moment to reassure those of you who bought a Globus unit from us or anyone else. You have a great product using the same internal technology (wave patterns, etc.) and we will continue to support you just like we did Compex owners when we switched to Globus several years ago. The programs are nearly the same; the reason for the switch is for the future. I have a partner who is committed 100% to the U.S. market and has the resources to support our educational and marketing efforts. Compex/DJO is that company.

Of course, the new Endurolytes Fizz flavors in 2011—Peach coming this spring and Grape available toward the end of the year—are high on my list as well. There are also a couple of potent new supplements that may see the light

- continued on page 5
of day this year as well. I’ll be discussing those in greater detail in subsequent issues of Endurance News, so be sure not to miss an issue.

On a more somber note, as I am sure that most of you have been affected by cancer, personally or someone near and dear to you, one of our family members here at Hammer Nutrition was just diagnosed with AML Leukemia. I have recently written about Bob Weaver and credited him with transforming my ideas into a reality. (I’m talking about Montana Huckleberry Hammer Gel and the new Endurolytes Fizz and Perpetuem Solids.) Bob has done so much more for us and has been an inspiration to me and to so many of my staff with his intelligence, analytical skills, computer wizardry, work ethic, and humble demeanor. His title says “COO,” but he likes to be referred to simply as “The Fixer.” Whether it’s a software, server, or any other system problem, Bob has been there to fix it for the past two years. I’ve known him for most of the 16 years I’ve lived in Whitefish and only wish that I had been wise enough to bring him on board many years ago. We are already missing him greatly as he undergoes emergency treatment, and are hoping and praying with all of our hearts that he’ll make a full recovery and return to his rightful place as one of the most important members of my staff. Please pray for him; send him positive energy, good thoughts, or whatever you do in situations like this.

So enjoy the read, and remember to cherish every day.

Brian Frank
Proprietor

Kona Report: Good Eats and Coffee!  BY BRIAN FRANK

Last October I was in Kona for the big race and, as I am prone to do, spent a fair bit of time checking out local eateries and coffee shacks. The goal is always to find local, wholesome food and drinks that can nourish me while on the road. I was fortunate to have one of my favorite traveling companions Mike Freeman along, so we rode every morning and ate heartily every day; life is good in the islands. We did some great rides down to Kealakekua Bay and the city of refuge to the south, and a really fun ride out to Hawi and then up and over to Waimea and back.

So, here are a couple of places that I thought I’d highlight for the next time you happen to find yourself in Kona . . . like next October.

**Ultimate Burger** - I’ll start with a trivia question: Where is the largest cattle ranch in the world? If you said the Parker Ranch on Big Island of Hawaii, you’d be correct. However, it is surprisingly difficult to find this delicious, grass-fed, free-range beef at any restaurant. Discovering that a new burger joint in the strip mall area north of downtown serves up nothing but this good beef made my trip. Their burgers are “off the hook” awesome! You can build your own with dozens of toppings to choose from and your choice of 1 to 4 patties. They also work with local fishermen and offer fresh-caught mahimahi and other local fish, all grilled, seasoned and topped to your liking. Talk about fast food heaven. I heard that the owner has plans to expand to other islands and the mainland, and I can’t wait! Check out their website at www.ultimateburger.net. Coupon or not, you cannot go to Kailua Kona without eating here at least once.

The only other restaurant that I found on the island that features local meats (amazing lamb and chicken to complement the beef) and organic local produce is **Merriman’s** in Kameula. It’s worth the 45-minute drive, and they have a 2-for-1 entree special from 5:30 to 6:30 weekdays. This is a really nice, sit-down restaurant, but worth every penny and then some. Check out their website and put it on your list as well: www.merrimanshawaii.com.

**Kaya’s** - Most mornings, we rode up to Captain Cook to have coffee. This place just opened and sells only organic, estate grown coffee, pulled through a top-quality Italian espresso machine with organic milk! Yum. They also feature all locally crafted souvenirs that were really cool. I bought gifts for my daughters and wife there.
Welcome to the 73rd edition of Endurance News, the first in 2011! If this year is anything like the previous one, we’re going to be super busy . . . and that’s a good thing. I’m especially excited about the opportunity for you to use our two newest products—Endurolytes FIZZ and Perpetuem Solids. In this issue you’ll find a short article I’ve put together that explains the difference between Endurolytes in the encapsulated form and Endurolytes FIZZ, which of course is an effervescent tablet.

In Endurance News #72, both Dr. Bill and I commented on a study discussed by Dr. Gabe Mirkin regarding the potential performance-enhancing benefits of high fructose corn syrup. That article, “The best endurance drinks? What?!” struck a nerve with a couple of our clients, with one emailing us with the following, a portion of which is printed here:

Your article “The Best drinks for endurance?” by Steve Born unjustly discredits Dr. Gabe Mirkin. Dr. Mirkin is a well respected MD, Professor, and a leader in Sports Medicine. If you bothered to read or post the complete article you would see that Dr. Mirkin simply says that research studies have shown that caffeine/sugar drinks boost performance. Dr. Mirkin quotes some research studies that established these human performance findings.

Did you guys bother to read those studies? Your remarks did nothing to disprove the research that demonstrates that drinks containing caffeine/sugar enhance performance.

Your article then makes some inane statements comparing Dr. Mirkin’s suggestion that HFCS and Caffeine may boost performance with the physician administered use of steroids, EPO, and amphetamines to boost performance! Your remarks are hyperbole bordering on defamation! To link cola drinks with illegal substances is simply ludicrous.

Michael Moskaitis
Tucson, AZ

Client letter
Client letter: response

My response, in part, was as follows:

I have nothing but respect for Dr. Mirkin. However, that does not mean that I/we are in agreement regarding the use of refined sugar and/or HFCS during exercise, even if a single study with a mere nine participants in it suggests that its use during exercise will increase performance as compared to a sports fuel that contains only glucose. The purpose of the Endurance News article was not to discredit or disrespect Dr. Mirkin at all. It was simply to state our opinion regarding the use of fructose and/or HFCS during exercise, which we genuinely believe are poor choices (as is glucose), especially when compared to long-chain carbohydrates (maltodextrin/glucose polymers). All that the study showed that Dr. Mirkin discussed in his column was that a carbohydrate beverage containing fructose and glucose (preferably HFCS, which is glucose 55% fructose and 42% glucose) enhanced the performance of the nine test subjects doing a 100km ride as compared to glucose only.

Also, our article was in no way intended to convey the idea that Dr. Mirkin is suggesting that "athletes overuse HFCS drinks." It was simply to voice our zero-tolerance position on the consumption of HFCS, especially when we believe that a better alternative (maltodextrin) exists for use during exercise. What would the results have been if a long-chain carbohydrate source had been used in the study? The article "Carbohydrates 101: The Why's, When's, & What's..." (http://www.hammernutrition.com/knowledge/carbohydrates-101-the-why-s-when-s-what-s-294.html) provides the rationale for our stance regarding the superiority of complex carbohydrates over simple sugars.

I believe that Dr. Misner's remarks were not at all intended to defame, discredit, or disrespect Dr. Mirkin. Dr. Misner is simply asking the question "Is the consumption of HFCS during exercise justifiable, even if its use may only be temporary and appear to be beneficial?" As are all of us at Hammer Nutrition, Dr. Misner is very much anti-simple sugar and anti-HFCS consumption. However, I do not believe he is making a direct comparison of the use of HFCS to EPO or other performance-enhancing substances. What he is simply suggesting is that when one applies the adage "the end justifies the means" it opens up the door to potentially justifying the use of other substances that, in the long run, may have negative health consequences. Dr. Misner summarizes this well—both in terms of athletic performance issues and general health issues—in his short article "HFCS Now Equals Problems Later."

Again, we are not trying to disprove the results of this particular study nor do we wish to disrespect Dr. Mirkin in any way. We are simply offering a counterpoint to the information that appears in his article and we're not doing it to increase sales of our products.

Additional information of our stance regarding the consumption of fructose/HFCS can be found on our website:

"Fructose (Corn Syrup) is No Answer For a Sweetener" http://www.hammernutrition.com/knowledge/fructose-corn-syrup-is-no-answer-for-a-sweetener.2263.html


Dr. Bill replied to Mr. Moskaitis with the following:

I concur with Mr. Born. I have exchanged emails with Dr. Mirkin and enjoyed many of his reviews of pertinent peer review research. I have the highest respect for Professor Mirkin, including his esteemed contributions as an author-scientist in the Townsend Letter for Doctors & Patients. This does not mean I agree on every fine point what is best to consume when attempting endurance exercise. There are a number of peer review papers that support our position, "slant/interpretation," of what is best for attaining optimal endurance performance outcome. May I suggest what Steve replied is both appropriate and rational describing original intent? HN
**Steve's Super Salad!**

Aside from lamb chops or rack of lamb cooked on the barbie—and perhaps a couple other for-the-BBQ-only items—I’m admittedly not a very good cook. One thing that I do love to make, however, is a big salad, which I try to have every night (oftentimes it’s all I have for dinner).

Here’s my version of what I consider to be a super healthy salad. Aside from the salad dressing (which I’m sure I could alter, though I’m somewhat addicted to this particular one), it’s pretty low in calories, definitely low or devoid of saturated fat and cholesterol, low in sugar, and not so bad on the sodium content. In addition, it’s a good source of protein and an even better source of fiber and Essential Fatty Acids. Lastly, it’s a great way to obtain significant amounts of calcium, magnesium, potassium, and other minerals as well.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount</th>
<th>Calories</th>
<th>Fat (g)</th>
<th>Saturated (g)</th>
<th>Fiber (g)</th>
<th>Sugar (g)</th>
<th>Protein (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romaine lettuce – raw</td>
<td>3 outer leaves</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Spinach – raw</td>
<td>1.5 cups</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>1.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Broccoli – raw</td>
<td>½ cup chopped</td>
<td>22</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cauliflower – raw</td>
<td>½ cup chopped</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>2.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sweet Red Pepper – raw</td>
<td>1 large</td>
<td>84</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>1.5</td>
</tr>
<tr>
<td>Avocado – raw</td>
<td>1 regular</td>
<td>178</td>
<td>21</td>
<td>3</td>
<td>12</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Chia Seeds – raw</td>
<td>1 tablespoon</td>
<td>36</td>
<td>4</td>
<td>0</td>
<td>1.5</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Annie’s Organic Roasted</td>
<td>2 tablespoons</td>
<td>170</td>
<td>11</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**TOTALS:**
- 492.5 calories
- 24 g fat (of which only 4 g are saturated)
- 0 mg cholesterol
- 525 mg sodium (and again, once I find a lower-sodium dressing that I like, this figure can go down dramatically)
- 42 g total carbohydrates (which includes 24 g of fiber)
- 11 g sugar
- 11.5 g protein

All in all, it’s a pretty healthy salad and one that I think you’ll enjoy eating. Remember to buy organic produce as much as possible! HN
An "oldie but goodie" bit of advice

This is something I wrote in my column over two years ago, and while I usually try to avoid recycling material, I think it is worth repeating, especially because the nonsensical “replace what you lose” message is STILL being touted by many an “expert” as being the correct way to fuel. In fact, though it may appear that the tide is turning ever so slowly more toward the “less is best” direction, I’m betting you’ll get bombarded with this archaic fueling “strategy” more than ever. Once again I want to emphatically recommend that you don’t listen to this nonsense!

As you begin the 2011 season, I’m hoping that you will read and adopt the information I’m going to mention now, as well as the information available in so many areas on our website (especially The Endurance Athlete’s GUIDE to SUCCESS, which should be available soon). The reason I’m so zealous about this is because I am convinced it will take the guesswork out of fueling and it will help change what may have been your “weak link” (fueling) to being your strongest ally in your training and racing.

When it comes to fueling your body during exercise, you need to first and foremost keep the following in mind:

A. Your body is an amazingly well-designed machine with an incredible number of remarkably complex and efficient mechanisms, all working synergistically, that are a built-in part of it.

B. Via these built-in mechanisms, your body absolutely knows how to take care of itself in a crisis/survival situation; its first instinct is survival. And yes, when you start exercising, your body definitely goes into “survival mode.”

If you keep those things in mind and fuel your body in deference to the wonderfully designed mechanism that it is, it can’t help but respond favorably and keep doing what you want it to do. Sure, it’s interesting to know things like how many calories you’re burning and how many grams of salt you may be losing. However, while that information might factor slightly into the equation, it really isn’t that significant when it comes to fueling during exercise. What takes priority at that time is not what you’re losing in terms of calories, fluids, and electrolytes, but how much your body can comfortably accept in return from you and your fuel donation. If your body is going to keep doing what you want it to do, yes, it needs some fueling assistance. However, you need to give your body a helping hand, not kill it with kindness. As Dr. Bill says, “When we try too hard to help ourselves, we end up doing more harm than good.”

We will continue to promote the “less is best” method of fueling because it is the right way to fuel, simple as that. When you put calories, fluids, and electrolytes back into your body, your focus needs to be on what it is capable of accepting in replenishment, not what it’s losing. And you know what? When you adopt the “less is best” approach to fueling, you not only see better results, you make things a whole lot simpler for yourself. As you begin your season this year, make a commitment to keep things simple when it comes to fueling. Take the mystery out of it by working in cooperation with your body, not against it. Then, take notice of how good you feel and how your performance has vastly improved as a result. You’ll be stoked!

I wish each and every one of you a great 2011 and remember, we are here to assist you with your fueling and supplement program. Our goal is to help you achieve your athletic and health goals… we’re but a phone call or email away if you need us! HN
PRODUCT SPOTLIGHT

PSA Caps
BY STEVE BORN

When we introduced PSA Caps, a male-specific health supplement, we received a reaction similar to the feedback we got when we introduced our weight-loss supplement, Appestat: “Why offer a supplement not specifically for enhancing athletic performance?” However, now in its fourth year in the Hammer Nutrition® supplement line, PSA Caps has definitely earned its place. Sales continue to increase for this particular product, which we can only surmise is because it just flat-out works, simple as that.

As we mentioned when we first introduced PSA Caps, this is not a supplement that’s going to help you to a personal best in your races . . . at least not directly. It will, however, directly benefit some vital areas of male functioning that we men can certainly use some help with. I know, prostate health is probably something that you and I would rather not think about. However, it’s a topic that men just can’t afford to ignore, because most of us, if not all of us, are likely to develop prostate enlargement at some point in our lives. It’s no longer a stretch to suggest that poor-to-failed prostate health has become almost epidemic. (Is it really coincidental that the prostate-specific drug commercials you see on TV have increased dramatically the past few years?)

Here are some eye-opening facts that you might not have known about enlarged prostate:

• The prevalence of BPH (which I discuss in the next section) increases dramatically after the age of 40.
• The incidence of BPH is 50%, or higher, for all men at the age of 50.
• The percentage increases even more with each passing decade.

After you read the list of discomforts and problems associated with enlarged prostate, I know that you’ll want to do everything you can to prevent them from happening or to relieve current symptoms.

Fortunately, PSA Caps is the product designed precisely for these purposes, and ever since we introduced it a few years ago, thousands of men have benefited greatly. First, though, let’s review BPH and its role in prostate disorders.

BPH – The male-only malady

As a man ages, it’s common for the prostate gland to become enlarged; at some stage in life almost all men are affected. When this occurs—the condition is called benign prostatic hyperplasia (BPH)—it puts pressure on the urethra, the canal that carries urine and semen out of the body. Increased pressure on the urethra causes urinary tract discomforts such as retention and urgency. Over time, severe BPH can cause serious problems, including urinary tract infections, bladder or kidney damage, bladder stones, and incontinence. While the cause of BPH is not well understood, it is an extremely important issue for all men to address and resolve before it becomes problematic. PSA Caps is an all-natural formula that helps reduce the symptoms of BPH and other prostate disorders.

What causes BPH?

The specific cause(s) of this nearly universal disorder among older men is unknown, but most likely involves hormonal changes. The following three theories, in some combination, are the main culprits currently being investigated for BPH. The formula of PSA Caps addresses all three.

1. Higher estrogen levels within the prostate gland – Throughout their lives, men produce testosterone, an important male hormone, and small amounts of estrogen, primarily a female hormone. As men age, the amount of active testosterone in the blood decreases, leaving a higher proportion of estrogen. Studies with animal test subjects have suggested that BPH may occur because the higher amount of estrogen within the prostate gland increases the activity of substances that promote cell growth. For centuries it has been known that BPH occurs mainly in older men and that it doesn’t develop in men whose testes were removed before puberty. For this reason, some researchers believe that factors related to aging and the testes may spur the development of BPH.

2. Increased levels of DHT – Dihydrotestosterone (DHT) is a substance derived from testosterone in the prostate, which may help control its growth. Most animals lose their ability to produce DHT as they age. However, some research has indicated that even with a drop in the blood’s testosterone level, older men continue to produce and accumulate high levels of DHT in the prostate. This accumulation of DHT may encourage the growth of...
cells. Scientists have also noted that men who do not produce DHT do not develop BPH.

3. “Reawakened” cells – Some researchers suggest that BPH may develop as a result of “instructions” given to cells early in life. According to this theory, BPH occurs because cells in one section of the gland follow these instructions and "reawaken" later in life. These "reawakened" cells then deliver signals to other cells in the gland, instructing them to grow or making them more sensitive to hormones that influence growth.

BPH symptoms

Many symptoms of BPH stem from obstruction of the urethra and gradual loss of bladder function, which results in incomplete emptying of the bladder. The symptoms of BPH vary, but the most common ones involve changes or problems with urination, such as:

• Hesitant, interrupted, and/or weak stream
• Urgency and leakage or dribbling
• More frequent urination, especially at night

The size of the prostate does not always determine how severe the obstruction or the symptoms will be. Some men with greatly enlarged glands have little obstruction and few symptoms, while others, whose glands are less enlarged, have more blockage and greater problems. Sometimes a man may not know he has any obstruction until he suddenly experiences complete inability to urinate. Taking over-the-counter cold or allergy medicines may trigger this condition, called acute urinary retention. Such medicines contain a decongestant drug, known as a sympathomimetic. A potential side effect of this drug may be to prevent the bladder sphincter from relaxing and allowing urine to empty. When partial obstruction is present, alcohol, cold temperatures, or a long period of immobility also can bring on urinary retention.

It is important for men to tell their doctor about urinary problems such as those described above. In most cases these symptoms suggest BPH, but they also can signal other, more serious conditions that require prompt treatment. These conditions, including prostate cancer, can be ruled out only by a doctor's exam. Severe BPH can cause serious problems over time. Urine retention and strain on the bladder can lead to urinary tract infections, bladder or kidney damage, bladder stones, and incontinence. If the bladder is permanently damaged, treatment for BPH may be ineffective. When BPH is found and treated in its earlier stages, there is a lower risk of developing such complications.

Who Needs PSA Caps?

• Males in their 30s, primarily to help prevent prostate-related problems from occurring – Up to 10% of men in their 30s already experience enlarged prostate.
• Males age 40 and older (with increasing importance every decade) – BPH occurs mostly in men over 50, with 90% of men 85 and older having BPH.
• Male cyclists – Cycling may increase the risk of nerve damage, impotence, impaired urinary flow, and disorders to the male genital organs, especially the prostate gland.

If you fit into one or more of these categories, then PSA Caps is a supplement that you absolutely need to include in your daily regimen. The benefits are cumulative, so take it daily!

The benefits are cumulative, so take it daily!

With few exceptions, supplements should be taken daily to achieve optimum benefits. Nowhere is this more important than with a prostate-health product. The formulator of PSA Caps, Dr. Bill Misner, provides the following information from his personal testing:

Saw Palmetto extract (Serenoa repens)
The extract from this plant (a creeping palm with a trunk that lies on or just below the ground surface) is arguably the most frequently used herbal treatment for prostate problems, with several research studies demonstrating that a 45–90 day treatment for enlarged prostate leads to a significant clinical improvement. Saw palmetto (320 mg per day) inhibits 5-alpha reductase, the enzyme that catalyzes the conversion of testosterone to dihydrotestosterone (DHT), reducing DHT by 66% in the periurethral region of the prostate gland, and by 50% in the prostate gland. Saw palmetto also reduces epidermal growth factor (EGF). Men using saw palmetto for the treatment of enlarged prostate generally begin to notice relief from their symptoms within the first 30 days of use.

Stinging Nettle (Urtica dioica root extract, 4:1)
The active ingredient in this herb-like shrub inhibits the ability of epidermal growth factor (EGF) to bind to its receptors in the prostate and to subsequently stimulate the growth of prostate tissue (a key underlying factor in the progression of enlarged prostate). Other uses for stinging nettle include treatment for urinary tract infections, bladder or kidney damage, bladder stones, and incontinence. If the bladder is permanently damaged, treatment for BPH may be ineffective. When BPH is found and treated in its earlier stages, there is a lower risk of developing such complications.

The PSA Caps Formula

Beta Sitosterol
This plant sterol inhibits 5-alpha reductase, the enzyme that converts testosterone to harmful dihydrotestosterone (DHT) and aromatase, an enzyme that catalyzes the conversion of testosterone to unwanted harmful estrogens, estradiol and estrone, elevated levels of which are an underlying cause of enlarged prostate. Beta sitosterol has been reported to reduce BPH-related symptoms, including cancer growths in the prostate gland. Beta sitosterol has been demonstrated to improve urine flow velocity in men with enlarged prostate, while also providing anti-inflammatory effects in prostate tissue, which helps reduce BPH symptoms, enlarged prostate, and potential cancer cell mutations.
infections, kidney stones, and hay fever.

Epilobium (small flower willow)
Epilobium contains two polyphenols (Oenothein A and Oenothein B) that inhibit the 5-alpha reductase enzyme conversion of testosterone to DHT. Epilobium also inhibits aromatase from converting testosterone to estrogens, which happens in older males as they age, helping to reduce harmful DHT, estradiol, and estrone levels, which are known to contribute to prostate-related disorders. Epilobium also inhibits two types of prostaglandins, especially E-2, which have undesirable pro-inflammatory effects.

Lycopene
This important phytochemical in the carotenoid group produces the reddish colors in tomatoes, watermelon, pink grapefruit, guava, and papaya. It’s a powerful antioxidant that protects the deoxyribonucleic acid (DNA) in lymphocytes (cells found in the blood, lymph, and lymphoid tissues) from oxidative damage. It interferes with the ability of insulin-like Growth Factor-1 (IGF) to stimulate the proliferation of various types of cancers in breast, endometrial, and prostate tissues. Lycopene can remediate male reproductive disorders (erectile dysfunction, reduced sperm motility, and reduced sperm counts) resultant from endurance cycling. In one study, 50 volunteers with low active sperm counts received 8 mg/d of lycopene for one-year. Thirty-five experienced improved sperm count, and 30 had improved functional sperm concentrations. There was a 36% pregnancy rate among the participants’ partners by the end of the study.

Alanine, Glutamic Acid, Glycine
These amino acids, when taken for 14 days or more, minimized the symptoms of enlarged prostate. In order to positively affect/influence several hormonal pathways involving prostate health, these particular amino acids should be consumed at least one hour before other amino acids (or protein-containing foods) are consumed.

Proper Dietary Habits for Prostate Health

BY STEVE BORN

As men age, their risk of contracting prostate cancer increases dramatically. The Centers for Disease Control and Prevention produced this chart, which shows how vulnerable aging men become to prostate cancer.

RISK OF BEING DIAGNOSED WITH PROSTATE CANCER BY AGE

<table>
<thead>
<tr>
<th>Age</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>1 in 2,500</td>
</tr>
<tr>
<td>50</td>
<td>1 in 476</td>
</tr>
<tr>
<td>55</td>
<td>1 in 120</td>
</tr>
<tr>
<td>60</td>
<td>1 in 43</td>
</tr>
<tr>
<td>65</td>
<td>1 in 21</td>
</tr>
<tr>
<td>70</td>
<td>1 in 13</td>
</tr>
<tr>
<td>75</td>
<td>1 in 9</td>
</tr>
<tr>
<td>Ever</td>
<td>1 in 6</td>
</tr>
</tbody>
</table>

Summary
Dr. Misner boldly states, “I conclude that the PSA Caps formula predictably prevents or reduces prostate enlargement and the associated disorders reported to occur in males age 40 and over, especially masters cyclists. This formula presents substances to reduce harmful hormones dihydrotestosterone, estradiol, and estrone both in fatty acid-soluble and water-soluble cellular mediums. Reducing excess age-related ‘outlaw’ hormones (dihydrotestosterone, estradiol, estrone) will advance a healthy prostate environment and positively affect anabolic muscle growth and recovery cycles.” By taking PSA Caps regularly, you’re taking a major step in protecting the health of your prostate. And you can do it without breaking the bank. At $22.95 per 60-count bottle (a one-month’s supply), that’s an investment of about 77 cents a day.

Buy three or more, and we’ll drop the price down to $20.95 each, which makes each daily dose cost about 70 cents. It’s an incredibly inexpensive “insurance policy” for an area of men’s health that is undeniably important, so don’t put it off! I’m sure you’ll agree that’s exceptionally reasonable, especially given the importance of prostate health, an issue that you simply can’t ignore. HN
These statistics are nothing less than startling and should serve as a wake-up call, especially for men over the age of 50, to eat a prostate-healthy diet and use a prostate-health supplement.

Dr. Bill Misner states, “A big problem aging men over 40 have is loss of muscle mass with simultaneous mass gain in their prostate. This condition involves the enlargement and inflammation of the (male) prostate gland. It occurs in approximately 5-10% of men aged 30, 50% of men over the age of 50, but more than 90% of men over the age of 85!

As we age, an aromatase enzyme converts testosterone to an unwanted growth hormone, dihydrotestosterone (DHT). Compared to young men under 30, the ratio of free estradiol to free testosterone is also 40% higher as we age. As youthful levels of testosterone decrease, a cascade of estrogens-dominance occurs. These estrogens in the prostate gland increase significantly in the prostate resulting in an enlarged prostate.”

