



endurance

NEWS

a newsletter for the endurance athlete

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SAFETY & INTEGRITY OF E-CAPS

Bill Misner, Ph.D.

E-CAPS' contract manufacturers who formulate and encapsulate our products are required to perform periodic analyses and report any irregularities. No ingredient used in any E-CAPS product is banned by either the IOC or the USOC. Further, none of our ingredients have any metabolites capable of producing a positive result for any of the banned substances. To my knowledge, during the years 1987-2002, NO E-CAPS-Sponsored athlete has ever tested positive for an IOC or USOC banned substance.

One long-time user writes: "I have been

taking E-CAPS products enthusiastically since 1987. I have had multiple blood tests in that time period. I have yet to have an out of reference range testosterone level or other hormonal irregularities as is typically related to androgenic steroid use. My hematocrit, hemoglobin, RBC counts are at levels which are within normal reference range, eliminating illicit EPO drug use influence."

Scott Moninger, who recently left our sponsorship and went to a competitor, never had a positive test while he was with us. We do not know what caused his current positive result; I am not, nor is any one else, saying that Scott Moninger's

(see Safety on page 3)

Brian Frank, CEO

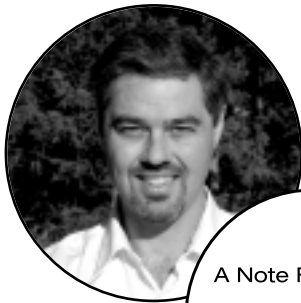
Despite the recent "flare up" caused by Scott Moninger's unfortunate predicament, supplement integrity is not a new issue. Shortly after I started the company in 1987, Ben Johnson, the Canadian sprinter, tested positive for steroids at the 1988 Olympics in Seoul. Shortly after that, Dr. Robert Voy came out with his book that blew the lid off the 1984 Olympics and revealed extensive use of old-fashioned blood doping, use of banned substances, and use of the USOC labs to determine clearing times. Prior to these revelations, supplement integrity and banned performance enhancers were not part of the consciousness of most consumers

The occurrence of contaminants is also not anything new. The USOC has gone so far as to advise athletes in their programs to avoid all supplements from a

popular chain store brand because of repeated cases of contamination. If you buy the cheapest variety of x, y, or z nutrient, it may very well have contaminants or inferior quality or potency. Spend a little more to get a reputed brand; your health and performance are worth it. With supplements, most of the time, you do get what you pay for.

At E-CAPS/HAMMER NUTRITION we take more precautions than I can easily list here. So, here's a partial list of precautions. First of all, we only work with well-established FDA-certified facilities that follow strict GMP (good manufacturing practices) guidelines. I have been doing business with most of these vendors, generally industry leaders in their area, for over 10 years. Each of them provides periodic random assays. We've never found a trace of any banned substance or anything besides the listed ingredients and excipients (compounds

(see Integrity on page 3)



A Note From
BRIAN
Brian Frank, CEO

Dear Client,

Happy New Year! I hope that you have enjoyed the Holiday Season and are looking towards 2003 with renewed motivation and enthusiasm. I know I am.

Despite the sluggish economy, for us 2002 can be summed up in one word - growth. The number of events we sponsored grew from under 100 in 2001 to over 400. The number of Hammer Gel pouches we distributed and sold also grew exponentially. The number of retail outlets selling Hammer Gel increased dramatically. Hammer Gel distribution in Hawaii increased by leaps and bounds. The number of clients we assisted also increased significantly. Yes, this all led to a healthy increase in sales volume as well. I know that this growth would not have been possible without your loyal support and patronage. I am extremely grateful to you for this and hope that you will continue to favor us with your support in 2003.

That being said, I am totally aware of the fact that you patronize our business because of the quality and effectiveness of our products and the superlative service and extensive knowledge we provide along with them. I am also very aware that you can take your business elsewhere if you choose.

Although I'm not one for resolutions, I made one this year. I am resolved, 100% committed to doing better for you in 2003 and beyond. We are scrutinizing

every product, service, and resource that we offer you to improve it, refine it or rebuild it from the ground up if necessary. We certainly won't throw the baby out with the bath water, but I see many areas that can be improved. Do you?

In order to achieve my goal, I need your help. I need you to hold me and my staff accountable at all times and I need your feedback. There is no one more qualified than you to do this. You are the supreme expert when it comes to your own satisfaction. So, please be outspoken with any feedback you have concerning any aspect of doing business with us. I'll take positive feedback, but what I'm really after are the things that would make you even more satisfied and fulfilled as a client. I want you to hold us to a higher standard, expect more and let me know if we fall short of your expectations in any way.

To help facilitate your assistance, I have set up a special e-mail address:

suggestions@e-caps.com

I will personally monitor all of the mail sent to that address and make sure that thorough consideration is given to each suggestion. Your input will get implemented if humanly possible. Although e-mail is most efficient, if you'd like to call us or write to us with your suggestion(s), that would be great too.

