

ENDURANCE NEWS



Endurance News : Helping you 'FUEL RIGHT, FEEL GREAT!®' since 1992

The "Balanced Diet" Myth Shattered...Again!

Authors : Steve Born and Bill Misner, Ph.D.

In one of the articles in The Endurance Athlete's Guide to Success ("Supplementation - A necessity for athletes"), we write the following:

We recommend the consistent use of an intelligently designed supplement program because the "balanced diet will provide all you need" notion is a myth. You cannot obtain all of the nutrients that your body requires from your diet. Here's why:

- There has never been a single clinical study that documents what comprises a balanced diet, nor one that has demonstrated one's ability to meet basic nutrient requirements through whole foods alone.
- New studies show that food alone does not supply all of the micronutrients that we need to prevent deficiency, let alone achieve optimal health.
- Very few of us have routine access to fresh, locally grown foods. Much of our diet comes from foods grown far away, picked when unripe, and then sent packing. Nutritional content is questionable and usually depleted.
- Even if we could obtain all of the nutrients that we need from our diet, it's highly unlikely that any of us eats an ideal diet as consistently as we

think we do.

With that in mind, here is a response from Dr. Bill regarding a recent article suggesting that a balanced diet does, in fact, supply an adequate amount of micronutrients...

Dear Editor,

In response to the September issue of HEALTHbeat's article, "Can you get all your nutrients from food alone?" you reported that a "balanced diet" supplies the required micronutrients from food alone. Clinical Dietitian Ellen di Bonaventura, R.D., Massachusetts General Hospital in Boston, and Helen Delichatsios, M.D., nutrition educator at Harvard Medical School, said that nutrient-dense menu of 15 individual foods provided by the sample menu that di Bonaventura [were] devised to meet the daily vitamin and mineral needs of a healthy postmenopausal woman consuming 1,500 calories or less a day (below):

- 8 oz nonfat yogurt
- ½ cup sliced papaya
- ½ cup sliced kiwi
- 1 oz (14 halves) walnuts
- 4 oz skim milk
- 1 small whole-wheat pita
- 1 cup dark green lettuce
- 1 red or orange pepper
- 1 cup grape tomatoes

see DIET on page 8

IN THIS ISSUE

Welcome	2
Salt And The Endurance Athlete	10
Go Faster - Get Younger	20
A Blast From The Past	31

Complete table of contents on page 2

Above - Scott Gaiser, 2nd overall, and Anya Weschler 1st woman, at the 2009 Hammer Nutrition Two Bear Marathon. Photos - Dustin Phillips

Real Athletes, Real Results!

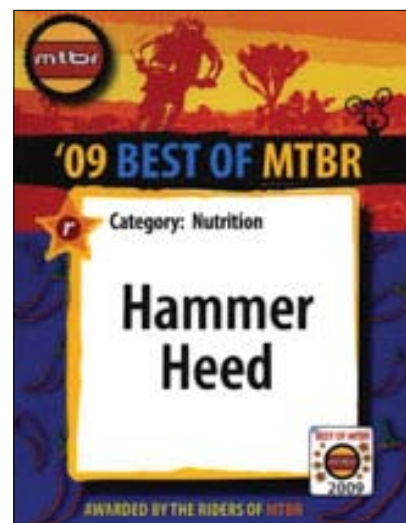
Your products are just all around awesome. I'm not an endurance athlete by any stretch, I'm a firefighter. My workouts last about an hour and consist of heavy weight lifting, squats, deadlifts, and pull-ups as well as weighted stair runs and truck tire flips. I use Recoverite and Hammer Whey as well as Perpetuem before every workout. Your whey is the purest I've found on the market. AWESOME JOB! I can do a strenuous workout on the day shift and not be sore or fatigued all through the night shift. The stuff is gold and worth every penny. I recommend it to all the guys of my fire station.

Thanks!
Jarrad Smith

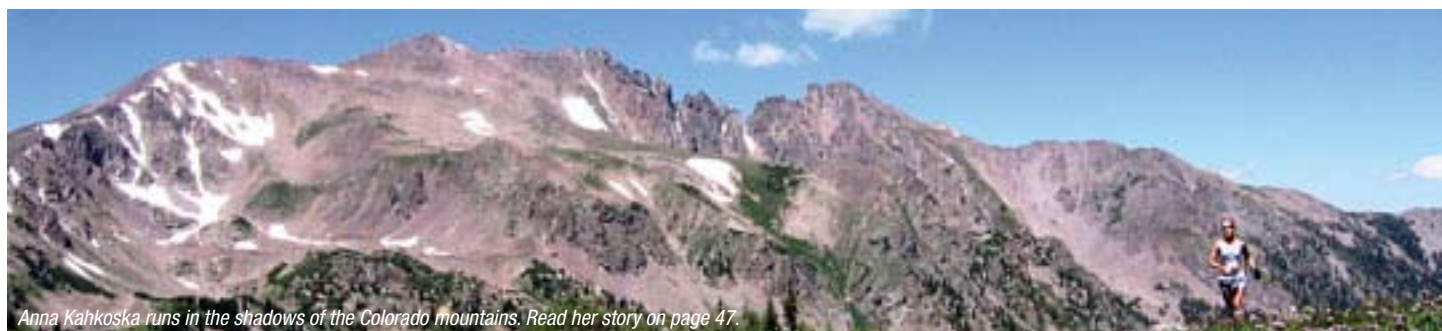


In This Issue

The "Balanced Diet" Myth Shattered... Again!	1	2009 Hoodoo 500	32
Welcome	3	2009 Furnace Creek 508	33
From The Saddle Of Steve Born	4	Nate's Corner	34
Product Spotlight : Phytomax	6	Reigniting The Spark-Again	36
Salt And The Endurance Athlete	10	Overtraining Symptoms And How	
Off-Season Supplement Suggestions	12	To Avoid The Negative Side Effects	38
Your Heart Is Sweet Enough	18	Athlete Spotlight : Arthur Webb	40
Go Faster - Get Younger	20	2010 Hammer Camps	44
From The Archives : Maltodextrin	22	Fall Colors	46
Bar Mitts	23	Another Record Year For Event Sponsorship	48
2009 Interbike Trade Show	24	Upcoming Events	49
Pearls Of Wisdom From Dr. Bill	25	Can Racing Save The World?	50
Power Up With EMS	26	Hammerbuck\$	52
Running Shoes And Barefoot Running	28	Race Report : Furnace Creek 508 Edition	54
Wholistic Cycling : An Off-Road Primer	30	Race Report	55
A Blast From The Past	31		

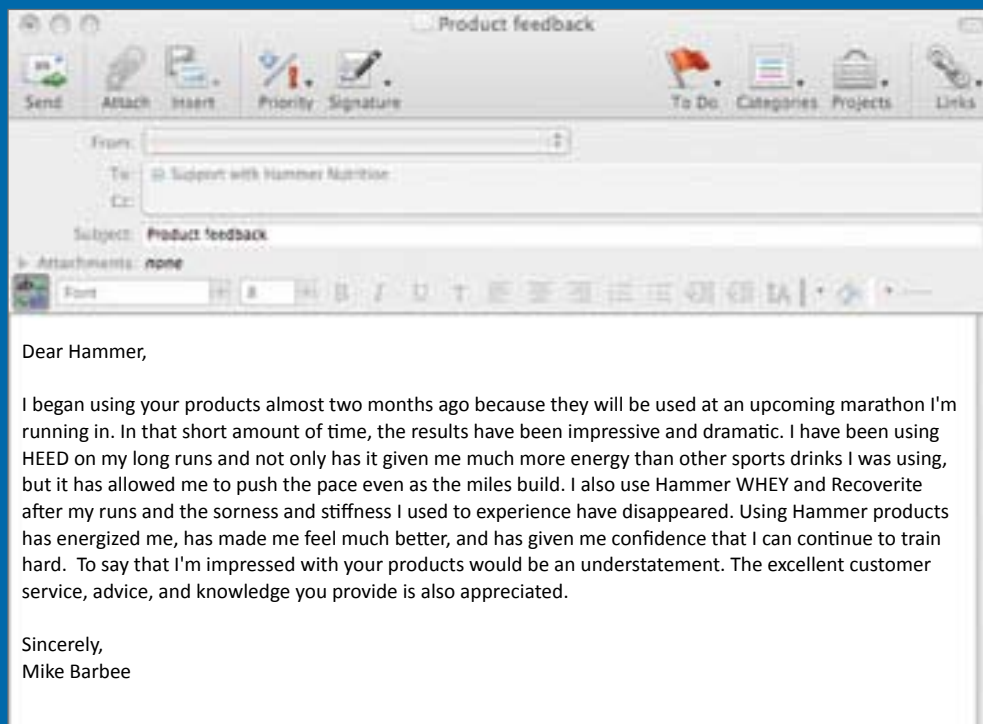


Just like in 2008, HEED was awarded the Best of MTBR in the nutrition category for 2009 by the riders of MTBR at Interbike. Read more about Interbike on page 24.



Anna Kahkoska runs in the shadows of the Colorado mountains. Read her story on page 47.

Real Athletes, Real Results!



Dear Hammer,

I began using your products almost two months ago because they will be used at an upcoming marathon I'm running in. In that short amount of time, the results have been impressive and dramatic. I have been using HEED on my long runs and not only has it given me much more energy than other sports drinks I was using, but it has allowed me to push the pace even as the miles build. I also use Hammer WHEY and Recoverite after my runs and the soreness and stiffness I used to experience have disappeared. Using Hammer products has energized me, has made me feel much better, and has given me confidence that I can continue to train hard. To say that I'm impressed with your products would be an understatement. The excellent customer service, advice, and knowledge you provide is also appreciated.

Sincerely,
Mike Barbee

This testimonial was unsolicited and has not been modified.

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Our Mission

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

Endurance News features insightful articles on diet, nutrition, training, and other topics of interest for endurance athletes - written by myself as well as professional and elite amateur athletes and other experts in the area of nutrition and exercise. In addition, Endurance News will include articles highlighting new and existing Hammer Nutrition products and how to get the maximum benefits from them.

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

Back issues available at www.hammernutrition.com

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Brian gets out the trials bike on a rainy day at Hammer headquarters. Photo - Angela Nock

Welcome

Author : Brian Frank

Welcome to the 66th edition of Endurance News, especially all of you first time readers. As always, we've got an issue packed full of useful knowledge and inspiring articles that I'm sure you will enjoy reading. My column this month is mostly updates and announcements of what we have been up to this year and what you'll be offered next year. But first, a last minute race update.

24 Hours of Moab: Dustin Phillips, our sponsorship director and wearer of many hats, built a four man team to go down and do the race. The team consisted of Ben Parsons, Whitefish Fire department; Matt Butterfield, Sportsman-Skihaus and Phil Grove, who helps run a raw, vegan, yoga retreat center outside of Whitefish. So, our four Montana boys went down there and ended up dicing for the overall win and the class win with a four man team out of Colorado. They ended up finishing 2nd in the 24-hour national championship and in the four man championship as well. Not bad for two rookies and two with only one previous 24-hour race under their belts. They had a great time and we're really proud of them.

Moving on to the list of "you asked for it" items, here's what we have in store for 2010: While the Strawberry Recoverite has been a huge hit, there have been many requests and I know many more of you have been hoping for it, so beginning in January, we'll offer our third flavor in this product, Chocolate! Also in the new flavor department is one that has been a dream



Ben Parsons, Dustin Phillips, Matt Butterfield, and Phil Grove celebrate their 2nd place finish at the 24-hour national championships in Moab.

of mine ever since I moved to Montana in 1995 and discovered the mysterious and delicious huckleberry. Being that this berry cannot be grown commercially and is only wild-harvested, I figured that we'd never be able to get enough to use them for a flavor of Hammer Gel. Once again, I was wrong and we are delighted to be able to begin offering Montana Huckleberry Hammer Gel in both jugs and pouches. As for the taste, I think it's far better than the Raspberry and that's our most popular flavor. Be sure to ask for a sample of each new flavor in your first order next year. We hope to offer this flavor year round, but depending on it's popularity, it may become seasonal due to the finite amount of hucks that can be procured. If you try it and like it as much as I do, you will want to stock up!

In the "eco friendly, recycle/cut down on waste and plastic" category we are beginning the migration to re-sealable, zipper top type bags for all of our powders. The big plastic tubs will be a thing of the past by the early part of 2010. You've been asking for it and we've been wanting to do it and now we

can with all of the new filling machines in place. The bagged powders will be available to our consumer direct clients first and will then make their way through distributors and into the retail stores shortly thereafter.

Hammer Body Care line:

I'm sure that many of you have been scratching your heads and wondering why a maker of endurance fuels and supplements would be making a foray into skin creams, lotions, and the like. I can tell you that it is for the same reason that we developed Sustained Energy and the rest of our fuels - The marketplace was lacking good, effective products and we knew we could create

a better mouse trap. The goal was to formulate products that are singularly effective and contain only natural, healthy ingredients and nothing else. Most of the body care products on the market today are filled with petrolatum and other scary chemicals; even most of the spendy, supposedly natural products contain propylene glycol and other "no fly" ingredients. If you have not tried the Hammer Balm or Seat Saver products yet, you really should if you use pain creams and/or chamois cream. The Hammer Balm does not behave like your typical topical analgesic that just irritates the skin surface and produces a "warm" sensation. Hammer Balm actually penetrates the skin's surface and provides deep tissue pain relief for hours - it's ideal for sore muscles, knees, and other joints. The Seat Saver just works better with less needing to be applied initially and reapplications almost completely unnecessary. It also smells nice. We have sample sizes of both that we'll be happy to include with

see BRIAN on page 5



Brian and Steve get a mid-summer ride in.
Photo - Kelly Pris

From The Saddle Of Steve Born

Author : Steve Born

Welcome to the late autumn edition of Endurance News! It's our last issue of 2009 and there are a lot of great, informative articles and race reports that I know you'll enjoy reading. With this being our last issue of the calendar year, I'd like to take this opportunity to thank all of our contributing editors for the excellent content they've provided this year. You definitely help make this newsletter such an enjoyable read and I really appreciate your contributions. Thank you!

It's been an absolutely great year for Hammer Nutrition and I want to personally thank all of you for being such valued clients and friends of ours. I'm writing this but a few days after the annual Interbike trade show that we attended again this year, and I can honestly say that it's REALLY good to be home. I mean, nothing against Las Vegas, but it's a city that I can only take in small doses. Thankfully, Interbike is only three days... any more than that and I think I'd be completely worn out! Still, as tiring as trade shows/conventions can be (and if you've never worked at one, trust me, they can wear you out!), we had a fantastic show. My favorite part is meeting a lot of people – primarily retailers and race directors – whom I've not met before or whom I haven't seen in awhile. I also really enjoy the camaraderie with Brian and the staff members who come along. This year, along with Brian of course, we had Casey, Dustin, Jason, Kadidja, and Vince as "the Hammer crew" and they were a

blast to work with and hang out with (no Stratosphere rides for me, though...too old for that kind of stuff!).

Anyway, by the time you read this I'll have completed my last two work-related trips for the year – the Healdsburg Wine Country Half Marathon in (where else?) Healdsburg, CA, and the Silverman



Steve visits with Fred, Candace, and Rick of the Race Across America. Photo - Vince Arnone

Triathlon in Henderson, NV. While a good portion of these trips will, of course, be work related, my wife and I are going to take a few days prior to and/or between each event to get a few last bike rides in before the snow falls (I find myself hardly believing that winter will soon be here). As I look back over the past several months, one of the first things I think of is, "man, you've been on the road a lot this year...again!" Still, as tiring as traveling to and from events can be, I really do enjoy going to them, especially because I get to meet and talk

with so many of the athletes attending.

Also, by the time you read this, the Furnace Creek 508 will have once again been completed (see my article/race report elsewhere in this edition of Endurance News). This is a race that is very special to me, one of the reasons being because it was my last competition before retiring. Of course, I had to "go out" by doing something kind of crazy so instead of just doing the "regular" Furnace Creek 508 race, which I had already done on two separate occasions, I had to fulfill a promise that I made to myself and try to do back-to-back 508's...a Double Furnace Creek 508

(a.k.a. The Furnace Creek 1016). It's been a full seven years since I successfully completed "The Double 508," though I remember almost the entire 75.5 hours that I was on the bike very vividly (maybe that's why I haven't been crazy enough to go back!).

I guess where I'm going with this is that after I completed The Double 508 I kind of felt a little lost, without a whole lot of direction as to what I wanted to do in the realm of athletics. It wasn't really a depression, but rather a feeling of "What do I do now?" I had been immersed in ultra distance cycling for 18 years and now, all of a sudden, I'm retired. I remember discussing this with Dr. Bill who, as always, gave me sage advice. He said that he completely understood

see STEVE on page 5

STEVE from page 4

the feelings I was going through but encouraged me by saying, "Think of it this way: You used to be the swimmer, and now you're the lifeguard," meaning that I could take everything I learned (a good portion of which was via the hard way) and share that with other athletes. His point was that even though I was no longer actively competing (the swimmer), athletes could benefit from my experiences and the knowledge that I had accrued during my many years as an endurance athlete (the lifeguard).

Turns out that Dr. Bill was right; I've been with Hammer Nutrition for nearly 10 years and, as I have said many times, I derive as much satisfaction from helping other athletes achieve their goals as I have my own. Yeah, sometimes I miss being ensconced in all that goes into preparing for a race and, of course, the race itself (except for the sleep deprivation part...that, I definitely don't miss!). Seriously though, the fact of the matter is that, for me, there's something incredibly satisfying in hearing that someone had success in their race(s) and knowing that I've played a role, albeit a small one perhaps, in the achievement of those goals. It may sound a little corny, but even after nearly 10 years, I'm still as passionate about helping athletes as I was the day I first started here. Add that to being part of a company that I believe so much in and whose products I've used for about as long as they've been around, and it just doesn't get a lot better for a guy like me.

So as the 2009 season/year comes to a close, I want to personally thank you for putting your faith in Hammer Nutrition and in me. It's been a genuine pleasure to be there for you this year and I look forward to helping you achieve your goals in 2010 and beyond. Enjoy this issue of Endurance News!

"I derive as much satisfaction from helping other athletes achieve their goals as I have my own."

- Steve Born

BRIAN from page 3

any order upon request.

However, the product that I'm most excited about is our new ultra hydrating skin cream, Pelle Eccellente (meaning "Excellent Skin" in Italian). The name is partly due to my affinity for all things Italian but mostly because every imaginable name for a skin cream is already in use or has been used. This is truly the first skin cream that I will use and here's why. My experience with every skin cream up until Pelle Eccellente was the same vicious circle - skin is a bit dry and scaly, I apply cream and my skin feels moist for a few hours or a day at most and then it is even dryer than before until I apply more, etc. So, when Dr. Bill said that he'd developed a skin cream that I'd like and be willing to use, I said "show me". Sure enough, I can apply a small amount to my legs and two or three days later the skin is still moist and soft. Seriously, if you don't use skin creams/moisturizers for the same reason, you've got to try this product. And if you do regularly use these types of products, you've got to try the Pelle Eccellente and compare it to your current favorite. I think that you will be highly impressed.

New website: We've been working all year on a brand spanking new website that will launch shortly after the new year. The main focus on the redesign has been to improve functionality and make the user interface more intuitive and user-friendly for repeat clients. This is a techy way of saying that you'll be able to get what you want from the site more quickly and with greater ease. One of the big new features is a master interactive calendar that will allow you to see from a local to a national and even international level what Hammer

has going on on any given weekend or day. Besides listing every event that we sponsor, you'll be able to see whether we'll have product on course, an expo booth, fueling seminar, etc. and so much more. You'll hear more about the site in the next issue and be able to drive it by the second week of January.

Another addition to the new site is going to be a bulletin board-style discussion forum with an RSS feed option and more. This will replace our current Yahoo-hosted discussion list and hopefully make the content that appears on our forum more universally accessible.

In closing, I'd like to call your attention to our Tucson Hammer Camps and extend a personal invitation to join me, Jim, and the Montana crew that makes The Cycling House training camps the experience of a lifetime. There are still spaces available for the January and March camps, so read the accompanying articles in this issue and give it some serious thought. If you can make the time and have the wherewithal to get there, you will not be disappointed. Of course if you have any questions, don't hesitate to contact me. Hope to see you there.

As you can see from the list above, not only do we take your suggestions to heart, but we actually act on them. I don't get much mail there these days, but I'd like to remind you that I do personally receive all e-mails sent to suggestions@hammernutrition.com. So if you have a suggestion for me, fire away.

Enjoy the read!

Brian Frank
Proprietor

Body care products with the same uncompromising standards as our fuels and supplements!

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Team Hammer Frogs, along with the crew chief, show their true colors before the start of the Furnace Creek 508. Photo - courtesy of Jennie Phillips

Product Spotlight : Phytomax

Live green Superfood for peak energy

Author : Steve Born

Although Phytomax is most definitely a product that can—and arguably should—be taken all year long, I've selected it to be the “spotlight” product for this issue of Endurance News, primarily because for many of us (depending on where we live), the availability of fresh, organic vegetables diminishes as autumn turns into winter.

All summer long I enjoy eating lots of vegetables; most every night (when I'm at home) my dinner includes a salad containing organic mixed greens, broccoli, cauliflower, red/yellow/orange peppers, and tomatoes (I also add some organic walnuts and almonds). In addition, my wife makes a mean vegetable stir fry that contains many of the above-mentioned vegetables plus eggplant, squash, and zucchini.

Unfortunately, during the winter months here in Montana the availability of these veggies, especially organically grown ones, is minimal, if not altogether non-existent. That's not to say that I still don't try to consume adequate amounts of vegetables during the fall and winter

...while vegetables are key components in the daily diet, today's food supply isn't what it used to be.

months; it just becomes more and more of a challenge to find them during this time, which is when I really make sure I'm taking Phytomax consistently.

It's important for everyone, and especially athletes (because their requirements for nutrients are much higher than the average person), to consume adequate amounts of vegetables. A primary reason is because there are substantial amounts of important nutrients—aside from vitamins and minerals—that are only obtainable via the consumption of whole vegetable foods. These “phytonutrients” are naturally occurring plant compounds that have numerous benefits, which make an undeniably significant contribution to overall health. Without adequate vegetables in the diet the body does not receive

the nutrient support and protection it needs, which means that health and performance suffers as a result.

Problem #1 - We all fall short of the mark!

As athletes and health conscious individuals, we place a lot of emphasis on both peak athletic performance and peak health. Most of the time we watch what we eat and try to consume a healthy diet. Unfortunately, like the overwhelming majority of Americans, it's almost certain that we fall well short of the mark in terms of vegetable intake. In fact, we at Hammer Nutrition have discovered that nearly 100% of

the athletes we've worked with over the course of several years have diets that are severely lacking in vegetables... not just marginally lacking, severely lacking! The USDA recommends 5-6 servings of vegetables daily but it's almost guaranteed that none of us come close to that. Dr. Bill Misner, who has been conducting dietary analyses for many years, states, "Only 7% of the dietary analyses performed between 1996-2002 were consuming adequate amounts of dietary plant foods." Now, this is just one person who has done dietary analyses but still, he's done several hundred over the course of seven years and only 7% were consuming adequate amounts? That's pathetically low!

Problem #2 - Vegetable nutrition is NOT what it used to be

see PHYTOMAX on page 7



How to use Phytomax

Take 3 capsules daily as a dietary supplement with a meal.

PHYTOMAX from page 6

As mentioned earlier, vegetables contain numerous phytochemicals, which science is continually discovering and showing to be powerfully beneficial for optimum health. Unfortunately, while vegetables are key components in the daily diet, today's food supply isn't what it used to be. As Dr. Misner points out, "Some authors from the food science industry argue that even 5 servings a day of fresh vegetables do not provide the organic substrates necessary for optimal cellular health. In the past 50 years, chemo-agricultural farming has depleted 90% of the soil's original minerals. Today's 'veggies' contain only 11% of the organic minerals found in produce during World War II. To get what we once got from 3-5 servings of vegetables per day, we would have to consume 40 servings per day, or approximately the amount consumed by a medium-sized horse. What are we really missing? Plant sterols and phytoestrogens, which have been shown to protect us against cholesterol absorption, tumor formation, colon cancer, radiation poisoning, and the side effects of most allopathic medicines. Most of these protective phytonutrients, phytosterols and phytoestrogens are lost during processing, degumming, refining, deodorizing, canning, bottling, and packaging; we simply are not getting enough."

Phytomax helps solve the problem

So while vegetable intake is still important—and of course we highly recommend the consumption of organically grown produce—most of us rarely eat enough to begin with and the majority of the produce available simply doesn't contain the quantity of nutrients that we need. This is where Phytomax comes in. Three capsules of Phytomax will provide higher quality vegetable nutrition than blue-green algae, spirulina, chlorella, wheat grass juice, barley grass juice, or any other similar product. In addition, Phytomax is a concentrated source of enzymes, phytosterols, and phytonutrients, which are so important for overall health but are unfortunately no longer available in appreciable amounts in our food supply.

Here's what Dr. Misner has to say about Phytomax...

The nutritional advantage for consuming

Hydrilla verticillata [the plant used in concentrated form to produce Phytomax, which is sometimes also spelled "verticillata"] presents an exceptionally potent phytonutrient from a wild noxious plant growing in unpolluted fresh waterbeds in Florida. The means by which it is processed preserves the enzymatic profile, making it one of the only green products with both enzyme integrity and free of toxic waste byproducts from competitive "greens" harvested from polluted lakes [such as Klamath Lake] in Oregon.

Because the Hydrilla plant is rooted, it easily accesses high amounts of organic minerals, vitamins, enzymes, and trace micronutrients found in the prehistoric lakebed's soils. After harvesting "live" Hydrilla by cutting the plant just above its root structure, an exclusive non-cooking, non-freezing, and non-organic-altering process is carefully applied. This 5-stage pressure wash, which includes an ozone injection for removing only bacteria and microorganisms, is applied in order to extract the raw foods found within the plant's green stems, stalk, and leaves. A drying process is then applied using jet turbine blowers at a maximum of 88 degrees to remove the moisture without damaging the "living" enzymes and rich nutrients stored in the harvested plant. After drying, the Hydrilla is fine-ground, encapsulated, and bottled to prevent degradation or contamination from its "live" state.

Hydrilla presents in a 2% solution a pH of 12.0, which contributes to increasing otherwise acidic pH generated during exercise.