**What foods should I eat to maintain a healthy prostate?**

While it appears that growth in the prostate is somewhat inevitable, it may be postponed or completely prevented by eating the right food substances. Perhaps the most important food groups to consume regularly are raw cruciferous vegetables, which include cabbage, broccoli, cauliflower, and brussels sprouts. These vegetables contain a number of beneficial substances, one of which is known as indole-3-carbinol (I3C), which is believed to alter estrogen levels and may also raise levels of protective enzymes in the body. The results of a study published in the *Journal of the National Cancer Institute* [JNCI J Natl Cancer Inst (2000) 92 (1): 61-68] revealed that the consumption of three or more servings of cruciferous vegetables a week reduced the risk of prostate cancer risk by nearly half.

Tomatoes, grapefruit, pink guavas, persimmons, watermelon, and sweet red peppers are other food sources that may be considered “prostate protective,” due to their high levels of the carotenoid called lycopene, which has been reported to prevent enlarged prostate.

Fava beans, pink lentils, avocados, potatoes, Serrano peppers, pomegranates, and cilantro are rich sources of beta-sitosterol, which has been scientifically proven to reduce the risk of enlarged prostate by inhibiting of the conversion of testosterone to dihydrotestosterone via inhibition of the 5-alpha reductase enzyme.

**Summary**

Regular consumption of whole plant foods, such as those listed earlier, along with supplemental support from PSA Caps, is a potent method in which one may help prevent or reverse the harmful effects of unwanted prostate growth in men over age 40.
A few weeks ago after a mostly sleepless night, I dragged myself out of bed to go for a run just as the sky let loose in violent thunder and hard sleet bringing downpour. It was exactly the kind of conditions I’d long ago stopped feeling the need to brave.

But this was not a day to be a wimp. In a few hours I would be giving the eulogy at my father’s funeral. How do you capture the essence of a man’s 89+ years of life in five minutes? The answers would start coming more clearly, I knew, by just getting out the door and taking those first steps.

The initial shock was hardly enlightening. God I’m freezing. What am I doing out here? This is insane. Holding a brisk pace just to get the blood flowing, I reached the abandoned railroad track where the rain and solitude opened the floodgates of old memories.

My dad was a product of the depression and WW2. Like so many of his generation, he was a man of few words who kept his feelings close to the vest. Having weathered some tough breaks in life, he learned from the school of hard knocks and believed his kids should as well.

So when you got cut from teams or finished poorly in a race, you might expect to hear, you’ll just have to try harder next time. Compliments were especially tough for him. Instead of that-a-boys or overt expressions of pride, he came when he could and watched from a distance. When you won your first race, his way of saying I’m proud of you was to flash a smile and thumbs up before scurrying back work.

But there were rare moments of candor when he spoke eloquently and was rather exceptional. As I reached the turning point on the trail, I recalled one from a day back in 1995 when he nonchalantly called me a “gifted” athlete. It was a notion I’d long rejected. Proudly proclaiming instead that my successes were earned through hard work because of my lack of gifts, he shook his head in befuddlement as if to say, “How did you get this far in life with so little humility?” He made his point thusly:

“Do you remember when I used to have you run to the store to buy me cigarettes?” Those cig runs were my earliest and best memories of being his son. I said, “Yea, you sent me when you ran out and were having nicotine fits.” He said, “Oh no, I always kept a few packs stashed away so that would never happen. Those runs were purely for your benefit, not mine.”

- continued on page 15
I was intrigued to hear more. “From the time you could walk and talk you wanted me to watch you run. I kept sending you on longer and longer runs and you always came back for more. So when you were about 5 or 6, I gave you a dollar and a note to buy me cigarettes at Widmer’s. You ran the whole way and were back in no time with a triumphant smile.”

There were many more cig runs and we laughed about the time he lit one and challenged me to make it back before it burned out so he could use it to light one from the new pack. He didn’t die from lung cancer, but we were working on it.

My dad raised 11 kids and I’d always assumed he’d sent most of us on those cig runs. When asked if that were true he answered, “Nope. You were the only one.” Seeing my surprise, he said, “That’s my point. I encouraged you to run because it was your thing—your gift. With all the other kids it was something else.” I was stunned. For years I’d been angry at him for being so detached, when all along he was quietly nudging me toward my path. I asked why he let me struggle in team sports and never directed me into running and he said, “I figured it’d be more powerful if you discovered it for yourself.”

At first, the answer really pissed me off. “Yea but wasn’t that kind of risky, what if that never happened?” To that he smiled and with a raised finger said, “Ahh, but it did!”

Well, he was right on that count. And he was also right that it was more powerful to discover a gift on your own. Not understanding the drive himself, he knew that whatever was driving a little boy to push his limits on those cig runs had to be the makings of a special gift. And now as a 75-year-old man speaking to his 37-year-old son, it was as if he was trying to say, “Hey dunderhead, your gift wasn’t hard to see. It was just as obvious at 5 years old as it is now . . . if your passion to race isn’t a gift, than what is it?”

Though he didn’t say all that, his eyes did. They told the story of a man who regretted not having embraced his own gifts earlier in life. In his final years he tried to make up for that by helping his many grandkids see their natural gifts. Having retold the cig story a number of times in speeches, I’ve come to appreciate my dad’s simple wisdom all the more. If he could, he would say to you now:

Regardless of your rank, the mere fact that you love to challenge yourself in competition is testimony that you’re pursuing a gift. Never deny its existence. That just minimizes what you can achieve and become. If modesty or a lack of confidence makes that difficult to accept, get over it. Give yourself permission to be great—you deserve that!

Before attending his funeral, I finished that 10-mile run soaked and feeling a warm glow. My preparation was complete, and I’d just enjoyed my favorite run of the year. He was gone but his legacy would be a gift forever. HN

Tony Schiller continues to be a top motivational speaker and over-50 competitor. The lessons of his father live on today. They inspired him to start the MiracleKids Triathlon, which in 2010 saw 1500 kids race and raise $300,000 for cancer kids and their families. He can be reached at ts@tonyschiller.com.
Hammer Nutrition Fuels and Supplements

Kid Friendly, Kid Appropriate!

BY STEVE BORN

The Hammer Nutrition Fuels

With the absence of refined sugars and artificial sweeteners, colors, and preservatives—none of which you want to put in your child’s body—Hammer Nutrition fuels are not only acceptable for young athletes and active kids, they’re the logical choice!

It’s for this very reason that Hammer Gel and HEED have become the fuel of choice for so many young athletes. Hammer Gel comes in seven delicious, kid-pleasing, non-caffeinated flavors (out of the nine flavors available, only espresso and tropical contain caffeine). HEED has become hugely popular with youth sports because it’s an undeniably better choice than the plethora of sugar-filled, artificially colored and sweetened sports/energy drinks available.

Additionally, the two sweeteners used in HEED—xylitol and stevia—are not only safe, but offer health benefits as well; xylitol is especially beneficial for tooth and gum health.

While most young athletes will be able to fulfill their electrolytic mineral needs from HEED, the use of Endurolytes or Endurolytes FIZZ during hot-weather workouts and races is certainly

- continued on page 17

"Hammer Kids" is coming to EN—look for it in the next issue. Juniors, share your race results, accomplishments, or photos by sending us a short email to athleteupdates@hammernutrition.com. We want to know what the next field of serious endurance athletes is up to!

Hammer Nutrition's A+ Juniors

BY VANESSA GAILEY

The more we connect with our clients and athletes (over 9,000 fans on Facebook now!), the more feedback and race results we receive. And recently, our junior Hammer athletes have reported in with lots of racing action—the younger generations, from ages 6 and older, are on their way to taking over the podium.

These serious competitors are learning at increasingly younger ages the importance that nutrition and fueling play in their success. In Endurance News #72, Joseph "Hambone" Ruggiers, 15, shared his state record javelin throw and his can-do attitude. We also heard from Tieni Duro Junior Cycling Development as they mold kids of all abilities into state champions and develop tomorrow’s cycling community (check the next installment of Tieni Duro’s series in this issue). Both Joseph and Tieni Duro’s team utilize Hammer Nutrition products as they push it to the next level.

In the last few months, Hammer Nutrition’s team of client advisors has heard from parents and coaches searching for fueling options for junior athletes. The common question is “Are Hammer Nutrition fuels kid-friendly?” and our answer is “Yes!” With academic stress, social and family pressures, and the demands that training puts on a developing body, it is vitally important that these athletes establish healthy eating and fueling habits, especially when it comes to avoiding refined simple sugars, preservatives, and artificial colors and sweeteners.

Who better to demonstrate the effectiveness of proper fueling and nutrition than some young racers we connected with recently. These junior competitors are on their way to becoming the next legends of endurance sports!
acceptable. With their low-sodium, full-spectrum electrolyte formulas, either of these two products are a far better choice than salt-saturated sports drinks or salt tablets. One scoop of HEED provides the equivalent of one Endurolytes capsule or ½ tablet of Endurolytes FIZZ, which is usually quite sufficient for younger athletes. However, when the weather is super hot, additional electrolyte support may be necessary. For that, we suggest one Endurolytes tablet or ½ Endurolytes FIZZ per 50 pounds of body weight.

Most young athletes don’t compete in races that last more than two or three hours. If and when they do, however, we have three excellent long-distance fuels that are kid appropriate—Sustained Energy, Perpetuem, and Perpetuem Solids—all of which contain high-quality carbohydrates and a small, yet adequate amount of soy protein. The Caffé Latte flavor of Perpetuem and Perpetuem Solids is the only one that contains caffeine.

Recovery is a vital component, not just for athletic performance, but for helping to strengthen the muscle tissue and support optimal immune system health. Recoverite is ideal for this purpose as it contains high-quality complex carbohydrates, whey protein isolate (the best protein source for rebuilding muscle tissue and boosting the immune system), and the multi-beneficial amino acid, glutamine. Most energy bars are nothing more than glorified candy bars, loaded with refined sugar, saturated fat, artificial sweeteners, and other undesirable ingredients. Hammer Bars are quite the opposite as they not only taste great, they’re made with 100% wholesome ingredients. Hammer Bars are loaded with healthy, non-GMO, organic ingredients with no added refined sugars. Plus, they carry USDA organic, non-dairy kosher, and vegan (Almond Raisin) certifications.

Much of the time, the daily diet provides adequate amounts of protein for children, with the following Recommended Daily Allowances (RDA) listed for the following age groups:
- Children 7–10 years old – 28 grams/day
- Males 11–14 years old – 45 grams/day
- Females 11–14 years – 46 grams/day

If and when additional protein becomes necessary, or if a liquid snack is desired, both Hammer Soy and Hammer Whey are great choices, especially for mixing into tasty, nutritious smoothies using fresh or frozen organic fruit. Hammer Soy contains 100% GMO-free soy protein isolate, while Hammer Whey contains the highest quality whey protein isolate available, sweetened with natural flavors and the healthy sweetener stevia.

**The Hammer Nutrition Supplements**

We currently produce 20 supplements, most of which are for adult use. There are, however, a couple of supplements that we believe are not only appropriate for children, but highly beneficial as well.

It’s unfortunate that the nutrient quantity and quality of our food supply seemingly continues to diminish. That’s why the "balanced diet will provide all you need" notion is a myth. Recent studies show that food alone does not supply all of the micronutrients we need to prevent deficiency, let alone achieve optimal health. Additionally, very few of us have consistent access to fresh, locally grown foods; much of our diet comes from foods grown far away, picked when unripe, and then shipped. As a result, nutritional content is questionable and usually depleted. Lastly, even if we could obtain all the nutrients we need from our...- continued on page 18
diet, it’s highly unlikely that any of us, children or adults, eats an ideal diet as consistently as we think we do.

Though the above scenario sounds a bit gloomy, we are not suggesting that anyone—children or adults—can neglect their diet, take pills, and have all nutrient needs covered. No supplement program can or should take priority over the consumption of a healthy diet—that’s a no-brainer. Supplementation means just what the word implies: supplementary. To augment the nutrients that children get from their healthy diet, we suggest the following supplements:

**Premium Insurance Caps** – This provides all of the necessary vitamins and minerals, plus some beneficial auxiliary nutrients. Our suggested dose is one capsule per 25 pounds of body weight daily.

**Phytomax** – Oftentimes, getting kids to eat an appropriate amount of vegetables on a daily basis can be a real chore. Phytomax, a goldmine of concentrated vegetable nutrition, doesn’t replace the consumption of fresh vegetables. It does, however, help bridge the gap between what your child may be consuming vegetable-wise and what they should be consuming. One or two Phytomax capsules daily is a good way to augment your child’s vegetable intake, ensuring they receive adequate supplies of all of the beneficial components (especially the vegetable-specific phytonutrients) that fresh vegetables contain.

**Carlson Norwegian Salmon Oil** – There are numerous benefits associated with the consumption of the Essential Fatty Acids (DHA and EPA) that make up fish oil. For children, perhaps the most important reason for considering taking a daily fish oil supplement is proper brain development. One to two softgel capsules daily is a great way to ensure your children receive all of the benefits that fish oils provide.

**Digest Caps** – Has your child been on a course of antibiotics? If so, it’s important to re-establish the healthy bacteria in the intestinal tract. One capsule of Digest Caps, which contains four powerfully beneficial strains of healthy bacteria, is the ideal way to help tip the scales in favor of the “good guys.” This is a product that doesn’t necessarily need to be used daily, but in certain circumstances—such as after a course of antibiotics—Digest Caps is the ideal “go to” product.

**NOTE:** We recommend that before you start your children on any supplement program, you first receive approval from their health care professional. HN
RECOVERY 101

Class dismissed

ORDER TODAY!
1.800.336.1977 / www.hammernutrition.com

Limit one. Offer valid while supplies last.

Purchase a 32-serving container of Recoverite and get a FREE Blender Bottle!

Ad code ENTER
Offer expires 3/31/19
If you are like most endurance athletes in the Northern Hemisphere, you’ve put the 2010 season behind you and are anxiously looking toward 2011, hoping to make it even better. Among the things you might be pondering is whether to add a new piece of training equipment or whether to start a new group training class or training program. Before you decide which new tools or tricks you want to add to your training mix, I highly recommend you take a step backward for a moment and begin your path to a great 2011 season by first taking a focused look at the quality, rather than just the quantity, of your movement. More miles or reps at the beginning stages of training—if some aspect of your movement is inefficient, causes pain, or is putting you at higher risk of injury—is shortsighted and will surely end up slowing your ultimate progress. In short, avoid adding progressive fitness elements to your training (positives) before you resolve lingering sources of pain, inefficiency, or dysfunction (negatives).

More specifically, the “negatives” might be: 1) a restriction in movement or lack of appropriate mobility where it is needed, 2) a lack of stability or balance, or 3) a nagging injury that you’ve been nursing for a while or that hasn’t resolved, that is resulting in other tissues being forced to compensate or absorb more stress than they were designed to. Even a subtle lack of balanced strength and flexibility around the hips/pelvis or in other joints in the body will prevent you from achieving the desired results from challenging workouts. In a way, it would be akin to a farmer going outdoors and trying to plant seeds on gravel. They (the workouts) simply won’t be landing on fertile soil and will have little chance of producing a bountiful harvest, and a bountiful harvest, e.g. results, is what matters! The bottom line: You have to move well before you throw reps, high heart rate, and miles at that movement. My suggestion to you: Choose to reverse the “negatives” now! Here are some TIPS to help you do just that:

- Know this: When you massage or use a foam roller on “healthy” muscle tissue, it shouldn’t be painful. If doing foam roller work is painful, the tissue has lingering micro-trauma and damage. Be smart and take care of the soft tissue work now to ensure normal muscle elasticity when you resume more progressive training.

- Get screened and/or evaluated by a knowledgeable professional who, among other things, knows the difference (and can show you) between core “strength” and core “stability.” There is a difference! The best “screen” I know of is the Functional Movement Screen (FMS), which is an excellent way to learn where you can improve and what your weak links, asymmetries, and overall risk of injury is. See www.functionalmovement.com to find a certified provider near you.

- If appropriate levels of flexibility are an issue, it is going to interfere with training at some point. Remember that you might be “inflexible,” e.g. stiff in certain places, because your body is creating that stiffness due to a weakness in a synergistic muscle somewhere else. Things aren’t always as they seem. Learn about Active Isolated Stretching and focus your flexibility work on muscles that are tight due to your lifestyle (sitting at a desk or behind the steering wheel, for example).
• Poor mobility, stability, or balance will interfere with training. Get them cleared at the beginning of your training, so that they won’t limit your progress or create greater risk of injury moving forward.

• You can visit me and my partners at our gait analysis lab (www.pursuit-athletic-performance.com) and get a full assessment of all of the above items, starting with a detailed exam, FMS, and 3-D video analysis. We do remote assessments also. Email me directly for more information: coachal@coach-al.com.

• Besides being assessed by a professional, start videotaping every exercise you are doing in your routine. Learn and study what good movement is and improve your awareness of how you are moving.

All of the above applies whether you are a novice or elite athlete. We know that the central nervous system (CNS) of talented high-level athletes is much better at compensating than the average CNS. An elite or a top age group athlete could still have a restriction in movement or a lack of basic core stability or compensation that is holding them back. Here’s a prime example: A woman I coach who WON her age group in Kona this year (and set a course record doing it) recently visited our gait lab. We discovered a number of issues related to stability, balance, and strength. Despite the fact that she handily beat the best in the world in her age group, she still has room for improvement and can be even healthier. As her coach, I feel that is exciting and is something that we can all learn from.

To summarize, this is a little bit like the “Tortoise and the Hare.” You could start out now with workouts designed to achieve fast fitness benefits, OR you can decide to learn how to move better now, and increase the chances of finishing stronger and better next season! If you get it right in the beginning of the training process and progress steadily forward, you will most certainly increase your chances of “winning” out in the end, beating those Hares every time.

Change is hard. I would like to leave you with one more reminder: At any moment in time, if we allow ourselves to, we are likely to always fall back to our “default” movement patterns and habits. That “default” setting feels natural because it is where we have spent the most time and are most comfortable. Even for folks who come to our gait lab, we can teach them to move correctly while they are here, but they will always be challenged to hold onto that correct movement when they return home. Change is definitely hard, but it is absolutely necessary for growth and development! Improving how you move NOW will pay big dividends in the long run in the form of improved vitality, youthfulness, and much faster race results! HN
Pumpkin Soup

2 large white onions
3 large garlic cloves
1 Tbsp pure olive oil, ghee, or coconut oil
16 oz. pumpkin puree
(I like to cut up a pumpkin and roast it in the oven, until it is soft and mushy. Then I scoop it out and puree it.)

½ tsp cumin
½ tsp cinnamon
½ tsp turmeric
1 liter (32 oz.) of chicken stock or water
Sea salt and fresh pepper to taste

Optional: 1 cup heavy cream, 1 cup unflavored almond milk, or ½ cup cashews

Garnish options: fresh dill and toasted pumpkin seed oil

Dice onions and garlic, and sauté in oil in soup tureen until lightly brown. Add spices and puree, and then cover with stock or water, stirring to blend puree. Bring to a boil and reduce to a simmer for 20 minutes. Remove from heat and let stand 20 minutes. (If desired, add optional cream, almond milk, or nuts.) Puree with a blender, food processor, or with a handheld blender.

Roasted Root Veggies

2 large carrots
2 large parsnips
1 smallish butternut squash
2 large onions
2 large leeks
1 small bunch of fresh thyme
1 sprig of fresh rosemary
4 sprigs of fresh sage
(Herbs can be dry; if fresh is not available, use 2 tsp of each.)

¼ cup pure olive oil, or ghee
(For fat-free version, use 1 cup of stock.)
Sea salt to taste

Preheat oven to 375°F. Wash root veggies very thoroughly, as they tend to be sandy. Peel carrots, parsnips, and squash if desired. Chop all veggies into approximately 1” cubes. Finely chop herbs, mix all ingredients in a 9”x13” Pyrex baking dish with oil, and salt to taste. Bake until golden brown and tender, approximately 45-110 minutes depending on your oven, altitude, etc.

Roasted Sea Bass

4 sea bass fillets (boneless and skinless)
½ cup cherry or grape tomatoes
¼ cup Kalamata olives, pitted and sliced
¼ cup diced bell peppers
¼ cup dry white wine
¼ cup lemon juice
4 cloves garlic
½ cup chopped parsley
1 tsp oregano
1 tsp thyme
Sea salt and fresh pepper to taste

Preheat oven to 400°F. Place fish in a Pyrex roasting dish large enough so that fish lays flat in one layer. Mix remaining ingredients in a bowl and pour over fish. Roast for 15-20 minutes, until fish flakes when prodded with a fork.

Serves 4
any have asked why I am doing this recipe column. As an athlete and a chef, I thought I would share my story and hopefully inspire you to try my recipes and enjoy healthy food choices.

I was born and raised in Southern California. I loved to cook and my family loved to eat, so cooking and baking endeared me to those I loved early on. After two years of junior college and working as a pie baker, I decided to pursue an education in culinary arts. I went to Paris and studied pastry and cuisine. I went on to have a varied career that would span the next 28 years: owning and running restaurants, working as a consultant, private chef for Hollywood’s elite, and cooking for special needs diets for health and weight loss.

I have been an athlete since the age of four. I’ve ice skated and competed on a national level, practiced tae kwon do, danced, showed horses, and now swim competitively. I also practice Pilates several times a week and enjoy jogging as a way to connect with beautiful places when I travel. I have found that, throughout my life, physical activity has helped me feel and look great. I have always liked being active and now view it as an essential, like eating or sleeping.

As a mother, athlete, and chef, I have learned the importance of proper nutrition firsthand. In an age of obesity and poor health, my family is remarkably fit. While my husband, daughters and I enjoy athletics, I attribute our good health mostly to our diet. I am not fanatic; I just try to keep our diet “clean.” That means I do my best to always use organic products, avoid processed foods, keep our salt intake to a minimum, and stay away from sugar and “garbage” fats and carbohydrates.

These are a collection of recipes I feed my family, as I cook most of the food we eat. While I am not cooking professionally for the moment, I cook daily for my family, friends, and various organizations I am affiliated/volunteer with. Please enjoy your food and feel better in everything you do! Healthy bodies support healthy minds.

HN
By Brian Frank

I am very pleased to announce that after a three-year hiatus with another brand, Hammer Nutrition has re-established our relationship with Compex, the world leader in Neuromuscular Electrical Stimulation (NMES) technology and devices for over 20 years. Compex was the first brand of NMES devices that I came into contact with in Europe almost a decade ago and the one we first offered to our clients in 2006. Since we parted company in 2007, Compex has undergone many changes, and I firmly believe that they are now the best company for us to partner with to serve you and the growing market for this technology in the U.S. This change also means that we will no longer be selling the Globus brand of NMES units. However, owners of Globus products can rest assured that we will continue to support them with warranty service, replacement parts, and of course, gel pads. The advanced training programs, user forums, and everything else we do will benefit users of either brand equally. I will also be reaching out to owners of Globus units directly in the next 30 days. I promise that we will not abandon you and that you do not have inferior units. This change is about the future, not the past.

Without going into unnecessary detail, things happened at the corporate level in Compex in 2007 that did not allow them to supply any inventory to us for almost a year. With no inventory to sell, growing demand from consumers, and no firm date as to when product would begin shipping again, we were forced to make the difficult decision to go to another brand. Now, three years later, we find ourselves in an entirely different situation: My preferred brand, Compex, is now well capitalized by its parent company and is in position to retake the lead in NMES technology education, with new generation models now available and exciting advancements to be announced in 2011 and 2012. Furthermore, they fully recognize the leading role that Hammer Nutrition has played in the introduction and adoption of NMES in the U.S. over the past six years, and are eager to be a full partner in the process going forward. In the coming weeks and in the next issue of Endurance News, we will be announcing our joint event demonstration schedule as well as other initiatives to help you understand and reap maximum benefits from NMES. Conversely, I am not aware of any new developments or new generation devices from Globus, nor are they apparently willing to provide capital and other resources for the U.S. market.

Compex was not only the original developer of the unique, square wave technology that makes NMES so effective and painless; the company was also responsible for introducing this technology to athletes through thousands of demonstration events throughout western Europe. Until now, the lack of a cohesive, nationwide demonstration program has hindered the growth and acceptance of this powerful training aid. That is going to change in 2011 and beyond, as both companies are fully committed to this tried-and-true plan. For many of you who have not yet had the opportunity to experience NMES firsthand, the discussion of this subject and attempts to explain it on a purely verbal basis may be very difficult to grasp. On the other hand, one Active Recovery routine on a pair of tired, lactic acid-filled legs is a revelation and leaves most athletes with a newfound appreciation for the potential of these devices—enough to want to own one. When we run an Endurance or Strength program that actually produces powerful muscle contraction, it becomes an "aha!" moment of epic proportions. When given the opportunity to use NMES for injury rehabilitation and pain relief, an athlete can see the full potential of Neuromuscular Electrical Stimulation. Knowing that not all of you will be able to attend an event where we are demonstrating Compex NMES units, we’ve extended the usual 30-day guarantee to 90 days, so that you can experience the benefits in your own home. Details are on page 29.

It may not be “the best thing since sliced bread,” but I do see NMES as being akin to the heart rate monitor and, more recently, watt measurement training tools in terms of its usefulness and eventual universal adoption. NMES has the ability to completely revolutionize the way you train, race, and recover. When you consider the cost savings and convenience compared to regular massage, gym time, and rehabilitation providers, these devices may offer the best bang for the buck yet.

If you have not yet had the opportunity to investigate and see firsthand the potential of this device, I encourage you to make 2011 the year you do. In the meantime, I encourage you to read the additional NMES content in this issue and call to speak with one of our NMES advisors if you have any questions.

Join our NMES forum online at: http://www.hammernutrition.com/forums/

Have all your questions answered, share ideas, and learn with our friendly NMES community!

“My new secret weapon is my NMES machine!” - Jim D.
A letter from Greg Houlgate

Hammer Nutrition is a natural synergy formed by our shared goal: helping the serious endurance athlete attain the highest levels of athletic performance by providing a safe, effective, and legal competitive advantage.

For the past 24 years, Brian Frank and his team at Hammer Nutrition have had the vision and passion to develop an entire line of superior nutritional products and provide unparalleled support, knowledge, and guidance to the endurance sports athlete. DJO Incorporated, a global provider of medical device solutions, is also the worldwide leader in the research, design, and manufacturing of Neuromuscular Electrical Stimulation (NMES) technology through its Compex brand of products. The combination of these superior NMES products and Hammer Nutrition’s fuels and supplements will help you obtain the maximum value from your training, enable you to recover quicker, and ACHIEVE PEAK PERFORMANCE EVERY DAY.