Be happy, be healthy and never stop striving to reach your goals. You can count on us to be there to help you every step of the way.

Happy New Year!

our mission

The objective of Endurance News is to provide you, the serious endurance athlete, with a valuable resource that you will find to be 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 E-Caps 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 there are no short cuts, and success can only come from hard work.

Brian Frank
CEO

Back issues of Endurance News are available online. Point your browser to www.e-caps.com

Legal disclaimer: The contents of Endurance News are not intended to provide medical advice to individuals. For medical advice, please consult a licensed health care specialist.

(Safety from page 1)

new product line caused him to test positive for a banned substance. We can only say that this occurred while he was no longer using E-CAPS products.

An athlete can easily and unintentionally consume a banned substance from over-the-counter products such as antihistamines, caffeinated drinks, ephedrine supplements, or especially from Chinese herbal preparations. Case reports recently showed that two or more adulterants were present in 14 of 15 Chinese herbal medicines. In a review, published on Bandolier's Web site at

<http://www.jr2.ox.ac.uk/bandolier/what-new.html>, it was reported that a wide range of adulterants were used, including steroids, non steroidal anti-inflammatory drugs, anticonvulsants, benzodiazepines, hypoglycemic agents, and even Viagra. While it was not clear what proportion of remedies contained adulterants, analysis of 2,600 samples in Taiwan showed that 24% contained at least one synthetic medicine. In the USA it was 7%. So who knows what's in these preparations?

The banned substances some athletes use in the upper echelons of endurance com-

petition include androgens timed to metabolize out of system by race time, EPO-enhancing drugs, and a group of stimulants. Not one of these occurs in any E-CAPS product or their metabolites. We use only natural and normally occurring substances to supplement what your body depletes during extreme endurance exercise.

When you buy an E-CAPS product, you get what's stated on the package, nothing more, nothing less.

(Integrity from page 1)

such as silicon dioxide or magnesium stearate) used in the encapsulating process. None of our vendors has ever been accused of or found guilty of cross contamination. Also, I have certifications on file from several of our vendors, and I expect them soon from the rest, guaranteeing that no product they manufacture for me will ever contain banned substances or other contaminants. When we have all of these in hand, I will post a policy statement on our web site and in our future catalogs.

Litigation is also a powerful deterrent. Scott indicated that he plans to sue the manufacturer, the retailer, and the company that branded the product. I think he has an excellent chance of receiving a substantial settlement. Anyone familiar with the stress of litigation knows that we don't ever want to have to defend a product liability suit.

Finally, I'd like to remind everyone of our absolutely immaculate track record over the past 15 plus years. Hundreds of athletes using our products have undergone testing for banned substances, and have never tested positive, with only two peculiar exceptions, neither of which implicated our products. After the 1988 Nice triathlon, Scott Molina was said to have tested positive for a steroid. Scott appealed and won because his urine sam-

ples were grossly mishandled. The question of cross contamination was never even considered because the steroid in question could only be taken by injection. The other case involved Chris Baldwin, racing in a Latin American country. He took a cough medicine or used a bronchial inhaler that contained a banned substance. Again, cross contamination from supplements was never even suggested.

I repeat: no E-CAPS or HAMMER NUTRITION product has ever shown a positive on any test, for any banned substance, for any athlete, in any sport, anywhere in the world. I sincerely hope that this will assuage any concerns that you may have regarding the quality and safety of our products.

Did too many holiday parties put you over the edge? The edge of the scale that is.

From Thanksgiving to New Years it's easy to get caught up in holiday eating. That is why there's **Appestat**. It's the sensible, healthy approach to weight loss.

Now, for a limited time, you can get our stimulant-free appetite suppressant for \$10 off the regular price of \$29.95 just by mentioning this ad.

\$19.95
90 Capsules

Don't let this offer pass you by, call today!

1.800.336.1977  www.e-caps.com

Check out our complete line of diet optimization products.



Offer expires 1/31/02



Question: It is recommended for ATP to be taken sublingually. Exactly how do the molecules get into the bloodstream?

Answer: Bodily absorption of nutrients, drugs, and other substances can occur through a number of venues: via the digestive system (anything swallowed), injection into muscle or blood vessel (e.g., a flu vaccine), rectal (suppositories), transdermal (nicotine patches), and many others.

For ATP100, a chemical sensitive to digestive acids, we take advantage of the area under the tongue. This tissue, known as the buccal mucosa, allows ATP molecules to pass through via osmosis and enter directly into the blood vessels. This occurs "up front," before the molecule has to go through the GI tract or liver.

If you look in a mirror at the underside of your tongue, you'll see that it has substantial vascularization. These blood vessels, at the surface of the underside of the tongue, readily accept many molecules, including ATP. Allowing the tablet to dissolve slowly aids the osmotic absorption, as it pools a concentrated solution of ATP in saliva under the tongue.