Phytomax's phytosterol benefits

Dr. Misner writes, "Phytosterols may decrease cholesterol absorption by displacing cholesterol from bile salt micelles. Cholesterol analogs found in plants may be protective against colon cancer. Superoxide dismutase (SOD), a free radical fighter, antioxidant and enzyme found in most plant life, is being seriously studied for its plausible positive effects in halting the aging process. SOD has been shown to provide a natural defense against the potentially damaging superoxide free radicals generated during exercise or aerobic metabolism. Including a source of "green" foods may not only enhance recovery, but also prevent the side effects from radiation, carcinoma formation, and the initiation of leukopenia. University studies report that milk production from dairy cattle and the egg-laying capacity of chickens were significantly enhanced when these animals were supplemented with this form of Hydrilla (Phytomax). The assumption is that carry over to human physiology is obvious, though not yet confirmed by reliable research. Some studies do suggest that the nutrients from this plant may have direct

see PHYTOMAX on page 9



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DIET from page 1

- ½ cup edamame beans
- 1 tbsp unsalted sunflower seeds
- Salad dressing (1 tbsp olive oil, balsamic vinegar, and pepper)
- 4 oz broiled wild salmon and yogurt sauce (1 tbsp Greek-style nonfat yogurt, 1 tsp lemon juice, 1 clove chopped garlic)
- ¼ cup cooked barley & ¼ cup cooked lentils with spices to taste
- 1 cup steamed baby bok choy

Using the First Data Bank Nutrition IV Dietary Analysis program, I found 18 of 29 nutrients required micronutrients were deficient.

Dietary Analysis for a typical healthy female, 5'5", 130 lbs, age 25-50

18 Nutrients = Deficiency %

1. Calories 54%
2. Carbohydrate 48%
3. Fat 61%
4. Fiber 85%
5. Vitamin B1 92%
6. Niacin B3 95%
7. Vitamin B6 95%
8. Alpha-Tocopherol. 31%
9. Pantothenate 58%
10. Biotin 40%
11. Iron 64%
12. Zinc 53%
13. Copper 44%
14. Manganese 75%

15. Chromium 63%
16. Iodine 0%
17. Molybdenum 57%
18. Vitamin D 23%

This then begs a question: "Does a balanced diet from any single menu provide all of our required micronutrients?" Since 1996, I have searched for, yet never found, a menu of foods that provide all of the micronutrients required...

Respectfully submitted,

Dr. Bill Misner, Ph.D.
AAMA Board Certified Alternative Medicine Practitioner
Author: "What Should I Eat? A Food-Endowed Prescription For Well Being." April 2009

FOOTNOTE

As we write in the "Supplementation - A necessity for athletes" article: "... please understand that we're not suggesting that you can neglect your diet, take scads of pills, and have all of your nutrient needs covered. By no means do we intend to send that message. Supplementation means just what the word implies, supplementary. The pills we take do not substitute for a healthy diet, they only fill in where diets fall short, and fall short they will, especially given the high nutrient

demands of endurance athletes."

"No supplement program can or should take priority over the consumption of a healthy diet - we all agree on that. So even though this article is about supplements, we cannot emphasize enough that your primary nutritional goal is to consistently consume a healthy diet. What does this entail? It means that eating whole grains and locally grown organic foods as much as possible, while avoiding packaged, processed foods and junk foods at all times. It means a low-sodium diet. It means consuming a variety of foods. It means avoiding foods containing artificial sweeteners, colors, flavors, and preservatives. It means you want to avoid added simple sugars (sucrose, fructose, glucose, etc.) in both your daily diet and in your sports fuels. It means many other things as well, but you get the picture. We're emphasizing both quality nutrition and supplementation. The quality of the calories you consume always matters."

This time of the year is, for most of us, a time of lower-volume, lower-intensity training. That's where the article "Off Season Supplement Suggestions" comes in. You'll find it elsewhere in this edition of Endurance News and, in addition to your efforts in consuming the best diet possible, we hope that you'll give serious consideration to the product suggestions made in the article.

Real Athletes, Real Results!

I have to tell you that I only have like 15 days or maybe a little more taking your supplements and fuels. My verdict? They are superior! I always had dark circles around my eyes and they have almost disappeared! They have done miracles for my performance. I started to exercise again after taking two months off due to a burnout from over training and not taking any supplements or fuels during my workouts. Well this Sunday, I swam almost 6 km in an open sea competition and I never felt tired! After only a few weeks of starting my training again! A few hours into the competition I felt a little tired so I took two Race Caps and I felt like new again! The next day I thought I was going to feel like garbage but I was feeling like nothing happened the day before; my team and I spent almost 7 hours at sea and I felt great the whole time, much like I feel right now. Thank you very much! I really like your products and they really make a difference! I am from the Dominican Republic, and I am telling all my friends and teammates to use your products! They are the best!

Wanda Guzman

Your performance foundation

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- Fill nutrient gaps in diet



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PHYTOMAX from page 7

application for free radical scavenging, anti-arthritis effect, stress management, remediating aging disorders, promoting healthy skin, and energy recovery.”

Summary

We at Hammer Nutrition definitely believe that athletes and active people need to address the diet first and foremost because, more than any supplement pill, diet is the foundation from which optimal health and performance can be achieved. Still, even our best efforts at consuming healthy foods on a consistent basis usually falls short more times than not. That's why supplementation in general is so important—to close the gap between what we need nutrient-wise and what we actually obtain in the diet—and it is especially true when it comes to vegetable intake.

Bottom line: Phytomax doesn't

replace eating vegetables. Instead, it efficiently and effectively bridges the gap between what we should eat and what we actually do eat. It's an important product that wonderfully complements the vitamins and minerals provided in Premium Insurance Caps. Phytomax, a powerhouse of enzymes, fatty acids, antioxidants, RNA, DNA, chlorophyll, sterols, and phytonutrients, helps "complete the puzzle" when it comes to vitamin/mineral supplementation. During the fall and winter months, when availability of fresh, organic vegetables may be at a premium, daily supplementation with Phytomax is definitely a wise strategy to employ.

REFERENCES

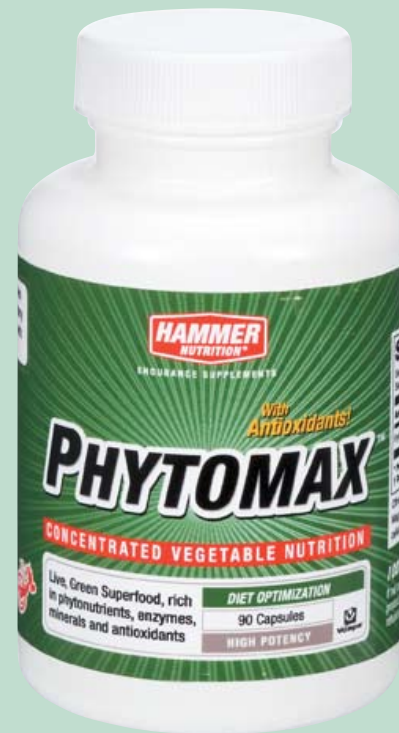
Available upon request

Should you buy Phytomax?

Ask yourself these questions:

1. How many servings of organic vegetables do you eat each day?
2. How many servings of organic fruits do you eat each day?
3. How many servings of organic cereal grains do you eat each day?

If the answers to 1, 2, and 3 do not total 9 or above, then Phytomax is a product that you should seriously consider taking on a regular basis. Dr. Misner writes, "While we never recommend substituting a pill for a whole food, in spite of Phytomax being qualified as a whole food 'green,' for those who consume the [typical] American diet, it is a step in the right direction."



Phytomax outperforms popular "green" supplements

	PHYTOMAX	BLUE/GREEN ALGAE	WHEAT GRASS
Calcium	131.20 mg	7 mg	5.1 mg
Potassium	24.30 mg	17 mg	29.3 mg
Magnesium	8.75 mg	2.0 mg	1.0 mg
Sodium	3.43 mg	2.7 mg	0.28 mg
Phosphorus	2560.0 mcg	5.1 mcg	4.0 mg
Iron	130 mcg	410 mcg	500 mcg
Selenium	0.06 mcg	0.7 mcg	1.0 mcg
Cobalt	34.0 mcg	2.0 mcg	0.5 mcg
Molybdenum	1.93 mcg	3.3 mcg	0.073 mcg
Niacin	1560 mcg	130 mcg	72 mcg
Pantothenic Acid	2000 mcg	8 mcg	10.25 mcg
Vitamin B1	1430 mcg	40 mcg	3.125 mcg
Vitamin C	1.180 mg	6 mg	2.12 mg
Vitamin B6	120 mcg	13 mcg	11.12 mcg
Vitamin B2	6 mcg	6 mcg	74.25 mcg
Vitamin B12	94 mcg	6 mcg	0.013 mcg

It should be noted that organic whole food nutrients generate greater nutrient potency though the dose per nutrient compounds are substantially less than a supplement dose counterpart.

We want you!

We are always looking for photos of our athletes to use in catalogs, mailers, newsletters, on our website, and elsewhere. Are you interested in being included? Send copyright-free photos to athleteupdates@hammernutrition.com with the name and date of the event, as well as the photographer's name, and you just might see yourself in print!



Hammer staffer Dustin Phillips (center) and friends celebrate the summit of Mt. Cleveland in Glacier National Park.
Photo - courtesy of Dustin Phillips



Salt And The Endurance Athlete

Author : Marni Rakes
courtesy of trimarni.blogspot.com

Skip the popcorn, Chex Mix, salted nuts, and pretzels and put down the salt shaker. Ironman athletes often feel overwhelmed by nutrition before the big day. I don't think Ironman athletes have trouble eating carbs so the second biggest focus in the diet is sodium. Due to an overwhelming amount of nutrition-related articles, athletes are lead to believe that they need to eat everything salty before the race and add extra salt to all food.

In hot weather, the more fluid lost through sweating, the more likely you are to deplete sodium and electrolyte stores. Sodium is one of many electrolytes used during endurance exercise, in addition to potassium, chloride, calcium, magnesium, and manganese.

Table salt is 40% sodium and 60% chloride. According to the RDA (recommended daily allowance), the recommended amount of sodium per day is around 2,400 mg, however it is also recommended that all individuals consume no more than 1,500-2000 mg/ day. Although sodium will provide a balanced quantity of electrolytes to prevent cramping and help maintain fluid balance, a high sodium (salty foods) or high electrolyte diet (through salt tabs or excessive electrolyte pills) does not ensure that your body will use those electrolytes.

Unfortunately, many athletes suffer

from stomach cramps and leg cramps, as well as white streaks on clothing during exercise, due to an excessive amount of sodium or electrolytes before and during the race along with a high concentration of sugary sport drinks consumed during the race which sit in the stomach undigested.

I have a feeling that most Ironman athletes consume way too much sodium and carbohydrate-rich foods in the days

...many athletes suffer from stomach cramps and leg cramps, as well as white streaks on clothing during exercise, due to an excessive amount of sodium or electrolytes before and during the race along with a high concentration of sugary sport drinks consumed during the race which sit in the stomach undigested.

(or week) leading up to the race and may neglect other vital foods such as lean/ low-fat, protein-rich foods, healthy fats, and fruits and vegetables.

Although sodium is essential in small quantities, in order to maintain fluid balance and control the contraction and relaxation of muscles, athletes exercising in hot conditions do not need to go overboard by salting every edible food in site. This could be a total body disturbance and possible DNF waiting to happen. By eating a balanced diet of real food with natural sources of sodium, an athlete can obtain the recommended

amount of sodium needed to maintain body homeostasis.

Here's my idea of the typical foods consumed by athletes before an Ironman (or long distance race)...

**Because most of these foods are packaged and processed, I am assuming that the servings I am giving are low compared to what many athletes would "snack" on in the days leading up to the race*

- Salting food at each meal or eating salt packets - Approximately 1 tsp. of table salt contains 1,500 mg of sodium.
- 1 cup Chex Mix Bold - 780 mg sodium
- 3 oz. Dry Roasted Mixed Nuts - 558

mg sodium (*I do recommend nuts prior to a race w/ snacks and meals in order to keep the blood sugar stable and to provide healthy fats but be sure to portion control. 3 oz nuts = 504 calories*)

- 4 oz. Rold Gold Pretzel Sticks - 1840 mg sodium (*not sure who can only eat 4 oz. of pretzels?*)
- 12 ounces (1 1/2 cups) Panera Vegetarian Soup - 1290 mg (*I included soup here and below. I do think soup is a great way to get sodium just be aware*

see SALT on page 11

SALT from page 10

when you order out and check online nutrition guides before ordering)

- 2 slices of a large Pizza Hut cheese pizza - 1500 mg sodium (I enjoy pizza two days before a race. Because most athletes will have 5-6 pieces of pizza, be aware of calories and sodium. 1 slice of a large, thin crust Veggie Lovers™ has 510 mg sodium and 170 calories, whereas 1 slice of cheese pizza has 300 calories. Because most athletes will choose restaurant pizza over "fast food" pizza, be aware of chef's going overboard on the salt shaker in the kitchen)

- 1 tablespoon mustard - 480 mg sodium

- Subway 6" turkey breast sandwich - 1020 mg sodium (*check restaurants and fast food online nutrition guides before you travel so that you can plan ahead before you order*)

Total: 6988 mg sodium
(*I didn't add any mg's for salting food*).

My idea of some healthy sodium-rich foods (some are great sources of protein):

- 1/2 cup fat free cottage cheese - 450 mg sodium
- 1 cup vegetarian soup - 815 mg sodium
- 1/4 cup feta cheese - 418 mg sodium
- 2 ounces Boar's Head roasted turkey - 350 mg sodium
- 1 cup skim milk - 127 mg sodium
- 2 slices rye bread - 422 mg sodium

Total: 2582.5 mg sodium

In addition to 2-3 Hammer Endurolytes on the 3-4 days leading up to the race. The biggest problem I find with athletes is the feeling of bloating and having to drink too much water in the days

leading up to the race. The best feeling you can have before the race is knowing that your body is healthy on the inside. Drinking water (not sugary sports drinks) is recommended several times during the day (20-24 ounces between meals) and 12-16 ounces with meals. Because sports nutrition during a race is just as important as what you put in your body before the race, keep the diet balanced before an Ironman and choose to eat healthy, portion controlled meals and healthy snacks every 2-3 hours. Always combine protein with carbohydrates to keep the blood sugar balanced during the day. Don't neglect those fruits and veggies which include many necessary vitamins and minerals which will be used on race day.

I have a feeling that the foods I listed in the typical Ironman pre-race diet are common in most American's diet. And I only listed a few foods which I consider easy to consume and contain sodium. I didn't list foods that are super bad for the heart but you will do a great thing for your body if you prioritize foods that have very few ingredients (for example: fruits and veggies) so always read nutrition facts and labels.

Even if you aren't doing an Ironman and are only training for a sprint triathlon or consider yourself a fitness enthusiast... read food labels to reduce and control the sodium in your diet.

Marni Rakes holds a Master of Science in Exercise Physiology and is a Certified Sports Nutritionist (CISSN). Marni is a Level-1 USAT Coach and is currently pursuing a Registered Dietician degree. She is a 2007 Ford Ironman World Championship finisher and just finished the Ford Ironman Louisville Triathlon on August 30, 2009 with a personal best time of 10:54.45. Marni enjoys public speaking and writing. She has several published articles in Hammer Nutrition's Endurance News, Cosmo Girl, and Triathlete Magazine and contributes monthly to IronGirl.com and Beginnertriathlete.com.

STEVE'S NOTES:

I'd like to personally thank Marni for this particular article. Oftentimes, Brian, Dr. Bill, myself, and other staff members at Hammer Nutrition receive quite a bit of resistance for our adamant position on this subject, so it's nice to have someone else "preach the message" (and yes, Marni is sponsored by Hammer Nutrition but is not employed by us).

Two things that I felt compelled to bring up:


1) Some athletes swear by using a specific daily dose of Endurolytes in the days leading up to a race. I personally don't subscribe to this because:

- During periods of resting, which is what one should primarily be doing in the days leading up to a race, electrolyte support via Endurolytes isn't crucial, in my opinion.

- I believe that too much sodium is already provided in the diet so the additional amounts in Endurolytes are unnecessary.

- The other electrolytic minerals, such as potassium, magnesium, calcium, and others, can be provided via the diet and supplementation with Premium Insurance Caps.

2) Marni's water intake suggestions are excellent, though I prefer the formula of 0.5 to 0.6 of your body weight in pounds to give you the amount of ounces of water that you should be consuming daily. Keep in mind, however, that if you've not been following either of these recommendations consistently, don't start too soon prior to a big race, as this will overwhelm your body with too much fluid too soon, which may increase the potential for hyponatremia. When you do start employing these recommendations, do so gradually for best result.



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A team photo of the 'Big Ring Flyers' out of Hudson, Wisconsin. Photo - courtesy of Nate Phelps

Off-Season Supplement Suggestions

Author : Steve Born

Note: The original version of this article first appeared way back in 2000, in EN #29, with updated versions appearing in EN #48 (2005), EN #52 (2006), EN #56 (2007), and EN #60 (2008). As I mentioned when introducing this article in EN #52, I don't usually like to recycle articles. However, this one's always been one of my favorites, and I believe that the information provided is useful and worth repeating, especially at this time of the year. I have made some significant updates in this particular version so I believe it's more relevant than ever...

For many of us, the competitive season is fast coming to a close. If that's the case for you, as your in-season training and racing schedule is winding down, you know it'll soon be time to look back and evaluate all of the things that went right as well as the things that need improvement; it's an ideal time to set your goals for the next season. Dr. Bill Misner has suggested that "pre-season goals should be realistically set at 1-3% above personal bests at each distance, with planned training peaks set to meet those goals methodically." If you're like most athletes, you'll probably be doing some form of aerobic cross training outside of your primary sport as well as weight training. But the day to day training, the accumulation of several hours spent running, cycling, swimming, or whatever your training involved, is definitely on the decrease at this time of the year.

Many years ago, when I lived in

Southern California the off season simply meant fewer miles on the bike. But when I moved to colder climates I discovered the benefits of cross training and began using Nordic skiing and weight training during the winter to prepare myself for the upcoming competitive cycling season. As has been the case for the past few years, I am retired from actively competing in ultra cycling. However, I still want to maintain fitness for general health purposes (and so I don't hurt so bad

If you plan to remain active, training frequently and racing occasionally, I wouldn't hesitate to remain on pretty much the same program you followed during your main competitive season.

come Highline Hammer time!) so I try to stay active all year round, even if the duration and intensity is less than during my main season.

But whether or not you choose to be active year round, once your main competitive season ends, does that also mean the end of your supplement program? I don't believe it should be and later in the article you'll find my supplement suggestions for the off-season. If you plan to remain active, training frequently and racing occasionally, I wouldn't hesitate to remain on pretty much the same program you followed during your main competitive season. There's no reason to stop supplementation if you're going to remain active because you will still want to provide your body with the nutrients

it needs so that you can get the most benefits out of whatever type of training you do. Now, you may find it desirable to cut back on the dosages if you're not training as heavily, but I would definitely continue your supplement program. I do not believe there is any reason to cycle off supplements, especially the three Daily Essentials—Premium Insurance Caps, Race Caps Supreme, and Mito Caps—during the off-season.

Free Radical Neutralization – Important all year round!

Louis Pasteur, recognized as the father of modern medicine, once said, "The key to medicine is host resistance" and this is where antioxidants excel. Antioxidants

strengthen our immune system, increasing our resistance to many types of toxins, bacteria, viruses, and degenerative diseases. They accomplish this primarily through the neutralization of excess amounts of free radicals. Over half a century ago Dr. Denham Harman first proposed the theory of free radicals and the role they play in age-related diseases. Back then, when aging was primarily believed to be more of a mechanical issue, due simply to many years of wear and tear on the body, Harman's theory on free radicals was... well, radical. Now, however, while there are many factors that contribute to the aging process, the Free Radical Theory of Aging is widely accepted as one of the

see OFF-SEASON on page 13

OFF-SEASON from page 12

primary, if not THE primary concept as to the cause of accelerated aging and/or age-related diseases.

Researchers Bradford and Allen write, "A free radical is simply a molecule carrying an unpaired electron...All free radicals are extremely reactive and will seek out and acquire an electron in any way possible. In the process of acquiring an electron, the free radical...will attach itself to another molecule, thereby modifying it biochemically." [R. Bradford & H. Allen. Oxidology. Chula Vista CA: R.W. Bradford Foundation, 1997. Pp. 64-65.] Leibovitz and Siegel state: "However, as free radicals (FR) steal an electron from the other molecules, they convert these molecules into FRs, or break down or alter their chemical structure. Thus, FRs are capable of damaging virtually any biomolecule, including proteins, sugars, fatty acids, and nucleic acids." [Leibovitz, B. & Siegel, B. (1980) "Aspects of free radical reactions in biological systems: aging" J Gerontol 35: 45-56.]

So even though some free radical activity in the body is actually a beneficial thing, allowing free radicals to accumulate and go unchecked—which they easily do, overwhelming the body's built-in antioxidant defenses—is definitely not beneficial. Dr. Misner states, "The human body uses free radicals to destroy specific microbes; however, when free radical volume accumulates in time or in high volume, mutagenic activity or degenerative disorders may occur." Free

radicals are now believed to be a primary culprit behind a tremendous range of diseases including cancer, cardiovascular disease, Alzheimer's disease, Parkinson's disease, and others.

A good portion of free radical damage results from the process of oxidation, which is somewhat of a double-edged sword. For example, whenever our bodies convert food to fuel it is done by oxidation, a vital, life-sustaining process. The down side is that the process is not 100% efficient and the metabolism of food, especially foods that are high in fats, can cause high amounts of free radicals to be produced. Dr. Misner elaborates: "Oxygen has the capacity to be both friend and foe. When energy fuels are metabolized in the presence of O₂, 5% of them create molecules that contain an odd number of electrons. The conversion of blood sugar, muscle glycogen, and fatty acids occur by oxidation. During this process pairs of hydrogen atoms are released like guided missiles, resembling a minute micro-level war, causing devastating destruction to underlying tissues and cells. If free radicals (FR's) are not neutralized by on site antioxidant body stores immediately, tissue damage occurs to absolutely every cell membrane touched by these imbalanced molecular wrecking machines."

In other words—and I'm paraphrasing this from a source I can no longer recall—"the very thing that helps give life (oxygen), is also what's killing us."

Free radicals are higher in people who:

- Exercise beyond 90 minutes duration
- Exercise above 80% VO₂ Max
- Have a high body fat percentage - (above 15% males, above 20% females)
- Eat animal meats and dairy products
- AGE-->Older (above 40) = More Free Radicals
- SIZE-->Bigger (above 200 lbs) =More Free Radicals

The take-home message is that even though oxidative damage occurs at higher levels during intense and prolonged exercise, it occurs at ALL times—during easy workout days and non-workout days—simply through the process of making energy. In addition, free radicals are also produced from environmental pollutants and ultra violet radiation. Also, stress of any kind creates free radicals. So even though you may be taking some well-earned time off from full-time training and racing, free radical production NEVER takes a day off and neutralizing them is the primary reason for the supplement suggestions that I've made.

One last note before I get into supplement suggestions: I strongly recommend that you read or re-read our article "Antioxidant Supplementation—It will shorten your life!" It's a real eye-opener of an article, outlining some of the "scare tactic" headlines and news reports that resulted from very questionable conclusions derived from certain "studies" on antioxidants. It's an article that will very much help "clear the air" about these dubious studies/

see OFF-SEASON on page 14

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OFF-SEASON from page 13

conclusions, while also explaining why antioxidant supplementation is so important. You'll find the article at www.hammernutrition.com/EN/en54/index.html#8

SUPPLEMENTS



1) PREMIUM INSURANCE CAPS- Every athlete I've designed a supplement program for or have given supplement advice to knows that I consider a multivitamin/mineral supplement

the foundation of any program, and that I consider Premium Insurance Caps to have no peer in that category. It's especially important during the competitive season because you're depleting these basic nutrients at very high rates, nutrients that are important in maintaining the optimal performance of many bodily functions, including the protection and enhancement of the immune system. It's also important to replenish our bodies with these basic nutrients during the off season as well, if only because our food supply is severely lacking in these important vitamins and minerals. I often recall something Dr. Misner wrote and his words have been instrumental in why I believe supplementation with a multivitamin/mineral product is so important: "Athletes today ingest only 11% of the organic nutrients from their food sources that the athletes of the 1940's enjoyed. Modern science has concluded that marginal nutritional deficiency and imbalance is directly responsible for 644 diseases or disorders."

One of Dr. Misner's research articles, "Food May Not Provide Sufficient Micronutrients to Avoid Deficiency," published in the prestigious *Townsend Letter for Doctors and Patients* (April 2005 #261, pages 49-52)—along with the paper (NIH State of Science Conf., Bethesda 14-16 May 2006, for *Am J Clin Nutr*) of another of nutritional science's brilliant minds, Dr. Bruce Ames—provides evidence that supports the notion that food alone does not supply all of the micronutrients that we need to prevent deficiency. When you think about that it's pretty sobering: Our food supply may not provide enough of the nutrients needed to prevent a deficiency disease, let alone enough to promote

optimum health. That, in my opinion, makes supplementation a necessity.

For the replenishment of vitamins and minerals, supplying what the diet cannot, and to provide the basics of antioxidant support, taking Premium Insurance Caps on a daily basis is an excellent idea. You may not require the full two-packet/14-capsule dose (which is the amount we suggest for athletes weighing >150 pounds who are doing workouts over 1.5 – 2 hours) but the consistent intake of 4-7 capsules a day, in divided doses if possible, will help provide the nutrients your body needs that it cannot get in adequate amounts from our food sources.

• Antioxidants in Premium Insurance Caps: beta carotene, vitamin C, vitamin E, manganese, selenium, and zinc



2) RACE CAPS SUPREME- This product is a "must have" during the competitive season as its nutrient components powerfully support enhanced energy production, endurance, and recovery.

The primary nutrients in Race Caps Supreme—Coenzyme Q10 (CoQ10) and idebenone—are vital for the production of adenosine triphosphate (ATP), the basic energy molecule of each cell, and this is but one reason why it's such an important "during season" supplement.