In the coming years, Compex and Hammer Nutrition will be dedicated to your improved performance and physical fitness. We will cosponsor an Active Recovery Zone with on-site demonstrations at various sporting events across the country and provide educational content on our respective websites and in upcoming issues of Endurance News. Jim Bruskewitz, a multiple-time triathlon age-group champion and NMES instructor, is available to provide 30-minute, 60-minute, and advanced consultations and guidance on all aspects of NMES technology to ensure you are incorporating NMES into your training regimen. Together, Compex and Hammer Nutrition will give you the ultimate competitive edge to help you exceed your highest athletic goals in 2011.

Achieve Peak Performance with Compex

BY GREG HOULGATE

Everyday athletes and even occasional weekend warriors are likely to watch their favorite athlete and wonder, “How can I perform at that level?” By adding Neuromuscular Electrical Stimulation (NMES), also simply referred to as E-stim, to their training routine, individuals have the opportunity to join the ranks of elite athletes worldwide who have incorporated NMES as part of their training regimen.

Electrostimulation therapy has been widely used and popular among European athletes for over two decades. However, the American athlete/consumer is likely to be a bit more wary to eagerly adopt NMES technology due to similar products advertised on late-night infomercials promising to shed belly fat without leaving the couch. Just as nutritional supplements are intended to augment a good diet, muscle stimulators are intended to complement serious training, not replace it.

NMES enables users to exercise more muscle fibers in less time by reproducing the body’s natural process of voluntary muscular contractions with high-intensity “optimal” electrical impulses. Numerous clinical studies conducted over 22 years have proven that when Compex is applied to the motor nerve, it provokes a deeper and more complete muscle contraction than what can be attained through standard voluntary training or activity. In other words, a muscle can’t tell the difference between a voluntary contraction triggered by the brain or through a muscle stimulator. The result is a more efficient workout regimen with less risk of injury to joints and tendons, with virtually no cardiovascular or mental fatigue.

Compex is the first U.S. company to offer consumers an FDA-cleared, over-the-counter, portable muscle stimulator for enhanced sports performance and improved physical fitness, currently used by professional sports teams and athletic training coaches worldwide.

Compex features up to nine specific stimulation programs that target specific muscle groups and enable athletes to maximize muscle performance specifically related to their particular sport. For instance, a cyclist can improve endurance, a triathlete can build muscle and increase strength, and a volleyball player can gain explosive power to jump higher. After training with NMES, athletes can expect progression in their overall strength, power, and speed, as well as a quicker muscle recovery after training. In addition to enhanced muscle performance, athletes can also expect to experience improvements in their circulation and faster reduction in lactic acid blood flow.

BY GREG HOULGATE

For the past 20 years, Greg Houlgate has coached and trained athletes from youth to masters, as well as international level competitors. He began running competitively in his teens as a top age-group road racer and member of the USA Junior National Track & Field Team, continued racing in college on the cross-country and track teams at University of California, Irvine. A two time NCAA Championship finalist and enjoyed a competitive post-college career internationally as an elite sponsored runner in Europe and Asia in events from 800 meters to half marathon.

Greg’s personal bests are: 10,000 meters (29:45), 5,000 meters (14:28), 3,000 meter steeplechase (9:04), 1,500 meter (3:50) and 800 meters (1:55). Greg has recently completed several sprint and olympic distance triathlons. Greg’s favorite races are: Wildflower Tri, Tegonuma Ekiden, Hood-to-Coast (2010 Mixed Masters Champions).

Greg’s passions are his family, friends and helping people perform at their highest level. He has degrees in Economics and an MBA in Global Management. He is fluent in Japanese and has traveled extensively for competition, business and pleasure. As a member of both the San Diego Track Club and the San Diego TriClub, Greg has volunteered his time to help club members improve their running capabilities.

Greg’s specialty is helping endurance athletes access their “dormant speed” and improving run-off-the-bike performances.

www.hammernutrition.com 25
You’ve been asking for it. Here it is! This plan guides you through eight weeks of strength training that will deliver performance gains you’ll feel. There are a lot of ways to “skin a cat.” Let’s look at two approaches:

1. Broad adaptations, like those needed for multisport, which can be gained and maintained throughout a season.
2. A specific phased approach can be extended through both the pre-competitive and competitive seasons.

Like any other training, results will come to those that train consistently and progressively increase the intensity of their sessions. Use the Active Recovery program daily (particularly if after strenuous activity when the muscles feel like they may cramp). Remember, if you aren’t recovered properly, you can’t train as hard the next day. Returning muscle tissue to optimum “pre-training” levels is the key to preventing physical breakdowns over your training period. To help keep you on track and lay the foundation for a season of improved strength, follow these suggestions (for Compex Sport Elite):

- Neuromuscular Electrical Stimulation (NMES) provides supplemental training that allows you to develop strength without additional stress to your joints and cardiovascular system
- Train three times weekly per muscle group
- Prioritize the muscle groups to train based on sport and personal weaknesses
- After your hardest traditional training workout(s), train for strength with NMES on that day
- NMES strength train a muscle group, taking at least 48 hours of recovery before the next session
- Start conservatively with milliamp (mA) number settings on the screen, e.g. high teens to 20 mA for most beginning individuals. Adjust intensity level to achieve contraction, but maintain comfort level to prevent soreness
- Increase mA levels weekly by ~10% until you acclimate to NMES training
- After 2 to 4 weeks of NMES training, increase the mA intensity to tolerable levels. You can start to be more aggressive once the soreness is gone. Adjust the program intensity based on your ability to recover from each session
- NMES training for strength one time per week is not very effective. Two times per week is good, but three times per week is optimal.
- Use the Active Recovery program daily after both your traditional workouts and NMES strength training sessions.

Nota bene: There is a good deal of personal variation, so the best rule is to never increase the intensity of the training program to a level that is not tolerable. HN

NMES Training Plan - 8 weeks

<table>
<thead>
<tr>
<th>Sport</th>
<th>#Primary Muscle Groups</th>
<th>#Secondary Muscle Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycling</td>
<td>Quadriceps</td>
<td>Gluteals</td>
</tr>
<tr>
<td></td>
<td>Calf Muscles</td>
<td>Hamstrings</td>
</tr>
<tr>
<td></td>
<td>Abdominals**</td>
<td></td>
</tr>
<tr>
<td>Running</td>
<td>Quadriceps</td>
<td>Gluteals</td>
</tr>
<tr>
<td></td>
<td>Calf Muscles</td>
<td>Hamstrings</td>
</tr>
<tr>
<td></td>
<td>Abdominals**</td>
<td></td>
</tr>
<tr>
<td>Paddling</td>
<td>Rotator Cuff</td>
<td>Trapezius</td>
</tr>
<tr>
<td></td>
<td>Biceps Brachii/Triceps Brachii</td>
<td>Latissimus Dorsi</td>
</tr>
<tr>
<td></td>
<td>Abdominals**</td>
<td></td>
</tr>
<tr>
<td>Climbing</td>
<td>Forearm</td>
<td>Quadriceps</td>
</tr>
<tr>
<td></td>
<td>Upper Arm</td>
<td>Calf Muscles</td>
</tr>
<tr>
<td></td>
<td>Abdominals**</td>
<td></td>
</tr>
<tr>
<td>Swimming</td>
<td>Latissimus Dorsi</td>
<td>Pectoralis</td>
</tr>
<tr>
<td></td>
<td>Triceps Brachii</td>
<td>Biceps Brachii</td>
</tr>
<tr>
<td></td>
<td>Abdominals**</td>
<td>Quadriceps</td>
</tr>
</tbody>
</table>

# These are not exhaustive lists.
** Always train abdominals with Endurance Programs

For proper muscle stimulation pad placement, please go to: http://www.shopcompex.com/content/electrode-placements/
Compex Neuromuscular Electrical Stimulation Training

The general program for general adaptations across the board. This fits well with triathlon and cross-training.

### Week 1-3-5 etc.

<table>
<thead>
<tr>
<th>Training</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hardest Traditional Sport Training</td>
<td>Hardest Traditional Sport Training</td>
<td>Hardest Traditional Sport Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Muscle Group(s) | | | | | | | |
| | Abs Lower Body Upper Body | Abs Lower Body Upper Body | Abs Lower Body Upper Body | | | | |

|-----------------|----------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|

### Week 2-4-6 etc.

<table>
<thead>
<tr>
<th>Training</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hardest Traditional Sport Training</td>
<td>Hardest Traditional Sport Training</td>
<td>Hardest Traditional Sport Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Muscle Group(s) | | | | | | | |
| | Abs Lower Body Upper Body | Abs Lower Body Upper Body | Abs Lower Body Upper Body | | | | |

|-----------------|----------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|

### A focused approach for those periodizing their training over an entire season. 1st 8 weeks

<table>
<thead>
<tr>
<th>Training</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hardest Traditional Sport Training</td>
<td>Hardest Traditional Sport Training</td>
<td>Hardest Traditional Sport Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Muscle Group(s) | | | | | | | |
| | Primary Muscle Group | Primary Muscle Group | Primary Muscle Group | | | | |

| Week 1 & 2 | STRENGTH 1 | STRENGTH 1 | STRENGTH 1 |
| Week 3 & 4 | STRENGTH 2 | STRENGTH 2 | STRENGTH 2 |
| Week 5 & 6 | STRENGTH 3 | RESISTANCE 1 | STRENGTH 3 |
| Week 7 & 8 | RESISTANCE 1 | RESISTANCE 1 | RESISTANCE 1 |

| Muscle Group(s) | | | | | | | |

| Week 1 & 2 | STRENGTH 1 | STRENGTH 1 | STRENGTH 1 |
| Week 3 & 4 | STRENGTH 2 | STRENGTH 2 | STRENGTH 2 |
| Week 5 & 6 | STRENGTH 3 | RESISTANCE 1 | STRENGTH 3 |
| Week 7 & 8 | RESISTANCE 1 | RESISTANCE 1 | RESISTANCE 1 |

<table>
<thead>
<tr>
<th>Active Recovery</th>
<th>Active Recovery</th>
<th>Active Recovery</th>
<th>Active Recovery</th>
<th>Active Recovery</th>
<th>Active Recovery</th>
<th>Active Recovery</th>
</tr>
</thead>
</table>

Nota bene: These mA number settings are suggestions. There is a good deal of personal variation, so the best rule is to never increase the intensity of the training program to a level that is not tolerable.
Incorporating Compex Neuromuscular Electrical Stimulation (NMES) into your training routine will allow you to:

- Dramatically increase muscular endurance
- Optimize muscle recovery (minutes instead of days!)
- Get the ultimate muscle warm-up

Over the past 20 years, Compex has become the leader in electrotherapy through extensive research and innovation. Compex's flagship electrostimulation devices are an essential ally to health care professionals and the most demanding athletes in the world. For the past 24 years, Hammer Nutrition has been the leader in educating athletes to fuel properly and since 2006 has been the leader in NMES education in the U.S. Together, Compex and Hammer Nutrition are your best choice for all things NMES.

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

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

More benefits!

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

Compex is FDA cleared

NMES consultations with our experts!

30-minute consultation
Consists of unboxing the device and connecting cables, pads, and charger. Proper pad placement discussion, program familiarization, and first use of the Active Recovery program.

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPC30</td>
<td>$49.95</td>
</tr>
</tbody>
</table>

60-minute consultation
Includes everything in the 30-minute consultation plus discussion and guidance on use of programs (varies depending on unit purchased), integration into your daily training regimen, stacking NMES workouts on top of conventional workouts, and more.

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPC60</td>
<td>$79.95</td>
</tr>
</tbody>
</table>

Advanced consultations
After initial consultation, additional consultation time can be purchased for $60 per hour. Quickly become an “advanced NMES user” and get the most out of your Compex device by working “one on one” with an NMES expert versed in all aspects of this powerful device and technology. Discounts are available for multi-hour packages as well, ask your advisor for details.

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPA60</td>
<td>$60.00+</td>
</tr>
</tbody>
</table>

"I’m using NMES like crazy because I can do that and work at the same time. a real benefit!" - Frank R.
Compex NMES is ideal for all athletes

**New generation with snap pads!**

**Sport Elite**
The Sport Elite muscle stimulator is recommended for the competitive/high-performance athlete who has a rigorous training and exercise regimen. It features a total of nine programs and five levels of progression that will keep elite athletes challenged with every training session, resulting in a true competitive advantage!

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSE</td>
<td>$999.99</td>
</tr>
</tbody>
</table>

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

**Programs include:**
- Endurance
- Resistance
- Strength
- Explosive Strength
- Potentiation
- Active Recovery
- Recovery Plus
- Pre-Warmup
- Massage

**New generation with snap pads!**

**Performance U.S.**
The Performance U.S. muscle stimulator is recommended for the fitness enthusiast and/or the athlete who engages in frequent competition. It features a total of five programs with five levels of progression to help competitive athletes achieve the highest level of performance.

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPP</td>
<td>$699.99</td>
</tr>
</tbody>
</table>

Programs include—Endurance, Resistance, Strength, Pre-Warmup, and Active Recovery.

**Fitness Classic**
Supplies are limited!
The Fitness Classic muscle stimulator is meant for individuals interested in building muscles and toning/shaping to improve general physical fitness. It includes two training programs and one special program.

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPF</td>
<td>$429.00</td>
</tr>
</tbody>
</table>

Programs include—Endurance, Resistance, and Active Recovery.

**Replacement pads and accessories**
Hammer Nutrition is your NMES headquarters for replacement pads, replacement parts, accessories, and more. Check out www.hammernutrition.com/NMES for all of the details.

---

Order Today! Order your Compex NMES unit from Hammer Nutrition and enjoy these exclusive FREE bonuses:

- 30-minute consultation - FREE
  A $49.95 value!
- 1 or 2 free sets of pads, depending on model - FREE
  Up to a $29.90 value!
- 90-day money back guarantee - FREE
  Priceless!

www.hammernutrition.com
As the "inventor" of Perpetuem Solids, I feel compelled to write about this new form of fuel. Any time a completely new product or product variation is introduced into the market, there is inevitably a wide range of reactions, a steep learning curve before adoption becomes universal. Those reactions literally cover the spectrum from glowing praise to profanity-laced diatribes and everything in between. One detractor actually posed the question, "What were you thinking when you developed this product?" This article is less of a defense of my newest product than it is an explanation, along with some historical context.

This is not the first unusual product I have developed over the past 24 years, and it won't be the last. Moreover, I'm not under any delusions that this is a product that every athlete will embrace or want to use. Just like any other fuel or supplement, and perhaps even more so, Perpetuem Solids is not for every athlete in every type of event or sport. An athlete's like or dislike of this product will be further influenced by their particular preferences with regard to taste, mouth feel (texture), and logistical requirements.

The impetus for Perpetuem Solids came in response to a reoccurring question we have been fielding for many years about the limitations of premixed fuels that contain protein (Perpetuem and Sustained Energy) for heat tolerance over long periods of time. For the last five or so years, clients have regularly inquired as to when Hammer would be introducing a "block" or some other-shaped gelatinous fuel that could be eaten/chewed instead of sipped or gulped. We tried in earnest for over two years to develop a gelatinous form of Hammer Gel/HEED, and it just won't work unless you bring the sugar content up to 50% or more of the total calories. The unvarnished truth is that these products are more candy than legitimate fuels and Hammer is not in the business of making candy, no matter the sales potential. In fact, our long and unwavering stance against high sugar intake during exercise is diametrically opposed to this product type. One of my longest guiding sayings for this company has been "principles before profits," and the abandonment of the gelatinous cube as a future product is a perfect example of how it is practiced here. Yes, I fully realize that this decision is costing us a lot of sales and that many of you use these products from other companies. I'm ok with that.

The next ongoing and unresolved challenge was that our protein-fortified energy fuels degrade in heat over time after being mixed with water. Any of you who have mixed up a bottle of Perpetuem or Sustained Energy and left it in the sun for several hours know exactly what I am talking about. It sours or goes bad because we don't use any preservatives. Over the years, athletes have resorted to carrying bags of powder and mixing as they go. For obvious reasons, this is less than ideal. Thus, you have the motivation behind the development and introduction of Perpetuem Solids. These challenges or "problems" weren't going away, and I am a problem solver. My goal was to address all of these concerns with a solid fuel that would not be a compromise in terms of ingredients and, ultimately, effectiveness.

Perpetuem Solids taste great and are the perfect fuel to use in subzero temperatures. I never have to worry again about my fuel freezing! - Jane R.
That's really how I got the idea of forming Perpetuem into a solid wafer. I turned the actual process of determining if this could physically be done and the search for someone who had the capabilities, or rather the rare machine, over to our in-house engineer, Bob Weaver. As he so capably did with the Huckleberry flavor of Hammer Gel and the new Endurolytes Fizz, Bob made it happen. We worked through dozens of iterations to get the density and other characteristics where we wanted them. With each new batch, myself, our staff, and several field testers used the Solids in actual real-world training and racing conditions. Our field testing was ongoing for almost a year before the first unit was offered for sale.

Before going further into who I believe may be a good candidate for using this form of Perpetuem, and the most effective technique for consuming them, I'd like to take you back in time to give further insight into the “What were they thinking?” question. Recall, if you will, the world of endurance nutrition in 1992. The Power Bar® had been out for almost five years and several other variations of the energy bar were on the market, but that was about it besides Gatorade®. Amino acids and protein powders were options for endurance athletes, but little used. That was the year that we introduced Sustained Energy, then known as Energy Surge. It was the first energy drink to contain protein while being devoid of any added flavoring or sugars. What? While some hardcore ultra runners immediately embraced the product, much of the initial feedback that we received from athletes comfortable with a brightly colored, 6% sugar solution was not pretty. The returns contained notes blasting us for selling "wall paper paste," "soggy Cherrios®," and many other less-flattering opinions. The minority of negative feedback did not deter us from continuing to offer this strange new drink, because it worked well. Those who were less concerned with taste and mouth feel than with being able to fuel for long periods of time without stomach distress were singing the praises of this funky energy drink. Since we introduced Sustained Energy 19 years ago, the endurance community has come to embrace protein-fortified energy drinks and the sale of products like Perpetueum and Sustained Energy continue to grow. Today, no one questions this form of an energy drink; it’s just another option out there. So, the answer to the question “What were you thinking?” is the same thing that I was thinking in 1991: If the product is technically effective, things like common convention, flavor, and mouth feel become subordinate, and we will bring it to market. Time has proven that there is indeed a good market for protein fortified energy drinks, even flavorless ones. We'll see in a few years how Solids fair in the endurance community.

The question we asked ourselves was, "Who might find Perpetuem Solids to be a desirable option for fuel?" It is certainly not people running 5K or 10K races, crit racers, or anyone who competes in high-intensity, short-duration races (although they might be a nice snack before or after these types of events or throughout the day if you compete in heats, qualifiers, etc.). Why? One of the prerequisites for this product is that you operate at a pace that allows you to breathe through your nose, as your mouth will be busy for a couple of minutes chewing the Solids. So, we are talking about long-distance runners and cyclists, iron distance triathletes (T2- special needs bags), adventure racers, and others doing multiday events. Climbers, hikers, and backpackers that need compact,
Hammering a Fast Century in Death Valley

BY BILL NICOLAI

In the fall of each year is the Death Valley Double Century and Century ride organized by Adventure Corps and sponsored by Hammer Nutrition. The Death Valley events are not races, but the on-course times and finishing order are recorded. Since I'd never ridden a century under six hours, this was an opportunity to see how fast I could go, although this 108-mile long course with 4,000 feet of climbing is not really a fast one.

For several years now I have used a selection of Hammer Nutrition recommended supplements while riding in ultra events. They seem to be really helping, as my results lately have been the best ever. For this event I decided to maximize speed by using all the recommended Hammer Nutrition fuels and supplements including the antioxidants. Here is the plan I came up with for the Death Valley Century event:

**Fueling and Supplementation**

**Pre-event:** I did the recommended four-day Race Day Boost loading.

**Fuel:** I started with my usual bottle with five scoops of Perpetuem with the intention of topping off at the turnaround at Scotty’s Castle. In case I needed additional fuel, I carried a tube of the new Perpetuem Solids in my favorite Caffé Latte flavor.

**Hydration & Electrolytes:** I had one aero bottle to sip and another on the frame to refill the sipper. For electrolytes I used the new Endurolytes Fizz, dropping two tablets into the sipper whenever it was filled.

**Supplements taken during the ride, one per hour:**
- One Race Cap
- One Anti-Fatigue cap
- One Super AO
- One AO Booster
- Two Mito caps
- Two Endurance Amino
- Two Tissue Rejuvenator

The 10 capsules per hour were each packed into six Quick Coin containers, and one container was consumed before the start and then another every hour.

**The Ride**

There were 165 riders in the Century and I started as soon as they allowed the first wave to start at 7:20 a.m. I was hoping to find some fast riders to work with and quickly get 30 miles down the road to the section where the main climb begins for the 24-mile, 3000-foot ascent up to Scotty’s Castle. Four riders led out and we started trading pulls.

At about 50 minutes into the ride, a very fast rider in a Hammer kit caught us, so I jumped on his wheel. It later turned out that this lean, young guy had started in the 7:30 wave and traveled by himself as far in 40 minutes as our “fast group” had gone while trading pulls in 50 minutes. As I was only a short distance into a long ride, I knew it was folly to burn all my matches so soon; when it became clear that he was much too fast to draft, I dropped back letting the other riders chase him.

As I came to the first rest stop, I passed three riders resting there. Gladdened

- continued on page 33
that I hadn’t used up my energy, I didn’t stop and rode on alone. Normally on these long rides I prefer to ride with others in a pace line and gain speed by drafting, but that was not possible since I was now ahead of everyone except the one crazy-fast guy.

Riding my own pace up the steepest part of the long climb, I once again saw the leader in the Hammer jersey come ripping downhill past me several miles from the turnaround. Then, palm trees appeared and I arrived at Scotty’s Castle. I quickly checked in and filled my fuel and water bottles while straddling my bike. A friend of mine, Jim Whitford, who had been doing the double Century ride, had decided to join me on the ride back, which I knew would be a great help against the wind. Seconds later, we were descending down the slope toward Furnace Creek.

As we descended down below sea level, Jim noted that I passed the century mark at 5:46, which was a personal best over the distance and not a bad time considering that it had involved strong head winds, not to mention the 4,000 feet of climbing. Finally, I arrived at the finish at 108 miles in 6 hours and 16 minutes from my starting time. Jim finished with me but had started 10 minutes earlier, yet still ended the day as the fourth finisher.

The Result

Checking in at the finish, we were amazed to hear that James Harrington, the lean young cyclist in the Hammer kit, had finished in 5:24, a full 52 minutes faster than my time. Though I was the second finisher, the day didn’t seem especially heroic while out on the course, just smooth and fast. But after looking at the results, it is apparent that I had an exceptionally good ride. Not only was my time for the first 100 miles a personal best, but it also checked the five-year history of the event; it turns out that my time was the fourth fastest time ever and would have been first on two previous occasions.

Post-event Thoughts

This attempt at a fast century had succeeded beyond any reasonable expectation. I think there were several reasons:

- I was in really good shape, having spent the fall doing road races, ultra events and regularly doing a fast club ride every Saturday that sharpened my speed.
- My bike was equipped with aero bars and wheels, and I wore an aero helmet.
- The fueling and maximal supplementation plan was effective.
- I believe the Race Day Boost really was a significant factor.
- Riding with Jim was a big help on the long descent and against the wind on the return.

In short, everything seemed to come together for a fast and fun century in Death Valley. Given the superb scenery, great support, and friendly fellow riders, I will return to this splendid venue again to enjoy the riding this spring. HN

Well, that’s my story and I’m sticking to it, as the old country song goes. I encourage you to consider whether you and your sport of choice may be Solids friendly, and then try them and decide for yourself whether you personally like this product or not. If you don’t, please let us know so we can refund your purchase price (if you did not receive a sample for free). You can take comfort in the fact that we offer a wide variety of liquid, gel, and bar fuels that you can use for your endurance fueling needs. HN
THE Classic CYCLIST Part Three

BY CHRIS KOSTMAN

The author on 17-Mile Drive in Carmel, CA during the Million Dollar Challenge, a seven-day, 620-mile cycling event from San Francisco to La Jolla on behalf of Challenged Athletes Foundation.

Photo: Preston Sandusky
As I explained in the first two parts of this article, cyclists entering the sport of road cycling over the past 15 or so years have tended to come in by way of mountain biking, triathlon, or fitness, rather than pure road cycling. As a result, most of these “cyclists” lack the knowledge that makes up the foundation of the classic cyclists’ repertoire and which respects the backbone of the sport. Continuing with the theme initiated in the first two parts of this article from Endurance News #70 and #71, here are some more things the classic cyclist knows and does:

Seasonal approach
The classic cyclist takes a seasonal approach to riding style and fitness variability, understanding that the highest level of cardiovascular fitness and muscular endurance—and therefore cycling ability—cannot be maintained year-round. In fact, different parts of the year lend themselves to different types of riding. As such, a periodized approach to the year is naturally employed, for example: additional cross-training (on and off the bike) in the late Fall, fixed gear in the Winter, base miles as the new year unfolds, more speedwork and club riding in the Spring, then peak events and challenges in the Summer and Fall. The bottom line is a simple understanding that overall health fitness is maintained year-round, but top-level efforts are only possible a few times per year. Riding with the seasons acknowledges this truth and also lends variety to each year’s program or campaign.

Other cyclists are just cyclists, not competitors
The classic cyclist is primarily self-motivated and shares a deep camaraderie with other cyclists on the road. While out riding, cyclists seen ahead in the distance are often overtaken, but they are never passed as if they are competitors in the same race and the finish line is just around the corner. The classic cyclist doesn’t care to “beat” other cyclists who happen to be out on the same roads at the same time. Instead, the classic cyclist will, at the minimum, greet other cyclists and will often engage in conversation with them. When the time is right, the classic cyclist will politely move ahead, or drop back, depending on goals, schedule, fitness level, or whim. For pure performance training, the classic cyclist self-motivates by sprinting to city limits signs or other landmarks, or by joining racing-oriented club rides (or throws down the gantlet at special invite rides with other classic cyclists).