As such, sublingual absorption gives you excellent uptake; some substances yield over 90% absorption. It is also very fast; the ATP enters the bloodstream within moments. This gives you more consistent intake, as the food in your stomach, digestive enzymes, or stomach acids do not affect the ATP dose. Each time you take an ATP100, you will receive consistent dose and results, and much more potency than if you swallow the tablet whole.

E-CAPS clients who take Cardio Caps: please note that we use enteric-coated ATP in that product. Enteric coating means that the ATP is protected from gastric juices in the stomach until absorption occurs in the small intestine.

RACE CAPS - How To Achieve Maximum Benefits

In a fairly recent Journal of Endurance (J.O.E. #22 - 10/28/02) Dr. Bill reviewed a study [Free Radical Biology and Medicine Volume 33, Issue 5, 1 September 2002, Pages 627-638] regarding the ubiquitous substance Coenzyme Q10 (the main nutrient in Race Caps). The objective of which was to determine the efficacy of oral administration of Coenzyme Q10 (a.k.a. CoQ10) and increased tissue levels. The conclusion of this study (in simple terms) revealed that oral supplementation of CoQ10 does in fact elevate tissue levels. The important thing for endurance athletes to know is the time it takes for peak levels to be reached.

From Dr. Bill:

"It takes 8-14 weeks to peak performance above base training. Having tested Race Caps short term and long term, my best performances came with the long-term dose applications. It would appear that systemic aerobic enzyme concentrations require time to reach full stress-adaptation potential. It is interesting that the dose per rat kilogram weight in the research is what E-CAPS recommends during each 2 hours exercise expense. The increased dose effects took 13 weeks to peak, not 4 weeks, is of specific interest to all serious endurance athletes.

It [the study] compares 4 weeks dose to 13 weeks supplementation of 150 mg/kg/d. They report that the 13-week dose CoQ10 resulted in higher protein oxidative damage decreases, higher elevation of COQ homologues in tissues and the energy producing mitochondria cells, while an

increase in antioxidative potential occurred in animals studied (rats). The researchers wrote "the magnitude of all these increases was greater after 13 weeks than 4 weeks." The suggestion is that taking Race Caps for a 13-14 week training period may produce better performance results than taking them only 4 weeks due to a time-dose relationship imposed by the absorption-uptake mechanisms of COQ10 homologues [the active ingredient in Race Caps].

For budgetary reasons, some athletes tend to hold back using their supply of Race Caps for only racing or for 4-6 weeks prior. I have tried it both ways - 4 & 14 weeks - but have had my best performances with the prolonged dose use. Steve Born has reported similar findings in his supplement protocols."

COMMENT: Although we routinely receive emails praising the benefits of Race Caps after only a two to four week long usage, Coenzyme Q10 (CoQ10), the main nutrient in Race Caps, appears to realize its best benefits from a longer-term, consistent use. When you factor in the general health benefits of this remarkable nutrient, along with the performance enhancing benefits (which appear to require long-term use) it suggests that using this product all year long is a wise strategy.



Supplement Facts		
Serving Size: 2 Capsules	Servings per container: 30	
Amount Per Serving	%Daily Value*	
Vitamin E (as d-Alpha Tocopherol Succinate)	400 I.U.	1333%
Phosphate (as Glycerol Phosphate)	100 mg	10%
Inosine	300 mg	†
Coenzyme Q10 (Ubiquinone)	150 mg	†
Bioperine® (95% 1-piperoylpiperidine from piper nigrum fruit)	10 mg	†
* Percent Daily Values are based on a 2,000 calorie diet.		
† Daily Value not established.		

Other Ingredients: Gelatin, Whey, Magnesium Stearate, Stearic Acid.

Stress Relief vs. Fat Burning *by Joe Arnone*

This is the time of year where most of us are either putting on a little extra weight, or we are trying to lose the weight we have already gained so far in the off season. Add to this the stress at work or at home and you have two separate needs tugging at your workout.

Stress relief seems to grab the most resource space in your brain for dictating the type of workout you have. This is the number one reason, in my opinion, that spinning classes, kickboxing, or any of the other tele-marketed frantic workouts are so popular. They are a short workout at a high heart rate which is a fantastic stress reliever but it does little to your fat stores. Wouldn't it be nice to tackle both issues with one workout?

While you can't achieve total success in both areas with one workout, I think I can offer some techniques that will help you achieve the "low fat/stress free" you that is so hard to find.

The primary objective of a base building phase of training is to:

1. Help you burn fat so that you enter the racing season at or very near your desired weight.

2. Get you fit enough to start the intensity phase of your training without blowing up your heart and at the same time, mentally ready to start torturing yourself.