However, I believe that as good as the athletic-specific benefits are, the general health ones of this product (especially from CoQ10 and idebenone) outshine them, which is why Race Caps Supreme is on my year-round supplement list. Entire books have been written on just CoQ10's antioxidant benefits and you could spend an awfully long time on the Internet reading about the other numerous benefits of this incredible nutrient. Here are but a few of the ones attributed to CoQ10:

- Improves blood circulation and aids in lowering blood pressure
- Alleviates asthma and allergies
- Helps alleviate chronic fatigue syndrome
- Prevents the oxidation of lipoproteins, thus potentially reducing the risk of arteries from forming plaque and getting damaged
- Used as a preventive and

therapeutic agent for heart disease, cancer, periodontal disease, and neurodegenerative diseases, such as Alzheimer's and Huntington's

Now, as important as CoQ10 is, and with such tremendous benefits, there are some experts that feel that idebenone, the synthetic variant of CoQ10, is an even more powerful antioxidant and a substance that yields even greater benefits. Dr. Misner explains, "Idebenone supplies all of the same benefits as CoQ10 [acting as a "spark plug" for the production of energy (ATP), as well as being a potent antioxidant] plus some distinct advantages based on its more complex chemical structure." In fact, the antioxidant power of idebenone is so potent that it is used to protect organs from damage when they are removed from donor for transplant to patient.

While CoQ10 is perhaps the most important substance one can take for the prevention of cardiovascular disease and certain cancers, idebenone also provides superb nutritional support in those specific areas, while appearing to have even greater brain-specific benefits. Dr. Misner writes, "Idebenone protects the brain from the detrimental effects of serotonin deficiency and facilitates endogenous serotonin production. Serotonin deficiency compromises sleep and may contribute to chronic depression. Idebenone favorably affects blood flow in the brain, reproducing verbal fluency, creativity, and memory. Idebenone enhances endogenous norepinephrine production by facilitating cellular uptake of tyrosine. This suggests that idebenone may indirectly improve the uptake and reproductive role of tyrosine in thyroid hormone production. Thyroid hormone deficiency is a factor in performance and body mass index."

Other "brain benefits" attributed to idebenone include improved cognition and mood, reduced damage from Parkinson's disease and Alzheimer's disease, and a role in the prevention of damage caused by excitotoxins (a class of substances produced from the consumption of substances such as MSG and some artificial sweeteners), which can impair neuronal functioning. On top of that, idebenone appears to positively affect liver mitochondrial function, which suggests that it would support and enhance the detoxification functions of

see OFF-SEASON on page 15

OFF-SEASON from page 14

the liver.

With Race Caps Supreme you have two powerful substances, which, along with the vitamin E in the product, have some outstanding general health benefits. All three substances—CoQ10, idebenone, and vitamin E—are premier antioxidants and cardiovascular health nutrients.

Speaking of cardiovascular health, Race Caps Supreme also contains Trimethylglycine (TMG), which not only has antioxidant properties but, even more importantly, is involved in the process of methylation, which is vital for, among other things, helping lower elevated homocysteine levels, which are implicated in cardiovascular disease. TMG, plus vitamins B12, B6, and folic acid, all of which are found in Premium Insurance Caps, are the key components (methyl donors/methylating factors) in the methylating process. One nutritional scientist writes, "If your body runs low on methyl donors or methylating factors, the body's essential detoxification and repair functions are impaired. Among other things, the body begins to have difficulty keeping up with the job of recycling homocysteine back into [the amino acid] methionine. The accumulation of homocysteine in the blood is a clear danger signal that methylation is impaired. It is also a direct threat to your health in and of

itself."

The specific dosage suggestion in the Hammer Nutrition Product Usage Manual (a.k.a. "the little red book" - www.hammernutrition.com/downloads/PUM.pdf) would be very applicable during this time of the year.

- Antioxidants in Race Caps Supreme: CoQ10, idebenone, vitamin E, Trimethylglycine (TMG)



3.) MITO CAPS – I think the most exciting anti-aging research I've read in many years was that of Dr. Bruce Ames regarding the effects of two nutrients—Acetyl l-carnitine (ALC) and r-alpha lipoic

acid (r-ALA)—on the health of the mitochondria. Ames' landmark studies found that both ALC and r-ALA (both of which are contained in Mito Caps) played vital roles in improving mitochondrial activity and cellular metabolism, which is beneficial not just for athletic performance but even more so for general health. The anti-aging implications of the ALC/r-ALA combination are staggering when you think about the potential they have for delaying, and even possibly reversing, mitochondrial aging, which would mean that the millions of energy-producing "furnaces" in our bodies might possibly

be restored to more youthful levels.

ALC is probably the most widely researched form of carnitine, one that not only enhances the use of fatty acids for fuels in the mitochondria (helping to make more energy available to cells and tissues), but also the form that most readily crosses the blood-brain barrier, helping support a number of brain and nerve functions and helping prevent neurodegenerative diseases.

r-ALA is one of the most potent antioxidants discovered and what makes it so unique in that regard is that it is both a water-soluble and fat-soluble antioxidant, able to neutralize free radicals in both the fatty and watery regions of the cells. In addition, it has the unique ability to boost and recycle other antioxidants such as vitamins C and E, CoQ10, and glutathione. In fact, r-ALA can stimulate the production of glutathione, which may be the most important antioxidant there is. No wonder so many nutrition experts refer to it as "the universal antioxidant." In addition, r-ALA plays an important role in controlling blood sugar, thus helping with the prevention of Type 2 diabetes.

What Dr. Misner wrote when we first introduced Mito Caps is at the heart of why I recommend taking the product every day of your life: "The longer you

see OFF-SEASON on page 16

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OFF-SEASON from page 15

can stimulate the lifespan or health of the mitochondria, the longer you will live and the better you will perform in endurance events. The athlete who has the most healthy/efficient active mitochondria is the athlete who performs at their best." As with Race Caps Supreme, the dosages suggested in the Hammer Nutrition Product Usage Manual would very much be appropriate during the off-season.

NOTE: *Mito Caps* was our "spotlight" product in *Endurance News* #58 and even more details about this amazing product can be found at: www.hammernutrition.com/EN/EN58/May2008.html#Pg_8

• Antioxidants in Mito Caps: r-Alpha Lipoic Acid, vitamin C (as ascorbyl palmitate), vitamin E, DMAE (Dimethylaminoethanol), PABA (Para Amino Benzoic Acid)



4) PHYTOMAX - I wish I could say that my diet is excellent all the time. The truth is that it's not always possible, especially in the winter where I live, to obtain substantial amounts of fresh, organically grown

vegetables. I have found this product to be a real benefit for helping provide additional nutrients not found in other foods or supplements. The vitamins, minerals, enzymes, and phytochemicals in Phytomax (I suggest 2-3 capsules twice daily), along with the vitamins and minerals in Premium Insurance Caps, will very much fulfill your nutritional "basics" and augment the nutrients that you obtain in your diet.

One of the benefits of Phytomax is its ability to help promote optimum alkalinity in the body, which helps create the best environment for the health of the cells. Other benefits that can be obtained with consistent use of the product (and we hear these frequently from regular Phytomax users) are increased energy levels (but without the unpleasant side effects of stimulants), faster recovery, improved immune system function, improved moods and mental clarity, and a higher quality of sleep.

NOTE: See the "Product Spotlight" article in this issue of *Endurance News*

for more information about *Phytomax*.



5,6) SUPER ANTIOXIDANT and AO BOOSTER – Super Antioxidant was a new entry in my off-season supplement list in 2006 (when the product was known as Super AO), and AO Booster—which was introduced this year—is a new entry on this year's list. I've included both products for one simple reason: additional antioxidant support.

As mentioned earlier, free radical production never takes a day off and with

the extraordinary antioxidant profile in these two products you have even wider-ranging support for the neutralization of free radicals, both water-soluble and fat-soluble. One of the reasons why the latter is so significant—and the primary reason why AO Booster was introduced—was because of something Dr. Misner once wrote:

My biggest criticism of antioxidant (AO) supplementation is that we take mega-doses of water soluble AO's, but are quite negligent of the fat-soluble components, whose ORAC values are remarkably high. It is my view that natural fatty acid nutrition and fat-soluble antioxidants should accompany the high ORAC (Oxygen Radical Absorbance Capacity) foods and water-soluble components [such as] Vitamin C, B-Complex, and [the multiple antioxidants in] Super Antioxidant for reducing free radicals.

Simply stated, with Super Antioxidant and AO Booster you provide the body with a plethora of unique antioxidants working in synergy with the ones provided by Premium Insurance Caps, Race Caps Supreme, and Mito Caps. You may notice that, unlike those three aforementioned products, I haven't listed the antioxidant components in either Super Antioxidant or AO Booster. Why? Because the ingredient list for both of those products contains nothing but antioxidants!

In addition to antioxidant support, two of the primary nutrients in Super Antioxidant—Ginkgo biloba and vinpocetine—are arguably the two most

well known "brain" nutrients in use today, believed to enhance memory and alertness. In addition, both nutrients—along with Gotu kola, another nutrient in the product—are believed to help increase circulation. A potential benefit of increased circulation is the ability to speed delivery of antioxidants throughout the body in addition to helping eliminate metabolic wastes more quickly.

One of AO Booster's potent antioxidants, lutein, is noted for its eye- and skin-specific benefits; it's arguably the most commonly used "eye health" nutrient. Animal studies with astaxanthin, another nutrient in AO Booster, suggest it provides impressive immune system boosting and potential cancer preventative benefits.

So for increased antioxidant support, plus support for enhanced cognitive function and circulation, taking a Super Antioxidant capsule at breakfast or lunch is good idea, in my opinion. Adding one AO Booster capsule to your daily supplement regimen will also provide significant benefits, primarily via its fat-soluble antioxidant support.

At the rate of one capsule a day, a bottle of Super Antioxidant and AO Booster will last you two months...not a bad investment for all of the benefits that you'll receive.

NOTE: *AO Booster* was our "spotlight" product in *Endurance News* #61, and more information about this powerful product and all of the benefits it supplies can be found at: www.hammernutrition.com/EN/EN61/ENIssue61.html#ao



7) CARLSON NORWEGIAN SALMON OIL - If there were ever a group of nutrients that I would classify as being essential all year round, it would be the Omega 3 fatty acids. Among their many benefits related to

athletic performance, the components of fish oil (DHA/EPA) improve endurance by increasing mitochondrial efficiency via their positive effects on coenzyme Q10 and idebenone, two key substrates involved in energy production. The absorption rate of these two fat-soluble

see OFF-SEASON on page 17

OFF-SEASON from page 16

nutrients is greatly increased in the presence of a fat source and there's arguably not a healthier fat than fish oil.

For general health purposes, fish oils provide one of the absolute defenses against cardiovascular disease. For example, an ever-growing body of research suggests that atherosclerosis, angina, heart attack, arrhythmias, stroke, and congestive heart failure may be prevented with the consumption of fish oils. Fish oils help to reduce blood pressure, maintain arterial wall elasticity, and prevent blood clotting... they really are the heart's "best friend."

Research shows that fish oils have a positive influence on brain function and mood, including the alleviation of anxiety, insomnia, and other symptoms of depression. In addition, Omega 3 fatty acids from fish oil have been shown to provide impressive anti-inflammatory benefits by reducing specific pro-inflammatory cytokines and Series 2 prostaglandins, while increasing the level of anti-inflammatory Series 3 prostaglandins.

There are two essential fatty acids (EFA)

that we need for life itself – the Omega 3 fatty acids and Omega 6 fatty acids. Our bodies cannot make either of them so it's necessary that we obtain them from dietary sources. However, while most of us consume an overabundance of Omega 6's, our Omega 3 intake is woefully lacking. In fact, while research points to a 1:3 Omega 3 to Omega 6 ratio as ideal, most people's diets show a 1:20 ratio, which is obviously very much out of balance. The bottom line is that we need Omega 3 fatty acids and the best source for them is fish. However, consumption of certain types of fish (such as salmon, mackerel, and sardines) two to three times a week, while being an extremely wise strategy, is simply not possible for most of us. That's where the Carlson Norwegian Salmon Oil supplement comes in. 2 soft gels twice daily is a super easy way to make sure you obtain the essential O-3 fatty acids.

Summary

Some people reading this article may think, "Wow, you've listed seven different products...that's a lot of stuff to be using during the off-season!" I admit that it is a fairly sizeable number of products to consider using, but I genuinely believe that the combination

of these products provides a tremendous and wide-ranging number of athletic performance enhancing and overall health benefits; otherwise, I would not have suggested them (and believe me, there were another product or two that could have made the list). That said, if finances are an issue for you, then I would suggest the use of the three Daily Essentials products first and foremost. That's not to say that the other products I've suggested aren't worthy of including in your daily regimen (they definitely are), but in my opinion the three Daily Essentials—Premium Insurance Caps, Race Caps Supreme, and Mito Caps—will always be the most important.

Excellence in athletics is a year round proposition so even though the off-season may be a time for cutting back on heavy training, I believe it still requires a full time commitment to your athletic goals, especially as the focus shifts more towards general health requirements than it does actual training. A year round supplement program is vital for making positive increases in both fitness and health and I believe the one outlined in this article covers a tremendous amount of nutritional "bases."

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



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- Reduce post-workout muscle soreness
- Eye and skin-specific benefits



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- Enhance energy
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- Reduce free radical damage
- Improve circulation and cognition



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- Antioxidant support
- Potential increase in longevity



Live green Superfood for peak energy

- Non-stimulant energy boost
- Strengthen immune system
- Provide missing micro-nutrients



Venture Crew 2917 members Caitlin Caltabiano, Jessie Mazur, Daniel Gibbs, Megan Apple, Joey Mazur, and Matt Kennedy take time for a photo on the top of Mount Rainier. Photo - courtesy of Venture Crew 2917

Your Heart Is Sweet Enough

Author : Nancy Appleton Ph.D. and G.N. Jacobs

(Source: nancyappletonbooks.wordpress.com - Reprinted with permission from the authors)

Perhaps, you've already read one of the many variations of recent statements on sugar from The American Heart Association? We at Nancy Appleton Books are very happy, so much so that we'll take a moment to do the Snoopy Dance. On second thought, the dance looks stupid when real people do it.

So, what does the American Heart Association's instructions that everyone should cut their added sugar intake by 70-percent mean beyond giving Doctor Appleton a moment where she gets to say I told you so sometime back in 1986? Well, that depends on your circumstances, because we think the Heart Association has picked a sugar threshold that is still well above what is best for optimal health, but also represents a vast improvement over how things are done now.

Data collected between 2001 and 2004 and cited in the statement put the average American's sugar consumption at 22 teaspoons or 355 extra calories of sugar per day. Citing recent studies that generally link sugar to obesity, diabetes and heart disease, the association has decided that men on 2,200-calorie diets should cut their sugar intake to 9 teaspoons or 150 calories per day. Woman in similar actuarial brackets assumed to eat 1,800 calories per day are instructed to cut down to 6 teaspoons or

100 calories per day.

Just so you know, while these "official" recommendations may not be enough for some people to lose weight and become healthier, they do represent threats to the major producers of sugar in our modern diet. A soda manufacturer, for instance, will worry because the average cola tips the scale at 8-10 teaspoons or 130-150 calories. The heart association published statistics that break down our sugar usage to regular soda (33%), sugars and candy (16.1%), cakes, cookies and pie (12.9%), fruit drinks (9.7%), dairy desserts and milk products (8.6%) and other grain-based treats (5.8%).

Even with other categories of foods that deliver sugar to an unsuspecting populace not discussed in this breakdown, a reduction to 9 and 6 teaspoons respectively means many sugar producers may change their business model. We'll discuss what the heart association left out in a later paragraph.

In her first book *Lick the Sugar Habit*, Dr. Appleton states that the human body needs only about 2 teaspoons of blood sugar (glucose) per day. Normal consumption of whole fruits, vegetables and grains will provide this amount of glucose without resort to any added sugar at all!^[i] So you see, 6 or 9 teaspoons of sugar versus 2 teaspoons still means that the heart association people have quite a ways to go before they get our full support.

We also have reason to wonder if the

statement writers have based their sugar consumption numbers on statistics that underreport the real story. Statistics on sugar vary between reports depending on who is doing the test and how close they are to the U.S. Government, which until very recently thought nothing was wrong with sugar if you brushed your teeth. In 1989, the Berkley Wellness letter, estimated that sugar consumption in 1985 to be 133 pounds per year or 500 to 600 calories per day per person.^[ii] We are already well above the numbers cited by the heart association statement written nearly twenty years later. We have in the years since raised yearly sugar consumption to well over 150 pounds per person per year.

One thing that we can completely agree on with the American Heart Association is the high degree to which soda delivers the most sugar to the most people. Their information says that soda represents a third of all sugar injected into the average diet. Our information may not exactly agree, but still says that we get too much sugar from soft drinks, lemonade, punch and whatever Tang is defined as. We devoted a whole chapter of *Suicide by Sugar* to soft drinks and other similar sugary drinks.

In 2005, the average American was estimated to drink 35.5 gallons of just regular soda, which when the other categories of sugary drinks are added in comes out to the equivalent of 637 cans of soda per person per year.^[iii] We cited a statement from the American Academy of Pediatrics made in 2004 that said that all members should advocate for the removal of all sugary drinks from schools. The primary reason was to prevent obesity in children and to make sure that sugar didn't replace healthy nutrients in children's diets.^[iv]

see *HEART* on page 19

HEART from page 18

The Heart Association has come out for sugar reductions and we applaud. But, we find it interesting that the bulk of the recommendations fall against the easy culprits in our sweet diets: soda, ice cream, cake, pie, but not some others that may in the long run be more useful. We understand about birthday parties and the social reasons we eat sugar, even though we assume many people will act like addicts and lose the ability to say "no more today." But, shouldn't sugar reductions fall against all sugar producers equally?

As of this writing, Mr. Jacobs holds a Heinz ketchup bottle in his hands with this ingredient list: tomato concentrate, distilled vinegar, HIGH FRUCTOSE CORN SYRUP, CORN SYRUP, salt, spice, onion powder, natural flavoring. He also pulled out a can of his generic brand chili where SUGAR and MODIFIED CORN STARCH are listed together about in the middle of the list. So far, there is no call on the part of the Heart Association to question the sugar

that is in regular processed food that doesn't need to be there from the point of view of taste.

Mr. Jacobs admits to making compromises with some sugar-laden foods for convenience. He refuses to boil beans and simmer down meat and spices to make his own chili, a recipe that he was never taught, because he already spends too much time in the kitchen some days. He is trying to wean himself off of ketchup as a base for marinara sauce in favor of steamed tomatoes. He reports mixed results. But, these foods aren't supposed to taste sweet; yet, we see sugar in all of its many names on the labels.

We would suggest to the Heart Association to take a look at the sugar in these processed foods and see if advocating for cans of chili without sugar added would help reduce sugar consumption without being so draconian about the obvious sugar sources. Yes, in a perfect world whole fruit with a tiny bit of cream for the lactose tolerant would replace the fudge sundae, but the

short term comfort of these foods is very powerful.

Instead of denying the occasional fall off the wagon doesn't it make more sense to start with foods that the sugar taste is practically overwhelmed by all the other spices as to be tasteless? Sugar is not a preservative and canned meat is vacuum-sealed, so preservation isn't the reason for this practice. We hope it isn't because sugar is addictive, another of our common rants.

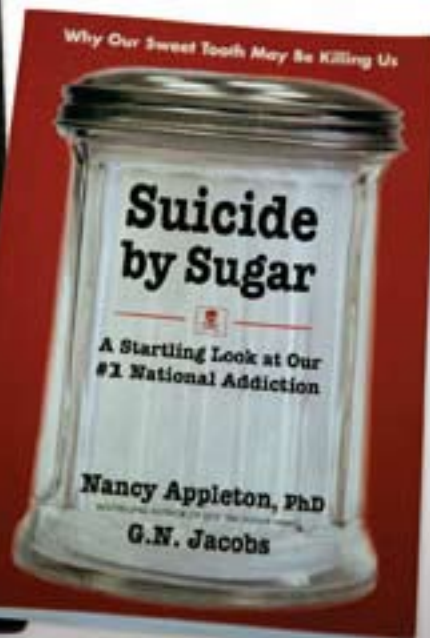
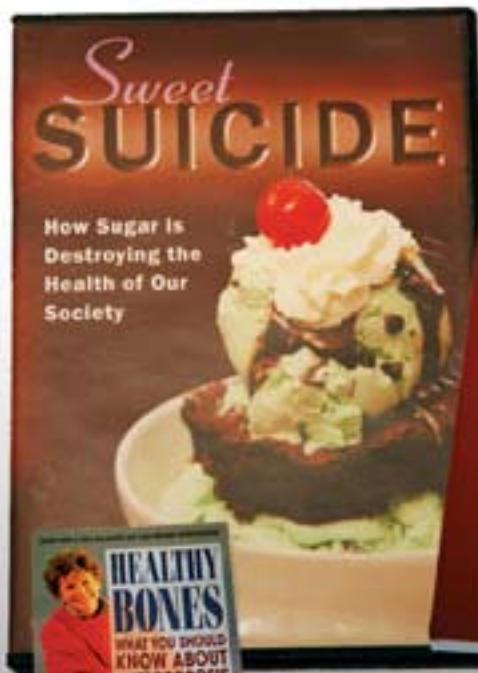
Sugar upsets body chemistry and helps cause heart disease, diabetes, obesity and many other maladies. Doctor Appleton has said this for more than 30 years and we feel good that other health groups are now catching on. It is a good day.

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Lito and Bill Nicolai head toward the summit of Logan Pass.
Photo - Angela Nock



Go Faster - Get Younger

Author : Bill Nicolai

In his writings on nutrition Dr. Bill Misner has written "Aging Defeats Champions" and he has even calculated that the estimated loss in athletic performance is .4 to 1.4% per year, and he is correct on the average; but who says you have to be average. This article discusses the real possibility of slowing, stopping and even reversing physical aging by pursuing athletic endeavors. I am going to explain how older athletes can actually get faster not just slow the decline that occurs with age. In so doing you will become younger physically. I suppose that if you presently are performing at the proven limits of your age range, I.e. you are the world age group champion in your sport, this may not apply. Everyone else keep reading since I'm going to give you real information on how to get faster, become younger and put some time on the old guy with the hood and scythe.

The seven keys to speed and youth

1. Stop being realistic in your expectations and goals:

There is an unbelievable amount of propaganda in favor of getting older and slower. A well known poem says "Take kindly to the counsel of the years, gracefully surrendering the things of youth" a well known proverb says "if you can't beat them join them" and just last month The Wall Street journal says "After 50, Avid Athletes Find That to Stay Healthy, They Must Let Go..." Sure, there is a sort of realistic fatalism in all this negativity, but I say it is a bunch of bunk. If being realistic is such

a good idea, to just give up and slow down, then explain to me that what benefit you get from thinking this way. Getting faster is actually pretty simple, but it is not easy; and hard though it may be, it is easier than getting older.

2. Make time and space in your life for your physical self:

Consider which you need most at this phase in your life; money versus vitality is an equation that often occurs. Ask yourself which means more to you, an extra 20% in your estate for your heirs, or happiness for yourself for the next 20 years. If you are approaching old age, then you likely have time to indulge more, not less, in your passion for athletics. Some years ago when I took my first VO2 max test at a university lab, the physiologist said to me. "Aerobic exercise is the fountain of youth". This man had seen and tested thousands of athletes and patients at the facility and that was his considered observation. As you become physically younger you may well have to adjust your acquaintance circle. I think the impact on personal relationships of decreasing physical age is a major impediment to achieving it, some of your friends may not like it; but, just who's business is it that you should want to be more fit and can you afford to let others determine this for you?

3. Injury, sickness and poor life habits, not age, are your enemies; optimizing health is your defense:

If you wish to get faster and younger you cannot expect to get there by just punishing yourself and working out harder, piling on the miles, ignoring

pain and the like. You will injure yourself and get sick if you do this. Nor can you persist in eating unhealthful food, have poor rest habits or maintain dysfunctional personal relationships. I am not telling you anything here you do not know, but are you making improvements in these key areas? You must. Again, these things are simple, but may not be easy.

4. Make sure you train enough at moderate levels:

Most athletes use maximal effort as the feedback governor to determine the level of training; most days they go as long as they can as hard as they can. But serious students of endurance athletics have known for the last 30 years that the most effective program is to do activities below the levels they could maintain most of the time and then to go very hard once or twice a week. I.E spend about 70% of your time at 70% of max and only 15% above 80%. For older athletes there is no apparent benefit going above 90% in training though you may occasionally end up doing so in short races or riding with a group. Occasional moderate Tempo work between 70 and 80% is fine, but this is where many athletes spend most of their time and it is proven to limit fitness. Done just right, proper endurance exercise habits are actually making you younger at the cellular level. To quote Dr Misner "Following prolonged hypoxia, a biological programmed cell death process (apoptosis) is activated to remove disabled non-productive cells and replace them with normal healthy ones."

5. Quality of rest is an often-missed key element:

All the gains you get from training come while you are resting. As noted above training is the mechanism for carefully causing damage to your tissues that

see FASTER on page 21

FASTER from page 20

elicits the repair and rebuilding response from your body during recovery. High quality rest is essential to this process. One rule I observe is to always take a nap rather than do another workout when that is the choice. Another point is that while you can and should train when you are fatigued, you should not do so when you are exhausted. There is a difference and you should know what it is. Training when exhausted will lead to poor rest and a decline in fitness. Many athletes get trapped in a declining cycle of overtraining resulting in poor rest, causing less fitness, which makes them train even harder. The end point in this cycle is injury and sickness. It is very common. Athletes who are getting faster and younger trust themselves; they know they are not lazy and are observant enough to properly modulate the training/rest balance. This is a subtle thing that requires careful attention to body cues and confidence in your motives and ability.

6. Eat high quality organic vegetables and fruits for all of your meals:

Forget about carb loading, drinking more water than you need or loading minerals like salt. Do not eat extra in anticipation of hard workouts. Animal flesh, particularly certain fish, is also seen to be useful or even essential to provide adequate nutrition for athletes, but large amounts are not necessary. Avoid

alcoholic beverages as much as possible; they inhibit recovery significantly. While exercising, observe the fueling protocols documented in Hammer Nutrition publications. Use appropriate supplements that are known to be effective for enhancing athletic performance. Athletes simply utilize more micronutrients than can be supplied in their food and need supplementation in order to maintain optimal health at the cellular level. The pages of this publication are replete with information on the proper supplements that are known to be beneficial for athletes.