Technology is a tool, not an end in itself
Because the bicycle is used as a tool for exploring the outer and inner universes, the classic cyclist appreciates cycling for the cycling, not for the equipment. The bicycle’s beauty and grace are appreciated for what they offer the rider, but whether there are six cogs or eleven on the rear wheel is insignificant to the classic cyclist. The same goes for shifter type and location. The classic cyclist often “retro-fits” a “modern” bike with downtube or bar-end shifters to have a more authentic and organic feel for his gear shifting, and to intentionally make shifting less frequent. As well, “race wheels”—which have become ubiquitous as standard equipment on new bicycles today—are saved for just that: racing. Ninety-five percent of the time, classic wheels with 32 spokes and tyres at least 25 mm wide are used, providing a comfortable ride, bullet-proof longevity, ease of repair or adjustment (if it’s ever needed) and very small likelihood of stranding their owner while out in the boondocks.

Each ride an adventure
Cycling offers such a wide panorama of opportunity, it’s a sacrilege for the classic cyclist to do the same rides week after week on a fixed schedule. As such, the classic cyclist uses a higher level of awareness—and map study—to search out new roads to ride, new ways to create loops in otherwise known areas, and new ways to connect disparate regions. The classic cyclist doesn’t wonder what’s down a certain road or over that hill; she rides out there and finds out for herself. In the process, a deeper, richer understanding of the landscape, the environment, and the character of one’s region is acquired, offering more opportunities for creating new routes and for avoiding anything resembling a rut or a routine.

Any bike, anywhere
Bikes are the ultimate freedom tools: they let cyclists go to more places, more easily, and more simply than any other human invention. But in today’s era of high technology and equipment specialization, they can also seem incredibly limiting. In fact, the common misconception is that without the “right bike,” one simply cannot partake in the wonderful landscape of cycling opportunities. “Dirt” must require a “mountain bike,” most assume. But how wrong that is: A “road bike” with tyres of 25 mm in width can handle the majority of trails, gravel roads, and fire roads one might encounter. It might be more difficult or challenging to ride those unpaved routes on a road bike, but that is, of course, the point. (Remember, suffering is to be embraced and adventure sought.) Classic cyclists do not choose between “road biking” and “mountain biking” and subsequently let the bicycle determine the route and terrain of any given ride. Instead, creative “first ascent-style” rides are strung together in one epic route which involves all manner of riding surfaces, sights, sounds, and scenes. Having a memorable, unique, and personal experience of the profound richness of the sport, and of the planet, is what motivates the classic cyclist. HN

Chris Kostman has been a classic cyclist since 1982. Besides competing in races as diverse as the Race Across America, the Iditabike Mountain Bike Race, and the 24 Hours of Canaan, he also organizes the Badwater Ultramarathon and Furnace Creek 508 races, as well as a series of four century rides. This is his seventeenth article for Endurance News. Learn more at www.adventurecorps.com.
Made with real fruit!

Even, reliable energy, without the flash and crash of sugar-loaded products.

SPECIAL OFFER!
Purchase a 26-serving jug of Hammer Gel and receive a FREE single-serving pouch of Apple-Cinnamon and Raspberry gel!

ORDER TODAY!
1.800.336.1977
www.hammernutrition.com
I started 2010 setting another PR (2:53:26) at the Houston Marathon, after a successful 2009 running year placing at the top of several 50k and 50-mile ultra marathons and setting PRs on 10-mile, half marathon and 30k races. This was also the beginning of a string of injuries that would last awhile; still, I captured the "Tornado Revenge" team that captured the victory at the 203-mile Texas Independence Relay in early March and then won my age group at the 2010 Seabrook Lucky Trail Marathon. That’s when I really had to stop and start therapy to take care of two injuries that got out of hand.

By early summer, things started to turn around; I had been totally dedicated to running for the past four years, so a break from running and the Texas heat was in order before resuming my normal training. We headed for the mountains, my other passion. Having climbed many mountains in northeastern Mexico as well as the high volcanoes of central Mexico including 18,700’ Pico de Orizaba and 17,200’ Iztaccihuatl twice, I caught the Colorado 14er (mountains above 14,000’) climbing fever in 2005; I returned in 2006 and climbed a few more. My 2010 12-day Colorado family vacation included 11 14ers in nine days of climbing.

These required a total of 20,000’ of elevation gain and 46 miles of hiking.

7/5 14,421’ Mt Massive
7/6 14,005’ Huron Peak
7/7 14,420’ Mt Harvard
7/8 14,148’ Mt Democrat
7/9 14,229’ Mt Shavano and 14,155’ Tabeguache Peak
7/10 14,309’ Uncompahgre Peak and then climbed to 13,800’ on 14,017’ Wetterhorn Peak before turning back due to early storms
7/11 14,034’ Redcloud Peak and 14,001’ Sunshine Peak
7/12 back to 14,017’ Wetterhorn Peak, by far the most interesting and exposed climb of them all

My only fuel source for these adventures was Hammer, and just like I have in the past three years on my ultra marathons, the use of Hammer Gel, HEED, Endurolytes, and Recoverite made these climbs feel like "a walk in the park" and made this my most productive and memorable climbing outing yet. I just wished I’d had more time to keep climbing more Colorado 14ers.

A few months after that, and it was back to the Texas racing season. Thanks a lot guys—keep Hammering!

HN

With over 8,700 participants, the American Birkebeiner is the largest cross country ski marathon in North America. This year’s race takes place on February 26, and as always, Hammer Nutrition is honored to be a product sponsor, with HEED as the official sports drink of this epic event.
Everyone should take probiotics regularly, not only for digestive health and nutrient absorption, but especially for enhancing their immune system, which accelerates recovery, enabling resistance against catching the “bug.” Bacteria rapidly proliferate inside the warm, moist 100-degree gut cavern. Extraordinary proliferation of “bad” bacteria reduces immune system strength, which may also be stressed from exercise. When the immune system is exposed to exercise, “bad” gram-positive or gram-negative bacteria proliferate more rapidly against the “good” bacteria, resulting in an imbalance in good to bad bacteria ratio.

As the optimal-healthy ratio deteriorates, reduced immune response may predispose us to catch a “bug” and/or inhibit our rate of recovery. If a strong probiotic is not taken to replenish “good” bacteria, the chance of catching an upper respiratory infection from pathogenic bacteria such as Staphylococcus aureus, Streptococcus pneumoniae, and β-hemolytic streptococci is a whopping 19% greater!

Additional information/research

Strep, Staph and the bacteria that cause sore throats, sinus infections, severe gastric stress, pneumonia, or influenza typically challenge the immune system through airway passages. If the immune system is strong, then getting a “bug” may be avoided or if we do get sick, the severity of sickness will be remarkably reduced. As a bacterial reservoir, the nose may harbor potentially pathogenic bacteria (PPB: Staphylococcus aureus, Streptococcus pneumoniae, β-hemolytic streptococci, and Haemophilus influenzae). In patients carrying PPB, antiseptic regimens could be crucial for infection control after major operations on or injuries of the head, nasal sinuses, or lungs. Such regimens may also be important for diabetic patients and persons receiving hemodialysis, in intensive care units, or with impaired immunity due to various other causes.

Researchers tested a possible effect of the ingestion of probiotics on the bacterial flora of the nose. In an open, prospective trial, 209 volunteers were randomly assigned to consume either a probiotic, fermented milk drink [65 mL with Lactobacillus GG (ATCC 53103), Bifidobacterium sp B420, Lactobacillus acidophilus 145, and Streptococcus thermophilus; n = 108] or standard yogurt (180 g; n = 101) daily for 3 weeks. Nasal microbial flora were analyzed on days 1, 21, and 28. The microbial examination was blinded to the source of the samples. They found a significant 19% reduction in the occurrence of nasal potentially pathogenic bacteria in the group who consumed the probiotic drink but not in the group who consumed yogurt. The effect was mainly on gram-positive bacteria, which decreased significantly. These results indicate that regular intake of probiotics can reduce potentially pathogenic bacteria in the upper respiratory tract. The results also indicate a linkage of the lymphoid tissue between the gut and the upper respiratory tract [1].

REFERENCE


NOTE: Each capsule of Digest Caps contains two billion cells from four different strains of healthy bacteria. iFlora is even more potent, containing 16 billion cells from a blend of 16 different strains of healthy bacteria. HN
Everyone at Hammer Nutrition would like to congratulate Betsy Solis—winner of $2,500 in Hammer Nutrition products. Betsy, we hope you enjoy the products and clothing gear!

The drawing was held during Kona Ironman World Championships weekend, at the Kona Brewing Company on Oct. 10, 2010. The restaurant and bar were full, with many Ironman participants present. During a break in the live entertainment, Mike Freeman, our on-the-scene Hammer Nutrition Ambassador, pulled the lucky winner’s name.

Shortly after Kona, we heard from Betsy, who had recently added several daily supplements—from her one-year supply of Hammer Nutrition products—to her training regime: "I really never took a lot of supplements . . . just fueled with gel, but had heard lots of positive comments about Hammer Nutrition from other athletes here in Kona. Winning the Hammer raffle has made me more diligent about my nutrition. I am taking Premium Insurance Caps, Mito Caps, and Race Caps Supreme, plus Endurolytes while training—the vegetable capsules are a big bonus as I am allergic to gelatin. I did notice that my recovery is much better after taking these. I signed up for the spring Lavaman and hope to do a couple of other events during the year. Aloha!"

Not sure which products are right for you? Have a few questions that you’d like answered? Call today for your free consultation with a Hammer Nutrition Client Service Advisor.

"You guys are so awesome at Hammer Nutrition and have always been there whenever I needed help. It is so appreciated when the information can sometimes be overwhelming. Thanks for being so understanding of my needs.”

- Judy Mazowiecki

Call today!
1.800.336.1977 Mon.-Fri., 9-5 MST

www.hammernutrition.com
In the last issue of *Endurance News*, we included an article about the benefits of eating potassium-rich foods. Now, additional good news has emerged. According to the results of a study published in the October 25th edition of the *American Medical Association Journal Archives of Internal Medicine*, potassium may play a major protective role against the development of Type 2 diabetes.

Researchers from Johns Hopkins University carefully evaluated the data from the Atherosclerosis Risk in Communities (ARIC) Study, which spanned multiple years and involved 11,500 participants from 45 to 65 years of age. Upon enrollment in the study, samples of the participants’ blood were analyzed for serum potassium. Additionally, the participants’ dietary potassium intake was calculated via dietary questionnaire responses. Diagnoses of diabetes were determined during follow-up visits scheduled regularly over a nine-year period, which also included eight years of annual telephone contact.

Over the follow-up period, 1,475 participants developed diabetes, with the risk of developing the disease increasing with declining levels of potassium. The participants whose potassium levels were lowest—less than 4 milliequivalents per liter (mEq/L)—had a 64% greater risk of diabetes than those who had high-normal levels (5 to 5.5 mEq/L).

The data also showed that low dietary potassium appeared to be a predictor of the development of diabetes. The participants whose dietary potassium intake was in the lowest 25% had a 37% greater risk of developing diabetes than those who were in the top 25%.

According to Dr. Ranee Ahtterjee and the other coauthors of the study, “Our study suggests an inverse relationship between serum potassium levels and risk of incident diabetes mellitus in middle aged adults. Clinical trials should be developed to assess if increasing serum potassium, through medications, pharmacologic supplementation, or increased dietary intake—all relatively simple interventions—could indeed reduce the risk of incident diabetes mellitus.”

In EN#72 we focused on studies presented by the American Heart Association, which confirmed that eating foods rich in potassium may help reduce the risk of coronary artery disease and stroke. Now, the research team at Johns Hopkins University appears to have revealed another very good reason—to help prevent diabetes—as to why we should all be eating more potassium-rich foods. *HN*
Jump-start your potassium intake.

Premium Insurance Caps contains 50 mg of potassium!

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

Formulated with Optimum Daily Intake (ODI) amounts of the highest quality vitamins and minerals, not just minimum "daily recommended" amounts, Premium Insurance Caps provides a solid nutrient foundation, "bridging the gap" between what you should be getting nutrient-wise from your diet, and what you are actually obtaining.

Some potassium-rich foods include artichokes, oranges, broccoli, strawberries, lima beans, and cucumbers.

SPECIAL OFFER!

Order a bottle of Premium Insurance Caps (either size) and receive a FREE large Capsule Organizer!

Ad Code EN73P
Offer expires 3/31/11

Limit one. Offer valid while supplies last.

ORDER TODAY! 1.800.336.1977 / www.hammernutrition.com
The Race Across America is a grueling 3,020 mile cycling race where cyclists experience nearly every type of weather and terrain that America offers. We rode through snow flurries when peaking Wolf Creek Pass in Colorado, thunderstorms in Kansas, and 103 degree heat when climbing the wall-like hills of West Virginia. Team Type 1, a team consisting of Type 1 diabetes, also faces the challenges of managing type 1 diabetes during the demanding, non-stop cross country race.

Team Type 1 competes annually in the 8-Person Division of RAAM and has won the race four of the last five years. The mission of Team Type 1 is to inspire and motivate those living with diabetes to properly manage their diabetes and to not let diabetes hold them back from pursuing and reaching their goals.

In the 2010 Race Across America our objective was to again win the race and also better our record setting time of 5 days, 9 hours and 5 minutes set in 2009.

Our strategy in 2010 was to again have one rider on the road at any given time, and to only keep them out on the road for as long as they could maintain maximum effort. When climbing through Colorado, Missouri, Ohio and West Virginia, the pulls were short, sometimes only 2 to 3 minutes in length to keep the average speed as high as possible. On the flatlands of Kansas we could stay on the bike for 20 to 30 minutes at a maximum output. It was during these times when we were averaging 25 to 30 miles per hour where we saw our lead over the eight teams increase to over five hours.

Being a team of Type 1 diabetics, there are many other areas that require our constant attention other than biking as fast as we can. With the sleep deprivation of a non-stop race, altitude and heat, our bodies were taking a beating and therefore managing blood sugar levels is much more difficult than in everyday life. After transitioning one rider to another we would enter the rider car and quickly try to recover and make sure our blood sugar levels were at a proper level. The rider car was littered with Endurolytes bottles, HEED drink bottles, Hammer Gel packs, and blood glucose test strips, which were all evidence of our constant attention to hydration, recovery, and making sure our electrolyte level was at its peak.

Riding at maximum output in 15-minute intervals, in scorching heat is a difficult for anyone, but doing this over 100 times across the country, with a period of stationary sitting in a minivan in between pulls makes cramping a major issue in the Race Across America. In previous years, the cramping problem led to many athletes being forced to withdrawal from the race as their legs literally would not release out of a seized position. Team
Type 1 made the elimination of cramping one of their main areas of emphasis. All eight riders trained throughout the off season with HEED, Perpetuem, Hammer Gel, Endurolytes and Recoverite to ensure that these products would resolve these problems. We required nutritional products that would allow the athletes to race at maximum effort for longer periods by delaying fatigue onset and without suffering through 3,020 miles of debilitating cramping. The Hammer line of products delivered exactly as promised. By fueling regularly with HEED, Perpetuem, and Endurolytes, we were able to maintain a constant high speed across the country and with Recoverite we were able to recover faster than ever.

There was one thing that Hammer couldn’t overcome: A Race Across America rule change. In 2009 we were allowed moving transitions from one rider to the next 24 hours a day. In 2010, race officials changed the rule to where the outgoing rider had to be at a standstill until the incoming rider was stopped next to him during the hours of 7:00 p.m. to 7:00 a.m. This made a huge impact to our average speed during these hours. We adhered closely to the rules in order to avoid a 15-minute time penalty, however the new rule proved to be too much to overcome in our attempt to better our 2009 record setting finish time.

Team Type 1 finished the 2010 Race Across America in 5 days, 10 hours and 48 minutes and arrived at the pier in Annapolis, Maryland, at 4:21 in the morning. We averaged 22.97 miles per hour in the 3,020-mile journey to win the 8-Person Division.

The accomplishment again proved to the 24 million diabetics in the U.S. that all things are possible despite living everyday with a chronic disease. Diabetes is a completely manageable disease; with proper diabetes management and proper adherence to the body’s nutritional and fuel requirements, all people, including diabetic athletes, can compete, and they can win.

The Team Type 1 Race Across America riders express our gratitude to Hammer Nutrition for the tremendous contribution to the success of the team.
The Short Course Meters Regional Championships drew more than 540 swimmers to Long Beach, California’s Belmont Olympic Pool for three days of record-breaking competition, Dec. 3-5. The Long Beach Grunions, while being a small team, do a mighty job of hosting this event, the country’s largest SCM meet. The Belmont Olympic Pool continues to draw elite master swimmers from all over North America, resulting in many new national and world records broken. This year was no exception, with over 20 world and national records smashed in various age groups. What is most impressive to me is that the majority of these people are over the age of 50! Many are swimming faster as they get older, which shows that there is more to swimming than youth. Technique, fitness, and mental brawn also play large roles.

Hammer Nutrition was a sponsor at this event and had free-flowing HEED and Recoverite for all the participants and offered samples of our newest products: Perpetuem Solids and Endurolytes Fizz. Both products were a huge success, and many athletes came by to tell me how good they felt and how much they enjoyed being fueled by Hammer Nutrition. I had the pleasure of talking to marathon swimmers and channel support crews regarding endurance fueling. Our new swimwear was another hit; people loved the cut and style.

I am looking forward to the next event and the opportunity to turn more swimmers onto the benefits of “Fueling Right and Feeling Great!”

Hammer Nutrition was a sponsor at this event and had free-flowing HEED and Recoverite for all the participants and offered samples of our newest products: Perpetuem Solids and Endurolytes Fizz. Both products were a huge success, and many athletes came by to tell me how good they felt and how much they enjoyed being fueled by Hammer Nutrition. I had the pleasure of talking to marathon swimmers and channel support crews regarding endurance fueling. Our new swimwear was another hit; people loved the cut and style.

I am looking forward to the next event and the opportunity to turn more swimmers onto the benefits of “Fueling Right and Feeling Great!”

Hammer Nutrition was a sponsor at this event and had free-flowing HEED and Recoverite for all the participants and offered samples of our newest products: Perpetuem Solids and Endurolytes Fizz. Both products were a huge success, and many athletes came by to tell me how good they felt and how much they enjoyed being fueled by Hammer Nutrition. I had the pleasure of talking to marathon swimmers and channel support crews regarding endurance fueling. Our new swimwear was another hit; people loved the cut and style.

I am looking forward to the next event and the opportunity to turn more swimmers onto the benefits of “Fueling Right and Feeling Great!”
Hammer heads to the top!

Results are in from a recent BikeForums.net poll and you've put Hammer Nutrition near the top as your preferred nutritional supplements!

Do you use nutritional supplements?

**YES:** 51%  
**NO:** 49%

If yes, what brands?

- Clif  
- Hammer  
- PowerBar  
- GU  
- Accelerade/Endurox  
- Cytosport  
- Honey Stinger  
- First Endurance  
- Zip Vit

Reprinted with permission from:

BikeForums

www.hammernutrition.com
I am a big fan of intuition. As a practicing psychiatrist, I couldn’t do my job without a healthy dose of intuition. My neuroscientist friends call this “right brain” activity—the part of the brain that houses creative thinking, subjective thought, big-picture thinking. The opposite side, or “left brain” activity, is where your more rational, logical, linear thought patterns live. Using this simplified version of neuroanatomy 101, if you came to see me as a patient, my left brain would be doing all of those logical, left brain, traditional physician behaviors, like taking your history, doing a mental status examination, determining your diagnosis, and then presenting you with options for medications, therapy, and other treatments. But at the same time, my right brain would be looking at your non-verbal language as you tell your story, your posture, your subtle changes in emotion. And sometimes I will know to ask you a question that absolutely is the key question to ask you, and it might completely change the treatment plan in a different direction. Sometimes I just “know” things. I am intuitive. My intuition is part of what makes me a good doctor. However, I would NEVER rely on my intuition as sole method of treating my patients. I rely on my entire toolbox of tools to help my patients heal. You might say that I teach my patients to acquire and assemble their own toolbox full of tools to handle whatever problems they might have.

My own journey from extreme obesity to a healthy weight required me to assemble my own toolbox of tools. And yes, I had my team of professionals helping me along the way—a therapist, a dietician, more than a few coaches and trainers, fit friends who walked the journey before me, and sports medicine doctors, just to name a few. Throughout my decade-long journey from obesity to health, I learned to use a variety of tools. Some of them are clearly left brain activities, like tracking my intake, output, and measurements, taking monthly pictures and assessing the change, weighing my food in grams, measuring my heart rate data, and calculating my running paces. Others are definitely right brain activities: connecting emotions to certain foods, or using my intuition to help me decide why I had an insatiable craving for chocolate when my stress levels were high.

I have come to believe that intuitive eating is a learned skill. Like any skill, some people just get it easily, naturally, and without hassle. Other people (like me) have to work hard to acquire that skill. In fact, intuitive eating has been such a difficult skill for me to master, that I have considered it a “power tool” for me. Let me explain.

When I was learning how to scull, I wanted to start out in the long, skinny boats—I would watch the experienced rowers and marvel at how beautiful they looked in those tiny little narrow boats. From a distance, they looked like giant silver, black and red needles, slicing their way through the Halifax River at sunrise. They made it look so easy and effortless, and I wanted to be just like them. But I didn’t want to spend the necessary time building the skills. I just wanted to launch off the dock and effortlessly row myself into the sunrise, all balanced and poised, strong and confident, maybe even intuitive. I clearly remember the first time I ever sat in a shell. Lucky for me, it wasn’t one of the long, skinny needles; it was a big, clunky, wide yellow beginner boat. Had I been in one of the needles, I surely would have launched myself right into the drink instead of off the dock into the sunrise. Before I even took my very first stroke, I realized how difficult it was even to stay stationary in the water. It took many lessons of intense left brain study to learn the coordination required to balance the boat, move the oars in the right direction, and move my body in a way that powered the oars (legs-back-arms-arms-back-legs). And while doing that, you are feathering the oars down-

- continued on page 47
up-down-up. Kind of like rubbing your stomach and patting your head at the same time. For a bit, I had to constantly repeat the sequences in my left brain. Legs-back-arms-down-up. The coach had to correct me. A lot. Soon the creative right brain was able to take over. My mind and body began to intuitively learn the rhythm. Instead of focusing on the left brain chatter, I started feeling the power of my stroke as I propelled myself down the mighty Halifax, negotiating my way through the tight pillars of the Seabreeze bridge, maintaining my position as I navigated the boat wakes from the larger yachts.

I had become a rower. By the time I was ready to graduate to the needle boats, my stroke felt natural, normal, effortless and intuitive. I clearly remember when one of my fellow rowing classmates and I were out for an early morning row. It was one of those perfect water days-flat and calm, no wind, and only the occasional small fishing boat. I took the opportunity to work out hard-I effortlessly launched my silver needle toward the sliver of rising sun, and powered my way down the Halifax. I had a glorious row, the rising sun, the fishing birds, the faint smell of the ocean in the distance. I noticed that my classmate stayed far behind me, but I could tell he was fine. As I returned to the dock, I felt worn out and spent from the hard effort. My classmate’s first words to me upon his return were “wow, I tried hard to stay with you, but you were just moving, you are a really strong athlete.” Coming from an ex-college rugby player, his words meant a lot to me. I had become an intuitive rower. Power and strength are important, but at the end of the day, technique rules. And my intuitive flow on the water didn’t just happen the first time I put myself in a shell. It happened after much left brain angst. Before I was capable of handling the silver needle power tool, I had to learn with the safe yellow basic model.

And so it has been with intuitive eating. I can’t tell you how many times I tried on intuitive eating for size throughout my journey, and landed myself firmly in the drink. Except the drink in this case wasn’t the mighty Halifax, it was the mighty weight gain. Sometimes only 5 pounds. Sometimes 25 pounds. As I look back on those times, I see a pattern. I was trying to use the power tool before I learned how to use the basic beginner model. For me, intuitive eating is an advanced concept, an advanced skill.

Early in my journey, it was just too easy to convince myself that I intuitively needed more chocolate or peanut butter.

I have recently completed a two month experiment again with intuitive eating. I am thrilled to report that I maintained my weight without any tracking, weighing or measuring. All of those left brain skills seem to be flowing seamlessly over to my right brain, and I appear to be navigating the river of maintenance with ease. I am officially capable of using the power tool. But here’s the catch- life doesn’t always have smooth, glassy water to row. Even though I was capable of piloting that silver needle, there were days when the rough ocean tides spilled over into the Halifax, causing some challenging swells. On those days, I retreated to the safety of my big, wide, yellow boat-the perfect tool for the job.

I would like to think that I can live most of my days as an intuitive eater. It just feels right. It certainly takes less time. But I would be foolish to totally abandon all of the tools that brought me to the place I am in today. I am not ashamed to go back to my beginner skills anytime I need them. They are always there for me in my toolbox.

In my work with others who are undergoing major body transformations, I notice that some people are scared to ever try feeding themselves differently. They stay locked in the skills that brought them success. They believe that they could never become an intuitive eater. Sometimes I notice the opposite problem, people who are absolutely convinced that intuitive eating is the only way recover from a lifetime of restrictive dieting, and that any attempt to weigh, measure or track is somehow a personal failure.

The most successful weight managers I know move effortlessly across these techniques depending on life’s numerous variables. Have you noticed that you are afraid to leave the safety of your carefully calculated plan? Or perhaps you are someone, like me, who longed to be an intuitive eater, but who didn’t have the patience to learn some of those boring, tedious left brain steps prior to firing up the power tool. Wherever you are in your journey, consider building your own toolbox. Chances are, when the rough waters of life come lapping up the side of your boat, you will have the right tool for the job. HN
This year’s Ultraman, which became a Hammer Nutrition-sponsored event in 2010, was completed just before we went to press. Still, we had to make room to congratulate two of our longtime “Super Women” athletes, Shanna Armstrong (Lubbock, Texas) and Suzy Degazon (Glendora, Calif.), for their successful completion of yet another edition of this grueling race.