In order to achieve both of these goals, you need to have a 6-8 week period of progressively longer workouts but at a low heart rate for the entire phase. The heart rate zone you are shooting for is 65-70% of your maximum heart rate. To accomplish this, take your maximum heart rate and multiply it by .65 and .70. For example, if your max heart rate is 190bpm your heart rate zone would be 124-134. Shoot for the middle and don't worry about slightly above or below for short periods if you are watching your heart rate monitor. Without a heart rate monitor, this is a heart rate that you feel like you could maintain for an extended period of time. On the low end you don't want it to feel like you aren't exercising at all and on the high end you don't want to start feeling discomfort. The next zone up is where it isn't hard but it isn't easy either and you want to avoid this for now.

This is probably the hardest phase of the year because it takes the most discipline. From my experience, people tend to exer-

cise primarily in one heart rate zone. This doesn't allow for an adequate base building phase, which is the main contributor to fitness plateaus and burn out. In order to address the stress issue, I recommend that if you feel like you need some stress relief, do some short, high heart rate efforts several times during a few of your workouts each week. Between 1-2 minutes should be sufficient and this won't impact your fitness in a negative manner.

The key to being able to reach your maximum fitness level is to start the racing season with a sound fitness base. If you can hold yourself back 95% of the time during this phase of training, you will reap the rewards during the racing season. As an added bonus, you will have burned off those extra pounds, which will help reduce stress as well.

Happy training!!

Joe Arnone is a USCF Licensed Expert cycling coach. He was a 1992 and 1996 Olympic Trials competitor for road and track cycling. Here at E-Caps and Hammer Nutrition he is a Client Advisor and heads up Dealer Relations.

Consistency Is Key *by Nate Llerandi*

Note: As I often like to do, I recently took a look back in my folder of Nate's articles. Even though this one is nearly two years old, I find that its message is timeless and perfect for this edition of Endurance News.
- Steve

When devising a training plan for the upcoming year - whether you do it yourself or if you have a coach outline it for you - consistency in your training is key.

Skipping workouts, however infrequent it might seem, will hamper your progress and instill a sense of guilt. How many times do we think, "I should have _____ today?" Even if we don't have the time, the thought of a missed

workout eats us until our next opportunity to sweat.

And if you do find yourself skipping workouts rather frequently, then it might be time to rethink your plan. Maybe you're scheduling too many hours or workouts during your week. When I ask my athletes to figure out how many hours a week they have to train as a maximum, I tell them to subtract 20-25% from that figure to come up with a realistic training budget. That 20-25% allows for those "unforeseens" that take up our time but we can't really put our fingers on. For example, I didn't work out today because I spent a lot of time taking down holiday decorations

and putting them away. I decided to keep the day low stress than add another "to do" to the list.

Now the holidays are behind us and it's time to start focusing on the 2003 season. The more consistent you can be, and the more stress you can remove from your training schedule, the more progress you'll make and the more fun you'll have.

Happy Training,
Nate

Nate Llerandi is a former national champion class swimmer/world class triathlete who, after a five-year retirement from the sport, is getting back into it. He has been coaching since 1990 and creates programs for athletes of all sports and ability levels.



1,016 Miles

As I mentioned in the last issue of *Endurance News*, I decided (after a three-year break from competition) to tackle a formidable ultra-marathon cycling record: a never-before-attempted, back-to-back Furnace Creek 508! Nutso, maybe, but I trained hard all spring and summer, logging some 8,000 miles on the bike. At 1:00 p.m. Thursday, October 10th I began this extreme endeavor, and 1016 miles later, at 11:14 p.m. Sunday, I became the first person ever to complete a double Furnace Creek 508.

This annual California race, considered one of the toughest events in the sport of ultra-marathon cycling, begins in Valencia, about 40 miles north of Los Angeles. The race, which could be called the “Mostly Mojave 508,” traverses the most inhospitable territory in the country, 508 miles of potholed and poorly paved desert roads, hot, dry, windy desert conditions, and 35,000 feet of climbs over the desolate mountain passes that separate the sun-parched valley floors. Furnace Creek, the main station in Death Valley, lies at about the halfway point. The race survivors gain their hard-won laurels at Twentynine Palms, near Palm Springs.

I've had two successful Furnace Creeks before, winning in 1994 and taking second in 1999. The idea of doing two of them back-to-back tempted me as a new challenge. Although I had a good idea about the route, I hadn't raced in three years and I wasn't sure what I was getting myself into. Could two 508's be done back-to-back? I didn't know; no one had ever attempted it before. All I knew was that I couldn't get the thought of trying it out of my mind. I had to give it a go, even if it meant 1016 miles in the saddle and 70,000 feet of climbing ... yikes! In addition, I planned to do the entire ride on less than six hours of sleep. One Furnace Creek 508 alone is close to insanity—what was I thinking? Despite serious doubts, I had to meet the challenge.