7. Establish your goals, but don't obsess on them:

I believe that the joy we experience while doing our sports is intrinsic to achieving a more successful outcome. Being overly concerned with times and splits, heart rates and the like can actually inhibit performance. Do many of your rides and runs for fun, it all goes into your total fitness level and helps in increasing your performance. If you don't feel driven by your goals, you may find it easier to reach them. Most of the really accomplished older athletes I know are not too concerned about their achievements; they just like to play.

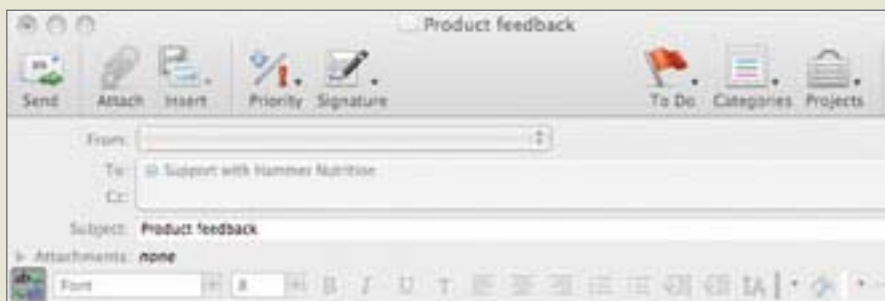
So, these are the seven principles that are working for me in my athletic life. This season in my 65th year on earth and my 22nd year as an endurance athlete, I had my fastest times ever at

several events including my all time fastest cycling TT. This quest for speed and physiological youth is a lot of fun and has invigorated all aspects of my life including relationships; there seems to be no cost other than the very real need to pay mindful attention to my athletic schedule, what I consume, how I rest and who I spend my time with. I do not think my experience, though unusual, need be abnormal.

How to start getting faster and younger

If you are reading this publication you are probably have a strong history of athletic activity and a good base from which to begin. I suggest you forget about your long past exploits, it is time to push reset and begin anew. Take the performances of this past year as your base. Look at some events you did and would like to do again and start plotting out what it will take to do these faster next year. Then organize your training and life around these events and use the principles above to improve upon your last year's performance. Do this every year until you die—a very long time from now. By observing this practice you will probably succeed in going faster and you will definitely achieve great satisfaction, which is the main point. Though I think it is best to go faster, life itself is the ultimate test of endurance, so it really is how you live that matters most, not the results of the contests along the way. There are no DNFs in this grand event.

Better than expected results!



My goal for 2009 was to go sub-2 in a half marathon. After three attempts I knew I needed a little help. My husband hooked me up with your Race Day Boost supplements as well as your Endurolytes and Anti-Fatigue pills. In one word, "AMAZING!!!!" I shaved, kid you not, 12 minutes off my half and not only reached my sub-2 half marathon goal, but came in at 1:56. Wanted to thank you all and share that I'm a BELIEVER!!!

Jane Fernau

This testimonial was unsolicited and has not been modified.



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Hammer staffer Levi Hoch takes part in Thursday Night Race League on Big Mountain.
Photo - Dustin Phillips

From The Archives

Ask Dr. Bill about maltodextrin

Author : Bill Misner, Ph.D.

Q: I understand that the maltodextrin (complex carbohydrate) you use in your fuels comes from corn. Is it GMO-free and/or organic corn?

A: The highly refined, "finished product" maltodextrin in Hammer Nutrition's fuels originates from conventionally grown and organically grown corn. These corn maltodextrins are neither certified organic or GMO-free. The refining process converts whole corn to long-

chain glucose polymers that generate a remarkably high glycemic effect through first-pass metabolism. This high glycemic effect resolves high blood sugar turnover depletion during extreme exercise sessions. Some (30-50%) of the corn maltodextrin is GMO-free while I estimate perhaps as much as 70% is exposed to GMO residue in either seed or insecticide. Once GMO-free and GMO corn products are mixed, GMO residue contents are diluted, but still present. The cost for GMO-free maltodextrin is higher than the bulk of crops grown all over our country from mega-farms.

Organic crop harvests much less than conventional grown, hence the huge differences in price. PCR (polymerase chain reaction) GMO detection tests done on Hammer maltodextrins are "negative," but [that] does not imply GMO residues, since by more precise measures/tests GMO measures may be detected. The detected levels of GMO-free maltodextrins originating from organically grown crops must have very, very low-to-NO GMO's based on more precise detection measures before being certified GMO-free. When I suggest that PCR detection is negative, that means there is none detected by the limits of that test method. The corn maltodextrin processed via our supplier is essentially gluten-free, but cannot be declared GMO-free. Hammer Soy Protein, however, is certified GMO-free.

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*These hands would have been warmer with Bar Mitts!
Photo - Angela Nock*

Bar Mitts

Keep your hands warm!

Author : Brian Frank

We originally ran the Bar Mitts article in one of our summer issues, but wanted to reprint it here for the more appropriate approaching weather and because they have expanded their offerings. In addition to the Shimano style, which features access holes for the cables, they have now finished development and are offering their Campy/SRAM style without the extra cable holes as well as a mountain bike version. These have been an excellent solution for cold hands for me on the road and I'm excited to have the opportunity to use the mountain bike mitts so that I can enjoy toasty bare hands on the bars during those chilly fall and winter singletrack missions. Here's the rest of the story.

Since moving to Montana in 1995, keeping my feet and hands warm while riding in the fall/winter/spring has been an ongoing challenge for me. I solved the cold feet problem years ago with the Northwave Arctic and the Sidi Hydro cycling shoes - both are insulated and waterproof. If it's really cold, cold weather booties over the top work great. However, up until a couple of months ago, the hands remained a problem. I've tried all manner of gloves - thick, thin, etc., and no matter what, after an hour or two, my fingers would be frozen. Dexterity and safety were also compromised with the heavy duty gloves.

So I was more than a bit curious when I saw the small ad in the back of a cycling magazine for Bar Mitts. Just from looking at them, they made sense

- big neoprene mitts attached to the bars of a bike. I ordered a pair and the inventor, Ward Graham, turned out to be a Hammer fan and recognized me when I called and introduced myself as "Brian from Montana". He said, "Oh, you're the guy that writes all of those articles." I said I wasn't sure if I was the guy he was thinking of and he said "Yeah, from Hammer Nutrition". He sent me a pair promptly and passed my first test for companies I do business with - nice, knowledgeable staff, efficient service, quick delivery - just how I like it. Now I'm a fan of his company and product too!

I've used the Bar Mitts now in a wide variety of temperatures and absolutely love them. Finally, no more cold hands, no matter if it's 30° or 0°. In fact, I've actually stopped wearing full fingered gloves altogether unless it's under 20-25 degrees, then a light pair of full fingered gloves, like our Giordana model, keeps

my hands nice and toasty no matter how cold it is. Also, I found that bike control - operating the brakes/shifters, getting your hands in and out of them to wipe your nose or signal a turn is easy with the Bar Mitts. They work equally well with Campy, Shimano, and SRAM levers.

With a price tag of \$64.95 and free shipping if you order online, Bar Mitts cost about as much as a nice pair of heavy winter cycling gloves would and they work infinitely better. When I told Ward I was going to write about them in my newsletter, he wanted to offer you an even sweeter deal. If you order now, he'll take 20% off the SRP and still pay the shipping. That reduces the cost to \$51.95, delivered. However, his website can't calculate the discount, so you have to call him or e-mail him directly to get this "Hammer" deal. Here's his info - **(775)622-8048** or **barmitts@charter.net** and be sure to tell him you read this article.

Note: We have no plans to start reviewing all types of gear and equipment in Endurance News. However, when we find a cool product or something that we think most of you may not be aware of, we'll talk about it as above. We have no financial interest and are not receiving commissions on sales resulting from this article.





Casey and Dustin stay busy during the 2009 Interbike Trade Show. Photo - Vince Arnone

2009 Interbike Trade Show

Author : Steve Born

Again this year, Hammer Nutrition was represented at the annual Interbike trade show in Las Vegas, NV. Brian, Kadidja, Jason, Dustin, Casey, Vince, and I attended the three-day expo (Sept 23-25), where we met with lots of our valued retailers and enjoyed meeting and talking with potential new ones. We also had the opportunity to chat with many of the race directors whose races we sponsor, while also catching up with several of our sponsored athletes who happened to be attending the show.

The “centerpiece” of our booth space was the oh-so-cool looking Hammer Nutrition

“Fueling Station” trailer, where we sampled the newest flavor of Hammer Gel – Montana Huckleberry – which received rave reviews (ETA for this new flavor is mid-to-late January). In addition, we prepared 1500 goody bags containing samples of some of the Hammer Nutrition products, which were handed out to prospective clients during the three-day show.

The non-stop action of the three days that make up the Interbike show can be really draining, but we all had a great time and, once again, it was a smashing success for Hammer Nutrition. Here are just some of the photos from this year’s show.



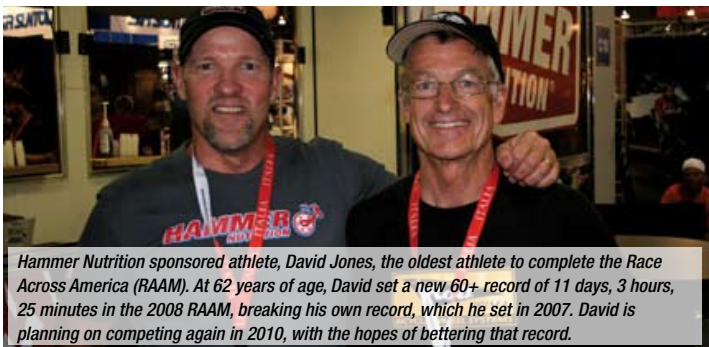
The Hammer Nutrition booth



Dustin, sponsored athlete and 2009 24-Hour Solo World Mountain Bike Champion, Rebecca Rusch, and Steve.



Steve enjoys a laugh with sponsored athletes and friends, Karen Lundgren and Paul Romero, well-known in the adventure racing world as Team Sole.



Hammer Nutrition sponsored athlete, David Jones, the oldest athlete to complete the Race Across America (RAAM). At 62 years of age, David set a new 60+ record of 11 days, 3 hours, 25 minutes in the 2008 RAAM, breaking his own record, which he set in 2007. David is planning on competing again in 2010, with the hopes of bettering that record.



12-year old Hammer sponsored athlete, Millie Tanner, and Steve.



A runner enjoys the late summer weather during the 2009 Hammer Nutrition Two Bear Half Marathon.
Photo - Dustin Phillips

Pearls Of Wisdom From Dr. Bill

Author : Bill Misner, Ph.D.

Micronutrient metabolism demand appears to be dose-dependent based on individual biochemistry observations and has been recorded to be in the +/- 5000% range.

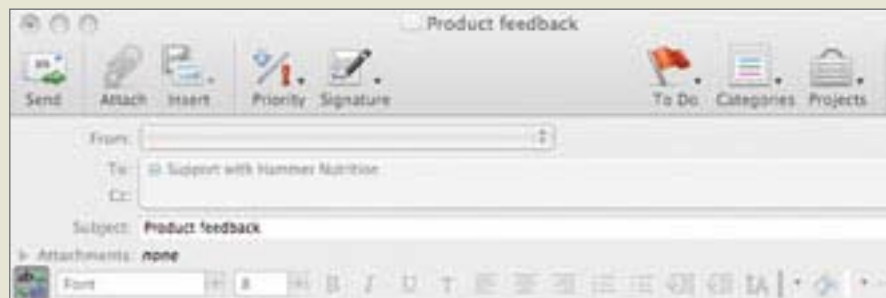
Example: Several years ago at the Leadville 100-mile ultramarathon run, Hammer sponsored a female runner with extraordinary talent. Her father, a cardiologist, followed his daughter carefully by having local docs take blood

samples at intervals before and after this very tough event. The Leadville 100-miler is at altitude, some of which is around 11,000 ft. Training in Texas at slightly above sea level exaggerates this athlete's ergogenic & VO₂ stress. The differences in temperatures are also extreme. One would expect terrific turnover in fluids, calories, and electrolytes. This athlete won overall female champion, placing in the top ten that year. She consumed only one (1) Endurolytes per hour with fluids from a Hammer energy drink and a few added

solid foods. Her serum electrolytes were all within normal reference range values both before and after the event blood labs.

Not every athlete can maintain normonatremic values on 40 mg of sodium per hour [the amount of sodium in one Endurolytes capsule]. I suspect that this athlete is the exception to the rule. I also suspect after years and years of analyzing hyponatremia presentation in endurance athletes that those who consume less sodium in their daily diets may not require as much sodium during exercise as those who consume high sodium amounts typical of the American diet. I add that the more fit the athlete, the more hyperthermic-conditioned, the less sodium is required to prevent hyponatremia.

Real Athletes, Real Results!



My husband, Herb, and I are in our early 70's and ride a tandem road bike. When he recently signed us up to do a Century ride I was almost panicked....how could I do it? The longest ride I had ever done was 82 miles and that almost killed me! However, my husband did a lot of research on what we could do to keep up our energy to finish the 100 miles. He found Perpetuem and bought it. We carried it in little baggies in the recommended doses and filled water bottles with the doses and water at rest stops and sipped it along the way. That stuff is amazing....I could literally feel my energy return as I sipped it. We finished the 100 miles without trouble but the best part was how I felt when I got off the bike. I felt as good as I do after a casual 20 miles around town.

Thank you for an amazing product....we are telling all our biking friends about this great aid.
Lucretia Cooper

This testimonial was unsolicited and has not been modified.





Gary Smith heads toward a first place finish in the 45-49 age group at the 2009 Coeur d'Alene Duathlon.
Photo - Cindy Smith

Power Up With EMS

Author : Jim Bruskewitz

Kicking back, putting the feet up, just adding some extra relaxation to our day gives us a chance to re-charge. After a season of training with a healthy serving of focus (obsession for some) folded into the mix before the final event(s) deserves some release. There is a time for everything. If you don't take the time to re-group, you'll likely find that your body and mind are not ready for the customary build to goal attainment when the time is right. So kick back a little- you deserve it.

An active lifestyle once engrained begs us to do something even when we are kicking back. It's a good thing. If the focus is scaled back and the routine is fresh, you can get an exercise fix and regenerate at the same time. Maintaining an active lifestyle continues to promote health. While staying active and developing some variety in our training, conventional wisdom suggests that we work on our weaknesses. Once the competitive season is upon us, we won't have the time to develop our weaknesses and our time is more efficiently used working on our event specific strengths. So if now is the time to keep it fresh and develop our weaknesses without worry of how we'll perform tomorrow, we're looking at an opportunity to address that list of shortcomings we're so aware of when the big events are upon us. For those that want more strength to contribute to their power, resistance training in the fall is a common approach and a reasonable one. Starting up a new routine in May or June is very difficult because

all of our energies have been claimed by the specific aspects of our training. Now is the time for functional strength exercises and resistance training. You'll probably get sore, but it will only last for a few training sessions. Once you become accustomed to it, not only will you enjoy the gains but you will also be able to incorporate this training into the precompetitive and competitive phases of your training later in the year. I've become very enamored with Globus EMS training. Not only the ever popular active recovery program, but also the different strength programs that target particular muscle fiber types. I can choose whether I want to build explosive strength, resistive strength, or endurance to name a few. If I choose, I can deliver anything from a very gentle training dose to a dose that would require placing a leather strap between my teeth until I had months of adaptation to the load. The beauty of this is that I can build those adaptations more quickly than I can with other strength building conventions. This is a result of the superior rate at which I can remove neural inhibition with EMS training. I am also able to develop balance between the force I can exert from both sides of my body. If I need to build strength in a muscle group that involves an injured joint, the EMS strength building programs will develop strength without flexing or extending a joint. Like any new workout, these can make you sore if you go after it. Starting now is the right time.

Any training session that isn't designed to help you actively recover will require some recovery of its own. There are

some general rules that will help guide you train a muscle group. 48 hours per muscle group is an appropriate amount of time to recover from an EMS strength program. We have an opportunity to strength train a muscle group with Globus EMS three times a week. Throughout the season we should move to ever more specific kinds of training. This means starting with strength, then resistive strength, endurance and ultra endurance on the Sports Plus model to occupy the majority of a yearly cycle of training. Three EMS training sessions to build strength at this time of year can easily fit into your weekly schedule. As we approach that period when the number of traditional quality workouts increases, the number of EMS strength training sessions per week can be reduced to two times weekly. Once in the competitive phase, the intensity of the EMS workouts can be reduced and frequency reduced to one maintenance workout weekly. Active recovery, massage, and the various warm up routines will help you recover from both EMS and traditional training sessions all year long.

We have an opportunity to fit EMS training into our schedule easily at this time of year. I've spoken with enough EMS users and can personally vouch for the fact that the strength training makes a big difference in our performance. As a coach and an athlete I hate to miss out on opportunities to find out what someone is capable of. If we don't make use of our time wisely we'll never know. Find out for yourself and good luck with the upcoming year.

Jim is a multiple-time World and National Age Group Triathlon champion, a coach (www.enduranceperformance.com), and former lecturer at UW-Madison-Department of Kinesiology. He recently left teaching at UW to study and teach EMS training.

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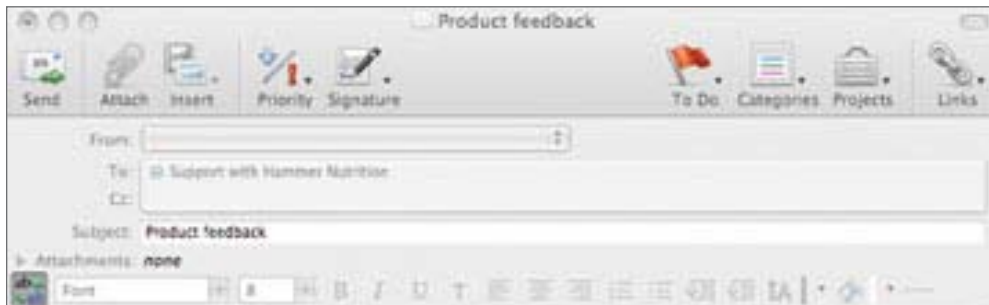
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After a winter of long preparation for the 2009 season, and a win in my first category 1, 2 race of the year, I had a very serious crash. I hit a steel reflector post at 40+ mph, fracturing seven vertebrae and three ribs. Needless to say my season was over, but I could walk and was expected to make a full recovery.

Once home from the hospital, I gave the guys at Hammer Nutrition a call to see if they had any recommendations to aid in my healing and keep me from losing any muscle mass in my legs. Jason was very helpful and encouraging. He recommended that I keep working with my doctors to rehab my injuries but thought that the Globus e-Stim unit would help me retain strength in my legs. I had read a little about the Globus unit and was wondering if this would work for me. It did! I used the unit on my legs every day and actually felt like I was keeping some strength in my legs. Jason from Hammer Nutrition helped me out in getting started and I stayed in touch with him while I was rehabbing from my injury. Within 3 weeks I was out on my bike riding lightly and in 8 weeks was back at my first race. Thanks to a lot of physical therapy, the Globus unit, and the help from Hammer Nutrition I was able to finish by first race in the main pack.

Now I am a believer! Using my Globus for active recovery is my favorite. I use it in between stages and after hard workouts. I almost always feel fresher the next day. I also used the warm up routine before a Time Trial at altitude and really thought that it helped me get my legs ready without taxing my respiratory system. Using the Globus I feel has really helped me speed my recovery and I am excited to use it in conjunction with my training for next season.

The nicest thing about working with a Globus e-Stim unit has been having great support from a great company like Hammer Nutrition that stands behind what they sell, as well as having top notch customer support.

Thank you Jason and Hammer Nutrition,
Shawn Ongers



The shoes and socks worn by Stefan Albinsson, the winner of the 2009 Muddy Marathon. Photo - Rick McNulty

Running Shoes And Barefoot Running :

Musings from a coach

Author : Coach Al Lyman, CSCS

Among the most common questions I receive from runners are those asking about different brands and types of running shoes, and how differences in design affect form and function. With the increasing popularity of minimalist lightweight designs including Vibram's 5-finger shoes (which mimic the feeling of being barefooted), as well as actual barefoot running, now is a good time to share some thoughts on shoes, form, and function. While I am not a biomechanist or shoe expert, I hope these musings that come from my own practical experience and study, are helpful. The questions I get usually follow similar themes: Is one shoe type or brand better than another? Should I try to change the way I run by changing to a different type of shoe? Should I be doing more barefoot running?

From my earliest days as both a runner and coach, I've always attempted to learn as much as possible about how shoe design and shoe fit relate to form, injury, and performance, especially for the average runner. Fast forward to this year's National Strength and Conditioning Association's conference in Las Vegas, where among the speakers I heard was well known PT and author, Gray Cook. Gray mentioned that after reading the book "Born to Run," he was telling every runner he met to run barefooted exclusively. I sat there, somewhat stunned, at what I felt

was a broad and perhaps haphazard recommendation, because I believed that while some runners could do well with barefooted running if they progressed smartly, many others who took his comments to heart might end up having more injuries, not less. They would inevitably try to do too much too soon, or suffer issues due to either a lack of running-specific functional / core strength or because of less-than "perfect" natural biomechanics.

That being said, I do believe many runners can benefit from integrating barefoot walking and running into their routine, as long as it is done in a controlled manner. I often program progressive barefoot workouts on the treadmill for athletes I coach, to help build lower-leg strength and dynamic flexibility. These sessions involve subtle and progressive increases in grade, as well as backward walking and running to build balanced strength. The ultimate benefit to these kinds of workouts is something we could all use more of: increased dynamic strength and flexibility, mobility, and resiliency of the lower leg and ankle, along with increased proprioceptive awareness and stronger intrinsic foot muscles.

Should you change the type of shoe you wear, or make wholesale changes to your run form based in part on shoe type?

While the book, "Born to Run," inspired Gray Cook to tell everyone they should

immediately start running barefooted, I do NOT believe it is smart to do anything that results in an instant and/or arbitrary change in the way you run or the way your foot hits the ground, especially exclusively. Yes, there are things that each of us can do to improve or "tweak" our form, all of which could help us to become faster and more efficient, such as improving our posture, quickening our cadence, or driving our knee forward more while we drive our elbows back, to create more horizontal (not vertical) movements. Wholesale arbitrary changes however, are almost always a mistake, especially if done exclusively. The reason is simple and important: the way we move and run is a function of how we are uniquely put together as well as how our bodies have adapted to our daily lifestyle. Do we sit a lot and rarely stretch? Have we become immobile around the hips, lumber spine, and trunk? All of these factors dramatically impact how we move and function, and thus run.

TIP: In my opinion, the single best way to improve running form is to improve your hip and ankle mobility, and develop a stronger core and run specific functional strength. These attributes will lead to shorter ground contact time (desirable), a natural, not forced increase in stride length (desirable), and a more stable pelvis during stance (desirable), all of which will improve your form and can reduce injury risk and improve efficiency and speed.

While it could be argued that a mid-foot strike is optimal for efficient and fast running, and that more of the world's best runners do land with a mid-foot strike, as of yet I know of no objective scientific evidence that says unequivocally that a mid-foot strike is

see FEET on page 29

FEET from page 28

“better” for ALL of us.

TIP: When you run, focus on loading your legs and body UNDER your hips, which will result in better posture, balance and less braking action. When you do this, inevitably you will land more mid-foot. The key is how you get there, and how you define a heel vs. a mid-foot strike, as notice I used the word “load”. Very often we see good runners whose heel touches first, but they are not “loading” the stance leg at that point. The best way to learn how to avoid loading the foot early is to work on gradually increasing cadence to 85-95 stride cycles-per-minute, as well as improving hip mobility and strength.

Be extremely cautious if you decide to go out and buy a minimalist shoe thinking you can change the way you run, just by wearing that shoe. Doing that may shock your body into moving a vastly different way, resulting in compensatory changes and increased stress on tissues that may not be ready to handle that stress. That could lead to a much higher risk of injury if you progress too quickly. The same is true for barefoot running: a little can be beneficial – but a lot, especially progressed too fast, can end up causing injury, not preventing it. Most experts agree: only about 20% of the world’s running population have near ideal biomechanics and a neutral gait and can run barefooted or with a minimalist shoe without increased risk of injury. The remaining 80% fall somewhere off of that “ideal” baseline. Recently, in a conversation I had with chiropractic

sports physician and injury expert, Kurt A. Strecker, DC, CCSP, he said: “minimalist shoes can often be a shock to the system. Most of us don't spend our entire lives barefoot. We've worn shoes, often not good ones, our entire lives. I wouldn't run 26.2 miles without training and I don't think it's a good idea to ask the kinetic chain of the lower extremities and lumbar spine to absorb the loads imparted by running with minimal support or cushioning, without significant preparation.”

Here are a few more TIPS that I hope help you in your search for the perfect shoe and stride.

How our feet impact the ground when we run involves different factors that are unique for each of us:

- Poor posture, which leads to poor skeletal stacking and muscular stress.
- Hip mobility or lack thereof, which greatly increases compensatory patterns and reduces your body’s ability to absorb and transfer energy via the stretch / shortening cycle.
- Lack of frontal plane (glute medius/ hip rotator) balance and strength, which results in loss of stability and energy leaks.
- Poor flexibility or elasticity in the quads and hip flexors, which puts the pelvis out of neutral and creates compensations elsewhere which reduce efficiency.

The point being, a change in foot wear or

any other arbitrary change, without first addressing how strong and mobile your foundation is, is short sighted and may end up resulting in injury.

- If you use orthotics due to a biomechanical issue that was identified by a foot doctor or PT, you should continue to wear them, but at the same time continue strengthening your legs and feet and improve your hip mobility, with an eye toward hopefully needing less support from these devices as time goes on.
- Seek out a high quality running shoe store to purchase your shoes: My personal favorite is FLEET FEET SPORTS. Their staff is well trained and I like their approach to shoe fit. Remember, you usually get what you pay for.
- The road to faster, injury free running is paved with smart, diligent, progressive, patient, hard work. There is no easy way or quick fix to better running form, strength, mobility, or elasticity. Seek a path that avoids fads or quick fixes, and focus on established fundamentals. Become stronger, more mobile, more flexible, and train smart. In the end, you'll run faster and be much happier.
- Lastly, get feedback from an expert by way of a video running form / gait analysis. For information or recommendations on how I can help you with this valuable service, email me at coachal@coach-al.com. Thanks for reading, and best of luck!