Shanna, an eight-time competitor and six-time champion had yet another great race, competing in what was undoubtedly the strongest women’s field in the race’s history. Amber Monforte of Reno, Nev., took top honors and broke the 21-year-old Ultraman women’s record by over an hour and a half, with a blazing time of 24 hours, 7 minutes, and 11 seconds. Hillary Biscay of Tucson, Ariz., came in second place, breaking the old record as well, with a time of 24:40:28. Shanna also broke the old record and finished a mere 3 minutes, 29 seconds behind Biscay. Her overall time of 24:43:57 was her fastest ever (by over an hour), and placed her third amongst the women and eighth overall. An outstanding accomplishment!

Suzy is even more of a fixture at Ultraman, having competed in the race an unprecedented 13 times. The real kicker? She’s now successfully completed it 13 consecutive times, a phenomenal achievement, this year in a time of 32:08:38!

The Ultraman World Championships Hawaii is a three-day event that took place on November 26-28, 2010, on the Big Island of Hawaii. The field is limited to 40 participants, so you know that whoever competes in this event has paid their dues. And you’ll most certainly have wanted to pay your dues with this kind of schedule. Check this out:

Stage I begins with a 6.2-mile ocean swim, which is then followed by a 90-mile bike ride. Stage II is a 171.4-mile bike ride that contains 8,600 feet of climbing. Stage III is a 52.4-mile, double-marathon run. Each stage must be completed in 12 hours or less, with the recommendation that the swim be completed in 5.5 hours or less. Anyone not finishing any of the days’ stages within the 12-hour limit is disqualified.

Congratulations to both Shanna and Suzy on their superb efforts at this year’s Ultraman World Championships Hawaii! More information, results, bios, and photos from this and previous years can be found at ultramanlive.com. HN
Sorry, John. We’ve got this one taken care of!

Taking Race Caps Supreme is like putting fresh spark plugs in your body, ensuring consistent, efficient energy production!

ORDER TODAY! 1.800.336.1977 / www.hammernutrition.com
The course rules and information for the 24 Hours of Starvation Ridge are enough to make even the most serious motocross rider reconsider: "Be sure to duck when you go into the barn. Weather permitting, we will have a fire obstacle. Be careful of the thorns in Grayson’s Briar patch." And last but not least, "We will be going through the farmhouse again."

Add to that the sloppiest, slimiest, muddiest conditions imaginable, and you have the 2010 edition, the toughest course to date. Held annually on Halloween weekend in Goldendale, Wash., 24 Hours of Starvation Ridge is one of the most intense off-road motorcycle events in the country. Hammer athlete Dennis Cromwell fought it out solo for 24 hours (28-mile laps through the muck, rain, and hours of darkness) and finished 4th. "It had rained most the week before the race, and it rained for most of the day and night of the race, turning the clay dirt into slime," Dennis “DJ” reported. "The night was also very foggy, so visibility was quite bad. The course was one big mud track after the first lap, forcing you to work twice as hard just to keep your balance."

To train for an event of this intensity, in addition to long hours on the bike and shorter competitions, Dennis cross-trained on his mountain bike. "I rode my mountain bike mostly during daylight hours after work, but also at night too, to get used to night riding. I have young kids and a trailer that hooks to the mountain bike; with a busy life, I would have to take the boys with me sometimes, so I would pull them behind me in the trailer, including riding grass soccer fields for extra work," Dennis said.

His training paid off—more than half of the participants posted a DNF due to the intense conditions. After 24 hours, covered in "muddy glory," Dennis took home the fourth place "Ironman" solo division trophy.

"Even though this was the hardest race of my life, this is the first endurance race that I have felt good internally the whole time," Dennis said. "My mind was clear and I had no worries about how to fuel my body. One of the hard parts of off-road motorcycle racing is the logistics of separate bottles to drink from for water and for Perpetuem. I was excited when I saw you released Perpetuem Solids just in time to order for the race. I fueled on Perpetuem Solids, Endurolytes, and Anti-Fatigue Caps, and for the last 12 hours I also used Energy Surge to stay alert."
When we race—no matter the event or the distance—the goal is to go from Point A to Point B as quickly as we possibly can. The definition of "quickly" is different for each one of us, but the goal is the same. No matter the distance we cover—a 5K to a marathon, a 40K cycling TT to RAAM, an Olympic distance triathlon to an Ironman—whether or not we hit a PR can be dependent on many factors. One of these factors, in large part, can be the single biggest determining factor in your quest for success.

The majority of world records (nearly 100% of them) are achieved through negative splitting. Negative splitting is where you cover the second half of a race more quickly than the first half. Very few world records are achieved through even splitting—the first and second halves of a race covered in equal time—and (to my knowledge) none are achieved through positive splitting (second half slower than the first half).

The reason for this is that if we go out too hard in a race, our bodies rebel and shut down as fatigue and lactate mounts. Our bodies can no longer deal with the build-up of these detriments and, thus, slow us down so it can better cope. As a race or workout progresses, we are also dealing with cardiac drift, which means that at a static level of effort our HR will rise during the course of the workout/race, because as time passes, it becomes harder for our bodies to deal with the fatigue and/or lactate. Thus, it becomes harder to hold a given pace, and we have to work harder to do so as we cover more distance.

So, that being said, it is better to start out conservatively and really hammer it home the second half of a race. When we are fresh, it is easier to exert ourselves, so we need to be careful to pull the reins in at first. Otherwise, we go out too hard and pay the price (sometimes dearly) later. For example, let’s say your goal was to run a 31:15 for the 10K (5 minutes per mile pace). Let’s assume this is a realistic goal but one, that for you, is a real stretch. If you start out at 4:45-4:50 pace, you’ll feel like you’re going out fast but in control. You’ll hear the first mile split and be excited that you’re going out fast but in control. You’ll hear the first mile split and be excited that you’re ahead of pace. But, by mile 4, you’re struggling to hit 5:20-5:30 and you finish the race at 32-and-change (and disappointed).

However, if you started out at 5:10 pace, you would feel like you were going out "way too easy." Yet, by mile 4 you would be really challenging yourself to hit 5:00 pace. But because you were more conservative at the front end of the race, you can push yourself harder as the race goes on. You really kick it in (maybe even crack 5:00 on a couple of the miles) and finish in 31:18, right on target!

In closing, it’s easy to feel strong and go fast at the beginning of a race. It is the best of us that saves our best efforts for the second half of our races so that our results are the best they can be. *HN*
It’s been a long season for the Hammer Nutrition four-person “working men’s” (read: non-professional, full-time employees) mountain bike team. After a hard-earned win in Spokane and a dominating victory in Canmore, the team’s toughest challenge came at the mecca of mountain biking—Moab, Utah—beginning at noon on Saturday, October 10th and finishing at noon on Sunday, October 11th. With the 24 Hours of Moab race also being the USA Cycling 24-Hour National Championships, Team Hammer Nutrition knew that all of the “big guns” were going to be there, including teams comprised partly-to-soley of professionals.

As is the case with all 24-hour mountain bike races, the goal is pretty basic: cover the most laps in the fastest accumulated time over a 24-hour period, and you’re the winner. That may be simple, but the course at Moab is anything but, with its oh-so-difficult, ever-changing, and body-bashing terrain that required full concentration the entire length of its 15+ mile circuit.

Once again, the “Hammer Working Men’s Team” of Matt Butterfield, Phil Grove, and Dustin Phillips provided the horsepower. Jason Keister, who played an integral part in both victories...
earlier in the year, decided to sit this one out, so we recruited Colin Cares, a Hammer Nutrition athlete and up-and-coming rider from Colorado Springs, Colo. I was once again the team’s crew chief, and Noah Young was enlisted to take care of all things bike-related.

Based on previous results and our lineup for this race, I knew we had a great team ready to lay it all on the line. However, as mentioned earlier, a lot of great teams were there to stake their claim at winning a national title. After reviewing the stellar lineup of four-person teams, I knew that while we were most definitely going for the win, a podium finish would be a remarkable achievement.

Per usual, Dustin did the LeMans start and rode a superb 13 minute, 4 second lap, good enough for 3rd place as he handed off the timing chip and baton to Colin, who blazed a sub-hour lap. Matt took over on the third lap and powered to a strong 1:02 circuit. After that, Phil rode a 1:04:38 lap, which was not as fast as he or any of us had expected, but quite remarkable considering he had broken his chain about two miles from the finish. With one full rotation complete, Team Hammer was riding strong and most definitely in contention, currently in 2nd place. Unfortunately, the Colorado-based Honey Stinger/ Trek team, comprised of all-professional riders, was already flexing its muscle. With the first four laps tallied in 58:32, 59:27, 58:18, and 1:01:16, they had built a nearly 16-minute lead over the rest of the field. With the amount of dust, mud, and sand that covered every inch of the Moab course, the “one and done” tactic with the bottles was definitely the route to go. I also “stayed the course” when it came to pre- and post-lap supplementation, with each rider having premade containers of various Hammer Nutrition supplements (Race Caps Supreme, Anti-Fatigue Caps, Endurance Amino, Endurolytes, and Mito Caps) and post-lap containers of Race Caps Supreme, Mito Caps, Super Antioxidant, AO Booster, and Endurance Amino, with the occasional use of Tissue Rejuvenator and Xobaline. Of course, each rider had a fresh Blender Bottle of whatever Recoverite flavor they preferred ready for consumption upon completion of each of their laps.

On top of it all, we had the Hammer coach, the ultimate in race support. Being able to get away from the elements, lie down, and do an EMS “active recovery” session after each lap gave us as much advantage as any team could hope for.

Undeterred, the guys from Hammer kept the heat on, aided greatly by Noah, who was doing a superb job in keeping the bikes running smoothly. In addition to providing motivational support and keeping track of split times, I made sure the guys were properly fueled prior to and after each lap. The pre- and during-lap fuel consisted of three options: Hammer Gel and Endurolytes, Hammer Gel and Endurolytes Fizz (yep, we had some of but a handful of samples available to use), or HEED. As we did in Canmore, I made sure every rider had a fresh new bottle to contain fuel. With the amount of dust, mud, and sand that covered every inch of the Moab course, the “one and done” tactic with the bottles was definitely the route to go. I also “stayed the course” when it came to pre- and post-lap supplementation, with each rider having premade containers of various Hammer Nutrition supplements (Race Caps Supreme, Anti-Fatigue Caps, Endurance Amino, Endurolytes, and Mito Caps) and post-lap containers of Race Caps Supreme, Mito Caps, Super Antioxidant, AO Booster, and Endurance Amino, with the occasional use of Tissue Rejuvenator and Xobaline. Of course, each rider had a fresh Blender Bottle of whatever Recoverite flavor they preferred ready for consumption upon completion of each of their laps.

Still, the strength, determination, and spirit that had seen Team Hammer Nutrition to two victories in 2010 wasn’t about to give up or go away. Noah kept the bikes and lighting systems dialed in perfectly, and I made sure to keep the guys on their fuel and supplement schedule, while also keeping track of where our competition was. And the riders? Well, they never let up, riding each and every lap with conviction and a hell of a lot of heart. If first place was out of reach, second place wasn’t going to be given away that easily, and there was no way they were going to let any chasing teams take away a podium spot.

Two-man championship – Stars and Stripes for Hammer duo!

Ben Parsons and Clint Muhlfeld are two Montana riders who have had excellent seasons. Highlights for Ben included a second place finish at the Cascade Creampuff 100 (the course being anything)
but a “creampuff”), following that up with a hard-earned, well-deserved win at the brutal Butte 100. Parsons and Muhlfeld joined forces as a two-man team for the Break Epic in Colorado, which consists of 251 miles and 42,000' of climbing over six days. Unfortunately, after building a sizeable lead, their race ended one day early as Clint crashed in the last few moments of Stage 5. Clint was taken to the hospital for reconstructive surgery . . . his body needed a little repair but when Moab time came he was ready to go, both physically and mentally.

I had worked with both of them regarding their fueling and supplement strategy and seeing how well it had worked at the Breck Epic, I saw no reason to change things up much at all. Their normal pre-lap routine was a serving of Hammer Gel and an appropriate number of Endurolytes shortly before the lap, with HEED in their bottles during the lap. Because of the short time they had to rest after each lap (as compared to a four-person team), that’s where I emphasized supplementation, focusing on supplements—Race Caps Supreme, Mito Caps, Endurance Amino, Anti-Fatigue Caps, Tissue Rejuvenator, Super Antioxidant, AO Booster—that would help them recover a bit while also prepping their body for the next lap. Because of the too-short time between laps, Recoverite was not an option so I suggested they use Sustained Energy or Perpetuem to provide both high-quality carbohydrates and protein.

That strategy, along with their support crew, not to mention their incredible talent, was the ticket for success. Taking the lead from the get-go, Parsons and Muhlfeld kept cranking out strong lap after strong lap, earning the top spot on the podium, and achieving National Champion status. Parsons would later write:

For twenty-four hours straight, Clint and I would take turns pounding out a 15-mile convoluted loop through the desert under perfect conditions and challenging terrain. I have competed in a couple of 24-hour events as a four-man team and have learned what works well for me nutritionally, as well as how much effort to put out each lap. You wouldn't think that racing as a duo would be that much different, but the race takes on a completely new character.

Everything from pace setting, maximizing rest off the bike, calculating risks, to fueling is amplified. Small mistakes add up quick when it’s one hour on, one hour off. Overfueling or underfueling can take you down a spiral that takes more than a couple of laps to recover from. I remember the initial excitement for the race wore off long about midnight when I had already done two laps in the dark, and I realized the night had just begun. Going out for night laps required intense focus to find the best lines to minimize wasted energy. It was easy to start thinking of the negatives when I already felt like I had done plenty of racing but the event was only half over. Time off the bike was also intense. The mind and body could never shut down, and I didn’t want it too. But at the same time, it was pretty wearing to stay on top of the game and not lose focus or motivation for 24 hours straight.

We had our supplements and fueling dialed and with the help of my dad and the rad boys of Shimano, our bikes and lighting were well taken care of, allowing us to focus on fueling and recovery. After Clint finished our final lap, we were so overjoyed that we had put together such a clean race while continuing to put time into the other teams that we may have shed a tear or two. Neither of us really thought we’d get to come home with a National Championship to add to our palmares. What a dream come true!

Cary Smith – An outstanding culmination to a supreme season

Cary Smith of Jackson, WY is one of the nicest guys you’d ever want to meet. He also happens to be an amazing athlete who has put together one of the most outstanding seasons a solo ultra distance mountain bike racer could dream of.

"I recently rode in the 24 Hours of Moab and was very impressed by how polite and friendly your Hammer team riders were. My teammates, the Mud Honeys, agree that Team Hammer was the best! In the middle of the night, it was so awesome and encouraging to hear them say “great line” or “good job” instead of the typical grunt or “rider on the left” while being passed as if standing still. Please pass on to the team/athletes a huge thank you for their great attitudes and encouraging words! Keep up the strong work!” - Megan S.
With victories at a number of tough 100-mile mountain bike races—Pierre’s Hole, High Cascades, and Creampuff—one would think that’d be plenty of racing (and suffering) for one season. But Hammer-sponsored Smith wasn’t about to pass up an opportunity for a top finish at Moab.

In correspondences with him, it was clear that he had his fueling and supplementation pretty well dialed in; I merely confirmed what he was already doing, while offering a couple bits of advice to help ensure a successful race in Moab. During the race, while my primary responsibility was to take care of our four-man team—and to some extent, the Hammer-sponsored two-man team—I felt compelled to wander over to Cary’s pit area to chat with his crew (and with Cary, if he had stopped for a short spell).

What I found was a highly organized, well-meshed team that knew how to take care of their rider, and a rider who knew how to pace himself properly over the long haul. While Colorado-based riders Josh Tostado and Kelly Magelky had first and second places well secured for the majority of the race (and at its end, second places well secured for the majority of the race and at its end, with Tostado ending up winning), Smith rode a most-intelligent race, one with properly over the long haul. While I used to run marathons… never fast, not a star, didn’t win any, but did run more than 30, as well as 10 ultra marathons with distances of up to 50 miles. Many long distance motorcycle riders have similar backgrounds in some type of endurance sport. There is something satisfying in the strategizing and execution of a plan, to be able to say, “I did that!” And, essentially, I did 10,000 miles on my own.

Summary

It’s pretty evident that Hammer Nutrition was well represented at this epic race, with top finishes in the men’s solo, two-man team division, and four-man team division. Congratulations to each and every one of you for laying down some awesome results! HN

About a year ago I signed up for the MERA 10'n10, a 10-day, 10,000-mile motorcycle rally throughout the good ol’ U.S. of A., with a “typical” scavenger hunt format. Using a bonus pack provided by the rally master, each rider maps their own route to obtain points for photos, receipts, or answers to questions. In the end, the rider with the most points—with at least 10,000 new odo meter miles—takes home the title. Let me tell you, it takes about a year to prepare for this endeavor: the bike, the business schedule, the finances, and of course, fitness.

In preparation, most successful rallyists have a physical training program that includes weights, aerobics, and good nutrition…all of which aids in spending long hours in the saddle. Endurance motorcycling can require 3,000-4,000 calories per day; for a fueling plan, I use (almost exclusively) Hammer Nutrition products. In fact, I think in 10 days, other than Hammer Bars and Hammer Gel, I consumed two 6-inch Subway sandwiches and another 6-inch sandwich from a deli, plus some corn and cottage cheese at my sister’s house. I don’t eat much solid food while on the road; I take supplements and Endurolytes along with copious amounts of water—a gallon or more per day.

My plotted route began in Salt Lake City and included a leg from California to Nevada via Yosemite, Daniel Boone’s birthplace in Missouri, the Indianapolis 500 Motor Speedway, and Mount Rushmore. I rode through 100-degree temperatures in the Midwest and 30-degree temperatures in Yellowstone with snow lining the road. I intended to ride the Beartooth Highway pass in Montana and tried, but after 20 miles or so, I was turned around by a nice lady with a flag, who said it was closed due to snow and construction.

Before crossing the finish line in Salt Lake City, I also passed through the site of the Wounded Knee Massacre, cruised Chicago, caught a sunset at Lake Superior, and visited Wisconsin. After collecting points from all the spectacular places I’d been, I finished 11th with approximately half the points of the winner.

For those who like stats:
• A total of 10,101 miles in 10 days
• 152 hours, 6 minutes of ride time
• 33 hours, 8 minutes of stopped time – that does not include Indy, motel sleep, etc.
• 66.5 mph running average
• 54.6 mph overall average
• My weight loss: about 7 pounds

By the way, after the awards banquet, I slept almost 11 hours, and then it was time to hit the road for home—800 miles in 11 hours of running time, with 39 minutes of stopped time. My route took me through a 114-degree day in Death Valley; my overall average speed was 70.4 mph…now those are some stats I am proud of!

I used to run marathons… never fast, not a star, didn’t win any, but did run more than 30, as well as 10 ultra marathons with distances of up to 50 miles. Many long distance motorcycle riders have similar backgrounds in some type of endurance sport. There is something satisfying in the strategizing and execution of a plan, to be able to say, “I did that!” And, essentially, I did 10,000 miles on my own.

Thanks to all for your support and interest.

Peter Perrin, Long Distance Motorcycle Adventurer—with pride! HN
Last September I had the opportunity to travel to Dijon, France and participate in the annual Randonnée des Grands Crus de Bourgogne. The invitation came from my longtime friends René and Jeanine Tabacchi and my new friends—since doing this ride in 2008—Yves Paillard, the president of the Randonneurs Dijonaise, and his lovely wife, Janine. I was extremely fortunate to be accompanied on this epic trip by three of my best friends: Steve Born and Hammer Ambassadors Danny Beck and Doug Augustine from Newnan, Georgia. I was even more fortunate that my dear friend Carlo Vanini and his wife, Patricia, were able to make the ride, as were 10 of the Italians who I usually ride with in Italy each summer. Having them join us for a festive dinner on Saturday night and then for the 150-kilometer ride itself on Sunday was simply the top of the tops.

During our weeklong visit to Dijon we did some amazing rides with the nicest group of guys you could ever hope to meet, enjoyed even more amazing scenery, ate unbelievably delicious meals, sampled some of the finest wines from the area (not available in stores, only private cellars), and saw glimpses of the rich history with which the area is oozing. To cap off the trip, we spent three days in Paris sightseeing and people watching with René and Jeanine, except when we went out looking for Jägermeister in the Latin Quarter.

Steve and I have done a lot of riding together over the past 11 years, but not in France. In fact, he had not been there since 1987 when he and a small group followed the Tour de France for several days, culminating with Steve and a couple of the others riding their bikes down the Champs-Élysées in the middle of the night. But that's a story you'll have to ask Steve about the next time you see him. I can tell you that taking Steve to the Burgundy wine country was like taking Elvis's biggest fan to Graceland for the first time, and that is not an exaggeration. He knew more about the wines we were drinking than some of the owners, who happily uncorked their rarest or favorite vintages. Numerous wines from a few of the nearly countless Burgundy appellations and subdivisions such as Pommard, Nuits-Saint-Georges, Gevrey-Chambertin, Corton, Chambolle-Musigny, Vosne-Romanée—and vintages all the way back to the 1970s—were the order of the day . . . after several hours in the saddle and a good meal, of course.

Danny and Doug had never been to France before, and they were more than stoked to take their second “once in a lifetime trip” with me in the past 15 months. (They accompanied me on a bike trip to Italy in June of 2009, but that’s another long and hilarious story.) I met Doug and Danny at the 2006 and 2007 Hammer Highline weekends in Montana.
(let’s just say that they were the life of the party) and we’ve been close friends ever since. You couldn’t ask for three nicer guys to travel with—fun, eager and always ready to grab the check before one of our gracious hosts.

We all arrived at the Charles De Gaulle airport at more or less the same time on Tuesday morning, the 7th of September. I had rented a large nine-passenger van to haul all of our bikes and gear down to Dijon. We had a nice home-cooked dinner that night with René and Jeanine, and had a glass or two of wine before walking down the hill to our hotel.

Much to our surprise, a group of eight randonneurs were waiting for us in front of our hotel at 8 a.m. on Wednesday to take us on a beautiful 100-kilometer ride along the canal and on quiet country roads west of Dijon. After the ride, it was lunch, sightseeing around Dijon, and then a festive dinner near their hotel and the start of the ride.

Sunday was an epic, sunny day that was just perfect for the grape harvest and for a long ride through the vineyards. The photos just don’t do justice to the majesty we witnessed that day. With post-ride awards presentations and a party for all of the volunteers who worked the event, it seemed like Sunday was the longest day ever, but it was so fun that we didn’t want it to end. On Monday we did a two-hour spin, packed up our bikes, and did our final bits of sightseeing and souvenir shopping in Dijon. We drove to Paris on Tuesday morning, dropped off the van, and headed to see the sights. During the day, I showed the men my favorite places from my childhood visits to this classic city, including the White Lotus, a famous Vietnamese restaurant frequented by French politicians including Chirac, Sarkozy and dozens of others. We were also treated to a special award and an extended private tour of the National Assembly by Bernard Depierre, the current minister of sport and a longtime personal friend of René.

It was an epic trip and one that I know we’ll all cherish and remember for years to come. Those of you who would like to see the rest of the photos from this journey can view them at www.hammernutrition.smugmug.com in the Randonnée des Grands Crus de Bourgogne Gallery. This year’s ride is set for September 11th and I hope to bring a larger group of friends, clients, and ambassadors. Interested in joining us? While I cannot promise you the exact same experience we enjoyed in 2010 (private wine cellars, tour of the National Assembly), nor is this an organized event such as our Tucson training camps, I can promise you a “once in a lifetime experience” with my French friends.

I’ll set the dates and make all of the arrangements for cars, trains, hotels, meals, and such. All you need to do is get yourself to Paris and back, and cover your expenses on the ground while in country. Email me at suggestions@hammernutrition.com if you are interested in coming along. HN
he number of school age children coming to school obese is growing each year. Could genetically altered corn syrup be part of the cause?

Obesity in children has tripled over the past 30 years. While sedentary lifestyles contribute to being overweight, recent research is showing that the production of some foods may greatly contribute to weight gain.

HFCS — High Fructose Corn Syrup

High fructose corn syrup didn’t exist until 1957. Researchers named Marshall and Kooi developed an enzyme called glucose isomerase. This process rearranged the molecular composition of glucose and converted it to fructose. When natural glucose in corn syrup is altered and becomes fructose, it becomes much sweeter.

While the discovery of fructose may have benefited the corn growers, this process did no favors for the health of our children. During this time, sugar prices also increased making production of food products more expensive. Having fructose available seemed to be an economic solution to sweetener use.

In 1984 Coca-Cola and Pepsi began using the high-fructose corn syrup and production grew from 3 million tons in 1980 to 8 million tons in 1995. Fructose was off and running. Fructose began to replace sugar because it was sweeter and it took less of it to sweeten a product. Today, 42-55% of fructose has been genetically altered.

Mercury Found in High Fructose Corn Syrup

A study published by the Minneapolis-based non-profit Institute for Agriculture and Trade Policy (IATP) expressed great concern about the genetically altered fructose. Dr. David Wallinga, the director of IATP’s food and health program, tested
55 products that contained fructose. Detectable levels of mercury were found in 31% of the foods. Mercury has been linked to disabilities and other educational issues. Since fructose is not a natural food, the body does not react to it like a normal food item.

"Most carbohydrates containing sucrose, glucose and unaltered fructose cause our pancreas to create insulin. This in turn allows these sugars to be broke down into energy and then triggers our brain that we are full. High fructose corn syrup, on the other hand, does not cause the pancreas to produce insulin. HFCS goes straight to the liver where it is then treated like a chemical and turned to fat." [1]

The safety of fructose continues to be debated. Some believe that fructose is a contributing factor to behavior problems and learning disabilities. A recent study by prestigious Princeton University states that high fructose corn syrup caused a more significant weight gain in laboratory animals that sugar. While sugar has been blamed for several years for weight gain, it now looks like it is not sugar but fructose.

**Fructose is a Hidden Ingredient in Many Food Products**

A recent article in the LA Times reported that the Corn Refiners Association has decided to change name glucose to "corn syrup" to evade the bad reputation fructose has developed. Unfortunately, the genetically altered substance will retain the same composition.

Since 1977 more food items contain sugar. Fructose has gained volume over sugar. Many food products contain fructose without the consumer knowing.