My support crew (Dad, three brothers, and good friend Jeff Martin, a 508 finisher/RAAM-qualified rider and E-CAPS client) and I gathered at the Best Western Motel in Twentynine Palms. This is the finish line for the race; I would first ride the course backwards, then meet the competitors at the start line and make the return trip for my double. We set out equipped with, among other things, two vehicles, three bikes, six sets of wheels, tons of clothing, and enough E-CAPS supplements and HAMMER NUTRITION fuels to last a month or so under normal conditions. I hoped to pace myself properly in order to get some, but not too much, sleep before turning my bike around for the 508 competition. Because sleep and break time counted in my overall time, I had to plan my start so I would arrive at Valencia somewhere between midnight and 2:00 a.m., getting just a short rest before restarting, this time with the race group, at 7:00 a.m.

During this first portion of the initial 508 miles, I had extremely favorable weather: on the warm-to-hot side, but much more comfortable than I had anticipated. The climbing, though, was a different story. Even though I still had the same 35,000 feet to negotiate as I would in the regular 508, the climbs on the reverse direction seemed much steeper and with less downhill payoff after the summits. It sure seemed that way anyway.

The crew and I kept an excellent pace, handling several tough climbs before entering the Badwater section of Death Valley shortly after midnight. I felt great and my fuel package of Perpetuem Pro, Sustained Energy, Hammer Gel, and Endurolytes worked perfectly, as I expected. Badwater, at 282 feet below sea level, is the lowest elevation

in the United States, so it's all uphill from there, including the obscenely long and difficult Towne Pass climb (STEEP GRADE TURN OFF AIR CONDITIONING TO AVOID OVERHEATING ENGINE grimly read the road signs), which tops out at 4956 feet. Fortunately, my pace was right where I wanted it to avoid the heat of the day on the valley floor or on the Towne Pass ascent, which exits the valley to the west. After a long, grueling, nearly 30-mile effort, I summited, and then, after another extremely difficult climb, rolled into the borax mining town of Trona, 24 hours and nearly 360 miles into the ride, with the toughest part of the route behind me. I still had a lot of miles and climbing to contend with, but at this point I felt extremely confident that I would get to Valencia in good shape. At 12:22 a.m. on Saturday morning, after several more climbs, some undesirable headwinds, unusually cold weather (thank God I had all the winter clothing with me; I needed darn near all of it!), and what seemed like ever-lengthening miles (they just seemed to go by SO SLOW), I finally reached the starting line hotel in Valencia. By 1:00 a.m. I was showered, in bed, getting a

massage, and falling fast asleep. I had projected 36-38 hours for this first 508-mile segment and came in at 35:22. I hit the sheets feeling achy, sore, and of course, very tired, but immensely satisfied with the effort.

At 6:00 a.m., far too soon for me, came the wake-up call for the actual Furnace Creek 508. In somewhat of a daze, and with coffee in hand, I wandered out into the parking lot to join the



Steve riding through the desert.

largest field in the race's history. It was great to see a lot of my friends and competitors; riding the next 508 miles with other entrants on the

course would certainly be much more pleasant than my solo inbound ride. My support crew handled all my needs perfectly, so I knew I was in good hands. Still, I didn't really know if I could complete the challenge of another 508 miles when what I really wanted was a lot more sleep and a good two weeks of recovery!

I got dropped right away; shortly into the race I found myself in dead last. It took awhile to regenerate my momentum, but once the climbs started my legs started coming back, and I began to work my way up the nearly 60-strong field. The heat did not blast us the first day, but a strong headwind, one that would be an unwelcome companion most of the first 300 miles, slowed the pace of the field. As I made my way along the route I found myself struggling with being alert and strong one moment, then tired and irritable the next. Training in Montana doesn't allow me the luxury of substantial heat training so I again gave thanks for the weather, which although windy, was not too hot. I believe the temperatures the whole time topped out in the low to mid 90's, much more tolerable than the 107-110 degree heat I endured in 1999. I never really knew exactly what

position I was in during the race, and for the most part I didn't care; just completing the double was my only goal. Still, I was very pleased to find out that I had moved from last place into the top half of the field before reaching the midway point.

Without a doubt, the highlight of the entire ride was the climb back over Towne Pass, entering Death Valley from the west. The climb is so steep and unrelenting from this side that it forces some riders to walk. I must have hit a "high" during this time because, for some unknown reason, I climbed the pass stronger and faster than I ever had, even passing a rider or two. I do give a ton of credit to my fuel and supplements, which allowed me to maintain my energy with absolutely no stomach distress whatsoever.

While the trip up and over Towne Pass was a

definite high, the trip back through Death Valley was a definite low, no pun intended. Fortunately, as they would the entire distance, my crew's encouragement and devotion helped get me through the tough times. The 60 miles of fairly flat road through the valley bottom, including Furnace Creek and Badwater, seemed endless. Then came the ascent at the south end of the valley, two vicious climbs less than a mile apart. As I approached the summit of the second, Salsberry Pass, I witnessed one of the most beautiful sunrises I have ever seen. Under a brightening blue sky, shades of orange and pink bathed the barren mountainside terrain, softening the harshness of this extreme landscape and briefly alleviating the misery of mind and body. What a gorgeous morning! Unfortunately, knowing the 508 course and

Pass; most of the field were either far ahead or far behind. So much for the companionship of the competition.