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*Road bikes off-road? You bet! Elizabeth Jefferson leads the way.
Photo - Chris Kostman*

Wholistic Cycling : An Off-Road Primer

Author : Chris Kostman

A wholistic approach to cycling rediscovers, encourages, and authenticates the universal nature of outdoor performance skills. Tear away the veil of sports specificity and the wholistic athlete is catapulted into a transcendent, transformative, and transpersonal athletic experience. In this realm, the wholistic seeker appreciates and uses the skills learned (or relearned) in one sport to enhance athletic expression in other sporting arenas. Call it cross-training at an elevated level. Thus cycling lends itself to snowshoeing and to scuba diving, and vice-versa, while all sports lend themselves to a softer, more engaged pathway through life.

In the wholistic state of being, barriers fall away naturally and higher potential is realized. From there, it is but one more step to fully integrate these skills into the arena of daily life. The proverbial journey of a thousand miles begins with but a single step. Catalyzing the journey to wholistic training begins with but a shift of perspective and energy.

Here are a few wholistic performance tips for superior off-road cycling:

- Run or hike the trails you ride or race. You'll learn things about terrain and trail conditions that you just can't see at cycling speed. Also, hiking is a tremendous "recovery workout" for cycling because of the adaptation to the non-flat surface and the positive impact

of that upon the lower back, hips, and legs.

- Look far ahead to where you want to go, on and off the bike. Where you look



*The author on Mt. Tam, above the San Francisco Bay, scouting trails for the 2010 Rough Riders Rally.
Photo - Ed Levinson*

is where you'll go. Look at a big rock or log in your path and you'll hit it. Apply the rule to life in general; look ahead of, instead of at, the obstacles to your goals.

- Realize that there really is a single best "line" on any trail (and sometimes on certain roads). To move down the path most quickly, elegantly, and smoothly, your goal is to find and ride that line and leave it unscathed in so doing.

- Play follow the leader while riding with a friend or in a race. Assume that if the rider in front of you can do something, no matter how hairy or scary, then you can do it as well. Likewise, if you're leading down a tricky or fast section, assume

that you will be run over by the following cyclist if you stop, fall, or otherwise make a mistake at any given point.

- Move with the bike or move the bike, but don't let the bike move you any more than necessary. Be a trapeze artist or a bike-bound ballerina.

- Move around on your bike, especially on the saddle. Slide way back, slide way forward, shift side to side, and everywhere in between. This will change

your muscle group usage, provide miniature muscle recoveries, and effectively give you added strength and speed on flats and while climbing. Many cyclists routinely slide way back on the saddle to climb, but how many get way out on the tip of the saddle to accelerate? You're missing something if you don't.

- Be one with your bike, like an equestrian with a horse. Let this unity with your steed extend to the earth beneath it. Work and proact with the landscape, not against it and not reactively.

- Conserve your energy. Don't tighten a single muscle or body part that needn't be tightened. Constantly self-scan for muscles and body parts which you can relax. Waste not, want not.

- Recover your energy. Every time you can get your heartrate back down, you are recovering. Use downhills and flat sections to recover for the next tough

see *WHOLISTIC* on page 31

WHOLISTIC from page 30

section. Interval training will coach your heart to drop its rate more immediately after a high intensity effort, allowing you to recover sooner and more often. Never waste a chance to recover, however briefly, in training and while racing.

- Conserve your momentum. More so than power, momentum will get you through most any tight or tricky spot. Never lose your momentum, not just while cycling but also while pursuing your life goals.
- Use your gears! Don't let your cadence bog down by anticipating your need to shift to a harder or easier gear. Don't "save" a gear; use it as soon as you need it when climbing. When you crest a hill, pedal all the way over the true crest, then shift it into a taller gear and head for the downhill at maximum speed. You can rest once you've spun out the gears on the downhill, not before.
- Train with less technology. Race with more technology. Getting used to race pace with skinnier tyres or without suspension will make you an even better rider once you haul out the competitive arsenal on your epic ride, or race, days.

Chris Kostman has lived on the endurance path since 1982. Besides competing in races as diverse as the Race Across America, the Triple Ironman, and the 100-mile Iditasport Snowshoe Race, he also organizes endurance events such as the Badwater Ultramarathon and Furnace Creek 508 races, a series of four century rides, and a five-day cycling retreat in Death Valley. This is his eleventh article for Endurance News. Learn more at www.adventurecorps.com.

Reader Tip

In this day of not being wasteful, I discovered that rinsing out my Hammer Gel jug with my water bottle water, and then putting it back used every last drop of gel plus made for a nice, lightly-flavored water.

Thanks for your great line of products!

Chris Boffa

Have a tip? Send it to anock@hammernutrition.com



Kieran atop the podium at the TBF Racing Tri for Kids in Rancho Seco, CA.

A Blast From The Past

Author : Brian Frank

For the past few months there has been something in the air or the water that has caused us to reconnect with long lost clients and friends. One of those people is John Devere. He was one of the first pro athletes that we sponsored in 1987-1988, along with a relatively unknown Aussie named Greg Stewart who would surprise many with his 3rd place finish at IM Kona in 1987, thanks mostly to a 43 minute improvement in his marathon split from the previous year. John was introduced to our products by Bob Brooks in the Central Valley Cycling days - one of our super seniors that is still dominating his age group today, but that's another story for another issue. Along with John and Greg we sponsored other up and coming pros like Todd Jacobs, Lisa Laiti, Mike Meteyer, and several others. In turn, their performances and talk of our products led to us sponsoring the big names - Scott Molina, Erin Baker, Kenny Souza, Scott Tinley, and an unofficial relationship with Mark Allen.

John always impressed me with his humble demeanor and strong work ethic. The classic example of an athlete who walks softly and carries a big stick. After a few years as a pro triathlete known for his strong swim and winning Wildflower and several other major races in the process, John moved on, finished school, became a teacher, got married to Emily, and started a family. Fast



John in his professional days



John, Emily, Kieran, and Ian at the beach

forward to July of this year when the "Howdy, remember me?" e-mail showed up in my inbox. He had recently spent some time with Mike Meteyer, who I also reconnected with a few years ago through Jim Bruskewitz in Madison, WI and was encouraged to send an e-mail after hearing about our progress over the past two decades and that I was still around. Besides the fact that John has recently returned to competitive cycling and triathlons as a masters age grouper, he also has a budding prodigy in his 11 year old daughter, Kieran. She is already winning races and is eager to follow in her dad's footsteps. There's no doubt that genes are a factor, but I think that the healthy and active lifestyle that John has cultivated with his family is the main reason that Kieran is excited about sports and doing so well. I am fairly sure that her younger brother, Ian, will be following in dad and sister's footsteps in the near future.

At Hammer Nutrition, we talk about our clients and sponsored athletes being like extended family and while some of you may think it's cliché, that's really how I see it. This is why it's not uncommon for us to have ongoing relationships with clients and sponsored athletes who've been with us since the beginning, and even if we lose touch, it's always nice to reconnect too. That means an awful lot to me. That being said, I say "welcome back to the family, John; we missed you and look forward to resuming our journey in sport together."



Utah scenery along the Hoodoo 500 route.
Photo - Deb Rowling

2009 Hoodoo 500

Hammer-sponsored ultra cycling event is another success!

Author : Deb Bowling, Race Director

Courtesy of: Deb Bowling, Race Director (with additional comments from Steve Born)

Racers from twelve states and three countries took to the roads of Southern Utah September 12th to 14th, at the Third Annual Hoodoo 500 UltraMarathon Bicycle Race. The Hoodoo 500 follows a course starting in St. George, and traveling through Hurricane, Colorado City, Kanab, Carmel Junction, Bryce, Tropic, Escalante, Boulder, Torrey, Loa, Panguitch, Cedar City and back to St. George. While testing their mettle over 515 miles with 30,000+ feet of climbing over mountain passes above 10,000', racers enjoyed awe-inspiring scenery which varies from majestic cliffs, striking red rock hoodoos, aspen and pine forests and high mountain meadows.

It started out as a perfect weekend for racing in Southern Utah. Saturday daytime temperatures ranged from the mid 80s to low 90s, winds were fairly calm, and not a drop of rain or hail or snow fell in the high mountains. Overnight temperatures were in the 40s and 50s. Mother Nature had something else in store for Sunday... headwinds blasted with gusts up to 30 mph, rain and hail fell on Cedar Mountain. The weather slowed racers to a crawl and added a whole other dimension to this already super challenging course. The winds literally shredded the solo field to

pieces. Only the toughest of the tough—seven of fourteen solos and two of eleven solo voyagers—crossed the finish line in St. George. Champions all.

David Holt from Laguna Niguel, California, won the overall solo, and was also the first place 50+ racer, with his very impressive time of 34:27. David missed the 50+ course record by a mere 7 minutes! He can definitely blame that on the wind!

Ex-pro racer Sean Nealy won the solo Voyager division with a great time of 42:43. Sean was hours ahead of the Voyager record when he decided to back off and get some sleep. He waited a couple of hours in Cedar City for his friend and fellow racer Dave Elsberry. After being by himself for so long, Sean was happy to ride with Dave for the short 15 minutes allowed, and was then content just to have Dave within sight while riding the last lonely 80 miles. Sean and Dave crossed the finish line together.

Voyagers must race the entire 515 miles without any outside support other than sending drop bags to four time stations and scavenging along the course. Just finishing the Voyager division within the 50 hour time limit is a tremendous accomplishment, achieved by only five racers in three years. Voyager finishers are a very select and special few incredibly strong, highly motivated and determined ultra cyclists. Present and past Voyager finishers exemplify what the division is meant to be: An incredible

physical and mental challenge, which, when conquered, is no doubt a cherished lifetime accomplishment and memory.

Relay-Team records were smashed in 2009:

- 4-Man Team (Road Rage - Brian Duff, Patrick Watson, Anthony Restuccia, Andre Gonzalez) bested their own record with a time of 23:27.
- 4-Man 60+ (Team Hoosiers - Drew Clark, Steve Gerbig, Richard Rupp, Dave Tanner) set the mark in the 60+ category with an impressive time of 30:03, which bests the course record in the 50+ division.
- 2-Man Team (Red Rock - Colt Albrecht, Scott Smith) took over three hours off the prior course record with their spectacular time of 28:49.
- 2-Man 50+ (Desert Rats - Shaun Griffin, Ric Schrank) broke the 50+ record by nearly two hours with their 35:11 finish.

STEVE: The Hoodoo 500, as compared to other ultra cycling races, is still quite young in terms of history. However, it is growing rapidly and fast becoming a "must do" race in the world of ultra cycling. Hammer Nutrition is honored to support this race and we look forward to next year's edition. To see for yourself how exciting and competitive the race was, you can view photos of the race and review all of the time station splits at <http://www.planetultra.com/Hoodoo500/2009Webcast/index.htm>

On a side note, in an email to me, Deb wrote: "Thanks again for your support and for all the wonderful prizes and goodie bag stuff. Racers were stoked!!!"



The start of the infamous
Townes Pass.
Photo - Chris Kostman

2009 Furnace Creek 508

A phenomenal "dual in the desert"!

Author : Steve Born

The 26th edition of this truly epic Hammer Nutrition-sponsored ultra cycling race—recognized as one of the ten toughest races by National Geographic Adventure Magazine—was contested on October 3-5, 2009. The extremely challenging race course is actually 509.58 miles long and has a total elevation gain of over 35,000', while crossing ten mountain passes and stretching from Santa Clarita (just north of Los Angeles), across the Mojave Desert, through Death Valley, to Twentynine Palms.

A solid field of 179 racers began the race this year: 59 solo riders, 52 on 2-person teams, and 68 on 4-person teams. Fifteen US states and four Canadian provinces were represented, along with seven countries or nationalities.

Once again "The 508" (as it's commonly known) proved to be a most memorable event, with the 2009 edition being perhaps the most fiercely contested race in Furnace Creek's long history. The field was loaded, but most eyes were on Chris "Ram" Ragsdale, 32, of Seattle, WA, and three-time champion, Michael "Alpine Ibex" Emde, 39, of Spokane, WA. (Note: instead of race numbers, the riders are identified by animal "totems," hence the designation of "Ram", "Alpine Ibex", etc.).

Ragsdale, who placed 9th in the 2005 Furnace Creek 508, DNF'd in 2006, and finished 2nd (to Emde) last year, was hoping that this year would be his year

to claim victory. Hammer Nutrition-sponsored Emde, with his 3rd place finish in his first year at Furnace Creek (2005), followed by his three consecutive victories (2006, 2007, and 2008), has one of the most impressive records in the history of this prestigious race. In 2009, he was looking for an incredible fourth straight victory.

The race began with the traditional CHP escort out of Santa Clarita, CA, followed by excellent tailwinds as the racers sped north into the Mojave Desert. Ragsdale and Emde arrived within seconds of each other at the first time station in California City (83.60 miles) and at the second time station in Trona (153.78 miles). Closely following them was Brian "American Kestrel" Ecker, 37, of Bellingham, WA. (What is it about the state of Washington that produces so many fast ultra cyclists?!).

Interestingly, daytime temperatures would be an unusually pleasant 82 degrees, but would rise to 90 degrees at night in Death Valley. The mild daytime temperatures, along with the favorable winds, allowed for extremely fast times by the leaders; both Ragsdale and Emde averaged over 23mph as they passed through Trona.

Weather-wise, things were about to change... for the worse. Turning east onto Towne Pass, the ten mile, 5,000 foot ascent which is the entryway to Death Valley, the wind began to blow in a less favorable direction. By the time the racers started to traverse Death Valley

proper, near the giant sand dunes at Stove Pipe Wells, the wind was blowing a steady 30mph from the south, with sand blowing across the road like a river.

As the race route turned due south on the way to Furnace Creek (the halfway mark) and beyond to Badwater, the wind was blowing straight in the racers' faces at 30mph or faster, with gusts up to 50 to 60mph. In fact, wind conditions were so fierce that it forced some racers to walk their bikes into the wind, and many-to-most of those who chose to ride were able to go no faster than about 5mph through the night. The race leaders were also definitely affected by the wind, taking over six hours—an abnormally longer time for frontrunner(s)—to cover the 73.5 miles from the time station at Furnace Creek to the time station in Shoshone. Race director, Chris Kostman, later commented, "The wind truly terrorized the competitors in this year's race, easily outblowing the 'thermonuclear headwinds' of the 2004 race." (STEVE'S NOTE: I was at the '94 edition of the race, crewing for my brother Jeff, and I couldn't believe how bad the winds were through Death Valley... I can't imagine anything worse than that year, but apparently 2009 was just that. Ouch!).

Ragsdale arrived at the Furnace Creek time station (252.89 miles), just two minutes ahead of Emde. Both were a bit over 30 minutes ahead of 3rd place rider, Ecker, with the rest of the riders still remaining in the race an hour or more behind these three. During the worst of the wind conditions, Emde took the lead, reaching the Shoshone time station (326.39 miles) 14 minutes ahead of Ragsdale. A little over 56 miles later, when Emde reached the time station in Baker (382.62 miles), he had extended his lead over Ragsdale to 23 minutes. The race was far from over, however.

see 508 on page 35



Ken Kreidl celebrates his 'Clydesdale 12 Hour Solo World Champion' title after a win at the 12 Hours of Snowmass.
Photo - courtesy of Ken Kreidl

Nate's Corner

Author : Nate Llerandi

Steve's Note: As is usually the case, I go through my archive's of Nate's "Tip of the Week" (and I think I've saved them all, beginning around September 2000) to find some ones that, while perhaps a couple of years old, still provide very relevant advice. Here's one he wrote a couple years ago, right around this time of year, which I've enjoyed revisiting and reviewing. I hope you will as well...

Mix It Up Indoors

A lot of us are going to be forced indoors here pretty quickly, in terms of training. We may have to resort to training indoors 100% of the time during the week and only be able to venture outdoors during the weekend. If we are used to varied terrain and training on various routes that really give us a well-rounded aspect to our training, what do we do when we are indoors and logging

time on a treadmill or stationary trainer for the bike?

You can simulate the outdoors as much as possible. You can, for example, use a harder gear on the bike to simulate a climb. You would sit back in the saddle and assume the seated body position you would when climbing, choose a gear that allows you to spin at 85+rpm, and "grind it out". You could also mix up your indoor climbing with some out-of-the-saddle drills. Likewise, you could simulate a downhill by picking an easier gear than normal and spinning at a higher cadence, say 100+rpm. If you are going to spend 40 minutes of an hour workout at 70-78% (for a solid aerobic session), you could easily mix that 40 minutes up between riding "on the flats", "climbing", and "descending" as you would outside.

With the treadmill, it's easier because you can program in hills of various steepness. And you're really climbing

up! On the bike—even with a CompuTrainer –it's just not the same. You are not going up. Instead, you are simply battling more resistance against the flywheel or more resistance that is self-imposed (by using a harder gear). That does not directly translate to climbing outside. However, mixing up your workouts should allow you to derive greater benefit from them because you are altering the way you use various muscles and muscle groups. Diversity is the key here, rather than specificity.

By mixing it up, you will accomplish a couple of things:

- 1) You will help the time pass by more quickly and you will also help stem the tide of boredom and loathing that can quickly consume any indoor training regimen
- 2) You should squeeze more out of your indoor training than in the past. All of this will help you enter the spring more refreshed mentally and stronger physically - both key elements to racing well come summer and beyond.

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508 from page 33

Somehow, during the nearly-35-mile stretch between Baker and the time station at Kelso (417.55 miles)—a section of the race that includes the long and arduous 20+ mile climb up Kelbaker Road—Ragsdale had all but made up his time deficit, passing through the Kelso time station a mere one minute behind Emde. The two continued their epic dual, with Ragsdale just 15 seconds back of Emde at the final time station at Amboy (451.30 miles). Shortly thereafter, however, he made his move and took the lead, putting 15 minutes on Emde on the final climb up Sheephole Summit.

Twenty eight miles after summiting this final climb, Ragsdale reached the finish line in Twentynine Palms in a time of 29 hours, 10 minutes, and 31 seconds. Emde finished about 37 minutes later in a time of 29:47:34; Ecker would hold on to 3rd place, finishing over four hours after Ragsdale (33:14:06), and slightly less than five minutes ahead of Charlie "Water Dragon" Engle, 47, of Greensboro, NC. David "Mudcat" Holt rounded out the top five, an extremely impressive

finish for the 57-year-old, especially coming less than a month after his overall win at the Hoodoo 500.

The women's winner, Leah "Mighty Mouse" Goldstein, a dual citizen of Canada and Israel, is a professional cyclist racing for Team ValueAct. She is the current Israeli national champion in the road race and time trial. At the finish line, the first-time entrant stated "I've competed in the Tour de France, the World Championship, National Championship, and many other races and can honestly say that the Furnace Creek 508 is the toughest, hardest race I've ever done." Goldstein was the only woman (of six solo women starters) to finish the race, and her time of 35:01:50 placed her a most impressive 6th overall.

How difficult was this year's Furnace Creek 508? Well, the data provided by Chris Kostman provides the answer to that question:

- 98 of 120 team racers finished = 81.67%, the worst since 2000. The historical team finishing average is 94% (908 of 966 team entrants).

- 29 of 59 solos finished = 49.1%. That is the lowest finishing rate in a decade (finishing averages went up when the race organizers implemented a selection process, rather than first-come, first-served, to determine the race field). The historical solo finishing average is 58.6% (638 of 1088 entrants) after 25 races on this race route.

Needless to say, finishing the 508 is truly an outstanding accomplishment, especially in more-difficult-than-usual years such as 2009.

Once again this year, Hammer Nutrition was honored to support this incredible, most-unique race. Complete results, photos, and much more from this and previous year's editions of the Furnace Creek 508 can be found at www.the508.com

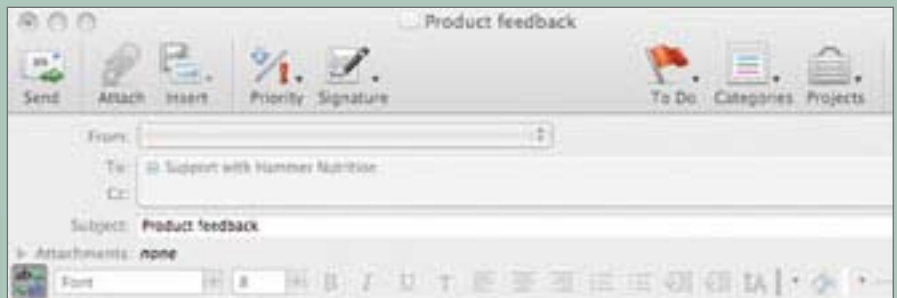
*Special thanks to race director, Chris Kostman, for providing a large volume of the information for this article.

*Check out the Furnace Creek-specific race reports on page 54.

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I first tried Hammer Gel, HEED, and Recoverite at a 50K almost two years ago. By the end of 2007 I added more of your products to my arsenal after getting rid of the sugary gels and sports drinks and the days of finishing marathons and an occasional 50K in a painful and crampy way were over.

Since then, the use of your products has enabled me to become a better endurance runner finishing in the top three 12 times plus one 1st in age group at 13 ultramarathons (eight 50K, one 60K, and four 50Milers) winning three of them; I also won 1st overall at the 2009 Seabrook Lucky Trail Marathon, one of six marathons and several 30K's, 25K's, and half marathons, setting lower and lower P.R.'s along the way, occasionally on back-to-back weekends. Sub 3-hour marathons and longer ultras are now more frequent and less tiring at age 44.

Training in the hot and humid conditions of the long summer in the upper Texas gulf coast to race in the fall and winter became much easier too. I now use Hammer Gel, Race Caps Supreme, and Endurolytes in all of my races beyond half marathon distance. For 50K's, I add a combination of HEED/Perpetuem or Sustained Energy and Anti-Fatigue Caps and when I go beyond 50K, Perpetuem is a must, complemented by Endurance Amino and Tissue Rejuvenator. For a really fast recovery, Recoverite, Hammer Whey, and Super Antioxidant are my best allies.

Hammer Nutrition has made all the difference in the world for me.

Thank you guys!
Francisco Garza



The author watches the finish line at the 2009 Hammer Nutrition Two Bear Marathon.
Photo - Dustin Phillips

Reigniting The Spark - Again

Author : Tony Schiller

For years my articles in this publication have pretty much focused on one thing: the motivation for staying power. Not surprisingly, the topic is easier and a lot more fun to write about when things are going great than when they're not.

The truth is, when my racing is off, as it was in 2009, I don't much look forward to writing these pieces. It just feels a little hypocritical writing about motivation during times when I don't feel particularly motivated myself. On the other hand, we can often get more out of reflecting on the rough patches than the good times, so why not get real and try to be of some help to others – perhaps even you?

So what went wrong in '09? I'd love to chalk it to facing more than the usual number of distractions. The trouble with that theory though is who didn't? It was an epic year for distraction for all of us and many people faced circumstances a lot tougher than mine. If distractions really do hurt performance, and more people faced them than usual, shouldn't we have seen a corresponding drop in performance in 2009, especially at the age group level?

Of course, that didn't happen, did it? The evidence shows that races got even more competitive in 2009. In Minnesota, the competition was faster and deeper than ever and records fell at nearly every race. The same thing is happening in races worldwide. So what gives?

Here's my theory: tumultuous times bring out the best in us as athletes. As self-determined people, we love being in control and racing gives us a chance to largely do that. So when we're stripped of that control in other areas of our life it's natural that we'd turn with even more focus to racing to regain some of that control. Having things go well in athletics gives us the sense of normalcy and confidence needed to tackle the other challenges in our life. I believe this explains why athletes often accomplish some of their most amazing feats while enduring some of their toughest life trials. They do so, not despite of those trials, but because of them.

Just the opposite was the case for me this year. When things got challenging I turned away from instead of to athletics as my anchor. I raced only 6 times and without the training to back it up. While I truly planned for it to be a low-key year, I didn't expect to take it to such extremes. It started by breaking from my normally dedicated routine, first just a little, and soon, almost all the time. I stopped going to group swim, trained almost always alone, and rarely at the top of the day. In short, I just got lazy and sloppy.

Ultimately, the break from intensity will prove to be good for refreshing and recharging the mind and body. Fortunately I know what it takes, how to refocus, and what routine is needed to get it back. Now the work on 2010 begins.

Here's what I'm going to use to spark

that campaign and maybe it can also work for you. It's getting back to applying the lessons gained from a powerful conversation I had with my high school coach, Jerry Larson, some 20 years after graduating. In a rare and enlightening visit, he told me the key to all success in athletics is self-confidence. But then he explained that in all his years of coaching he never had a single kid exude natural confidence. "All of us," he said, "gain confidence only through one thing... experiencing success." He then explained that his entire approach to coaching came down to finding a unique way to help each kid have a success, every single day.

As he spoke, a whirl of memories flooded back to me as I recalled so many little moments he purposefully acted to achieve that end. I realized that everything he did as a coach was measured and orchestrated to help us realize a new success. He truly was a master motivator who made every comment, eye gesture, pause for effect and word count. He always had our undivided attention, especially when issuing personal challenges (often privately) to each and every one of his 30+ athletes on a daily basis. We lived for those challenges and wanted more than anything to earn his simple nod of approval by achieving them.

As I listened to him that day it became clear how much I took for granted everything he did to draw out of us, a little bit more. I realized for the first time how lucky I was to end up under his tutelage. For three years I was immersed in his powerhouse program and surrounded by teammates who were hell-bent on achieving those daily breakthroughs that led us to believe we could accomplish much bigger things. I couldn't help but think what my life would have been like if he hadn't been

see SPARK on page 37

SPARK from page 36

there or if I ended up at another school.

That conversation happened years after I'd left the professional triathlon ranks and returned to age group competition and yet it proved transformational. At that time in my life I was a numbers junkie. I'd become obsessed by everything measurable in a number... pace per mile, mph, mileage, # of intervals, etc. If at the end of the day there were positive numbers to record, I considered it a success.

What I suddenly realized though was that most of the successes Coach Larson helped us achieve weren't even measurable. They were far more nuanced than that, all aimed at getting us to think, act and believe we were champions. Whether your goal was to run the mile in 4:20 or 5:20 didn't matter, he expected you to go after it with just as much vigor. We achieved so many goals not by being obsessed with numbers but by creating the winning culture and environment where great things happened naturally.

From that day I started shifting focus away from numbers and back to environment. Instead of how fast and far I could go, I thought more about creating a winning culture to exist in. For me, that meant going back to the basics by being coached on how to refine technique again, by asking more questions, and by training a lot more often with others who I could help and who could help me. In short, though not able to go back to high school again, I tried to approach sport more like the 16 year old version of me did than as the 38 year old guy had been going about it.