- sugary cereals
- toaster pastries
- soft drinks
- juice pouches and boxes
- jams and jellies
- salad dressings
- sauces
- ketchup
- canned fruit
- cookies
- crackers

In addition to the above, some other food items surprisingly contain fructose:

- canned ravioli
- pasta meals
- canned soups
- peanut butter
- breakfast or snack bars
- boxed stuffing
- vegetable drinks
- coffee
- energy drinks

Reading labels is imperative. Food sources should be "back to the basics" purchasing fresh fruits, vegetables and proteins. While real sugar is preferable over fructose, neither is a healthy choice.

If children coming to school have begun their day with a soda, a Pop-Tart, and a sugary cereal, it is no wonder that we have tripled obesity rates.

[1] Dr. Claudia Anrig (For more on Dr. Anrig, please see www.drclaudiaanrig.com/main_about.html). HN
Endurolytes Fizz

How it Compares to Endurolytes Capsules

BY STEVE BORN

Endurolytes Fizz (introduced recently along with Perpetuem Solids) is the newest member of the Hammer Nutrition lineup of superior, high-quality fuels. This great product gives you yet another option—and a deliciously refreshing one at that—to fulfill your body’s electrolyte requirements.

As we mention in other articles and in various places on our website, each Endurolytes Fizz tablet is equivalent to approximately two Endurolytes capsules. We say “approximately” because the two formulas are slightly different by necessity. We’ll explain why in a bit.

As you can see from the chart below, each Endurolytes capsule contains 100 mg of salt, which is comprised of 40 mg of sodium and 60 mg of chloride. Half of an Endurolytes Fizz tablet contains 100 mg of sodium (in the bicarbonate form) and 30 mg of chloride (in the calcium chloride form). So when comparing the sodium and chloride components of both, there is more sodium and less chloride in Endurolytes Fizz than there is in Endurolytes capsules. However, the net total of both of those mineral components combined is extremely close. There’s only a 30 mg difference between the two, with one Endurolytes capsule containing a total of 100 mg of sodium and chloride combined, and one-half of an Endurolytes Fizz tablet containing a total of 130 mg of sodium and chloride combined.

Other differences between Endurolytes Fizz and Endurolytes Capsules

1. It was necessary to use bicarbonate forms of sodium and potassium—and more total sodium in Endurolytes Fizz than in Endurolytes capsules—in order to achieve the desired effervescent properties.

- continued on page 61

---

### FORMULA COMPARISON

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Endurolytes (one capsule)</th>
<th>Endurolytes Fizz (one-half tablet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM</td>
<td>40 mg - as Sodium Chloride</td>
<td>100 mg - as Sodium Bicarbonate</td>
</tr>
<tr>
<td>CHLORIDE</td>
<td>60 mg - as Sodium Chloride</td>
<td>30 mg - as Calcium Chloride</td>
</tr>
<tr>
<td>CALCIUM</td>
<td>50 mg - as Chelate</td>
<td>50 mg - as Calcium Chloride and Calcium Chloride</td>
</tr>
<tr>
<td>MAGNESIUM</td>
<td>25 mg - as Chelate</td>
<td>25 mg - as Magnesium Oxide</td>
</tr>
<tr>
<td>POTASSIUM</td>
<td>25 mg - as Chelate</td>
<td>50 mg - as Potassium Bicarbonate</td>
</tr>
<tr>
<td>VITAMIN B6</td>
<td>6.6 mg - as Pyridoxine HCL</td>
<td>6.5 mg - as Pyridoxine HCL</td>
</tr>
<tr>
<td>MANGANESE</td>
<td>1.6 mg - as Chelate</td>
<td>1.5 mg - as Manganese Gluconate</td>
</tr>
<tr>
<td>L-TYROSINE</td>
<td>50 mg</td>
<td>50 mg</td>
</tr>
</tbody>
</table>

"You guys surprise me with your customer service every time I buy something." - Dennis Y.
2. Because we needed to use more sodium bicarbonate in Endurolytes Fizz, the formula required slightly less chloride. That was the only way to have both sodium and chloride in the product without ending up with a jumbo-sized tablet. That same principle applies to #3.

3. The amounts of actual (elemental) magnesium, calcium, and manganese are the same in both Endurolytes (one capsule) and Endurolytes Fizz (one-half tablet). However, for Endurolytes Fizz to contain the same total elemental volume amount of these three minerals as Endurolytes capsules, we had to use different forms, ones that contained more elemental amounts of those minerals in the compound.

Amino acid chelate forms of magnesium, calcium, and manganese contain less elemental amounts of these minerals than magnesium oxide (as a source of magnesium), calcium carbonate (as a source of calcium), or manganese gluconate (as a source of manganese). Basically, if we were to use an amino acid chelate in Endurolytes Fizz, the tablet would be gigantic.

4. Another reason we chose magnesium in the oxide form, calcium in the carbonate form (as well as the chloride form), and manganese in the gluconate form is because these chelating agents do not inhibit the effervescent reaction process and in some cases aid in the process. Conversely, an amino acid chelate (as is used in Endurolytes capsules) would severely inhibit and perhaps even halt the process. Our goal was an Endurolytes Fizz tablet that would dissolve as quickly as possible in solution, which is the primary reason why these particular forms of minerals were chosen.

5. The amounts of potassium are higher in one-half tablet of Endurolytes Fizz (50 mg) than in one Endurolytes capsule (25 mg). As mentioned in #1, the formula required more bicarbonates in order to achieve the effervescent properties we wanted while also helping to maintain a fairly close sodium-to-potassium ratio (62.5% in Endurolytes capsules, and 50% in Endurolytes Fizz).

6. The amounts of vitamin B6 and L-Tyrosine are the same in one Endurolytes capsule and one-half tablet of Endurolytes Fizz.

Summary

It is neither practical nor possible to have an exact replicate of an Endurolytes capsule in an effervescent tablet form. However, when comparing the two they are very similar in terms of electrolytic mineral makeup and volume, so we believe that you can dose them similarly. HN
The 27th edition of this epic Hammer Nutrition-sponsored race, which began October 2, was the second largest ever, with 202 cyclists entered: 20 solo racers and 120 racers comprising the relay teams of various configurations. This California ultra cycling race begins in the Los Angeles County city of Santa Clarita, heads north and enters Death Valley from the west, rolls through the valley, passes the lowest point in the U.S. (Badwater, 282 feet below sea level), exits the valley via the difficult Jubilee and Salsberry Passes, negotiates several more arduous climbs, and finally finishes in Twentynine Palms in the Mojave Desert.

Billed as “The Toughest 48 Hours in Sport,” one of ultra endurance’s toughest endeavors covers 508 miles and ascends 10 mountain passes, totaling 35,000 feet of elevation gain. Additionally, the race is contested mostly on desert roads, which means less-than-ideal pavement and usually in typical desert climactic (read: hot) conditions. This combination of distance, terrain, and road/weather conditions makes for a uniquely difficult challenge. Although temperatures typically play a key role in determining the outcome of the race, conditions at this year’s 508 were, for the most part, fairly tolerable (not quite so hot and not nearly the kind of winds that racers competing in the 2009 edition had to endure). In fact, there were areas where rainstorms occasionally blew through, creating some thick mud accumulations on the roads . . . highly unusual! Still, the mostly decent weather conditions, along with the quality of the field, allowed for a slightly higher finishing rate: 69.5% for the solo riders and nearly 98% for the team division racers.

Hammer Nutrition was well represented at this year’s Furnace Creek with many a competitor using Hammer supplements and fuels, and flying the Hammer colors. One of those racers was 52-year-old Terry Lentz of Templeton, Calif., who set a new 50+ men’s solo record of 29 hours, 19 minutes, and 35 seconds. Just as impressive a feat, Terry’s time set a new Classic Bike course record. What makes this one-of-a-kind division so unique (no other ultra cycling race, to my knowledge, has such a division) is that it requires the rider to race on technology from 1983 or older, meaning:

- Lugged steel frame and fork (but built in ANY year, including brand new).
- No more than six cogs on the rear wheel.
- 32 spokes per wheel minimum.
- Friction shifting on the down-tube or bar-ends (must be true friction shifters, not clickables set in friction mode).
- Toe clips and straps.

With cycling equipment evolving on a seemingly daily basis, Terry’s performance—which he talks about in the accompanying article—is quite the feat. Way to go, Terry!

Also representing Hammer Nutrition magnificently was the 4-woman “Hammer Frogs” team, making a return appearance to Furnace Creek after winning their division and setting a 4-woman team record of 32:39:33 in the 40+ age group (based on average age) in 2009. The California-based team of Lori Cherry (Fresno), Isabelle Drake (Laguna Beach), Jennie Phillips (Danville), and Jeanine Spence (Fresno) was determined to set a new record in the 4-women 50+ division; with such talent, along with THE veteran crew chief, Lee “Fuzzy” Mitchell, and armed with Hammer Nutrition supplements and fuels, they did just that in a blazing-fast time of 33:43:22. Read about their superb accomplishment on page 71.

One other team that shined in this year’s race was the 2-person Flying Voles team of Joel Sothern and Keith Laird. Competing in the 50+ division, their time of 29:46:52 was the fastest of all of the 2-person times in any age group division—by over three hours! Joel recently wrote us to say, “We both use your products during training and used them extensively during the 508. I used HEED, Sustained Energy, Hammer Gel, Endurolytes, Race Caps Supreme, Anti-Fatigue Caps, Hammer Bars, and Recoverite during the race, and Keith used Perpetuem, Hammer Gel, Endurolytes, Race Caps Supreme, Anti-Fatigue Caps, and Endurance Amino.” Congratulations, Joel and Keith!
Lastly, congratulations to Team Mustangs—Bill Albers, Debbie Albers, Marlies Radtke, and Patrick Seely—who used Hammer products to propel them to a win in the Two Tandem Mixed division. Furnace Creek is definitely not considered a super-friendly tandem course, but this team blitzed the course in a time of 32:42:33, after a race-long dual with Team Hammerdillo, which finished just over an hour back.

Once again, Hammer Nutrition was honored to support the Furnace Creek 508, and we congratulate all of the solo and team riders who competed in this year’s race. The 2011 edition is tentatively scheduled for October 8. You can find complete results from this and previous years’ editions of the Furnace Creek 508 at www.the508.com. HN
ATHLETE SPOTLIGHT:

Max King

INTERVIEW BY DUSTIN PHILLIPS
or those who haven't heard of Max King, he just celebrated his 3-year title reign at the 2010 XTERRA Trail Run National Championships. While Hammer Nutrition sponsors many elite athletes, not many are able to win national championships at the elite level while maintaining a working profession along with a family. I contacted Max for insight on what motivates him and to find out how he is able to balance his running and life.

MK: Well, let's just say I “tried” to make the transition to ultras—I would say I failed to some extent. I did have a few decent results but really I just scratched the surface with running 50 miles. I never did get up to 100 miles. The trail comes fairly naturally to me, though, and I do most of my running on trail and through the woods, so any transition I made was originally to the track and road . . . now I'm just coming home to where I really enjoy running and can excel at the event I was meant to be in.

DP: Obviously you have an impressive résumé, but you also have a real job as a chemical engineer. How does your job allow you freedom, or do they give you time off for these big events and the training necessary to stay on top?

MK: For the most part I’ve taken vacation for the time off, but really Bend Research is very supportive of what I do. Three years ago I went to part time because I needed some more time at home and for running; then they allowed me to take a year off to live and train in Eugene with the Oregon Track Club for the Olympic Trials. They gave me my job back when I was done, and I’ve been working back at full time since then. It’s tough, but it’s fitting the training around the rest of life. Sometimes it’s nice because I can concentrate on something else and come back to running later.

DP: You signed with Montrail this season and spent a fair amount of time in Europe. Had you run in Europe before, and how is the competition there different than here?

MK: Yeah, I was actually in Europe this summer twice. Once was for a training trip with Montrail/Mountain Hardwear President Topher Gaylord. We spent three days traversing the Mont Blanc Trail. It was epic—a once in a lifetime experience (although I’m hoping to do that again next summer). The next trip was the mountain running championships in Slovenia. It was similar to the other IAAF World Championship events I’ve competed at around the world and in Europe. We’re starting to get a lot of African countries competing in mountain running, making it a much more competitive event, similar to the World Cross Country Championships I’ve been to where I’ll be in the top ten of Europe/North American but finish 40th overall. It’s really incredible how fast guys are from Eastern Africa.

DP: I have been balancing family, work, and training for the last 10 years with varying degrees of success, though obviously not to the degree of your running success. How do you find a balance? Are you awake 20 hours a day and only sleep 4 (part of the chemical engineer’s secret)? I know that just last year you had a new addition to the family?

MK: Unfortunately I’m one of those people that needs 8 hours of sleep or more a night. It’s really kind of lame . . . just think how much more I could get done if I could sleep 4 hours a night. My secret is just going a million miles a minute and sacrificing a few things. Let me say that running usually isn’t the first to go. It has gotten more difficult with the new addition to the family, and I can already tell that it’s going to get harder. Micah is getting to the point where he’s a lot of fun and we can do more together. I’m not much of a baby person, but I do love kids. I think it’s because I never really grew up! (Trust me, my wife will vouch for that.)

DP: You currently live in Bend, Oregon, which is not as well known as Ashland, Boulder, or Flagstaff for runners. Is Bend a new hot spot for elite runners?

MK: It’s funny because there are quite a few elite cyclists, both mountain bikers and road, and elite cross country skiers, but for some reason Bend has never really caught on with runners. I’m fine with that, but with the great trails and training areas in town and very little snow in winter, I’m surprised it hasn’t.

DP: Running at the level that you do is clearly demanding. What are the precautions you take to ensure you stay healthy, because I wouldn’t consider it luck to be as injury-free as you are?

MK: I’ve been really lucky, plus the
MK: I always try to put good food in my body no matter what I'm doing. When I was looking at different nutrition products out there, Hammer Nutrition came across as having the cleanest, most scientifically supported products out there. Being an engineer, I can appreciate the amount of research and analytical effort that goes into Hammer products.

Since I've started running longer distances and harder terrain, nutrition has become much more important to me than it used to be in my track days. My main fuel for a long run will usually be a few Gels just for their ease of carrying a couple packets. After hard workouts and long runs, I always put down a serving of Recoverite. And the hardest part of race nutrition to get right is always the electrolytes, so the Endurolytes play a big role in getting me across the finish line in longer races.

DP: What is your favorite flavor Gel?

MK: My favorite for taste has got to be the new huckleberry. Mmm!

DP: Are you coached or are you on your own program, and why?

MK: Since college I've mostly been self-coached with a few coaches here and there, like when I was training in Eugene. For the most part though, I've had the best luck coaching myself. After running for a good part of my life, I've gotten to know my body pretty well; I know how much time I have to train, I can handle high-training loads, and I put it all together and it's worked out pretty well. That said, sometimes there's still a piece missing, so just recently I went to seek help from my college coach that I credit with getting me to the level I am at today. He has a way of motivating me that no one else has ever been able to.

DP: A goal for you in 2010 was to do Western States, which didn't work out (at least to my knowledge). Is this still a goal for you?

MK: Yeah, it didn't work out, but I think it was for the better. I stepped back and realized that I need to go in a slightly different direction for the time being. But, yes, WS is still in the plans, just a few years down the road. I'll get there someday.

DP: Since cross country isn't on the ticket for London, do you have hopes of qualifying for London in one of your other many disciplines?

MK: I'm working on getting in on the marathon; that's the primary reason I went back to my college coach. The marathon trials are the focus for the next year. Really wish they'd get XC in the Olympics though . . .

DP: Do you want to give a shout-out to anyone who has helped you through the past season or in past years?

MK: Wow, there are too many to name. I'm thinking I better thank my wife. She puts up with a lot so that I can do what I do. I feel like I'd be leaving a ton of people off the list if I only name a few, but I've got to put down Jerry Smith (coach), my fam, and I'll just say the general running community. It's like nothing else out there.

DP: That ought to do it. If there is anything you want to add, like if you volunteer (with all that free time) at a homeless shelter or something . . .

MK: No homeless shelters lately, but I think it's important to give back since I've received so much help from others over the years. I put together a local community performance running group that runs Tuesday nights. I write the workouts and hold the stopwatch, and hopefully help runners who want to push themselves and get a little faster. I've also been working with the middle school Junior Olympic XC program, just a little coaching and helping the kids get to state, regional, and national JO meets. There are some pretty phenomenal middle school cross country runners coming out of Central Oregon. Watch out! HN

As this issue of Endurance News was going to print, Max wrapped up his 3rd X-Terra World Championship title on December 5th. Congratulations Max!
Hi Hammer Nutrition,

This summer I gave myself a fierce case of tendinitis in my left knee while attempting the Leashville 100-mile run. (Live and learn right?)

The real problem lied in the fact that I had Ironman Kona in seven weeks and was now injured. I was very excited to have qualified for Kona this year, and I didn’t want anything to spoil my chances of doing this race. Having been thoroughly impressed with a wide range of Hammer products, I immediately ordered some Tissue Rejuvenator. I cut running almost entirely out of my training schedule and took four

Tissue Rejuvenator capsules twice daily with my other Hammer supplements.

Progress was gradual at first, but after five weeks (two weeks before Kona) I was once again able to do long runs without any pain whatsoever.

Thanks to Tissue Rejuvenator, I didn’t miss my chance to finish on Illi’s Drive! I would strongly recommend this product to anyone battling tendinitis or other joint injuries. Thanks for keeping me healthy!

Cheers,

Will Flanagan

Tissue Rejuvenator capsules twice daily with other Hammer supplements.

Progress was gradual at first, but after five weeks (two weeks before Kona) I was once again able to do long runs without any pain whatsoever.

Thanks to Tissue Rejuvenator, I didn’t miss my chance to finish on Illi’s Drive! I would strongly recommend this product to anyone battling tendinitis or other joint injuries. Thanks for keeping me healthy!

Cheers,

Will Flanagan

SPECIAL OFFER!

Get a FREE pair of Hammer socks when you place an order of $50 or more.

Ad code EN73T
Offer expires 3/31/11
Limit one. Offer valid while supplies last.

Joint health second to none!

- Reduce pain, inflammation, and swelling
- Increase joint integrity and mobility
- Stop NSAID use

SKU   MSRP
TH    $27.95

ORDER TODAY!
1.800.336.1977 / www.hammernutrition.com
After almost 10 months of intense training, Natalie Merrow successfully became the 191st person (per recorded crossings dating back to 1927) to swim across the Catalina Channel. Natalie, a Hammer athlete, started her challenge on Catalina Island just before midnight; she completed the 20-mile swim 13 hours and 50 minutes later on Terranea Beach in Palos Verdes, Calif.

The swim, in water temperatures at 60-66 degrees, was longer than she intended for it to take, due to several miles of strong current that forced her to swim diagonally. “The boat kind of shielded me from the wind, but it was still sloppy out. I had a bad headwind and fought that damn current the last six miles or so. It was hard and my shoulder was starting to feel weird each stroke on my left side. I needed my fueling feeds bumped to 15 minutes—I had to in the adverse conditions,” Natalie shared with Hammer headquarters.

“My fuel consisted of Orange-Vanilla Perpetuem (two scoops) and Mandarin HEED (one scoop) in addition to plain water. My fuel mechanism was brilliantly handled by my support team. It was two water bottles attached to carabiners with a flip top wide-mouth lid. The carabiners weren’t the typical ones, they were the kind that you had to push down on. It made it more secure out there and worked like a charm! I also had Gels in three flavors, Endurolytes, and Anti-Fatigue Caps.”

Just a few days after her swim, Natalie was already focusing on future challenges: “I was so happy and I was so proud of myself. I want more! Now that I conquered the channel, I want to swim the English Channel and the Manhattan Island Marathon swim (MIMS). It truly was the most amazing experience I have ever had and that high is the greatest thing you will ever have. I want it again! I am thankful for my family, my support crew, Hammer Nutrition, and for everyone believing in me.”

Splish, Splash all the way to Catalina!

BY VANESSA GAILEY

UPDATE:

Ryan Correy

BY VANESSA GAILEY

Sometimes, our greatest accomplishments are not in the results; they are in the pursuit. In Endurance News #72, we touched base with Ryan Correy, just a few weeks of training away from his attempt at the world spinning record of 8 days, 8 hours (longest time to continuously cycle on a spinning machine). Just short of 7 days (officially 6 days, 20 hours), Ryan surrendered his attempt and stopped spinning due to uncontrollable hallucinations. He reported that, in the end, his legs were fine but sleep deprivation proved insurmountable. He compared it to RAAM, which he has participated in, stating that while RAAM is more physically demanding, his spin record attempt was far more mentally draining.

Ryan’s pursuit of a Guinness World Record was an amazing feat of determination and endurance, and Hammer Nutrition congratulates Ryan on his attempt.
At Hammer Nutrition, one of the many joys of the job is hearing firsthand from our athletes about their astonishing and inspiring accomplishments. When we heard from ultradistance runner Connie Gardner in October, she had just completed 141.4 miles in 24 hours to take home the women’s 24 Hour National Championship title. And yes, we were impressed, but not surprised. Connie has been a dominant ultrarunner for years and was the second female competitor to cross the finish line at the Badwater Ultramarathon 2010. In the NorthCoast 24-Hour Endurance Run (the 2010 national championship race), this Hammer-sponsored Ohio athlete kicked it far enough to become the female champion and the second place overall winner. Her fueling strategy? We asked Connie to share some fueling tips:

I believe it was the Recoverite that got me through my summer of racing. Recoverite is what helped me recover from each race and move on to the next. I drink it after every training run. For 24-hour fueling, my crew made the Perpetuum into a gel consistency, offering me a flask about every 3 miles; I took a few ounces along with a bottle of water. After about 16 hours I switched, relying more on Hammer Gel. Four Endurolytes an hour rounded out my basic nutrition plan, and it really helped me “Hammer” it out.

BY VANESSA GAILEY

Don’t blame the spider!
He was just after her Hammer Whey.

Protein supplementation is absolutely essential for any hard-training athlete, 8-legged insect, or nursery rhyme character to maintain, repair, and grow lean muscle mass. **Hammer Whey**, ideal for supporting your immune system and enhancing recovery between workouts and races, helps you obtain the full amount of protein you need daily.

<table>
<thead>
<tr>
<th>SKU</th>
<th>MSRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>W/1</td>
<td>$2.95</td>
</tr>
<tr>
<td>W/24</td>
<td>$37.95</td>
</tr>
</tbody>
</table>

ORDER TODAY! 1.800.336.1977 / www.hammernutrition.com
Claims the Desert!
The 2010 Furnace Creek 508

By Terry “Chesapeake Bay Retriever” Lentz

I made a vow after the 2007 Furnace Creek 508 to never do this race again. That year I raced on a fixed-gear bike that I had built, and finished third overall in a time of 30 hours, 13 minutes—a very gratifying but painful experience. However, a “Classic Bike” division was introduced in 2008; the bike had to be 1983 or older technology. The idea of building the finest “Classic” bike I could dream up and breaking the Classic record had been hatched. Working on it for almost a year, I finished 10 days before the race—a little too close to race day for proper testing, break-in, and adaptation. But, the bike was beautiful with its stainless steel frame and Campagnolo 50th Anniversary components.

Through Panamint Valley, about mile 200, the sun was getting low as we approached Townes Pass. I had visualized the race 20 times in my head and expected to pass a few competitors there. It didn’t quite happen as gloriously as I had planned. It was a long climb, 10 miles of 6 to 10% grade with pitches of up to 13%. The downhill was a screamer: miles and miles of coasting during which my crew told me we hit speeds of up to 55 mph. I couldn’t believe I pedaled the whole way down on a fixed gear last time.

My feet started to hurt in my leather bike shoes. One of the “Classic” rules called for traditional toe clips with straps. The straps added pressure to the balls of my feet, causing them to heat up and swell. I told my crew we had better do something sooner than later. When we stopped, my crew pulled out a 2.5-gallon water container with the top cut open, filled with ice and water. I plunged both feet in. Their ingenuity saved me. I was good for hours after that five-minute stop.

Nutrition was based mainly on Hammer products. I knew I had to keep up my energy level. Gel was mixed in a 10:1 ratio of Vanilla and Raspberry flavors with water. HEED was used about every sixth bottle. We used Perpetuem as much as possible, mixing a pretty strong formula of 10 scoops per 21oz bottle. Some solid food was used also, consisting of half sandwiches. In all, our best estimates calculate we took in approximately 10,000 calories for this race.

It was during the 30-mile stretch on the Death Valley floor from Badwater to the base of the next big climb that I first saw, off in the far distance, the rear flashing lights from the crew vehicle of the rider ahead of us. As the road curved in and out of the desert slopes, the lights would appear and then disappear. They had a good lead; I didn’t think we’d ever catch them.

After Badwater, the trend was uphill—to my advantage. I’ve always been a decent climber, training on hills every day, and I planned to take advantage of this strength during the 35,000 feet of climbing in this event by having lost about 13 pounds by race day. At mile 300 we started up the four-mile Jubilee Pass climb, and the flashing lights ahead were definitely closer. A few miles into the climb, we came around a turn and found ourselves right behind Chris Ragsdale, the leader. It seemed like he sensed we were there and picked it up to try to hold us off. We followed them for quite a while. When it felt right, I went around their crew vehicle.

My crew told me later that this was the most exciting time of the race for them. Here we were in the darkness of the desert, with only the stars in the sky and the lights of...
Making a return appearance at the 508, Team Hammer Frogs hoped to set yet another 4-woman record; this year our sights were set on the 50+ age group record (based on average age). Lori Cherry, Isabelle Drake, Jeanine Spence, and I were a confident team going into the race, thanks to experience, a great crew chief (Lee “Fuzzy” Mitchell), and Hammer Nutrition fuels and supplements—the best around!

Jeanine was first in the saddle, giving us a great start on the stage from Santa Clarita to California City. From there, Isabelle took over and kept us going strong to Trona. The typical tailwinds did not show up this year, so darkness was upon us as Jennie mounted up and carried us into Furnace Creek. No strong tailwinds early on, though, meant that we did not have dangerous headwinds later, so the road from Furnace Creek to Shoshone was much safer than in 2009, much to Lori’s delight as she tackled that stage. The rotations continued in a similar order as we powered our way towards Twentynine Palms and thanked our lucky stars (pun intended!) that we avoided a torrential thunderstorm that caused flash flooding on the course about six to eight hours ahead.