The climb up Kelbaker took its toll on me. Under an ever-increasing heat I suffered up the climb, forcing myself to stay on the bike, fighting hard against the temptation to stop. Over and over again I whispered, "Please help me God" as I methodically made my way up the road. Thankfully, my crew kept me filled with appropriate amounts of Hammer Gel, water, and Endurolytes, as I could no longer remember to take them consistently.

After a good two hours, the summit finally came, followed by a bumpy descent and a shorter (12 miles), but steeper climb over the Granite Mountains. My body rebelled in full force now. My legs still turned the pedals, but "smoothness" left their vocabulary. Other maladies such as rashes, sore muscles, and achy joints became more apparent as I negotiated the climb. Fortunately, there's a tremendous long downhill to the town of Amboy prior to the last big climb of the race, Sheep Hole Summit. My legs definitely needed the break!



Steve rides through the night attempting a double Furnace Creek 508.

the weather of this area as well as I do, I knew this serenity wouldn't last.

After a tough 50-mile segment, taking me to almost 900 miles total and the remote desert town of Baker, I took a quick break before tackling the infamous Kelbaker Road grade. It averages only 2.4% but goes on for over 21 miles. Typical of desert alluvial fan terrain, the entire lay of the land rises up, giving the impression, especially when you're tired, that you're not really climbing. It's demoralizing because you ride what you think is a ridiculously easy gear, yet forward progress is slow, tedious, and painful. Also, the heat of the day was coming on. The wind subsided somewhat, but both gradient and heat slowed my pace substantially. I also realized that, with few exceptions, I had been riding pretty much alone since the previous night around Towne

After leaving Baker, the quality of the pavement deteriorates, perhaps reaching its worst through Amboy and up Sheep Hole Pass. The potholes had potholes, and the actual "pavement" (I use that word loosely) appears to have been constructed with tar and fist-size rocks. It really made for miserable riding, especially since I had started to hallucinate from sleep deprivation. I passed Amboy just after dusk; my eyes alternated between seeing illusions and straining to discern road from shoulder. Even with my support vehicle's lights illuminating the road, I still managed to find the bottom of darn near every pothole, slamming me painfully with each jolt. When I had nearly ridden off the road for the umpteenth time, my crew decided I needed to take five, close my eyes, and gather myself for this final climb. They knew that I didn't want

(see 508 on page 8)

(508 from page 7)

to take a full sleep break, which I had so far avoided (while actually on the road) in both directions, but they realized I needed a few moments to refresh my addled brain.

The 10-mile climb over Sheep Hole Summit was more difficult than I remembered, and I thought it would never end. Passing cars would linger in the distance interminably before their taillights finally disappeared, indicating that the car had reached the summit. However, with the help of my crew, who played loud music and talked to me over the loudspeakers, I managed to summit the last major climb of the race.

One last difficulty remained: the final 20 miles to the finish. Considering what the riders already dealt with, this last section isn't all that difficult. It's just a problem of perspective when you're totally wrung out. The finish line seems so tantalizingly close, yet each mile seems the equivalent of three. It just goes by so slowly; it can be the most difficult part of an ultramarathon race. Although I was riding fairly strongly and controlling my bike, my brain could only muster the basics of rationality: sooner or later the finish line would come, and it would arrive a whole lot sooner if I just stayed on the bike. I wasn't setting any land speed records, but I was definitely making progress.

When my brother told me one of the final turns was upon us, I couldn't believe it; I thought I still had well over 10 miles to go. Soon I reached the main drag of Twentynine Palms—less than four miles to go. After one final hill, I saw the familiar structure of the Best Western Hotel. A quick turn left, then a right into the parking lot, and I rolled victoriously past the finish line. At 11:14 Sunday night, after 1016 miles, 70,000 feet of climbing, and slightly over 82 hours (including sleep break), I had achieved my goal of completing the first ever Double Furnace Creek 508.

Specifics

I kept my caloric intake at 300-350 per hour. I weighed in around 180 pounds at the start of the ride and I estimate that I lost about 4-5 pounds. My primary fuel was Perpetuum Pro, Sustained Energy, and Hammer Gel. I also consumed soda crackers, NutriGrain bars, Organic Food Bars(tm), and a few sliced luncheon meat sandwiches. I cannot remember any time during the race that I had any stomach distress. There was no bloating, no nausea, no gas, nothing. It ALL worked perfectly.

I took 3-6 Endurolytes per hour, each and every hour, without fail. I ended up going through three bottles (360 capsules) and I will say unequivocally that this product was absolutely vital to my success. I simply cannot imagine doing any kind of exercise session over an hour or two without Endurolytes. During this ride I never experienced any cramping, nausea, or water retention.