2009 aside, I'm convinced that conversation and the coinciding changes brought on by it have played a huge role in my success as a master's competitor. Now in going back to the drawing board it all starts with first getting back to creating that winning environment to do it in again.

For me, that starts with people, being around the right training partners and coaches on almost a daily basis. Though the list of successful endurance athletes

who by choice or by necessity train alone is impressive, if 2009 was a painful reminder of anything, it's that I'm not one of them. For me, going solo is not a good way to go.

So what comes before everything else – before setting goals or building a training schedule – is just getting back into the game as if being guided by Coach Larson again. That means forgetting about where we've been before and just focusing on where we're at today. Just embrace today and do the good work you can do today and there's no where you can come out except in a better place. Then just keep building on that. That's what champions do and the next 4 months is when they do what will make them champions next summer.

Enjoy every bit of the journey.

Tony Schiller is a motivational speaker and the director of the MiracleKids Triathlon. This year over 1000 kids raced while raising over \$200,000 to help Minnesota kids who are being treated for cancer. Tony won his 6th ITU age group world championship in 2008 and though not enthralled by his 2009 season still managed to go undefeated in the 50-54 age group.

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Paul Moir does a little trail riding in Malaysia.
Photo - Brenton Moir

Overtraining Symptoms And How To Avoid The Negative Side Effects

Author : Robb Beams

As we get to the middle of race season, your performance program has become a combination of critical sport specific elements like aerobic, lactate tolerance and muscular strength workouts, flexibility and mental enhancement routines along with disciplined nutritional choices (pre/during/post workouts). With a matrix of all these elements becoming the foundation and infrastructure of your health, you have begun to settle into a level of speed and endurance that is representative of your consistency and discipline. You have also realized that you are literally only as strong as your weakest link which has forced you to self analyze what is working and what isn't. Though this sounds like a simple evaluation with daily adjustments becoming routine, when your performance results begin to waiver, you quickly begin to lose your rational thinking and strive to offset poor results (from either racing or daily workouts) by pushing harder and/or longer to prove you are mentally tough and able to "push" to that next level of performance. However, after four to six weeks of lagging results you begin to become more and more frustrated which only makes your symptoms worse – WELCOME TO THE WORLD OF OVER TRAINING (OR AT LEAST CLOSE TO CROSSING THAT LINE)! In this article, we are going to help you identify if you are getting close to crossing that threshold of overtraining and if so, what you can do to reverse the negative

side affects before they get worse and undermine your efforts to improve.

Step 1 – Identifying if you are experiencing any of these overtraining indicators:

While reading the overtraining indicators listed below, put a check mark beside each characteristic that is consistent with how you have been feeling over the last three months.

Overtraining Indicators

- Plateaus within your workouts and race results
- Inability to sleep even though you are physically and mentally fatigued
- Not able to wake up without the assistance of an alarm
- Feeling heavy and lethargic when you wake up
- Decreased desire to train (at any level of intensity)
- High resting heart rate in the morning – even after a day of low intensity workload(s)
- Inability to finish an easy workout without feeling like the effort was "hard"
- High heart rate while exercising at a low rate of speed
- Reduced appetite and other natural desires
- Increased cravings for simple sugar
- Lower body weight – more than 5 pounds within one week
- You get mad easy and over small issues

Evaluation: if you are experiencing more than three of these indicators on a regular basis, you are on your way to experiencing some long term effects of fatigue associated with overtraining. At this point in your program, you have two choices. One can ignore the indicators and wear yourself down further or two, you can evaluate where your program detoured and began to head the wrong direction. If you choose to evaluate your program, let's take a look at what causes overtraining.

Step 2 – Identifying what causes overtraining

Though there are many schools of thought regarding what is the final activity that puts your body across the overtraining threshold, the bottom line is you may have brought this upon yourself by one or more of the following elements:

- Training above your intensive endurance level (usually around 83% - 85% of your heart rate reserve) too often
- Training duration is too long
- Not allowing for enough recovery in between high intensity intervals
- Increasing your volume and/or intensity too quickly
- Having your high intensity training volume greater than 25% of your total weekly volume
- Not providing your body with adequate amount of sleep for sufficient recovery
- Insufficient amount of quality calories (dense in micro and macro nutrients) consumed on a daily basis

Step 3 – Identify how this has happened to you?

Though you may be aware of the overtraining symptoms by definition,

see *OVERTRAINING* on page 39

OVERTRAINING from page 38

how does this level of fatigue catch up with you, the dedicated athlete? The answer is simply not observing the indicators that your body is sending you that it is tired, hungry and looking for a break. Look at the following list of variables relevant to rest, food and working out to see if you have experience any of them over the last three months:

Variables of Rest

- Awakening to an alarm – startled, tired and frustrated
- Going through each day rushed to get all of your tasks completed (i.e. too many irons in the fire!)
- Not getting 8 to 9 hours of quality sleep a night (five to six days a week)

Variables of Food

- Not sitting down to eat 5 to 7 small meals a day
- Not chewing your food a minimum of 10 times prior to swallowing
- Eating convenience foods that are high in simple sugars and low in nutritional value
- Not eating enough clean protein to provide the necessary micro nutrients to rebuild broken down muscle tissue (from training and racing)
- Not drinking 40-50 ounces of pure water on a daily basis

Variables of Working Out

- Working out too hard and too often in a week
- Not allowing enough rest in between intervals during your workouts
- Wanting to improve so badly that you ignore over training symptoms (see list of symptoms)

When one or more of these variables occur on a daily basis your body sends physiological messages to you in the forms of a high resting heart rate, suppressed appetite, dramatic drop in your morning body weight, etc. (should sound familiar if you take a look at the overtraining indicators listed above).

Step 4 – What you can do to avoid over training starting today!

The good news is there are four things that you can implement tomorrow that will reverse this trend of overtraining and will improve your performance to completely new levels:

- Create and follow a Periodization Program
- Maintain a detailed workout log
- Maintain a detailed food log
- Maintain the AEM Body Analysis Spreadsheet

Periodization Program

As discussed in a previous article, Championship Speed in 2009 through Periodization is the foundation to planning out your race season to ensure that you are identifying your key races, identifying your physical weaknesses, training these weaknesses and re-evaluating field testing to confirm that you are moving your performance program forward on a consistent basis. The goal is to improve a little each week and ideally by the end of the year, you should be at a performance level you have never experienced before.

Detailed Workout Log

Also discussed in a previous article, Faster Lap Times & Increased Endurance by Understanding Energy Systems, understanding the various energy systems that you are training on a daily basis will ensure that you are not pushing too hard on your recovery days, and on the other side of the equation making sure that you hit the necessary intensity levels during your quality workouts. By maintaining a detailed workout log, you can keep track of important variables like intensity levels (as reported by your heart rate monitor), average pace, total distance covered, energy levels and your perception of the workout (productive, non-productive, hard or easy).

Though this seems like a mundane activity, you need to evaluate how you felt before, during and after each workout. When you do so, you will begin to see how the overtraining indicators are identified very quickly. Here is an example. If you are supposed to be completing an easy workout for 90 minutes and you are dragging to get up and out the door, you may want to stop and determine the cause of this fatigue: too much intensity or duration yesterday, not enough food consumed yesterday for recovery, not enough quality sleep? At this exact moment, you need to make a decision about the workout that you are getting ready to complete: should I even complete the workout, if so, should I cut the duration down, how low should I keep my heart rate during the workout to make sure that I create an environment for my body

to actually recover and improve.

Detailed Food Log

By maintaining a detailed food log you can evaluate the quality of your workouts to the food you have consumed the day before and also during your workout. The key to this information is once you determine what food combinations are producing the best performance results for you, you have the tools to be the most prepared racer each and every race! Keep in mind that food because a functional component of everything you do in the performance world: build new muscle, repair damaged muscle, pre-hydrate the body from the inside out, top off glycogen storages within the liver and the muscles for intensity workloads and much more at the micro nutrient level (i.e. facilitate the absorption of other vitamins and minerals).

Motoendurance.net is a premium resource center for motocross and supercross riders of all abilities and ages. The website outlines the MotoE Performance Training programs available to racers for 2009 - similar to training programs used with great success by two time WMA Champion Ashley Fiolek and top amateur racers like Ian Trettel, Tyler Livesay and Warren Nelson in 2009. Additional resources available include the MotoE Performance Training Facility in Haines City, Florida, eBooks on various human performance elements and online instructional videos. To discuss your current program or have a new one developed for you, feel free to contact Robb Beams at Motoendurance.net or 407.701.7586 directly.



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Arthur and his crew, along with race director Chris Kostman, at the finish of Badwater.

Athlete Spotlight

Arthur Webb

Author : Steve Born

Our featured athlete in this edition of Endurance News is ultra distance runner Arthur Webb of Santa Rosa, California. To say I'm impressed with this guy and what he's accomplished is a major understatement. At 67 years young he is still going strong - better than ever, I'd suggest - and what he's done, and continues to do, is the kind of stuff that really is awe-inspiring and motivating. For example, when I read about the challenges he faced and overcame at this year's Badwater ultra run, I was both inspired and humbled at the same time (I think you will be as well). Simply put, it was just a remarkable display of courage, tenacity, and of course, endurance.

I recently interviewed Arthur via email... enjoy!

STEVE: Arthur, I want to first congratulate you on your latest accomplishment. Only a couple of months ago you finished your 12th consecutive Badwater ultra run and your time of 46:35.29 placed you 37th overall... an amazing feat and one that you must certainly be pleased with.

ARTHUR: Thanks Steve, but I would have to say that this Badwater race was like swallowing a bittersweet pill. My original goal was to finish the race for the third consecutive year in less than forty hours - 37:48:35 in 2007 and 39:46:53 in 2008. That did not happen. Unfortunately, I lost many hours dealing with a major issue early in the race,

but I was still able to complete it in less than 48 hours. There is some lingering disappointment but that is overshadowed by the satisfying and immense effort it took to finish my 12th Badwater.

STEVE: I think an entire book could be written about your exploits in running; unfortunately, we don't have anywhere near the amount of space that would be needed, so could you give us a "snap shot," so to speak, of your career?

ARTHUR: I started running at 35 and, like most ultra runners, I progressed from 10K's (33:00 best time) to marathon (2:37 - Chico) to 50 milers (6:37 - Ledson Marsh) to Western States (23:55) and finally the Badwater race (33:55). At 58, I attempted to join the "crème of the crop" by completing Badwater in less than 30 hours, but a debilitating spinal issue and age-related aches and pains sapped my speed. For the past ten Badwater races I have been "at ease" and relatively more "comfortable" finishing around the 40 hour mark. Although I was never equipped with great speed, I have always trained extremely hard, which enabled me to compete with the "next" wave of runners and I actually won a few local races. I had some success winning at the masters level in the marathon and 50 mile distances, but that was many years ago; now I have resorted to just grinding it out with the "back of the packers."

STEVE: In email correspondences we shared after this year's Badwater, you mentioned that you

had some harsh problems early on. What happened and how were you able to get back into the race, keep going, and finish?

ARTHUR: The best that I can describe it is that I had some sort of "balance" problem, beginning at mile 11 and ending on a cot at Furnace Creek (mile 17). Race medics, EMT's, and Dr. Lisa Bliss monitored and tested my vitals and blood and urine samples for nine hours before clearing me to go back on the course. At 11:15 p.m. I stepped out of the van into a pitch black night to be greeted by searing winds and 109 degree temperatures. To complete the race in less than 48 hours and buckle for my eleventh Badwater, I would have to run and power walk the next 118 miles hoping that guzzling down Endurolytes, HEED, and Hammer Gels would keep me balanced enough to prevent another dehydration, chemical imbalance, or whatever-the-problem-was episode.

Still feeling "off" and woozy, I headed down the road, going from baby steps to power walking and eventually into my well-recognized running hobble mode. After several hours I started feeling "normal" again, so through the night and day and next night I ran. I calculated, concentrated, and zeroed in on hitting all of the necessary timing marks at each aid station, which were about 20 miles apart. I stopped at miles 42 and 72 for ten minute respites on the stoop of our crew van. But by mile 96 I was totally exhausted and crumpled on a mat on the side of the road. Lying on the ground, I thought of the kids at the Valley of the Moon Children's Home in Santa Rosa, CA that I run for and have told numerous times that it is not all about winning, medals, ribbons, money, etc., but it is always about not quitting. I believe that once a commitment is

see SPOTLIGHT on page 41

SPOTLIGHT from page 40

made, there is a moral and ethical responsibility to respect the dignity of the human spirit by completing that goal. Period.

Fifteen minutes later I was back on the road and still on pace to buckle if I managed to run the rest of the way. At mile 103 a race official said the finish line had been moved from mile 135 to 131 because of a fire in the hills above. And the buckle time was revised; I had to make up another forty minutes. Gritting and bearing the harsh news and continuing to fight off extreme weariness, I managed to hunker down and run all the way into Lone Pine (mile 122), even putting in a few 7-minute miles. Totally exhausted, I finally arrived fifteen minutes ahead of schedule. I had enough time to essentially do a fast shuffle/crawl up the very steep Whitney Portal Road. Bone core weary and in survival shuffle mode, I reached the 131-mile finish line, but the fire department opened the road and the finish paraphernalia was hauled back up to the original 135 mile mark. Whoa, four more miles straight up the side of Mount Whitney and I was again totally depleted.

Fortunately, thanks to Endurolytes, HEED, Hammer Gels, a few Starbucks Double Shots, and a bit of the "cows smelling the barn" thing, I managed to refresh long enough to finally reach the finish line; it took 46 hours and 35 minutes. Fait Accompli. Basically, it was relentless determination, an intractable will, a super pampering crew. and lots of Hammer products that got me there.

STEVE: Unreal. That's nothing short of awe-inspiring because I'd say that many an ultra distance athlete (most of us?) would probably not be able to get it together and keep it together after having such problems so early on in such a difficult race.

ARTHUR: Thank you for that. I have been on the desert floor numerous times in the past and it has never been easy to "get it together" and continue to the finish line. But I am possessed with a truck full of tenacity, perseverance, discipline, and a will of titanium that helps to get the job done. Plus, I have a poster taped on the side of my van that

says "The goal is to finish. I didn't come all the way out here to quit." Remember the time worn cliché, "Pain is temporary. Pride is forever?" It still works.



*Arthur presses on through the desert.
Photo - Chris Kostman*

STEVE: When I did RAAM, Furnace Creek 508, and other ultra cycling events, I oftentimes listened to a variety of music - especially during the late night/early morning hours - to help keep me motivated. Do you do a similar thing in your races? And if it's music that helps keep you motivated, what do you listen to?

ARTHUR: Where I go, so goes my iPod. It has always been a motivating training tool. At Badwater, music is soothing at times, especially at night, but tends to be a major distraction as I concentrate on monitoring time, effort, extreme tiredness, and the physical discomfort and associated problems caused by the intense and suffocating heat of the day. But it is along when needed and loaded with Led Zeppelin, the Moody Blues, the Doors, and Bruce Springsteen.

STEVE: What does your training program look like in general, and is there anything specific that you do prior to an extreme race like

Badwater?

ARTHUR: I run about 5000 miles each year. I discovered early on that the more miles I trained the bigger the endorphin rush. So it's 100 miles every week (bumped up to 130 miles for Badwater), an hour a day in a 170 degree sauna for heat acclimation, and lots of core strengthening at a local fitness center. Half my mileage is done in the hills and half on the flats. That's it in a nutshell.

STEVE: You've done Western States and you've done Badwater. I think I already know the answer to this, but I'd like to ask anyway, if only to get your perspective: Which race do you think is harder and why? Aside from the extreme heat of Badwater, is there anything about that race that would make it more difficult than Western States, assuming it is more difficult?

ARTHUR: Needless to say, both races are extremely difficult. Although I felt capable of finishing in less than 20 hours (ha, surprise!), silver buckling at Western States (23:55) was one of the hardest things that I have ever had to accomplish. The steep canyons and the heat in the afternoon took their toll, and there was little time for rest or recovery and forget about bonking. At Badwater, there is a bit more time for R & R but it is needed for the excessively punishing 35 more miles of effort. The three lengthy mountain climbs (Townes Pass, 16 miles; Panamint, 8 miles; and the steep 13 mile struggle up the side of Mount Whitney to the finish line) are far more challenging and also win the nasty award. Having to deal with the 130 degree suffocating blast furnace-like heat during the day and 100 degrees plus at night definitely puts Badwater in a class by itself. Both well organized races should be near the top of any ultra runners "To Do" list.

STEVE: Having done the Furnace Creek 508 a few times, including a trip backward on the race route

see SPOTLIGHT on page 42

SPOTLIGHT from page 41

(which thus goes in the same direction that a portion of Badwater goes), I'm pretty familiar with the terrain. One of the sections of the "backward" route that I did on the Double Furnace Creek 508 record attempt that's also part of the Badwater route, is the climb over Townes Pass. Now, I found that to be one of the most difficult parts of the entire 1016-mile Double 508, simply because that climb seemed to go on forever... you're going from below sea level to over 4900! Would you consider that to be the toughest part of the course terrain-wise or is there another section (or sections) that you consider even more difficult?

ARTHUR: The relentless, unforgiving 16 mile climb to the top of Townes Pass is by far, for me, the toughest part of Badwater. Even the first 42-mile struggle across the Death Valley basin in temperatures that can reach 130 degrees pales in comparison. Maybe being battered and tortured all day with the suffocating heat and wind adds to the physical discomfort and the mental struggle to summit. I don't know, but it is awful.

STEVE: Out of all of the Badwater races that you've done I would imagine that this year's edition was perhaps the most difficult for you... would that be an accurate statement? Also, of all the Badwaters that you've done, which one do you consider to be your best effort and why?

ARTHUR: Yes, this year was very difficult but once I recovered, all I had to do was run for 37 hours without collapsing again. That is where my extensive training regimen paid dividends. My best time was in 1998 when I finished practically unscathed (except for an hour of vertigo at Panamint Springs, mile 72) in 33:55. But I believe that my best effort was the 2003 Badwater. After running in horrendous 130 degree heat and extreme humidity all day, I crashed and burned at mile 52. I had trouble recovering and numerous times plodded forward with little success.

To make something positive happen,

I drove to Lone Pine and summited Mount Whitney where I was pelted with ice, rain, and lightning by a late afternoon storm. After turning purple from the bone chilling wind, I suddenly felt better. After descending, I went back to my red flag planted along Townes



Arthur and his wife Christine reach the finish line at Badwater. Photo - Chris Kostman

Pass and ran the entire 80 miles to the imaginary Badwater finish line at the Whitney Portals long after everyone had gone home. For this "above and beyond" accomplishment, race director Chris Kostman modified my DNF to an honorable mention and sent me an official finisher medallion. It is my most prized and cherished running possession. Although there is a bit of a rub, I have finished Badwater 12 consecutive times; eleven officially.

STEVE: I'm guessing that since you've done Badwater 12 straight times, it has to be your favorite race. Is that true or is there another race that you consider to be your favorite?

ARTHUR: Well, I have a favorite local 5K race, which takes very little training and I usually beat lots of little kids (just kidding) but yes, Badwater is my favorite. It has always been a mental, physical, and spiritual litmus test to struggle through the harshest environment in the world and at times against almost insurmountable odds to complete this incredibly difficult race. In my little running world, completing Badwater with my beautiful wife, Christine, at my side is as good as it gets on this planet.

STEVE: When we corresponded awhile back, you mentioned that you relied heavily on Endurolytes and HEED to get you through

Badwater. Are there any other Hammer Nutrition products that you use regularly?

ARTHUR: Yes. I suck down Hammer Gel and in years past have had success using Perpetuem and, for a change of

pace, alternating during the race with Ensure. Next year I plan on training and running the entire race exclusively on Perpetuem. Since Jamie Donaldson switched to Perpetuem with satisfying and successful results, maybe I will be able to run just behind her (for the first 100 feet or 50 or 30 or...).

STEVE: You're the race director for the Santa Rosa Marathon (in Sonoma County, CA), which Hammer Nutrition enthusiastically sponsors. Can you tell us a little bit about this race, what makes it special, and what plans you have in mind for future editions of the race?

ARTHUR: Santa Rosa has never had a marathon so I decided that it was time to stage an inaugural event. The idea was to promote a quality community event that would welcome walkers and runners of all abilities, starting in the center of town at Juilliard Park and traversing the picturesque Memorial Greenway as well as the scenic Santa Rosa Creek with its spanning trestle bridges, vineyards, horse ranches, and wildlife-filled ponds. The best part: it is all on a paved and hard packed trail with no motorized vehicles. Unbelievably, we sold out, but we will tweak the course and hope to have twice as many runners next year. Check out the race website at www.thesantarosamarathon.com.

see *SPOTLIGHT* on page 43

SPOTLIGHT from page 42

STEVE: In an earlier email correspondence, you mentioned - and I'm quoting you here - "Anyone want to do something really, really hard? Then race direct a marathon, which I did for the inaugural Santa Rosa Marathon this year; makes Badwater seem like a walk in the park." I am good friends with many race directors so I think I have a pretty decent idea why directing/producing a race can be so hard. Still, for the benefit of our readers, can you elaborate on why directing a race "makes Badwater seem like a walk in the park?"

ARTHUR: Badwater or any ultra requires setting aside a few hours each day for some training mileage and maybe a bit of sauna time. Running/walking/survival shuffling Badwater is no doubt an incredibly difficult proposition, but it takes only two days. Race directing is 24/7. Hundreds of requirements, demands, and responsibilities relentlessly tug at you in every direction for months. When I committed in January to stage the marathon there was no money, sponsors, permits, business, website, course, volunteers... essentially nothing but an idea. It was a grueling six-month process but with Badwater determination I was able to stage a sold out and successful race. I have never worked so hard in my life. I believe that running consecutive Western States and Badwater doubles would be easier.

STEVE: What races do you have planned for 2010, and is a 13th Badwater in the works?

ARTHUR: Aside from a few short, local charity fundraising races, if invited, I will ramp up my mileage in March or April and attempt to polish off a "Bakers Dozen" 13th Badwater, hopefully in less than 40 hours.

STEVE: This is kind of an esoteric question, I know, but what keeps you motivated to stay in the sport and wanting to continue to do super-difficult races like Badwater? How long do you plan on competing?

ARTHUR: I still look forward to, enjoy, and appreciate running mega mileage each day and I have always

committed to lofty goals. Badwater is just the other half of the equation. The chance to inspire and make a positive impact in the life of some of the "struggling" youngsters that I run for with my Badwater "DO" attitude is the best motivator of all. I intend to stay physically conditioned and mentally strong enough to challenge the sub 40-hour finishing mark of Badwater well into my 70's. I am not quite ready for the rocking chair.

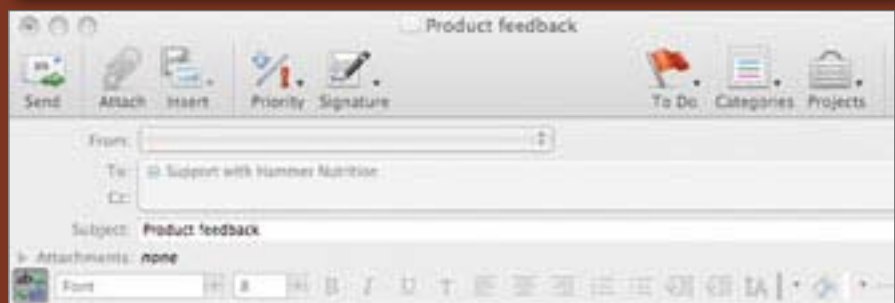
STEVE: You obviously have a wealth of experience, from which any endurance/ultra endurance athlete can learn from. With that in mind, what advice or "words of wisdom" would you give to someone just starting ultra distance running?

ARTHUR: I have a short list of helpful hints that I incorporate during all of my ultras and will share one "pearl" that has made a difference. Be a role

model and run for children's charities. But remember, there is no honorable explanation for quitting. Most of these kids have already seen and heard too much of that.

STEVE: It's been a pleasure chatting with you, Arthur; thanks for your time and congratulations on all of your stellar race results, especially this year's amazing effort at Badwater. You're an inspiration!

ARTHUR: Well, thank you. Although this may sound a bit patronizing, I must say that I've been using Hammer Nutrition with success for the last six years. Endurolytes are by far the number one running product that I have ever used; they exceed expectations and deliver cramp-free races. They have played a major role in my ultra running success, including this year's Badwater. They work. Period.



I thought you might like to know how your Hammer boxes are 'recycled', so I attached a picture of how my Hammer box was 'recycled' into a kitty cave by my Bengal, Zazu! He has gotten tons of fun out of that box and packing paper.

Lisa B.

This testimonial was unsolicited and has not been modified. Have fun with the boxes Zazu!



*Hammer campers taking advantage of the Tucson sun.
Photo - Owen Gue*

2010 Hammer Camps

A cycling experience you don't want to miss!

Author : Brian Frank

With a couple of months still remaining in 2009, perhaps it's a bit early to be giving a lot of thought to the 2010 season. However, it's definitely high time to sign up for one of the remaining upcoming Hammer Camps in January or March. Besides being more fun than you can imagine, having a Hammer Camp on your calendar to look forward to really helps with the motivation for winter training and can provide a warm, sunny break at just the right time to get you excited for the fast-approaching race season. Due to the popularity of the

campers with previous attendees, and the friendships that have developed from living and training together for a week each winter, the mid-February camp was sold out by September by the growing group of athletes who have decided to make this an annual pilgrimage. The two remaining camps are likely to fill up as well, so read on and then sign up.

Slots are still available for the following camps:

- The "Season Head Start" Camp #1 January 25th - 31st, 2010 (8 of 12 slots currently available)

- The "Putting It All Together" Camp #3 March 1st - 7th, 2010 (7 of 12 slots currently available)

The feedback that we've received ever since our first camp in February of 2007 has been virtually unanimous - Hammer Camps have been an absolute hit, with athletes enjoying themselves and taking away more newfound knowledge than they ever expected. When you come to a Hammer Camp you'll not only get in some great riding and coaching assistance, you'll be pampered with full SAG and professional domestique rider support, on-site massage, Globus EMS sessions, generous supplies of Hammer Nutrition fuels and supplements, fantastic (and we do mean f-a-n-t-a-s-t-i-c), yet super-healthy

see CAMP on page 45



*Owen leads the way up a climb.
Photo - Vince Arnone*



*Kathleen McCormick makes her way up Mount Lemon.
Photo - Vince Arnone*



Photo - Vince Arnone



*Part of the group stops for a photo op.
Photo - Vince Arnone*

CAMP from page 44

gourmet meals, and plenty of tasty 53 x 11 Coffee products. While all of these features help make the experience memorable and unique, it's the positive energy, camaraderie, and zero stress environment that really typifies the Montana hospitality that emanates from the Cycling House in sunny & warm Tucson, AZ, and sets it apart from anything else you've ever done.