Our finishing time was 33 hours and 43 minutes, earning us 1st place for 4-Woman teams and setting a course record for 4-Woman 50+ team. That also placed us 6th overall out of total of twenty 4-person teams (women’s, men’s and mixed).

As in 2009, the Hammer Frogs relied heavily on Hammer Nutrition® products.

Pre-measured packages of Sustained Energy, HEED, and Perpetuem abounded in the support van, while Hammer Gel flasks and other supplements (Endurolytes, Anti-Fatigue Caps, and Endurance Amino) were available in jersey pockets and even doled out to the rider straight from the van. Post-ride recovery consisted of Super Antioxidant, Endurance Amino, and Recoverite (sometimes augmented with Hammer Bars when the stomach was able to take on solid food). One teammate had some quad and calf cramping issues early in the race, but after quick consultation with her Hammer Frogs teammates, we had her taking more Anti-Fatigue Caps and Endurolytes. Problem solved—she recovered wonderfully for her next stage on the bike!

Job well done, Hammer! And thanks for your support to the Hammer Frogs for the 2010 edition of the Furnace Creek 508! HN
Life on a Chain
A Season with Tieni Duro Junior Cycling

BY LANCE LARSEN
Tieni Duro Mentor and Junior Cyclist father
with introduction by Dustin Phillips

As the second installment in a three-part series providing an inside look into the Tieni Duro Jr. Development team, this article is written with the flavor of “A Season in the Life Of.” Lance offers an opportunity to see how hard this program works for its riders and in turn how hard the riders work for the team’s success. As always, this success is built on commitment, leadership, proper training, and of course, nutrition. I hope you enjoy the nine-month “cliff note” version of the Tieni Duro season.

Campaign junior cyclists are accustomed to early morning wake-up calls. After all, the juniors are always the first race of the day in every form of road cycling . . . no sleeping in for these athletes. Still, the 4:30 a.m. alarm clock seemed particularly early on that cold December day. Nonetheless, everyone was excited to put the holidays behind them and leave the San Francisco Bay Area for the vast open spaces of the Mojave Desert. It’s winter field camp time, which means 11 kids, two coaches, and three mentors loading 16+ bikes, spare wheels, and gear into vans and heading 500 miles south for a week of training, lectures, adventure, and team bonding.

The last three months leading up to field camp have been filled with leisurely fixed-gear rides out to the coffee house, weekly long, slow group training rides, mountain bike adventures, and maybe even a cyclocross ride or two. But all of that is about to change for the 11 kids heading into the early morning dawn, and they know it; the season begins today. Results in the spring and summer begin with the efforts put in today. These are the hard facts that every seasoned cyclist understands. You get out what you put in.

The competitive junior cycling season is long, really long, and intense. Racing starts in late February and continues into October. For the athletes on Tieni Duro, that means working with their coaches on a structured plan that enables them to peak for specific events (usually 2 - 3 per year) while balancing the other aspects of their lives like academics, family, and work. Kids on the team range in age from 11 to 18, both boys and girls. The team has “newbies” riding right alongside California and U.S. National Champions. The club has been around for nine years, and prides itself in creating not only great cyclists but outstanding young people dedicated to the sport of cycling and their communities.

This article shines a light on the travails of the team throughout the 2010 season: From January winter training camp in Death Valley, California, to the U.S. Junior National Road Championships in Bend, Oregon. Along the way, the kids learn how to train, how to race, and how to be part of a high-performing team with a shared goal and a shared vision. Mostly though, it’s about creating friendships and memories that will last a lifetime. This is their story.

- continued on page 73

"Making chocolate chip bars as good as yours should be illegal." - Jason W.
Transition Stage: “Small Ring Only” Days

The coaching staff prohibits using “the big ring” during autumn, so everyone spins small gears at a high cadence, and the group rides are a lot slower, allowing new riders to “stay on” during training rides. In the autumn, Directeur Sportif Jason Kent works with Coaches Rick Moale and Shawn Rosenthal on the “yearly macroplan” that encompasses the traditional elements of a periodized training regimen: transition, preparation, and competition. The management team then puts together the funding and puts the organization behind the macroplan. Shawn works with each athlete to develop a personalized plan based on season goals and aspirations. For the older riders, this typically is power-based training (using watt meters) while the younger and newer riders tend to focus on traditional heart rate zone training methods.

The fall brings a renewed focus on fundamentals. Coaching staff work with the kids on the basics . . . developing a high cadence, effective and aerodynamic body position, proper nutrition, fueling, hydration, and recovery. Hammer Nutrition has been the Tier 1 sponsor for the team since its inception. We rely on Hammer extensively for feedback to fueling issues. As thought leaders for endurance athletes, Hammer is our go-to resource when questions arise with our athletes. Many of these athletes are training 12-16 hours per week and have road races that may last 4+ hours at a very high intensity. That, combined with still-growing bodies, equates to very high caloric intake, on the bike and off.

Additionally, the youngsters learn proper bike handling skills, pack skills, and finally cycling etiquette and safety. Coach Rick Moale, who back in the 1970s won many junior races himself, provides the logic behind this approach . . . “kids need to learn foot speed and proper technique right away. They are very coach-able at this age, so we spend a great deal of effort getting the boys and girls doing things technically correct right away . . . it pays off immediately and will stay with them for life.”

Preparation: Death Valley Leadership Camp

Each year, the coaching staff select about 10 of the older, more seasoned racers for a week-long training camp held in Death Valley. This location was chosen by the management team for several reasons: First, it has generally dry and warm weather, even in early January. Second, the scenery and riding are sublime. And third, there are very few distractions in Furnace Creek, California. When working with teenagers, this is an important consideration. After morning rides across wild terrain and over long steep climbs, the group settles in for a couple hours of training modules that typically include power based training, nutrition and hydration (thanks Hammer for the resources!), race tactics, leadership, etc. The late afternoons generally include a non-cycling activity like hiking or visiting a nearby ghost town. Each year, the team captain and co-captain are selected at a secret location up a dry wash with a ceremony involving anointment by a time-honored elixir (Hammer Gel Espresso mixed with Caffé Latte Perpetueum!!). The week in the desert together serves a combined purpose of jump-starting the physical training, and perhaps most importantly, it creates a sense of shared purpose and journey.

Competition: Early Season Wins

The Northern California and Nevada Cycling Association (part of USA Cycling) is a region blessed with a strong cycling culture that has created an extremely competitive district, even at the junior level. But the kids are up to the challenge. In February, Dylan Drummond, age 14, set the tone with a win at the Cherry Pie Criterium and the Snelling Road Race. Page Robertson, at age 15 and in only her second season racing, also won the Junior Women’s Snelling Road Race. And later in the spring, she took first at the Copperopolis Road Race, a particularly difficult race known as “California’s Paris-Roubaix” due to poorly paved roads and generally inclement weather.

Team Co-Captains Adam Hodes and Trevor Larsen lit up the Berkeley Hills Team Time Trial to capture first in Juniors with a time that would have put them in the middle of the Pro 1-2 field. Adam followed that up with his first Category 3 win at the hilly Pine Flat Road Race in a strong and deep field. Alex Gee and the team executed to perfection at the Dinuba Criterium for his first crit win as a Junior. Good results, all. The time spent in the desert was beginning to pay off.

Sea Otter Classic: Cycling Spectacle

Sea Otter is more than a bike race. It is a spectacle of cycling. The kids love this race, which occurs every April at Laguna Seca in Monterey, California. It draws tens of thousands of racers and spectators from all over the U.S. With talented and large fields, any top ten result is considered solid. Sixteen-year-old Tyler Hanson had a good four days. He took 2nd in

- continued on page 75
Tell others about Hammer Nutrition and get rewarded!

Use the Athlete Referral Program

Here's an example of how it works . . .

Steve (in the Hammer gear) tells his friend Jason (not a Hammer client) about the superior fuels and supplements from Hammer Nutrition.

1. Jason calls* and places his FIRST order with Hammer Nutrition and receives 15% OFF his order total. He’s happy!
2. Steve gets 25% of Jason's FIRST order total credited to his account to use just like cash on future orders. He’s happy!
3. Hammer Nutrition gets another satisfied customer. We’re happy! It’s a win-win-win situation!

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

Program Details

1. Referral rewards can be used just like cash for any order you place.

2. We keep track of your rewards for you. Call anytime for an update.

3. Whenever you place an order, you can apply your rewards to that order or save them for future use.

4. If you order online, just add a note asking that we apply any available rewards.

5. Use the convenient referral cards attached to the price list in the middle of this magazine. Need more cards to give out? Download the PDF on our website.

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

"You should get the ‘Gold Hammer’ award for customer satisfaction." - Michael C.
the Circuit Race, and 6th in the Road Race. Dylan Drummond managed a 10th in the Circuit Race racing in the 15-16 category despite being only 14, which is held on the Laguna Seca race track.

**Hammer-sponsored California State Junior Championships**

They say Luxembourg has the Schleck Brothers. Well, Tieni Duro has the Drummond Brothers. Dylan, now 14, began riding with Tieni Duro at 10. His younger brother Jacob, now 11, is in his first season of racing. The brothers both won the historic Cat’s Hill Criterium in dominant fashion. Then, a week later they went for the repeat at the California State Championship Road Race in Panoche Valley, near Pinnacles National Monument. The Drummond boys were joined as champions by their teammate, 15-year-old Page Robertson, who won the 15-16 Women’s RR championship, helped by new Tieni Duro racer Emily Anderson-Merritt who finished 3rd. But the Drummond boys were not done yet. Both took their respective State Championships as the District Track Omnium—pretty cool.

At the Hammer-sponsored California State Criterium Championship, Page and Jacob both won the Championship races. Page made it a three-peat with a win at the Individual Time Trial Championship a month later in Davis, Calif.

It was a good run, with a total of eight California State Championship jerseys for Tieni Duro. And these are the young guns, so the future is shaping up quite nicely. Add to that other up-and-comers like 15-year-old Reese Levine who is training and racing like a man possessed, and things are looking very interesting indeed.

**USA Cycling Junior National Championships, Bend, Oregon**

Eight Tieni Duro juniors descended on Bend, Oregon, in mid-June to compete with the other top U.S. Junior cyclists. Tyler Hanson, the team’s strongest time trialist, did not disappoint with an 8th finish in the 15-16 field. And Page Robertson finished in the top ten in the TT as well. Dylan Drummond just missed his second national championship and finished 2nd in the road race and 3rd in a crash-filled evening criterium.

Alicia Halpern, competing in what was probably her last junior race before heading off to U.C. Davis where she will race collegiately, capped off her junior career with a 21st in the women’s 17-18 Crit. Adam Hodes was well positioned for a top 10 finish in the Road Race, but was denied due to a mechanical on the last lap. Oh well, that is bike racing in a nutshell. He’ll be back as a Cat 2, U23 racer next year, hopefully with a bit more luck.

**Sponsors Make it Go . . .**

Tieni Duro was founded on a simple premise . . . get as many kids onto bikes as possible and teach them how to train and race to become the next generation of competitive cyclists. We spend a lot of time doing the things necessary to make that happen. None of it would be possible without the ongoing support of Hammer Nutrition Products. It takes many people working tirelessly to grow the sport. Hammer has been right there for Tieni Duro for all these years, and we are proud of what we have accomplished together. HN
As a Master Coach for Total Immersion Swim, I travel a lot (OK . . . probably not as much as Steve Born). With most airlines charging exorbitant fees for bike transport, the cramped quarters in hotel rooms, and high rental fees for road bikes, I’ve devised a practical alternative to maintain cycling strength when I travel.

I always travel with my “portable gym”—a yoga mat and a small inflatable fitness ball. Through a combination of Pilates and yoga, I’ve been using the ball and mat to maintain functional strength for years. Recently, I was in Poland training new TI coaches, stranded without my bike! No problem . . . I conjured up a simple bike-specific workout: high reps of single-leg squats using the ball for my suspended leg.

To assure specificity, follow these guidelines:

1. Size matters. Use a small ball, definitely less than knee-high. (Photo 1) It’s difficult to squat down to a knee angle of 90 degrees with your suspended leg on a large ball.

2. Keep your working knee vertically aligned over your working foot, and keep your foot oriented straight ahead. (Photo 3) This is crucial for preventing knee injury and to train foot, ankle and hip stability, all of which ensure correct knee tracking.

3. Keep your weight centered over the ball of your foot—avoid sinking back in your heel. This weight concentration at the ball of your foot closely imitates pedaling, since most cyclists position the cleat so that the pedal axis passes under this region of the foot. It’s also much easier to maintain balance.

4. Hinge forward at your hips and maintain a reasonably flat low back. (Photo 1) This pelvic orientation activates your abdominal core muscles, low back, and glutes.

5. Maintain good head and neck position, retracting your chin and lengthening the back of your neck. (Photo 4) This engages your spinal stabilizers.

6. Keep the flexion-extension cycle of your squat smooth, without abrupt starts and stops.

7. Inhale for one complete rep, exhale for the next.

8. Make sure that the
resting leg (ball leg) is straight behind you, not angled to the inside or outside. (Photo 3) Rest the top of your elevated foot on the ball, near your toes. (Photo 1)

9. Keep your weight in the working leg. The more you weight your resting leg on the ball, the more difficult your balance will be.

10. Position the back of a chair in front of you to catch your balance when necessary.

I have refined this exercise for both road bike and tri bike. The refinement has to do with the degree of forward pitch in my upper body (remember the flat low back) and arm position. To imitate a road bike, I prefer a speed skater’s stance. (Photo 1) The arm opposite my working leg is extended forward while the other is tucked behind, with my hand resting on my low back. (This hand keeps me mindful of my low back posture.) For aero position, I pitch farther forward at my hips, keeping my low back as flat as possible, and position my forearms on imaginary aero bars. (Photo 2) Compare these two positions, and notice the differences in muscle recruitment in your core, glutes, and legs.

When conducting this workout regularly (2-3 times per week), I’ve built to six sets. Each set consists of four cycles of alternating reps of 16. (16 reps of right leg plus 16 reps of left leg, at 4 times each, equals 64 reps for each leg in a cycle.) Initially, try 6-8 reps before switching legs. If you maintain form and balance for three or four cycles, gradually increase the number of reps per cycle. In between each set, I do two sets of 12-16 calf raises for each leg, placing the opposite hand high on a wall. Be prepared to feel sore for two days after you first do this exercise. I believe the soreness is mostly from the eccentric contraction that controls the speed of each squat. With consistency, you can build and maintain that eccentric strength—something that conventional cycling won’t do.

At home, I often follow this single-leg squat session with 30-45 minutes on the venerable stationary stand; after a short warm-up with a series of “Yin-Yangs” (see Endurance News #67, page 54), I do 30-second jump repeats, with 90 seconds recovery in between. When I’m traveling, I may finish with a short run that includes 30-second strides or short hill repeats.

Shane Eversfield just joined Facebook! He started the app “Zendurance Triathletes.” He is the author of Zendurance and produced the DVD “T’ai Chi for Athletes,” both available through www.totalimmersion.net. See his coach blogs there too. **HN**
Another Record-Breaking Year

2,667 Hammer Nutrition-sponsored events! Over one million samples provided!

BY STEVE BORN

We sponsored events in all 50 states, with the following states representing the top 20:

- California – 254
- Florida – 136
- Michigan – 133
- New York – 119
- Texas – 106
- North Carolina – 101
- Colorado – 95
- Ohio – 88
- Arizona – 87
- Washington – 85
- Virginia – 77
- Utah – 75
- Oregon – 74
- Minnesota – 73
- Wisconsin – 73
- Montana – 71
- Georgia – 63
- Idaho – 60
- West Virginia – 54

Not surprisingly, our busiest months were:

- June – 345
- May – 342
- August – 338
- July – 312
- September – 303

When we say, “We support your sport,” we not only talk the talk, we walk the walk, as evidenced by the number of events we sponsored in 2010. We thought that it was going to be tough to outdo 2009, which was a stellar year for us in terms of sponsored events, but we did just that and broke the old mark by 56 events. And that’s just in the U.S.—that figure doesn’t even include our Canadian sponsored events!

Sponsoring that many events means a lot of product! From our most recent calculations, we provided samples, brochures, and goody bags to 1,055,032 athletes. We have also supplied thousands of containers of HEED and a nearly countless amount of HEED cups. (I estimate close to 2.5 million, if not more.) WOW!

Our top sport(s) continues to be multisport events – triathlons and duathlons. Check this out: We sponsored 810 “triathlon only” events, 127 “duathlon only” events, and 69 events that contained both a triathlon and a duathlon. That’s a total of 1,006 events. Can you think of ANY company, or even a combination of companies, that sponsor anywhere near this many multisport events?

Mountain biking followed with 404 races, encompassing both cross country and ultra distance events. Road cycling events were next, with a total of 293, 53 of which were ultra distance rides or races. Sponsorship of ultra running events continues to grow for us dramatically as our 2010 total of 197 events exceeds our 2009 mark by 48 events. Running events, which primarily means marathons and half marathons (both on and off road), totaled out at 187 for the year. Adventure racing is still going strong with 170 Hammer-sponsored events. We’ve also significantly increased the number of camps and clinics we sponsored, with a total of 131 for 2010.

What we’re really psyched about, though, is the huge increase in the number of cyclocross races we sponsored, with a total of 120 for the year, by far the highest number we’ve ever supported in this ever-growing, increasingly popular sport. Lastly, we are really pleased to have broken into the Masters swimming world in a big way. In 2010, we sponsored 20 USMS events, with even more as a realistic possibility for this year.

Needless to say, we’re very excited about having achieved this new standard in event support in 2010 and we look forward to a great 2011. As I’m fond of saying, “If you’re going to an endurance race, chances are you’ll see Hammer Nutrition there!”
Attention adult cyclocross enthusiasts, consider yourselves forewarned about your future competition: the number of junior cyclocross racers is growing, and the field gets bigger—and better—every year. Cyclocross series reported record numbers for 2010, with the state of Oregon boasting one of the largest adult and junior cyclocross scenes in the country. The Oregon Junior & High School Cyclocross Series, which provides racing venues for athletes age 10-18, doubled its participant numbers since 2009 and had 4 of the top 5 attendance records in the United States for 2010. Their Nov. 7 series race at Washington County Fair Complex ranked #1 with 98 participants, per Crossresults.com.

Always an advocate of junior development and healthy fueling options for kids, Hammer Nutrition was a proud sponsor of this series and donated HEED (a "flavor of the week" for each race) for the seven 2010 series races. "To all the sponsors and supporters of the series, I want to extend my thanks for your part in this record turnout year. I am truly amazed at our participation numbers," race director John Wilson reported after the final event’s awards ceremony. "Who doesn't like giving stuff to kids who are so excited and appreciative? I wish all of you could have been there. Thanks for giving me that opportunity."

John’s passion for cycling and his search for a racing venue for his daughter Haley (now 11 years old) prompted him to start the series in 2009. "Regularly over a thousand racers turn out at Oregon races, which has created some challenges for juniors. Race day schedules were so impacted that Oregon juniors needed to share the course with sometimes overzealous adults," John said. "Safety rules in Oregon prevent juniors below 12 from racing with adults. This left no room for the youngest juniors, who are the future of our sport."

As coach for the Corvallis High School Cyclocross team who competed in the series, John was surprised that they were not familiar with healthy fueling and hydration. "We worked on the basics of prerace meals and hydration, a Gel 10 minutes before the start, and the importance of post-event (or training) fueling to reload/top off those muscles with glycogen. It has been great to be able to help these kids and see the improvement in skills and energy level."

104 Juniors line up for the start of the Nov. 7th Hillsboro round of the Oregon Junior & High School Cyclocross Series. A one-day participation record for Oregon and perhaps the largest Junior Cyclocross race in the country in 2010! Photo: Brent Adams.
I just raced the 24 Hours of Adrenalin at Hurkey Creek in the solo women’s category. I placed 3rd in a hard-fought battle for second.

Thank you for helping me reach my goals with such a wide range of excellent products and excellent support.

Wendy Skean

Congratulations to Hammer Ambassador, Troy, on his 1st place age group (40-44) and 7th overall finish at the Vikingman Triathlon in the half ironman distance with a time of 5:01.

Troy DeLong

Ironman 70.3 Timberman
5th place, 35-39 age group

Ironman 70.3 Timberman
5th place, 35-39 age group

USAT Long Course Halfmax National Championship
1st place, 45-49 age group

Julie Deery

Photo: Manny Luna
CJ Boyenger (right)
USA Cycling 2010 Master’s Track Nationals

1st place
Sprints – 45-49 age group
Flying 200TT – 45-49 age group

2nd place
500TT – 45-49 age group
Team Sprint – 30-99 age group
Team Pursuit – 30-99 age group

Results from our trip to Frisco, Texas for Master’s Track Nationals! We wouldn't have done so well without Hammer Nutrition. I usually get the flu/cold at least a few times a year and with working and training full time, I tend to feel very tired and sluggish. This year I not only didn't get sick, I had more energy and was able to train at higher intensities. That really helped improve my overall fitness and top-end speed.

I'm not sure if you know this, but Shane was diagnosed with Rheumatoid Arthritis a few years ago. She takes numerous medications, along with monthly infusions, to shut down her immune system in an effort to prevent it from attacking her joints and tendons. With a compromised immune system, she is highly susceptible to colds, flu, and infections. I like to think that the Hammer products we take every day contributed to the fact that she has maintained good health and was able to recover from the flu very quickly this year. I was discussing her condition with a doctor who was racing at Master’s Nationals, and he couldn't believe she is as strong and fit as she is. He said he’s never seen anyone with RA compete at this level, regardless of the wonder drugs that are on the market.
- CJ Boyenger

Lisa Clines (middle), Judy Ann Cummings (left) - 2nd place, and Julie Malliet-Nowak (right) - 6th place, at the National Halfmax National Championships.

Lisa Clines
USAT Long Course Triathlon Halfmax National Championship
1st place, 50-54 age group

I was so pleased and excited to earn this honor this year, but the reason I wanted a picture with Julie, who is also a sponsored Hammer athlete, is to honor her example and sportsmanship. Julie caught me on the run portion of the race around mile two. I had left my Endurolytes on my bike, and my leg started cramping so much that I could barely move it. Julie was there by my shoulder and asked how I was doing. I told her I was cramping and she immediately pulled out her own stash of Endurolytes and shared some with me. In a short time, my cramp released and I was able to continue. Thankfully, Hammer was on the course and I was able to get more Endurolytes at the aid stations. I am so grateful to Julie because her generosity kept me going. I am also so grateful for the Hammerbuck$ program that allows me to have the nutrition that keeps me going all year long. If it is acceptable to you, I would like to share a portion of my Hammerbuck$ with Julie. She was there representing Hammer just as I was and as far I am concerned, I believe her sportsmanship should be honored as well.

Thank you, Hammer Nutrition, for doing so much to help age group athletes "Hammer On" with your education series, your awesome products, and your honesty and integrity as a company—and thank you for generously donating so much product to so many races around the country!

Shane Ellis (left)
USA Cycling 2010 Master’s Track Nationals

2nd place
500TT – 35-39 age group
Team Sprint – 30-99 age group
Team Pursuit – 30-99 age group

Lisa Clines
USAT Long Course Triathlon Halfmax National Championship
1st place, 50-54 age group

Turn race day into payday! www.hammernutrition.com/deals/hammer-bucks/
Terry 'Chesapeake Bay Retriever' Lentz (left)
Furnace Creek 508
1st place overall, men's solo division
Time 29:19:53

Chris 'RAM' Ragsdale (right)
Furnace Creek 508
2nd place overall, men's solo division
Time 30:15:12

Cathy Cramer
Furnace Creek 508
3rd place overall, women's solo division

Chris 'RAM' Ragsdale
Furnace Creek 508
2nd place, solo classic bike division
Jim Swartzman
Furnace Creek 508
2nd place, solo classic bike division

Team Flying Voles
Keith Laird and Joel Sothern
Furnace Creek 508
1st place, men's two rider division

Team Mustangs
Bill Albers, Debbie Albers, Marlies Radke, & Patrick Seely
Furnace Creek 508
1st place, mixed tandem four rider division

Team Hammer Frogs
Isabelle Drake, Jennie Phillips, Lee Mitchell, Lori Cherry, & Jeanine Spence
1st place, women's four rider division
Brenda Herrington
Ironman 70.3 Augusta
1st place, 40-44 age group

Joe Klinedinst
Chesapeakeman Ultra Triathlon
1st place, 30-34 age group

Steven Bland
USAT Long Course Halfmax National Championship
1st place, 40-44 age group

Jane Sanders
USAT Long Course Triathlon Halfmax National Championship
2nd place, 55-59 age group

Steve Smith
USAT Long Course Triathlon Halfmax National Championship
2nd place, 60-64 age group
USAT Age Group National Championship
1st place, 60-64 age group
Ironman 70.3 Syracuse
1st place, 60-64 age group

Ashley Deemie
Ironman 70.3 Syracuse
3rd place, 18-24 age group
Time 5:14:01

Haley Benson
USAT Halfmax Long Course National Championship
5th place, 25-29 age group

Cary Smith
24 Hours of Moab
3rd place, men’s solo division
16 Laps – 11:44:19
Sean Lewis
Ford Ironman Arizona
2nd place, 40-44 age group

Dale Humphrey
2010 USAT Age Group National Championship
2nd place, 45-49 age group

Tom Chiotti
Ford Ironman Arizona
2nd place, 65-69 age group

Monica Obsitos
Ironman Florida 70.3
1st place, 18-24 age group

Robert 'PoDog' Vogler
Arkansas Traveller 100
2nd place overall
Get the VIP treatment
Join the HAMMER AUTOSHIP Program today!

What is it?

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

FREE clothing!

Receive a FREE* cycling or triathlon kit with your first order. That’s up to a $102.90 value!

How does it work?

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

We’ll 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.

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 AUTOSHIP order, we’ll send you a cycling or triathlon kit (top and bottom) for FREE*.

4 - On your second AUTOSHIP 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 shipping on all automatic shipments and fill in orders.

Real Athletes, Real Results!