As much as possible I took the following E-CAPS supplements hourly:

- 1-2 Race Caps
- 2-4 Enduro Caps
- 2 Anti-Fatigue Caps

Each hour I also used the following non-E-CAPS supplements:

- 500 mg Carnosine
- 250 mg HMB
- 250 mg Acetyl l-carnitine
- 100 mg alpha lipoic acid

Every 3rd or 4th hour I would add:

- 1 Super AO

I used Tissue Rejuvenator as my primary pain reliever along with an occasional Ecotrin. I have found, both for myself and the athletes I have crewed for in the past, that Tissue Rejuvenator works splendidly for helping to relieve muscular soreness and is much less likely to cause stomach distress than typical OTC pain relievers.

I also wanted to mention the clothing. As most of you know, Voler makes our cycling-specific clothing and I have to say it is by far the most comfortable clothing of all I have used over the years. The newly available cold weather gear is just awesome as well... very comfortable and functional. The only clothing I wore during the entire double was the E-CAPS/Hammer Gel clothing and it never caused problems; I didn't have bad seams or anything like that irritating me and preventing me from focusing on my riding. If you're in the market for cycling clothing, and you want some of the best, if not the best, clothing available, you just can't go wrong with Voler. The best thing about the E-CAPS/Hammer Gel clothing is that you don't pay anywhere near full price for it.



It's Race Time!

For many of us winter training means Nordic skiing, known to the uninitiated as cross-country skiing. I've found this sport an ideal way to train for cycling. If you're fortunate enough to live where winter means snow, you know what I mean. Minute for minute it's tough to beat the quality that a Nordic skiing workout gives you. And then there are the races...

Again this year, we will proudly sponsor many long-distance Nordic races, including most of the prestigious American Ski Marathon Series. You'll find HAMMER GEL at the following races in 2003:

Jan 11

Great Nordeen Point-To-Point
Bend, OR - 36 km

Jan 18

Pepsi Challenge*
Biwabik, MN - 48 km

Jan 25

Noquemanon Ski Marathon*
Marquette, MI - 23 & 53 km

Feb 1

Craftsbury Marathon*
Craftsbury Common, VT - 25 & 50 km

Boulder Mountain Tour*
Sun Valley, ID - 32 km

Alley Loop Ski Marathon
Crested Butte, CO - 21 & 42 km

White Pine Stampede
Mancelone, MI - 10, 20 & 50 km

Feb 8

Subaru North American Vasa
Traverse City, MI - 12, 27, & 50 km

Feb 15

Minnesota Finlandia*
Bemidji, MN - 25 & 50 km

Feb 23

Payette Lakes Ski Marathon
McCall, ID - 15 & 30 km

*American Ski Marathon Series

For more information about the American Ski Marathon Series, log on to www.xcskiworld.com

From The Desk of Dr. Bill *Bill Misner, Ph.D.*

The pH of Hammer Gel, Sustained Energy, and Race Day Boost, and the interaction of these three products.

Someone recently asked me about the pH of Hammer Gel and Sustained Energy. I obtained the values below by dissolving 5 grams of product in 25 grams of distilled water. This solution approximates the solution that will absorb immediately at body fluid osmolality. I also measured Race Day Boost, which contains TSP (trisodium phosphate, a buffering agent with a high pH), and glutamine.

A little discussion about pH: The pH scale runs from 0 to 14, with 7 being neutral. Below 7 represents the acidic range, which would include most of the foods we eat. Black coffee, for instance, has a pH of about 5 and milk is just below 7. Tomatoes are about 4, and lemon juice, very acidic, comes in at about a pH of 2. Gastric acid is even lower, about 1.5, so your stomach secretes a mucous film to protect your own tissue.

Each unit of pH represents a tenfold change in acidity or alkalinity; it is a logarithmic scale. Thus, lemon juice with a pH of 2 is 100 times more acidic than tomato juice, with a pH of 4.

A pH above 7 is in the alkaline range, and some substances with high alkalinity can cause premature bowel evacuation. The pH of saliva is neutral and normal blood is 7.4.

Though the alkaline base pH of Race Day Boost seems attractive to buffer exercise-induced lactic acid accumulation, you ought not take it during a race. TSP can cause peristalsis, which empties the bowel (drug manufacturers use monosodium and disodium phosphates in larger doses in laxatives). Athletes should not tamper with the pH of either Sustained Energy or Hammer Gel during an event by adding Race Day Boost to the mix. Those who do may

increase the risk of making an unplanned exit to the nearest porta-potty.

We recommend using Race Day Boost to buffer lactic acid accumulation in a loading gradient format during a taper or between races (full instructions are included with the product. We include glutamine in Race Day Boost formula because research indicates that it aids long-chain carbohydrate (e.g., maltodextrin) absorption into resting muscle glycogen stores alongside the buffered high-pH TSP. This happens gradually during a taper or immediately following intense glycogen-depletion exercise.