Hammer Camps are hosted by me, founder and owner of Hammer Nutrition, and age group triathlon legend and master coach, Jim Bruskewitz. It's a superb way to get prepped for the 2010 season with greater confidence and a block of high quality training. Hammer Camps are nothing like the dormitory style, mass group camps that some coaches and organizations have become known for. Nor do our camps have the high price that some others are fetching. Our camps are individually tailored to the needs and goals of each camper, which we limit to 12 so that we can assure you will get all of the face time you want. With a client to staff ratio of 2:1, you will never get lost in the crowd or have to wait in line. We follow a loosely structured format that is centered around your individual needs and plenty of quality time - one-on-one and small group coaching discussions focusing on goal setting and refinement, gate and stroke analysis for runners and triathletes, constant nutrition/fueling/supplementation guidance before, during, and after training, and objective evaluations. You'll be psyched that you attended!

Each Hammer Camp features intensity specific to your fitness and plenty of volume. You get six days of white glove treatment from airport pick up to airport drop off - think of it as a fantasy camp for cyclists and triathletes. During your stay, you'll enjoy intensive education, training, healthy eating, relaxation, and camaraderie with your new camp friends and our gentile staff. All of this, plus you get to enjoy the warm (maybe even hot) Tucson area! Once you complete one of our camps, you'll definitely be ready for the start of your season!

If you are not yet convinced that you should sign up for one of our camps, read

what those who have already attended have to say about them in the box below. As mentioned above, a good percentage of attendees from previous camps plan to return, so these may fill up fast. Bottom line? Don't miss out; you'll definitely

regret it! The cost for each of these camps is \$1800.00 per person. For more information about either of these camps, click on the "CAMPS" link at the top of the homepage on the Hammer Nutrition website.

Hammer Camp Feedback

"In the 20 plus years I have been around endurance sports, I have not learned as much anywhere in a weeks time. The relaxed environment coupled with the information from Brain, Jim ,and the staff,along with the knowledge passed on by the participants was hopefully life changing. The food was not only tasty but along with being filling was prepared great. My wife and I have started on a different lifestyle. We have started eating the way we should. Fruits vegetables, sensible portions. We have purchased a Cusinart Food processor, a Cusiniart Grind and Brew Coffe maker. Thanks Brian-it is great!"

"Brian, thanks for an amazing camp!!! It definitely lived up to its billing of world class riding, pro level support, top rate coaching, great people, and fantastic food ... so the weather was a bonus. I sure would like to do it again next year, as it inspired me to train over the winter, and it's such a great jump start to the '09 season. I can hardly wait to get back into racing this season. It was so nice having Jim [Bruskewitz] there with his great combination of talent, knowledge, and easy-going personality. I was also very much impressed by Owen and the rest of the TCH staff...what a great group!

"It was by far the best thing I have done to date. I would highly recommend this to anyone from beginner to expert athlete."

The "Season Head Start" Camp January 25th - 31st, 2010

(8 of 12 slots currently available)

The "Putting It All Together" Camp March 1st - 7th, 2010

(7 of 12 slots currently available)

1.800.336.1977 / www.hammernutrition.com



Fall Colors

Author : Dr. Lowell Greib, MSc ND CISSN

Sitting here in Ontario, Canada in the early fall and watching the maples start to change to their golden and crimson colors helps me reflect on the summer sport season that has just passed. It offers me the opportunity to not only enjoy one of the most beautiful times of the year, but also provides a little “end of season” time to strategize my approach for the new season (in my case the winter nordic season).

As a long time competitive athlete and a doctor, I sometimes take for granted some of the privileges that my experiences have offered. Not only have I been fortunate to log thousands of training hours and finish more races than I can count, but I have also been trained to understand the intricacies of the human body. Putting all of this together allows me, as a doctor, to critically evaluate what my athletes are doing, but probably more importantly, gives me the ability to review my own athletic endeavors.

Just as the cool autumn breeze waxes and wanes, so do various aspects of an athlete's training year. Many of us build our training schedule to optimize our performance for a single (or maybe two) races. We dedicate much of our spare time physiologically preparing for what we hope are personal bests. One question that we need to ask is whether we are actually doing our best? Have we really put the time and commitment into maximizing our performance? Spending much of my time, both personally and professionally, working in nutrition, I sometimes wonder how much dedication

an athlete has on building the principles that can make (or sometimes break) a top performance. It seems that many so called elite don't understand what the daily nutritional requirements are to ensure that their bodies will perform! They are quick to snatch up the latest and greatest in performance sport supplementation, but do not pay attention to the fundamental biochemical rules that apply to the masses, let alone an individual who tortures their body physically and neurologically every day. In reflection, can you say that you eat optimally for an endurance athlete?

Before the first sign that the snow will fly, I challenge you to ask yourself the following:

Do I eat foods that are nutrient dense and will offer the most biochemical support for the demands of my sport?

Am I consuming the correct ratios of macronutrients?

Do I monitor my hydration status?

Do I have a hydration strategy that replaces water losses that occur during exercise?

Do I efficiently maximize my carbohydrate stores prior to an event by timing nutrition appropriately?

Do I fuel during exercise using the latest exercise science principles?

Have I designed a recovery strategy that will maximize my gains post exercise?

Do I have a means of monitoring my

stress and recovery?

Similar to most of nature's cycles, we too will experience a dynamic shift in how we live our lives. Our daily and sport nutrition protocols are no exception! There will always be “ups and downs” in how and what we eat. The occasional piece of birthday cake or over-indulgence during a holiday season will, generally, not decrease our long term performance. The key to success is recognition of what is going to offer sustainable, long term nutritional support. Eating appropriately a vast majority of the time will fulfill your nutritional requirements for optimum sport performance and still offer some wiggle room for some variability in diet. Albeit, autumn (at least for me) is a great time to re-evaluate what I have done over the summer months, but in essence a sporting life is one of constant engagement and change. Similar to our physiological training, we should be constantly evaluating our nutritional training and modifying it. One of the great benefits of spending time in this field of sport performance is that there really is no such thing as “over-training”. The more engagement in this area you have, the better (and ultimately, faster) you will get!

Dr. Lowell Greib holds degrees in biochemistry, chemistry and naturopathic medicine and offers his expertise in sport medicine, injury prevention and performance athletic nutrition in private clinics in Huntsville and Orillia, Ontario, Canada (www.mahiganmedicine.com). Dr. Greib is a member of the faculty at both the Canadian College of Naturopathic Medicine and the Canadian Memorial Chiropractic College and holds the CISSN designation from the International Society of Sport Nutrition. Dr. Greib can be contacted at askthedoc@mahiganmedicine.com or toll-free at 1-877-624-4633.

Reader Recipe

My favorite memory of the circus was the pink cotton candy. Today after my run, I blended 3 strawberries, about 2 cups of watermelon, 2 tbsp nonfat yogurt, and a big scoop of plain Hammer Whey. Awesome!

John Maniaci



Be a Hammer VIP!

The TEAM HAMMER Auto-Resupply program is for our clients wanting the ultimate in convenience and super VIP treatment. Receive automatic shipments of your favorite Hammer products, FREE shipping, and much more!



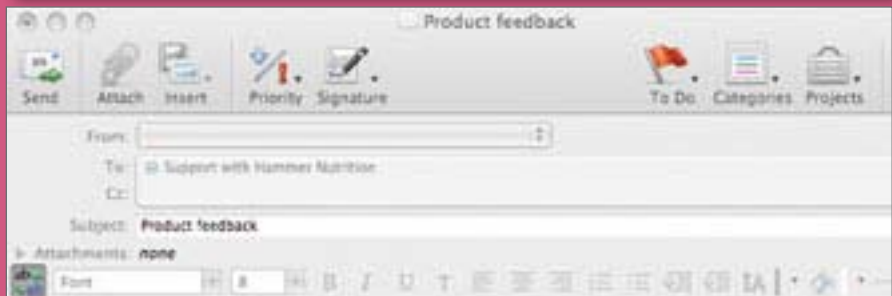
**Join
today!**

Katey, Client Advisor

1.800.336.1977

www.hammernutrition.com/team

Real Athletes, Real Results!



Hey! My name is Anna Kahkoska. I am 18 years old and I just graduated from Rampart High School and the International Baccalaureate Program. I will attend Syracuse University this fall on a full ride academic scholarship (the Coronat Scholarship), where I am planning on majoring in biochemistry.

I was diagnosed with Type I Diabetes when I was 11 years old. Since then, I have really gotten into athletics. I ran two seasons of high school cross country, swam one season, and ran three seasons of track (mid/distance runner). Towards the end of high school, I figured out that I enjoy longer events a lot more, and I tend to find a little more success there. In the last year, I have done two half marathons, two triathlons, a 20k, 30k, and 40k ski race, various running events, the Mount Evans Ascent, and most recently, the Pikes Peak Ascent.

My dad does a lot of biking and running himself, so I started sharing his Hammer products when I started doing some more intense training. I just wanted to let you know how much I rely on your products and how they have never let me down. I am a huge fan of HEED, Perpetuem, and the gels (when my blood sugar is dropping I can always count on a "HEED Lock" to stop the trend). I also use the Whey, Chromemate, Endurolytes, and the probiotics. Sometimes it feels like my blood sugar is impossible to predict, but with practice and patience I have learned how to manage my insulin and my fuel to keep my numbers in an ideal range. I am positive that I could not train or race as hard as I do without your products.

I also wanted to let you know that I write a blog on diabeteens.com that is largely focused on exercise and diabetes. I have discussed topics such as the importance of insulin and fuel during training, insulin and recovery, and post workout blood sugars. Most recently, I wrote about the Pikes Peak Ascent, detailing my fueling and insulin strategy. Of course I talk about Perpetuem. :)

Anyways, I wanted to thank you again for everything- the great fuel, the interesting articles, and the peace of mind I get while training with Hammer.

Anna

This testimonial was unsolicited and has not been modified.



Another Record Year For Event Sponsorship

2500+ sponsored events and nearly 1,000,000 product samples provided!

Author : Steve Born

When we say, “We support your sport,” we not only talk the talk, we walk the walk, as evidenced by the number of events that we sponsored this year. Now, I’m writing this article around the latter part of September so there’s still over a couple of months to go before 2009 ends. However, with us currently at a figure of 2542 sponsored events, we’ve already broken the previous record set last year by over 320 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! As of the time I write this (September 17th), we have already provided nearly 800,000 samples, brochures, and goody bags. With October, November, and December events still to happen and the numbers still to be tallied, there’s a very realistic chance that we’ll break a million. Wow!

We have also supplied thousands of containers of HEED, an amazing number of HEED cups (we’ve currently supplied nearly 2,000,000, with that total sure to increase), and we have donated literally tons of additional product for use as awards or raffle prizes. Wow again!

We sponsored events in all 50 states, with the following states at the top (all numbers are current as of this printing):

California – 242
 Michigan – 114
 North Carolina – 117
 Florida – 107
 Colorado – 106
 Texas – 101
 New York – 100
 Ohio – 93
 Arizona – 90
 Virginia, Washington- Tied at 91 each
 Pennsylvania – 84
 Minnesota – 79
 Wisconsin – 70
 Georgia, Oregon, Tennessee – Tied at 68 each

Not too surprisingly, our top months were:

May – 352 events
 August – 350 events
 September – 325 events
 June – 309 events
 July – 278 events

Our top sport continues to be triathlon/ duathlon (963, up nearly 200 races from 2008), followed by mountain biking events (378). After that were road cycling events/races (255), running races (203, comprised mainly of marathons, with some half marathons and shorter-than-ultra-distance trail running races), adventure races (165), ultra running races (140), and the camps/clinics we sponsor (148). We also supported a number of other endurance events, including water sport events (swimming,

paddling), winter sport events (Nordic skiing, snow shoeing), cyclo-cross races, and ultra cycling events.

As I’m fond of saying, “If you’re going to an endurance race, chances are you’ll see Hammer Nutrition there!”

Needless to say, we’re very appreciative of all of the positive feedback from both racers and race organizers and directors. We’re tremendously excited about achieving this new standard in event support and we look forward to even higher sponsorship numbers in 2010...we’re committed to supporting endurance sports like no other company has or will!

Recovery made easy!

Single serve \$2.69 / 32 servings \$49.95



HAMMER NUTRITION

1.800.336.1977
www.hammernutrition.com



Mixing HEED for the on-course sports drink at the Westerville Bicycle Club Dry Run.
Photo : Shari Heinrich

Upcoming Events

Author : Steve Born

When you sponsor 2500+ events annually there's really never a "slow period" to be had, though at this time of the year Kendra and I have a little "breathing room" when it comes to handling event sponsorship requests and orders. At the time of this writing (September 18th) we've not yet received all of the November/December event sponsorship requests, so the events I was able to list in this article are a bit more sparse than in previous event-specific articles in Endurance News.

Still, we've got some darn good events happening, highlighted by the various Cyclocross series that we're sponsoring throughout the U.S, many of which have started prior to the publication of this edition of EN...

- Kisscross Events/Cyclocross Series (Michigan) - www.kisscross.com
- Cross The Way Cyclocross Series (Tennessee) - www.uphillgrindproductions.com
- Mud, Sweat, & Gears Cyclocross Series

- (Tennessee) - www.msgcross.com/wordpress
- LARPD Cyclocross Race Series (California) - www.liveplayride.com
- Arizona Cyclocross Series (Arizona) - www.azcross.com/mainsite/
- Alabama Cyclocross Series (Alabama) - www.bamacross.com
- Inland Northwest Cyclocross Series (Washington) - www.emdesports.com/Race_Flyers/2009/2009_cyclocross.html
- Mid-Atlantic Cyclocross Series (PA, NJ, MD, DE, NY, VA) - www.midatlanticcross.com

These are just some of the Cyclocross Series races that we're supporting, along with many individual Cyclocross races as well. In addition, we've got some other great events happening in the months of November and December...

- 11/07 – Catalina Island Triathlon (California)
- 11/07 – Mendon Trail Run (New York)
- 11/07 – The Iceman Cometh Challenge MTB Race (Michigan)
- 11/08 – Silverman Half & Full Iron Distance Triathlon (Nevada)
- 11/08 – Miami Man Half Iron &

International Triathlon/Duathlon (Florida)

- 11/08 – Iron Star Half Iron Triathlon (Texas)
- 11/14 – 12 Hours of Temecula #2 MTB Race (California)
- 11/14 – Odyssey AR Rogaine (Virginia)
- 11/14 – Solvang's Finest Century (California)
- 11/14 – Rim Rock Marathon (Colorado)
- 11/26 – Southwest Valley Regional YMCA Thanksgiving Day - Youth, Adult, & Relay
- Sprint Triathlon/Duathlon (Arizona)
- 12/05 – December Chill 7-Hour Adventure Race (Michigan)
- 12/05 – Dawn to Dusk Endurance Mountain Bike Event (Arizona)
- 12/12 – Chimera 100K Ultra Running Race (California)
- 12/12 – Chilly Cheeks Duathlon Series – Event #1 (Colorado)
- 12/19 – Lookout Mountain 100K Ultra Running Race (Tennessee)
- 12/29 to 1/1 – Across the Years 72/48/24-Hour Footrace (Arizona)

This is just a small segment of the races that we're sponsoring in the next couple of months! We're constantly adding new events to our calendar and updating our website, so make sure to check out the current list of 2009 Hammer Nutrition sponsored events at www.hammernutrition.com

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Can Racing Save The World?

Author : Shane Alton Eversfield

Those Who Do And Those Who Don't

There is a distinction among avid endurance athletes: those who race and those who don't. We who choose not to race will cite our disinterest and even disillusionment with racing. "I'm just not competitive." "I exercise for my mental and physical health." "I don't need to pit myself against others to gain benefit and satisfaction from my endurance training." We often perceive successful racers as being "type A's" blessed with good genetics – highly driven, even obsessed with winning.

However, within the ranks of racers, there is another distinction: On one side are those of us who race against one another for the dominating status of "winner-take-all" – making everyone else a loser. On the other side are those of us who regard "competition" as a "petition for companionship", seeking the synergetic support of athletes, volunteers and spectators. In our pursuit of athletic excellence, we choose to inspire and support one another, to collectively elevate ourselves to extraordinary performance levels of experience. We seek the magic of racing and are more apt to measure the quality of our race performances on the speed we find through grace, intelligence, efficiency and inspiration – rather than "balls-to-the-wall" exertion and sheer mental will.

All Of Us Do It

Athletic or not, there is one race that each and every one of us participates in – our human race. Our race as humans is similar to our race as endurance athletes. Some of us race against one another for domination and control. Others of us regard our human race as a petition for companionship – as an opportunity to inspire, guide and support one another to lives of extraordinary quality.

Two Sides

In both our athletic race and our human race, there is "me against you" on one side, "me and you" on the other. To varying degrees, each of us embodies both of these sides. Some of us are more one polarity than the other – just as some of us think more with our heads and some more with our hearts. Our logical, brain-intelligence analyzes, dissects and separates – creating the "me against you" side. Our intuitive heart-intelligence circulates, integrates and connects – creating the "me and you" side. It is futile and destructive for us to cast judgment on these two sides of ourselves – to condemn one side and make the other righteous.

Union

It is far more promising for us to nurture a healthy relationship between our heart and our brain. In a healthy, functional relationship, our brain recognizes and honors both of these unique separate perspectives – the "me" perspective and the "you" perspective. Supported by the heart, our brain ceases to operate out

of fear and the need to defend the "me" perspective and dominate the "you" perspective. Likewise, our heart no longer rebels in an effort to be heard over the brain's fear. Supported by the brain's brilliant skillful means, our heart is able to transform "me and you" into "us".

In each race – athletic and human – each of us is a unique expression of power, glory and grace – "me, you". Collectively, each race – athletic as well as human – is a living, breathing and conscious organism, a synergy of all those individual unique aspects – the synergy of "us"! As athletes, we often experience our greatest race performances when we tap into this synergy of "us".

Long Distance

As the distance of our athletic race increases and reaches epic length, the living connection we share – the "us-phenomenon" – becomes more vivid and more tangible. In our human race, the same is true. The farther we project our intentions, goals, dreams and our commitment, the more we appreciate and tap into the synergetic power of "us" as a human race.

Express Yourself

Racing is an expression of power – both endurance racing and human racing. That expression of power includes more than the primal struggle for domination, strength and control. Grace, balance, harmony and efficiency – elements of our effortless power – are far more promising than the misery of struggling for domination and control.

Politics and Power

In our race as humans, we now stand on a precipice in our experience and

see SALVATION on page 51

SALVATION from page 50

expression of power. Globally, when our collective heart and brain engage in a struggle for domination and control, the result is war. One side wields the intelligence and power of cold calculated logic, while the other side wields the intelligence and power of fiery emotional passion. True pursuit of excellence - athletic and human - begins by nurturing a healthy relationship between our brain and our heart – between logic and passion.

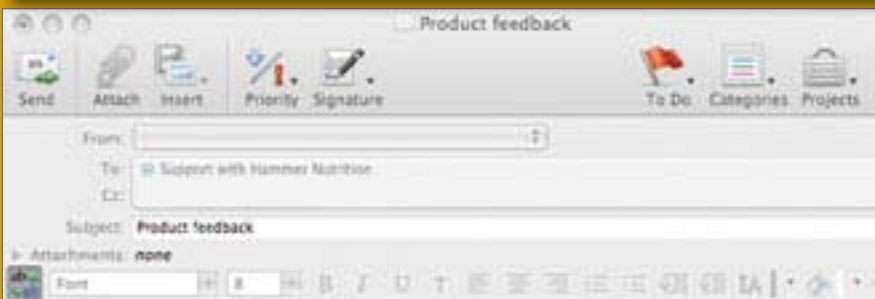
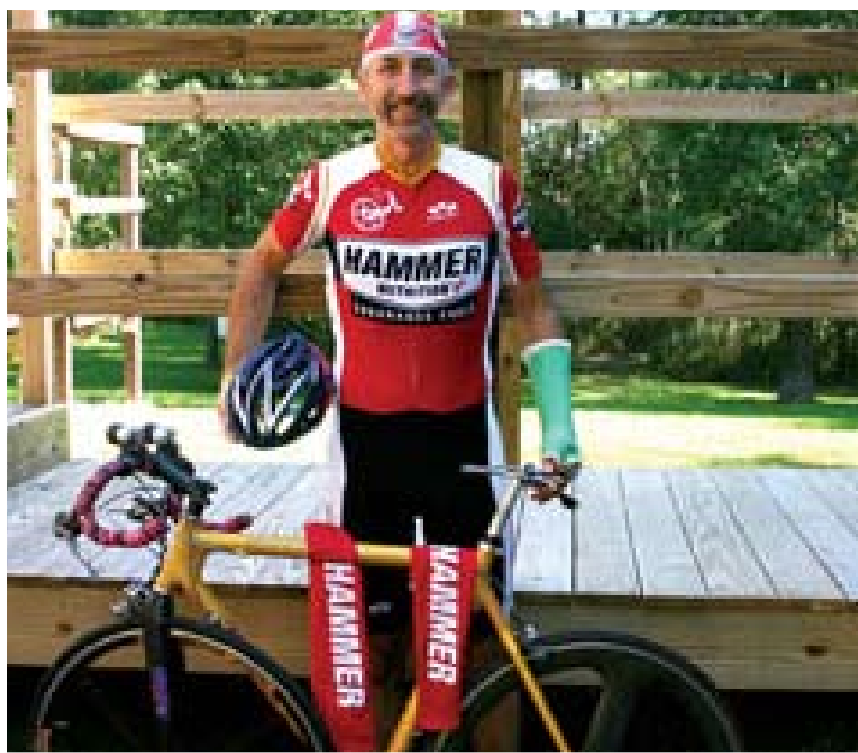
Race With Grace

Training and participating in endurance races – particularly races that are epic in length and difficulty – provide us with an opportunity to engage our third intelligence – the body intelligence – as a mediator to bring reconciliation and harmony to the relationship between brain and heart. Out of sheer necessity, the demanding challenge of a long-distance race motivates us to bring heart and brain into balance and cooperation to accomplish our goal. Along the way, we gain grace, wisdom and long-term vision that carry over into our participation in the human race. We begin to realize that we are either all winners or all losers. It's not how fast we get to the finish line of life or whom we beat on the way; it's how graceful, harmonious and efficient we are on our journey. This is what brings us enduring happiness and genuine satisfaction.

As athletes, the experience we gain from training and racing prepares us as we transform our human race into its truly epic destination – our planetary race. Either we thrive and prosper as an integrated planetary entity, or all of us perish in our futile struggle for domination and control. So, how do we want to cross the finish line? The choice is ours – NOW.

Shane Eversfield is author of "Zendurance, A Spiritual Fitness Guide for Endurance Athletes". www.zendurance.net. He races triathlons up to ultra distance and was USAT All-American 2008. He is also a Serotta Certified Advanced Bike Fit Technician and a Total Immersion Swim Technique Coach. ironzen@hotmail.com

Real Athletes, Real Results!



Just thought I would drop you a line about how good and durable your line of clothing is. On September 4th, 2009 we had a group of us doing a ride through one of our local parks. I had on my Hammer cycling skinsuit, a Hammer jersey over it (a little chilly), and Hammer arm warmers. As we were chasing each other down one of the hills, moving along at around 40mph, a deer crossed my path and I hit him dead center. I came to a quick stop, flew over the deer, landed on my head, and proceeded to bounce down the road for about 20 to 30 yards. Broken helmet (saved my skull), broken hand from impact with deer, stretched ligaments in ankle from first impact, and lots of road rash. When I got home my wife looked at the skinsuit, jersey, and arm warmers and could not believe that they were not ripped to shreds. Thanks for all the great products and keep up the good work.

KC Bailey
P.S. The deer didn't make it and neither did my bike.

This testimonial was unsolicited and has not been modified.

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Rebecca Villers on the podium at Ironman Louisville.

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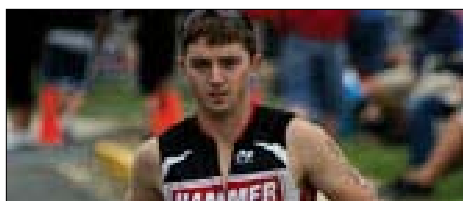
Rebecca Villers

Ironman Louisville in Louisville, KY
August 30th, 2009

1st in 35-39 age group - \$1500 credit

Ironman World Championships in Kona, HI
October 10th, 2009

3rd in 35-39 age group



John McDonough

ChesapeakeMan Ultra Triathlon in
Cambridge, MD

September 26th, 2009

2nd in 20-24 age group - \$750 cash



Steven Bland

2009 USAT Long Course Tri Nationals
in Oklahoma City, OK

September 19th, 2009

1st in 40-44 age group - \$1500 credit



Andrew Loeb

Ironman Louisville in Louisville, KY
August 30th, 2009

1st in 60-64 age group - \$1500 credit



CJ Boyenger

USA Cycling Masters Track National
Championships in Colorado Springs, CO

August 18th, 2009

1st in 45-49 age group - \$1500 credit



Garrett D'Alessandro

Ironman Lake Placid in Lake Placid, NY
July 26th, 2009

5th in 50-54 age group - \$150 credit



Erin O'Donnell

Ironman Louisville in Louisville, KY
August 30th, 2009

2nd in 18-24 age group - \$500 cash



Brian Stern

2009 USAT Long Course Tri Nationals
in Oklahoma City, OK

September 19th, 2009

3rd in 40-44 age group - \$250 cash



Shane Ellis

USA Cycling Masters Track National
Championships in Colorado Springs, CO

August 18th, 2009

1st in 35-39 age group - \$1000 cash



Stephan Schwarze

Ironman Louisville in Louisville, KY
August 30th, 2009

2nd in 40-44 age group - \$500 cash

More Hammerbuck\$ winners!