“Thanks so much for the extras you include in my autoship orders. It’s always exciting to see what will come next. You guys go the extra mile to not only make sure I’m getting my money’s worth, but that I’m getting more and it’s definitely appreciated.” - Billy S.

“I wanted to share my appreciation for your very generous gifts on all my autoshipments. I have t-shirts, jerseys, water bottles, etc. and wear the clothing to my competitions. Thank you, Hammer, for your generosity.” - Mark B.

“I am very pleased with both the products and the autoship pricing. I meet new people all the time who are using Hammer for the first time and are amazed by the results. Thank you for outstanding prices and products!” - Tim L.

“Thank you so much! I really appreciate a company with such great products and customer service.” - Bill M.

“Schwag or no schwag, it isn’t the free stuff that keeps me (and probably thousands of others) coming back, it’s the products and the service. The fact that the products are so good would make me keep buying even if the service weren’t so great. But somebody in your organization’s management apparently knows that better service makes better products.” - JHS

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

Call 1.800.336.1977
Every once in a while someone will ask me “Do you guys ever slow down there at Hammer?” The answer, of course, is that while some periods are definitely busier than others, we’re pretty darn busy year-round, especially when it comes to event sponsorships.

So while February and March may seem—at least on the surface—to be “down” months in terms of events, the truth is we’ve got quite a lot of them on board, including a handful of indoor triathlons, road cycling events, and adventure races.

In my column in EN#72, I listed a number of the Nordic skiing events that we’d most likely be sponsoring in 2011. Since they’re now upon us, I’ve taken the liberty of relisting them, this time with location and website information for each event.

Also, as I mentioned in the last issue, Hammer Nutrition is the official energy fuel of the United States Snowshoe Association (USSSA). Their 2011 schedule was not available at press time, but has since been updated. You’ll now find information regarding all of the USSSA snowshoe events that Hammer Nutrition is sponsoring at www.snowshoeracing.com/events.htm.

During these particular two months, however, the focus seems to be centered on ultra running events, and I’ve listed a number of the ones we’re planning on sponsoring, as well as the aforementioned Nordic ski races. As I write this article in mid-November (just before deadline), more event support requests in a wide variety of endurance sports are coming in on a daily basis and will be added to our calendar. So keep checking the Hammer Nutrition website to see which events we’ll be sponsoring in your area.
The Breakfast, Lunch, and Dinner of Champions!

The world’s finest endurance fuel, specifically formulated for multi-hour to multiday events. No matter how long or extreme your exercise regimen or races may be, Perpetuem is always up to the task.

NOW AVAILABLE IN SOLID, EASY TO CHEW TABLETS!

ORDER TODAY!
1.800.336.1977
www.hammernutrition.com
FROM OUR ATHLETES

Judy Boyle

Twenty-five years ago, I was hit by a car while running. I broke my neck, and now my C6 and C7 vertebrae are fused. I also had knee surgery for my ACL and MCL, and had a plate with five screws temporarily put in my knee. For years, I took synthetic glucosamine sulfate, which helped but never completely allowed me to be pain-free. Luckily, I found your Tissue Rejuvenator though a friend. Now, my injuries are nonexistent except for the scars. This my first year taking a full regimen of Hammer supplements, and the three women I rode with in the RATPOD (130-mile road ride through Montana’s beautiful Pioneer Mountains) couldn’t believe the change in my riding and energy level! We try to do four centuries a year; next year, we want to do the CHaFE in Sand Point, Idaho which is 150 miles . . . that shows how great I felt after all of my rides on HEED, Perpetuem, and Hammer Gel. I just can’t give Hammer enough praise for what you have done for me.

Bill Crisostomo

After a 15-year break, I completed a sprint tri in Carpinteria, Calif. After being introduced to Recoverite several years ago for my post Cross-fit workouts, I have been impressed with your products. I read about Race Day Boost in July’s Endurance News and decided to try it for this race. It worked great! I never felt a huge hit of lactic acid burn and, in retrospect, probably could have gone a little harder. Oh well . . . next time. Thanks for the great products, Bill

Jimmy Fiero

I love these Hammer Gel pouches. I put them just up the ankle area of my wet suit and eat them when I’m surfing.
David Ling

My 11-year-old son David and his 9-year-old brother Ryan participated in the IronKids Seattle triathlon in August on a cold, windy day. After having watched me for years, David wanted to know what he should have as a pre-race meal, since his race started at 7 a.m. While I explained that he didn't need anything, I did suggest that a serving or two of Hammer Gel would be reasonable if he wanted something. He decided on one Raspberry and one Montana Huckleberry (my two favorite flavors). He had a great race, finished 4th, qualified for Nationals (in the 12-year-old category), and had no problems with his GI tract. One of the highlights of the race was watching him outkick a fellow competitor in the last several hundred yards to beat him. I was very proud of the fact that he was persistent on a day when the conditions were less than optimal. Hammer on!

- Richard Ling, Hammer-sponsored athlete

Don Krueger

Just a few days ago I finished what was supposed to be one of the toughest 50-mile courses in the country (North Face Endurance Challenge, Atlanta)—and I felt great! It was all single track with several stream crossings and constant changes in elevation. I used Hammer Gel and Endurolytes all the way through, supplemented only with bananas, water, and PBJ sandwiches. I've been recovering for two days with Recoverite and will start running again tomorrow. I also wore Hammer Race Ready® shorts with the pockets in the back, and they worked awesome. They will probably go down as one of the best pieces of equipment I've ever purchased. Thanks for your help and please pass on my thanks to the product developers. I owe a big piece of credit for this accomplishment to the folks at Hammer.
Hammer Staffer Casey Becker and his teammates celebrated their men's recreational flag football league championship.

There were four different championships up for grabs in the league: an upper A, lower A, upper B, and lower B. The Hammer "sponsored" team claimed the highest possible (upper A) for 2010. The championship title a team plays for depends on how well they've done during the "regular season." Team Hammer finished the entire season losing only one game by one point. The win for the title came with a score of 38-37.

Back row, L to R: Bob Tuman (League organizer), Brandon Willer, Dustin Jones, Chad Wangerin, Greg Macijunas, Matt Beckwith, Casey Becker, Treyson Hopkins.
Not pictured: Scott Corbett, Gabe Buzzell, Tom Kientz.

Team Hammer

Perpetuem Solids were key to my nutrition during my 1000 Miles for Children. I mixed the Caffé Latte and Orange-Vanilla Solids with Hammer Gel packets as my primary food source for the entire race. I also took little jewelry-style ziplock bags and packaged a mixture of Endurolytes, Endurance Amino, and Anti-Fatigue Caps (2/2/2). This made it easy for me to reach and swallow the caps during the event.

The mixture of all of the Hammer supplements completely satisfied me. I made one mistake during the race which cost me some valuable time . . . during day two, about 31 hours into it, the temperatures increased above normal and I did not drink enough water, thus suffering some heavy dehydration which caused me to have to stop at race mile 951. There I had to rest and felt very weak. However, four bottles with Endurolytes Fizz and a bottle of Perpetuem/Hammer Gel combo later, I was back and able to finish the last 110 miles. At 8:27 p.m., I reached Lap Paz, after 1,062 miles and 37:21 hours. Recovery was also fast due to the Endurance Amino and Anti-Fatigue Caps.

Thanks to Hammer, I fulfilled a lifelong dream and by finishing the race I raised enough money to buy the specialty equipment for a special needs orphanage in Rancho Santa Marta in Baja, Mexico. Hammer Nutrition is the real deal!!!!!!!!!!

David Neff

Perpetuem and HEED were my main fuel for the 2010 Furnace Creek 508 and gave me a constant energy supply for the entire distance. Based on your advice, I had my crew supply me with about 250 calories/hr and 20-25 oz of fluids/hour. Throughout the course of the 2-day event in the Mojave Desert, never did I feel bloated or empty . . . just the opposite: in the middle of the night my legs had the energy they did on the first climb. This was the first multi-day event I’ve used either product; and from my experience in this very tough race, it’s without doubt what I’ll use on every ride. For the record, I used Perpetuem for 50% of my fuel, HEED for 25% and solid food for the balance. Thank you for your support and sponsorship of the FC 508. I noticed that the race winner, Terry Lentz of Templeton, Calif., was wearing his Hammer kit in the finish photo. Go Hammer Nutrition!! - David “Grasshopper” Neff
For the third year, Hammer Nutrition has sponsored the Trails 4 Tails 40-Mile Ultra Run and Relay in Hanover, Penn., which not only provides a challenging venue, it also benefits our four-legged friends at Animal Rescue, a no-kill shelter. The course is an 8-mile loop of trails, shoreline, and roads at Codorus State Park. After the 2010 race, director Kev Hawn gave us his race report: “We had a great day for our 3rd Trails 4 Tails, and the runners’ times reflect that; temperatures were cool, and the entire field ran well and runners came through with three records. Hanover runner Mike Flaherty looked strong all day to finish with a new men’s record of 6:20. First in the women’s field, 3rd overall, and with a women’s record was Kari Brown of Bedford, Penn., in a time of 7:04. For the relay teams, 4-person WRRC 1 from Westminster, Md., bettered their time from last year for a team record of 6:20. We had another successful run and everyone appreciated the Hammer products. Hammer has been with us as a sponsor from the start. Thanks, Hammer!”

Champion Mike Flaherty with his family. Photo: Kev Hawn

Tim Fischer
Blalock Lakes Duathlon - Tri the Parks Series
Masters champion and 5th overall
Indian Springs Duathlon - Tri the Parks Series
3rd in Masters

Thanks for the sponsorship for this year; it has helped a lot. Hammer’s continued sponsorship of all the Tri the Park Series events has made a big difference in the sport. The majority of the athletes at the races I’ve done this year are using Hammer products now—much different from two years ago when I started racing again.

Chris Gagnon
Race Caps Supreme is a new discovery for me and now a secret weapon in all of my ultra endurance races and training sessions. My solo 24-Hour win this past season at 24 Hours of Great Glen proved to be my biggest challenge, as I led the race from the first lap by only a 10-minute margin and held on until the very last lap—lap 27— which was only three minutes slower than my first! Coupled with Anti-Fatigue Caps and Endurolytes, I felt super fresh and had the energy to battle for literally 25 hours, finishing first, merely 12 minutes up on 2nd place. Thank you for making a great product that I can rely on!
FROM OUR ATHLETES

Dawn DiPierro

Thanks, Hammer Nutrition, for helping me bike 150 miles for MS! You helped me make a difference.

I rode the MS 150 City to Shore on September 25th and 26th with two friends, all of us using Hammer Nutrition products to help us through the race. We rode 75 miles the first day to Ocean City with about 7,000 other riders. Leading up to the race, we followed the Race Day Boost capsule guidelines. Day one was a beautiful 75 degrees and we kept up a strong pace all day of 17+ mph. Coming around into Ocean City with a sea of supporters was exhilarating! As we knew we had to get up the next day and do it all over again, we used Recoverite and Hammer Whey immediately following the race.

On day two, we rose at 5 a.m. to start our day. Just as we did on day one, we utilized the Anti-Fatigue Caps and HEED. The first 25 miles were tough for me—I felt I had no energy and my body was not responding to my need to pedal faster. I was barely keeping a 14 mph pace! At mile 25, I used Hammer Gel and was able to increase my speed to about 17 mph for the next 20 miles. I again used a gel at mile 55 and finished off the race with a great pace of 19+ mph. At times I was pedaling at over 20 mph which is way out of my comfort zone, but I believe Hammer Gel provided me with the extra energy to push out those final 20 miles and finish the race.

I really credit Hammer Gel for my success on day two. I went from no energy to being able to push faster than I ever have for such a sustained period of time. Also, I’m prone to electrolyte imbalance and HEED has helped tremendously with this.

When I received my initial order from Hammer Nutrition, I received additional sample items which I have tried and will order in the future. Thanks again for some great products! Oh, and by the way, I’m from Choteau, Montana, so of course the gel that helped me so much in the MS150 was Montana Huckleberry Gel.

-Dawn DiPierro, Exton, Pennsylvania

Ed Burgess

Duathlon for Suicide Prevention
1st place, 40-49 age group
5th place overall

Lincoln Murdoch

Lincoln Murdoch coming to the finish of the Omaha Triathlon, 11th overall and 1st in 50-54 age group on August 1, 2010:

“Hammer products fueled me perfectly during this Olympic distance tri. Perpetuem was my primary fuel, supplemented by Hammer Gel, Race Caps Supreme, Endurolytes, Mito Caps, and Recoverite afterward. Felt strong the whole race on this super challenging course! Thanks, Hammer!”

Brad Hendron

It’s been another strong season for Team Grasky Endurance athlete, Brad Hendron. After placing 1st overall in the Half Iron distance at the Mountain Man Triathlon in August, Brad went on to be the overall 70.3 winner at the Las Vegas Triathlon in September. When he crossed the finish line in 100-degree temperatures, he was 8 minutes and 50 seconds ahead of the second place competitor. Next on his schedule: Ironman Arizona.
Jamie Donaldson

Sponsored Hammer athlete Jamie Donaldson dusted the competition in the Arizona desert at the Javelina Jundred 100-mile trail race in October, besting the women’s course record by 20 minutes. After the race, Jamie reported, "I ran a 17:11 which put me first female and second overall, and I got a new course record by 20 minutes or so. I felt really strong the entire way. At one point, I actually was leading the entire race overall! I had Hammer Gel as my main fueling source with no stomach issues, even when it got hot in the day. Next race, Taipei, Taiwan, for a 24-hour invitational race in December. Thanks, Hammer, for everything!"

Bill McKenzie

FROM OUR ATHLETES

Tom Wenzel

Our team, Two Boys and the Old Guy, took 1st in our age group and 3rd overall (team category/Olympic distance) at the Emmett’s Most Excellent Triathlon in Emmett, Idaho. It was a blast! For this race, since I was only riding 25 miles, I had Huckleberry Gel mixed in a bottle of water. I have raced the Boise 70.3 IM the last two years and came in 4th in AG at the Pocatello Marathon in September. At my age, 56, I would never contemplate doing these long distance events, nor the training, without Hammer products. I use HEED, Perpetuem paste (can’t wait to try the Solids), Hammer Gel, Daily Essentials, Endurance Amino, Anti-Fatigue Caps, and of course, Recoverite.

Chris Seyler

Prescott Triathlon
1st place, 50-54 age group
“The Strawberry HEED hit the spot and kept me going on the mountain climb on my bike!”

Marty Smith

I’m a sponsored athlete for 2010, and I thought I would send a couple of pictures of my finish at this July’s Alp d’Huez long course triathlon (in the French Alps). This course is well known as one of the toughest triathlons in the world. I was very happy to take 3rd place in the 55-59 age group and 354th out of 792 overall this year, with a time more than 35 minutes faster than my time last year. I’d like to again thank you for your great products. Race Caps Supreme, Anti-Fatigue Caps, Hammer Gel, and Recoverite all played a key role in my training and during my race. Additionally, I use REM Caps quite often to make sure I get a quality night’s sleep, especially after a big workout day.

Keep up the great work!

We want to know what you’re up to! Send your news to athleteupdates@hammernutrition.com and we’ll try to include it in the next issue.
Ashley Randall
The Hickory Knob International Triathlon was the last triathlon on my schedule this year. It was great to see Hammer Nutrition featured as a prominent sponsor of this race and I was proud to wear my Hammer kit for the event. Hammer Nutrition provided my fuel for the day: a Hammer Bar with my raw apple sauce before the race, HEED and Perpetuem in my bike bottles, and a couple of Hammer Gels on the run. Together you helped me finish 1st in my age group (55-59). Thanks for a great end to my best season yet.

Jonathan Anderson
Giant Acorn Sprint Triathlon Overall Champion

David Souza
I just want to let you know that my 2010 race reason went great and I believe a lot of the credit goes to Hammer. I completed the VT 100 in 25:09, shaving approximately 4.5 hours off my 2008 time and bouncing back from a 2009 DNF. I reduced my time at the VT 50 by about 2.5 hours as well.

Joe Sauerbrey
I crossed the timing line of the Virginia Triple Iron Triathlon in 53 hours, 57 minutes! I was surprised that I got that time—this was a PR by well over two hours from my first Triple IRON time in 2008. It felt awesome completing the race in such a fast time and to be 2nd male overall. I was pleased with Hammer's products during the event. I have been using them for about three years now—got hooked on them after I completed my first Triple.
Thanks, Hammer Nutrition, for being a big part of my new Marathon PR (3:29) at the Twin Cities Marathon.

I’ve been using Hammer products since 2006 and absolutely love them. *The Endurance Athlete’s GUIDE to SUCCESS* has been a tremendous help in educating me on the nutrition and hydration aspects of endurance sports.

We had terrific weather for a marathon. Through mile 16, I was on pace for a sub 3:20. Things started to fade after that, but I was still able to hold on to a sub 3:30, thanks in part to Hammer Nutrition.

Unlike some previous races where I may have bailed on my hydration near the end and faded bad, I stuck to the plan for nutrition and hydration and although I faded, I didn’t fade nearly as much and I felt good at the end. The fade was likely due more to the faster pace at the beginning.

Thanks for all your support of the Army Triathlon Club!

---

**Rick Velasquez**

---

**Amanda McIntosh**

Wounded Warriors Project fundraiser

Here is a pic from our 12-hour run. Liza Howard and I ran for 12 hours around that track and our friends, including Chris Russell, joined us throughout the day. The guys playing football in the background were from the University of Texas at San Antonio ROTC. (The squadron joined us for a few miles.) It was a great event and we raised almost $1,700 for the Wounded Warriors.

We had the Hammer tent set up and a container of HEED on the course, plus Hammer Gel, Endurolytes, and HEED packets for the runners. Everyone was really excited about the Hammer Products.

Liza and I both used a combination of Hammer Gel, HEED, and Perpetuem during the 12 hours (plus a little solid food) and felt great. We both had Recoverite immediately after. I was able to get up the next day and do a 27-mile benefit ride for a friend involved in a bike accident.

The support of Hammer was terrific at this event and throughout my career as an ultrarunner.
As the 2010 season ends, I want to share with you, our sponsors, a year-end wrap up. The team had another strong year competing throughout Southern California and the western states. We set out in January with a goal to win the So Cal Cup Best Master's team competition. With strong, dedicated teamwork over the entire season, we prevailed over all competitors winning the cup. We also finished 3rd in the overall team competition. Along the way, Hylton Murphy returned to the race scene after battling cancer for a few years to win the 60+ State Criterium championship! Bob Willcox followed with a 55+ State road title. Kal Szkalak was Best All Around Rider (BAR) 55 + rider in the SoCal cup series with 406 points! Dale Luedtke won the CBR’s 55+ BAR competition for the fourth year running. John Rubcic was going to back off his usually heavy race schedule, but still won nine races. We also had some bad crashes that come with our sport, but everyone seems to be back on their bikes for the upcoming winter training season. Perhaps most gratifying is that we had many great individual victories that were supported by the hard efforts of the rest of the team.

Suncoast Velo

As the 2010 season ends, I want to share with you, our sponsors, a year-end wrap up. The team had another strong year competing throughout Southern California and the western states. We set out in January with a goal to win the So Cal Cup Best Master's team competition. With strong, dedicated teamwork over the entire season, we prevailed over all competitors winning the cup. We also finished 3rd in the overall team competition. Along the way, Hylton Murphy returned to the race scene after battling cancer for a few years to win the 60+ State Criterium championship! Bob Willcox followed with a 55+ State road title. Kal Szkalak was Best All Around Rider (BAR) 55 + rider in the SoCal cup series with 406 points! Dale Luedtke won the CBR’s 55+ BAR competition for the fourth year running. John Rubcic was going to back off his usually heavy race schedule, but still won nine races. We also had some bad crashes that come with our sport, but everyone seems to be back on their bikes for the upcoming winter training season. Perhaps most gratifying is that we had many great individual victories that were supported by the hard efforts of the rest of the team.

Lisa Sinclair Smaga and Sheila Carpenter-van Dijk

When Lisa came home from the hospital, my gift to her was a large container of Recoverite—drinking Recoverite before breakfast helped me after shoulder surgery. My best friend and lane mate, Lisa Sinclair Smaga, had just come home from open-heart surgery, necessary due to an 80% blockage in a major artery near her heart. This was fall 2009.

Fast forward to October 2010: we just completed her first competition since the surgery, the Tropical Splash and Dixie Zone Open Water Championships in Sarasota, Florida.

It is easy now to say “fast forward,” but Lisa’s road to recovery and racing was long. When she completed cardiac rehabilitation and was cleared to enter the pool for the first time, that was the moment she realized she was alive, she could still swim and that everything would be okay. Lisa’s comeback race was a joy to swim for both of us. I paced us for about 300 meters so we could warm up slowly without a spike in heart rate. She was breathing to the left and I was breathing to the right. We were side by side, stroke for stroke and could look each other in the eye. I saw she was doing great and motioned for her to go on. That was the last I saw of her until the beach where she was waiting for me with a great big hug. She finished a terrific second in her 50-54 age group, and we are already planning our next races.

She and I are once again lane mates, still best friends, and we swim regularly with Tampa Metro Masters, fueling with HEED during swim practice. With our coach on deck, there is no putting around in the pool; we swim and swim hard.

Lisa is a real-life reason to stay fit, because if you are, even when life throws you curve balls you can’t dodge, you will have the strength to keep playing the game until you come out a winner.
FROM OUR ATHLETES

Kevin Pawlik
I celebrated my 50th year on this rock by completing my first Ironman (Ironman Louisville) in August; I then ran the Columbus Marathon six weeks later, where I qualified for (and registered for) the 2011 Boston Marathon. I use Hammer products on a daily basis, and even if I skip a workout, I still have my “Recoverite smoothie” just to make sure that I’m ready for the next day.

Robert Denney & Chris San Agustin
Here is a shot from the Bernese Oberland in Switzerland where we went on several day-long hikes to the Swiss Alps! On one hike, we missed the train back down and ended up with an 18-mile day; this included traversing a glacier across the Top of Europe called Jungfraujoch. THANK GOODNESS we had our Hammer Gels and Perpetuem. I personally try to “save” my Hammer products for triathlon training, but hiking the Alps turned out to be equally as challenging. When you are working out, let alone having less oxygen at that altitude, it gets tough to eat solid foods, and Hammer gets you nutrition quick and smoothly without any GI distress. Thanks again for a highly efficient product that translates into ideal performance!

- Chris T. San Agustin

Trevor MacKenzie
I recently completed my sixth Mind Over Mountain Adventure Race in Cumberland, B.C., Canada. The MOMARs are 50k sprint-style adventure races offering several stages, typically involving kayaking, mountain biking, trail running, orienteering, bush whacking, trekking, and rappelling. Teammate Steve Moore and I competed in the 2-male category. After completing all stages—including a grueling 10K kayak with a nasty headwind and gnarly white caps that left us pretty shattered with over 40K of terrain left—we crossed the line hitting all 25 checkpoints finishing in 5 hours, 39 minutes (good for 14th place out of 100+ teams).

I began adventure racing to test both my physical and mental limits. The combination of exertion and focus create a challenge like no other. Throughout my training, I use Endurolytes to combat cramping, Hammer Gel, and Recoverite after long, epic adventures. I have always struggled with cramping, especially in races over 50K. After this recent MOMAR race, I can say with certainty that this is no longer a problem—Endurolytes have saved the day. I am so thankful I found Hammer! Thanks for contributing to my race success.
Zephanie Blasi

Thank you for all the support you have given me for my 2010 mountain bike racing season.

Even though racing took place a little late for me and I focused on more local/regional races, I still had a great season and the support was way more than I had expected. With your help, I am the Utah State XC Champion. I did my first 100-mile mountain bike race, the Butte 100, and I won by two hours. I was also able to secure many first place positions this season. THANK YOU!

Molly Hayes

"Montana Molly" Hayes kept her winning streak going in 2010 with an age group title at the USA Triathlon Sprint National Championship in Tuscaloosa, Ala., in September—just two weeks after competing Olympic distance in the ITU Triathlon World Championships in Budapest, Hungary. Truly committed to her sport, the 78-year-old Bozeman, Mont. triathlete has only missed two world championships since 2002, and she completed her 202nd Olympic distance triathlon this year. Molly has a fan club at Hammer headquarters . . . we wish her great success in 2011.

Michael Meteyer and Jim Bruskewitz

Hammer athletes Mike Meteyer and Jim Bruskewitz continue to rock their 50s as athletes. Both competitors brought home national titles from the 2010 USA Triathlon Age Group National Championships, with Jim’s win in the male 55-59 and Mike’s win in the male 50-54. Mike reported with their race results: "We are both from Madison, Wisc., and are training partners and great friends. The best part of this story was a result of the wave start order; Jim won his age group and broke the tape as the first to cross the finish line for the day, and I was right on his heels 15 seconds later, being the second to cross the line. Out on the run course, with the out-n-back sections, we could see this outcome taking shape. Jim had a bigger issue on his mind, because he still had to catch a competitor in his age group. With a mile to go he made the pass, and with a mile to go I passed the last guy between us. That was a sweet, sweet victory. Thanks a million to you and your staff. You folks are the best!"
Fuel Right, Feel Great!
(and look good too!)

Support your weight loss resolution!

- Suppress appetite without stimulants
- Help increase fat metabolism
- Reduce carbohydrate to fat conversion

AS $24.95

Electrolyte replenishment made delicious!

- Superior full-spectrum electrolyte support
- Effective cramp prevention
- Convenient, rapidly dissolving effervescent tablets

ELF/13 $6.50
- Grapefruit (G), Lemon-Lime (L), Mango (M), Peach (P)

Nordic clothes

High-quality Louis Garneau nordic clothing for your winter activities.

Jersey $114.95
Tights $89.95

For 23 years we've helped endurance athletes enjoy:

- Consistent, long-lasting energy
- Increased endurance
- Reduced fatigue
- Rapid and complete recovery

SPECIAL OFFER!

Mention ad code EN73
Place an order of $50 or more before 3/31/11 and receive a single serving packet of HEED and our NEW 22 oz. Purist bottle, FREE! That's an $8.75 value!
Limit one free gift per customer. Offer good while supplies last.

ORDER TODAY! 1.800.336.1977 / www.hammernutrition.com