Jeremy Dodds

USAT Long Course Duathlon National Championships in Auburn, CA
May 31st, 2009
3rd in 40-44 age group - \$375 credit



Lisa Clines

Halfmax National Championships in Oklahoma City, OK
September 19, 2009
2nd in 50-54 Age Group - \$750 credit



Sean Lewis

Ironman Coeur d'Alene in Coeur d'Alene, ID
June 21st, 2009
5th in 40-44 age group - \$150 credit



Team Hammer Frogs

Jennie Phillips, Lori Cherry, Jeanine Spence, and Rebecca Rising
Furnace Creek 508 / Oct. 3rd - 5th, 2009
1st in 40+ division - \$1000 cash



Greg Taylor

Ironman Coeur d'Alene in Coeur d'Alene, ID
June 21st, 2009
1st in 55-59 age group - \$1500 credit



Joanne Furu

Ironman Lake Placid in Lake Placid, NY
July 26th, 2009
4th in 55-59 age group - \$150 cash



William Truax

USAT Long Course Duathlon National Championships in Auburn, CA
May 31st, 2009
2nd in 55-59 age group - \$750 credit



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David Jones with his crew at the end of the Furnace Creek 508. Photo : Chris Kostman

Race Report

Furnace Creek 508

David Jones

Congratulations to Hammer Nutrition sponsored athlete David Jones on not only completing this year's Furnace Creek 508, but for being honored as a "Class of 2009" Furnace Creek 508 Hall of Fame inductee. The Furnace Creek 508 Hall of Fame, according to race director Chris Kostman, "honors those athletes who have shown a long-term commitment to pursuing their personal and athletic goals on the famed and fabled Furnace Creek 508 race course.

Inductees into the Hall of Fame have completed a minimum of five Furnace Creek 508 events, in any division or combination of divisions."

David recently wrote to me (Steve Born) and said, "It was good to see you at Interbike; my first time at the candy store. I made it to the finish of another FC508, my 6th. It was supposed to be an easy victory lap to celebrate my induction into the 508 Hall of Fame but turned out to be a real test of will thanks to historic headwinds for 100+ miles

through Death Valley and continuing to Baker. I am still dreaming about doing Solo RAAM again but have decided to put it off until 2011. Thanks for the great support over the years."

NOTE: David won the 60+ solo men's division of The 508 this year, finishing in a time of 42 hours, 12 minutes, 54 seconds. This was good enough to place him 18th out of the 50 men's solo riders who started the race.

David's "Hall of Fame" Furnace Creek track record:

*** Year: 2003 - Age: 57 - Time: 38:50:42
 *** Year: 2004 - Age: 58 - Time: 42:21:00
 *** Year: 2006 - Age: 60 - Time: 37:14:38
 *** Year: 2007 - Age: 61 - Time: 35:48:53
 *** Year: 2008 - Age: 62 - Time: 35:46:20
 *** Year: 2009 - Age: 63 - Time: 42:12:54

Team Hammer Frogs

In spite of the most horrific winds in the 20+ years of racing (according to Chris Kostman), Team Hammer Frogs still hammered the course fueled by Hammer Nutrition and all decked out in cool Hammer kits.

Total time was 32:39:33, setting a new record for the 40+ 4-Woman team category! 1st 4-woman team (OK, the only one entered). But also 3rd out of 15 total 4-person teams (13 of which were 4-man teams), and 6th overall (all racers in the event).



Lori Cherry, Jeanine Spence, Jennie Phillips, and Rebecca Rising with crew chief Lee Mitchell. Photo : Chris Kostman

Team Ichthyosaurus

With the nutritional support of Hammer and the backing of all our other sponsors, Bruce and I were confident in our first try at this difficult race. The race itself all went well until I dropped into Death Valley at mile 280 and hit headwinds of 30 plus MPH. It was a hard 17 miles to the finish at Furnace Creek Ranch. My poor teammate had to endure a night of 40 MPH winds with stronger gusts that almost stopped all forward progress. He covered roughly 20 miles in 4 hours on flat roads. Even with our tough night in Death Valley we finished in 37 hours, just three hours off of our expected finish time of 34 hours.



Troy DeLong and Bruce Frazier finish the 508. Photo : Chris Kostman



Julie Kaplan celebrates a fifth place finish in the road race at the National Senior Games in Palo Alto, CA. Photo - Ted Zaynor

Race Report

Hammer athletes

Dave Hurley

Just finished my first Ironman this summer in Nice, France. Unfortunately had a bit of a stomach flu in the days leading up, but went for it anyway because I'm stubborn. I managed a Hammer Gel before and after the swim, then a Hammer Bar as I started the bike. As the day turned warm and the bike course got hilly, I was unable to eat or drink anything else except water due to the flu. All my carefully measured HEED and Perpetuem that I had trained with would not stay down on race day. I slowed but never stopped, and completed the Ironman in 15 hours on just two gels, four Endurolytes, and a bar, proving that Hammer fuel provides lasting energy to stubborn athletes. Next month: the Athens Marathon!

Quick story : I'm stationed in Germany with the Army (and currently deployed to Bulgaria!) and just received my latest shipment from Hammer. I was overjoyed and full of appreciation that you have now added a 40% discount to APO addresses. I really appreciate the support this conveys to us when we are overseas in the military.

I've always sent referrals your way over the years without hesitation and now have even more reason to get my fellow soldiers hammering. Thanks again!

Dave
(My military call sign is "Hammer 6")

Brian Housand

Hammer Rules! A year ago, I started focusing on running, with a goal of improving my overall strength for triathlons. I just finished the Chicago Marathon and Hammer was a HUGE part of my personal success. I cannot wait to do that race again - it is awesome! Anyway, I used Race Day Boost leading up, daily Hammer supplements year round, 3 scoops of Sustained Energy in my water bottle, and a Hammer Bar for breakfast. Sustained Energy "heavy" mix on the run, supplemented with gels, Endurolytes, and Anti-Fatigue Caps on the run. My first marathon, no issues, ran 3:55 and can't wait to do it again. Thanks Hammer!

Brian Housand

Troy Barry

Congratulations to sponsored athlete Troy Barry, and his teammate Cary Smith, on their recent win at the 24-Hour National Championships in the men's duo division.



Adam Brown

I competed in the Ironman World Championships this past weekend. Once again, the Hammer products kept my body going all day. The heat was really tough and I don't know what I would have done without them. My result was not what I was hoping for, but to get to Kona and race is all that matters. Finishing time: 10:35.

Adam Brown

Save 15% when you buy a complete men's or women's Hammer kit!

Buy a kit consisting of a jersey, shorts or bibs, arm warmers, and a wind jacket and receive 15% off the individual prices! Gloves, socks, and other Voler items will also be discounted if they are ordered at the same time.

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Ben Parsons gets things started at the 24-Hour National Championships in Moab.
Photo : Dustin Phillips

Race Report

Hammer athletes

Eric "Sully" Sullivan

Hey Steve, just wanted to let ya know I just got back from racing the 4 Day Wu-Long Mountain Stage Race in China on Friday with Team Salomon Crested Butte and ended up 4th place. Only four weeks after we ended up 2nd in the Primal Quest Badlands Expedition Adventure Race. The Tissue Rejuvenator and Hammer Whey got the muscles back to 100%, no questions asked. The Recoverite was key for the long bus rides after 7-8 hours of running, biking, and paddling throughout the Wu-Long Mountains to get us ready for the next days sweltering temps and pace. Also, 4-5 Endurolytes an hour did the trick to keep the cramps at bay in the extreme heat and humidity everyday. Now just trying to get a little rest and get over the China stomach bug that plagued many of the athletes and get ready for Ironman Hawaii in another 10 days. So thanks again for the great product and I will give ya a heads up on Kona after the race.

Eric "Sully" Sullivan

Cole and Caleb Burke

I thought you'd enjoy the story of one of your youngest competitors. My sons, Cole (9) and Caleb (7), just competed and finished in the IronKids series in Alpharetta, Georgia with over 1000 kids present! Come race day, my son Cole had no race pants since he's grown so much over the last few months. I gave him my Hammer Nutrition triathlon shorts to wear. He did awesome and was pushing it as hard as any athlete competing! I love your products in my own triathlons and training regimen.

Brent R. Burke



Peter Roseman

I just ran the Reykavik, Iceland Marathon last weekend using Hammer products....gels, Endurolytes, and Perpetuem, as my main source of nutrition for the first time.

I have to report that, as a veteran of several marathons, I never felt better during an endurance race.

I devised and perfected a very specific nutrition intake strategy, and while others faded at the 20 mile mark, I kept up my pace and felt strong. I even told several people that I passed about Hammer. As I train and race in the future, I will continue to use these products and anticipate success in achieving my goals.

Peter Roseman



Keep your feet cool

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3 gram - \$2.25
2.7 ounce - \$13.95



Bob Hannon

My 15 year old son and I have been using your products for years and we recently won a relay tri here in Douglas, MA.. Below is a picture of my son, Zach, who did the swimming leg, myself, and Peter Zelken, our runner, with our medals and a canister of HEED. We finished first among relay teams.



High Sierra Fall Century

Our event, the High Sierra Fall Century, has been wrapped up, equipment put away, and now snow is falling on our high country. I want to thank you very, very much for supplying us with Hammer products! It made a huge difference and riders were certainly appreciative of the support. Our club, Eastside Velo, had a team in the recent Furnace Creek 508 (Team Eastside VELOCiraptors consisted of Jeffrey Byberg, 48, David DeVries, 54, Jim Pettigrew, 58, and Steve Schmund, 42). They placed 1st in the 4-man 50+ category and were the second 4-person team overall; powered by Hammer, of course. Riding around Mammoth slows down a little from this point onwards but we remain active by getting down to Bishop, about 40 miles away for the next 6 months. Thank you, once again, for supporting the High Sierra Fall Century.

Julie Kaplan

I just competed at the World Senior Games in Palo Alto and won both time trials...even had the fastest overall women's time for all age groups (okay, so they start at 50) for both TT's. I was 5th and 6th in the road races, thanks to a gnarly 0.4 mile finish climb.

Thanks again for all your support and the great products.

Julie Kaplan

Hot Tip : Hammer Whey

In previous issues of Endurance News we discussed the benefits of taking whey protein prior to bed to help elevate hGH levels by as much as 400% (*read the original Hot Tip below*). The key for this to be successful is to take Hammer Whey in water only, as carbohydrates will hinder the process. Note that Hammer Whey contains no added carbohydrates so it's going to be somewhat bland tasting. However, the benefits derived are anything but bland!

From Endurance News 54

Elevating Human Growth Hormone (hGH) levels is the surest way to enhance athletic performance and shorten recovery time. This is why some athletes resort to risky injections. To safely raise hGH levels without risk to your endocrine system, try this - just before bed, take 1 scoop of Hammer Whey protein in 4-6 ounces of water (not juice or milk as those carbs will hinder the process). This practice may safely raise hGH levels while you sleep by as much as 400% compared to the usual nightly spike. That's enough to have a noticeable effect on anabolic, muscle building/maintaining activity in the body, and that's a good thing.

Safely raise hGH levels!

100% whey protein isolate in 3 delicious flavors
(and Unflavored too)



- Minimize post-exercise soreness
- Protect lean muscle tissue
- Immune system support



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Single serve - \$2.89 / 24 servings - \$32.95 / 3 or more - \$28.95 ea.

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Will Black at the finish of the Jungfrau Marathon in Switzerland. The marathon started in Interlaken at 1950 ft and ended in Kliese Schidegg, in the shadow of the Eiger, at 7130 ft. Photo - Jo Black

Race Report

Hammer athletes

John Kahler

Attached are photos of my 1st place (1/201) finish in the sprint triathlon at the 2009 Tawas Triathlon Festival in Tawas, Michigan on September 12th. Another Hammer Gel success!

After exiting the swim in 7th place I quickly took the lead on the bike and posted the top bike split. Unfortunately, this took a lot out of my legs and I was having trouble holding the lead on the run. One Hammer Gel later I regained the strength to hold my pace and finish 1st overall. Thanks again!

John Kahler



Brendan Halpin

Congratulations to former Hammer staffer, Brendan Halpin, on finishing 22nd among all pro men at this year's Ironman Canada. Brendan blazed the course in 9:36:40.



Rebecca Johns

Rebecca, a local athlete, shares her HEED on the roof of a monastery in Zanskar at about 13,500' elevation.



Sal Castro

I'm writing to give you an update to the 2009 Long Beach Triathlon in Long Beach, CA. The first thing I noticed while in the transition was the number of athletes in their Hammer gear. There must have been ten of us wearing it.



Usually it is only me or maybe someone else. While setting up my stuff and doing my pre-race routine I had a couple of people ask me what kinds of pills I was taking. I talked to them about

Endurolytes and the benefits. I always bring extra pills just in case people want a sample. I think the word is getting around in Long Beach about Hammer Nutrition.

I did well in the race, placing 2nd in my age group out of 75, and 19th overall out of 945.

I've attached a picture of my son Cameron (who has been featured in the Hammer Newsletter) and I after the awards ceremony.

Thanks for your help,
Sal



Jamie Donaldson : USATF Athlete of the Week!

Donaldson named Athlete of the Week
09-30-2009

Contact:
Vicky Oddi
Communications Coordinator
USA Track & Field
317-713-4670

INDIANAPOLIS - Jamie Donaldson (Littleton, Colo.) has been named USA Track & Field's Athlete of the Week after setting an American record in the women's 200,000 meters over the weekend at the 28th Annual Ottawa International 24 Hour Self-Transcendence Race and Masters' 24 Hour Championship in Canada.

The fifth-place finisher at the 2008 24 Hour World Championships, Donaldson destroyed the 18-year old American record by completing 200,000m on the track in 21 hours, 1 minute, 28 seconds en route to running 214.487 km in 24 hours. The previous record of 21:08:47 was set by Sue Ellen Trapp in 1991. As the overall winner, Donaldson ended her 24-hour run in dominating fashion, as her next closest competitor, runner-up Andrew McLean of Ontario, ran 202.943 km.

Now in its eighth year, USATF's Athlete of the Week program is designed to recognize outstanding performers at all levels of the sport. USATF names a new honoree each week and features the athlete on the USATF website. Selections are based on top performances and results from the previous week.



Cronin Sailing Team / Team Spidey

Congratulations to Carol Newman Cronin and her teammates Kim Couranz, Margaret Podich, and Kate Fears, on their recent 3rd place finish at the Rolex International Women's Keelboat Championship. Nice hats ladies!



Photo - Dan Nerney/Rolex

Tim Olson

I recently completed my first ultramarathon, the Lean Horse Half Hundred (50 mile) in Hot Springs, South Dakota and I wanted to write and thank you. Hammer products played a huge role in my achievement. Throughout training I used HEED, Hammer Gel, Perpetuem, Endurolytes, Premium Insurance Caps, Race Caps Supreme, and Mito Caps. In the days leading up to the race I loaded with Race Day Boost and on race day I fueled exclusively with Perpetuem and supplemented with Endurolytes, Race Caps Supreme, and Mito Caps.

Your products worked flawlessly and your usage guidelines worked perfectly for me. Although 50 miles was a significant challenge, particularly on this day when the temperature reached into the mid and upper 90s, fuel and nutrition were never a challenge thanks to Hammer. Perpetuem kept my tank full throughout the day and Endurolytes kept the leg cramps at bay.

One of the most surprising aspects of race day for me was the constant comments from people about my Hammer shirt. Too many times to remember fellow runners cheered me on with encouragement like, "Go Hammer Guy!", "Hammer On!", "Yes, Hammer!", and "I love Hammer!" Your products are great and people know it. Keep the good stuff coming.

Thanks again,
Tim Olson



Ursula Grobler-James, who is coached by Carlos Dinares, after her championship single win at the Canadian Henley.
Photo - Stan Lapinski (www.goldmedalphotos.com)



Race Report

Hammer athletes

Cody Downes and the Inferno

To whom it may concern: Man do I have a story to tell you! My name is Cody Downes and I play for a highly competitive Inline Hockey team called the Inferno, based out of Scottsdale, PA.

We travel the East Coast playing against teams that are faster, much younger, and heavily stacked with talent. At the beginning of this season, we noticed that we had one great group of talented players that had a real

chance of dominating the league. There was one draw back though, our team was older. We had some players on the team in their thirties, and we were playing against an average age of about twenty. This didn't hold us back all season in our division, and we were able to dominate most of our games. Come playoff time though, I noticed, being 26 myself, that we needed help. We especially needed it when we played multiple games, up to six games a day. That's when one of my ace in the holes came into play. Eve Dietrich, the woman responsible for this all. You see, Eve is a very close personal friend of my family. She also happens to be excellent at sports nutrition, training triathletes, and working in the nutrition



field. I called and asked her "What can I eat? What can I do? Eve, I need help". Without hesitation she responded with "Hammer Nutrition", and first suggested that I buy Endurolytes. The first round of playoffs came around, I took my box of

product and samples into the locker room, and I was on. I played the game of my life! Very pleased with the product, I told everyone on the team what I was up to. Surely enough as playoffs went on the teams got younger but our second ace in

the hole, Hammer Nutrition, became a staple of our team philosophy.

Before I knew it we were in the national finals playing against an 18 year old team from San Jose, California, winning the national title. The greatest thing is, we NEVER cramped, slowed down, or even showed that we had signs of being the much older team. I have never been on a team that has won a national title, and I owe thanks to your company. Thank you very much for everything you have done for me, my team, and our accomplishments.

Sincerely,
Cody Downes

Stephen and Erik Armes

My son, Erik, and I did the Surf City Duathlon today in Imperial Beach, CA. Thank you guys for your sponsorship and fueling us to some great results. I came in 2nd overall and Erik came in 2nd in the 15 and under age group. Erik was using this race as a training event for the Ironkids National Championships in a few weeks.

You all are great, keep putting out the great products!!!

Stephen and Erik Armes



Jim Donaldson

I have had a great year so far, winning 65-69 category in every race except USAT Nationals (4th). Last week I won the 70.3 Muskoka, which qualified me for the 70.3 World Championship in Clearwater. That is one week after IM Florida and I am doing both (lots of Hammer products!).

Jim Donaldson

Lincoln Murdoch

Hey Hammer - thanks for your great products which fueled me to an 8th place finish at the ITU Sprint Triathlon World Championships on September 13th in Australia (50-54 age group).

Lincoln Murdoch



Riding along the Gold Coast beach area.



Hang'in with the Roos!

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Dave Daughtry

Dave started racing three wheelers in 1983 at the age of 18. He then ventured into Go-Kart racing. With age at his disadvantage, he realized quickly that it takes money to be competitive. With his passion for racing and obsession for engines it brought him to an automotive machine shop building race engines for circle track and drag race cars. As his experience grew through the early 90's he took a job as an engine builder for a professional pro stock drag race team, Johnson and Johnson racing. He eventually worked his way to be a prostock drag race crew chief. Dave's team won the NHRA Winston series that is now known as the NHRA Powerade series. While working as a crew chief, he decided turning wrenches just wasn't enough and bought a KTM motorcycle; he hadn't ridden bikes since the early 80's. After riding recreationally a friend talked him into trying his hand at racing. Dave went to Ellensburg, WA for the Desert 100 (for those of you who don't know, this race consists of two fifty-mile laps, with more than 1000 participants). His competitive nature was evident; after finishing with a broken leg and a 1st place trophy, he

was completely hooked. He raced bikes for a number of years, acquiring two gold medals at ISPE in Idaho, and 3rd in class at the Desert 100 with a ranking of 36th overall. A few years later at the Desert 100 he lead his class three quarter of the way through the race before wrecking and breaking his collar bone, leaving him unable to finish the race. As his injury count increased, his racing slowed down, until he finally gave it up. In October of 2008 he decided to give auto racing a try. It seemed to be the most logical choice for Dave, all the things he loved; speed, the smell of petrol in the air, adrenaline, and a roll cage. This is his first year auto racing Legend cars and he still claims to be learning the ropes, building his own engines, fabricating his own parts, two cars, and practicing every chance he gets. He is leading rookie of the year and master class, and 8th over all points with three races left.



ATHLETES...do you want the Hammer Nutrition community to know what you're up to? Have a great, copyright-free photo you want to share? Send a short email to athleteupdates@hammernutrition.com (please put Race Report in the subject line) about your recent accomplishments and we'll try to include it in our Race Report. Photo note: please ensure that all photos submitted are high resolution at 300 dpi or at least 500 kb in size. Thanks!

John McDonough on his way to a 2nd place age group finish at the Chesapeakeman Ultra Triathlon.
Photo - Ian Deming



Race Report

Hammer athletes

Tom Dell

I participated in and won the gold medal at the Michigan Senior Olympics on July 7-8, 2009. I won gold in the 5k time trial, 20k road race, and 40k road race. Please find attached photos with my gold medals. I competed in the 50-54 age group, in a field of approx. 40 riders.

Thanks!
Tom Dell



Brent Johnson

I wanted to let you know about my result from the Hotter 'n Hell Hundred in Wichita Falls, TX on August 29th. Pre-ride week I loaded with Race Day Boost using the new protocol for riders around 150 lbs. My legs were great that day and I had my fastest time ever for this event at 4:25:52 over 101 miles, 5 1/2 min faster than my previous best here 5 years ago, and the fastest century I've had since I was younger than 35! I'm now 51. I was 4th in the 50-54 age category. I also took Race Caps Supreme and Anti-Fatigue Caps pre-ride, and used Endurolytes, more Anti-Fatigue caps, and Hammer Gel during the ride.

Brent Johnson

Jamie Ingalls

You guys rock!!

See attached picture of me working my way toward finishing my first 100 mile MTB Race. Fools Gold 100 in Delohnaga, GA on 8/15/09. HEED and Endurolytes kept me in the game and allowed me to pick up seven places in the last 40 miles.

Jamie Ingalls



Darren Thompson

Hammer Nutrition's Canadian distributor, Darren Thompson, gets a little encouragement during the Sylvan Half Iron from his parents and son, Noah.



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Matt Muvey

I just raced my first Ironman in Louisville this past weekend and wanted to pass on how great your products worked. I used Perpetuem on the bike by making two three-hour bottles. I also took in a Hammer Gel every hour to supplement and I was never hungry during the ride. I also used Endurolytes on the run whenever I felt a cramp coming on and I was cramp-free the entire run. I have never run a marathon without cramps before. My goal was a sub-14 hour Ironman and I ended up with a 13:26! Just wanted to say thanks to Hammer for the customer support and the great products.

Thanks!
Matt Muvey

Team Hammer Gel

Here is an award photo for the 55+ four man TTT District Championship held on September 6 in Altamont, CA. Team Hammer Gel got 2nd on a very windy course. L to R: Jim Fox, Jack Kelso, Mike Freeman, and Lloyd Rath.



Scott Gaiser

I had a very satisfying race at Troika [half iron triathlon - Spokane, WA] -- 5th overall and 1st in the Masters. I had the 3rd best run split and felt strong at the finish despite a very hot day. Having HEED on the course sure did not hurt. I sincerely believe my arsenal of Hammer products made a difference.

Consistent use of Recoverite and/or Hammer Whey after workouts and one REM Caps before bed two days before the race ensured me of a restful nights sleep. On race day, 4 Anti-Fatigue Caps and 4 Endurance Amino capsules pre race, and one of each every hour during definitely have made a positive impact on my performance. Caffé Latte Perpetuem tasted great and consistently gets the job done. Given the heat, I was drinking a cup of water and a cup of HEED at every water stop along with 1 to 2 Endurolytes. It was one of those days where I stayed focused and with the help of my Hammer arsenal, I got into the zone and had one of my most enjoyable races in a long time.

Thanks again,
Scott Gaiser



Jari Kirkland

Hi Steve, We (Team Salomon/Crested Butte) are all recovering from Primal Quest. It takes a few days to recover after 600 miles. Thankfully, I have the best products to help me. It has been so wonderful to start to feel great after only a few days; I can never tell you how much I appreciate you and HAMMER. I still have a few more races that I will keep you up to date on. Thanks again for helping me be the best athlete I can be. Oh yeah, I should mention that we got 2nd, behind the current World Champs.

Jari Kirkland





IN THIS ISSUE

Product Spotlight

Phytomax **6**

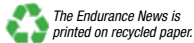
Off-Season Supplement Suggestions

What should you be taking? **12**

Athlete Spotlight

Arthur Webb **40**

Complete table of contents on page 2



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PS - I've included a photo of me with my nieces, taken by my sister Susie, before the start of the race.

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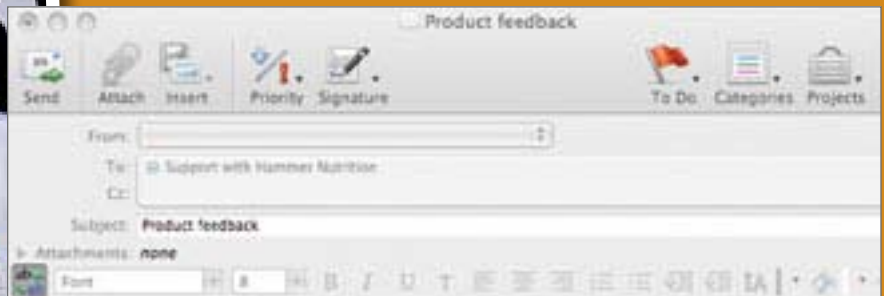
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This testimonial was unsolicited and only modified for length.

I got my 1/2 marathon back! Woo-Hoo!



I've been doing 1/2 and full marathons for some time and it's been a while since I've been able to complete one without having to stop and walk for a bit (outside the water stations). I tried your Race Caps Supreme on one of my previous 1/2 marathons. I took 1-2 caps before the race and while the first 9 miles went really well, the last three I had to walk a bit.

Well today, October 4th, 2009, I competed in another 1/2 marathon. I used a slightly different supplementation strategy. I took 2 Anti-Fatigue Caps and 1 Race Caps Supreme the hour before the race, along with my bottle of Perpetuem. Then, right about the 5.5 mile mark, I took another Race Caps Supreme, an Anti-Fatigue, and an Endurolyte. I've never taken additional supplementation during the race outside of what's on course.

From the 6 mile mark to the end of the race, the 1/2 marathon was uphill. Let me tell ya, not only was I able to improve my time from my last 1/2 marathon, I never had to stop running (outside of the water stops). I had some good energy on the second part of the race. This is considerable improvement. Wow, I've been thinking about it all day.

Hammer, you guys rock. I've never written an article into Hammer before because I've always just assumed my athletic performance. I just figured I'll need to stop here and there on longer distances. Today was a good step forward.

Today's course was a tougher course from my last 1/2 marathon simply because of the uphill part. I shaved about 2 to 2.5 minutes off my time. Overall time was 2:10:31.

Thank you Hammer!
Rob Hermann