PRODUCT	pH @ 20% SOLUTION - [WEIGHT : WEIGHT]
Raspberry Hammer Gel	5.5 pH
Sustained Energy	5.8 pH
Race Day Boost	8.5-8.7 pH
Raspberry HG + 1 Tsp RDB	7.2 pH
Sustained Energy + 1 Tsp RDB	7.6 pH

Go Cycling Maui *Brian Frank*

While in Maui this past October for the Xterra World Championships, I discovered a cool new company that I want to tell you about. Of course I wanted to bring my road bike so I could get some miles in while I was there. However, after I began adding up the costs and logistical issues, I decided to bag the idea. (\$150 airline fee, \$15 x 8 days for oversize rental car, schlepping all of my cycling gear, storing the bike in our hotel room, etc.) Then of course there's the issue of where to ride and who to ride with once I got the bike there and unpacked it. Despite Maui being an Island, there are a surprising number of possibilities.

This is where Go Cycling Maui (www.gocyclingmaui.com) comes in.

Donnie Arnoult, the owner, offers a "pro riding experience" so you don't need to bring anything on your next trip to Maui, but you can still enjoy some serious road riding. For a reasonable fee, Donnie will outfit you with a very nice Litespeed, shoes, helmet and a full set of clothing. Of course, if you want to bring your own shoes, pedals, or whatever, he's fine with that too. Then, he takes you out on scenic, yet challenging, rides of varying length and pace with complete sag support. His web site has all the 411 and examples of ride routes and so on.

As a retired category 1 pro, Donnie can keep you redlined all day if you want, but he's just as happy to ride a conversational pace as well - the choice is up to you. I thoroughly enjoyed my rides with his

group and recommend his company to you without hesitation. So, if you are heading over to Maui, leave your bike at home and give Donnie a call.

www.gocyclingmaui.com

Athletes....would you like the E-Caps/Hammer Nutrition community to know what you're up to? Send us a short email to graphic@e-caps.com (please put Race Report in the subject line) about your recent accomplishments and we'll try to include it in our Race Report

Race Report

'Rubber Duck' Rosenthal Fires Up Furnace Creek

Thanks to Hammer Nutrition I was able to complete the Furnace Creek 508 in 35 hours 26 minutes coming in 6th place in my age group and ninth solo rider overall. This placing qualifies me for the Race Across America.

My training plan starting in July included 300-400 miles a week with long rides on weekends and 2 intensity rides mid-week.

All the training was fueled by Sustained Energy, Hammer Gel and Endurolytes. Three weeks prior to race day I rode 200 hot and hilly miles with my crew as support and totaled 500 miles that week, then allowed myself 2 weeks of easy rides and recovery.

At 7:00am on Oct 12 we left Valencia,

CA for the start of the race. My plan was to ride steady, stay hydrated and not sleep. My crew was mixing Sustained Energy and Hammer Gel and feeding me about 300 calories an hour. I also took 1 to 2 Endurolytes every hour. The plan must have worked because I had NO stomach problems and was strong the entire 500 miles.

My longest ride up to then was 250 miles, so after Furnace Creek it was all new. My total calorie intake was 9,875, averaging 278 per hour.

Who knows, maybe next year I will be calling to get advice about RAAM.

Thanks Again
Wayne "Rubber Duck" Rosenthal

Cyclo - Mania!

Hot Off The Press!

USA Cycling recently announced the automatic nominees to compete at the 2003 World Cyclocross Championships in Monopoli, Italy, Feb. 1-2. One of those select few is a sponsored athlete of ours, Konrad Lebas, from Ansonia, Connecticut.

Konrad has had some impressive results in the past including 3rd place at the National Cyclocross championships 2000, 5th place at the National Cyclocross Championships 2001, and 4th place at the Overall Super Cup Cyclocross series. **Best of luck in Italy Konrad, from all of us at E-CAPS!**

The Incredible Molly Hayes

(Article from the Bozeman Chronicle, written by Thad Kelling.)

Most people would be happy completing one triathlon. But Bozeman's Molly Hayes isn't most people.

Hayes, 69, will compete in her 119th triathlon this weekend at the 2002 International Triathlon Union World Championships in Cancun, Mexico.

So why does she do it? "The cross training is excellent," she said. "The swimming is very kind to your body and it is fun to be out there getting some exercise."

Hayes also uses triathlons as an excuse to pack up her camper and travel.

"It's fun to do everything locally, then if you want to go somewhere, you ask, 'Is there a triathlon?'" she said.

Hayes, who moved to Bozeman from Washington in 1995, started competing in triathlons in 1986. She mostly was a swimmer and a long-distance runner to that point.

But Hayes started to think that maybe long-distance running wasn't too good for her body, so she decided to mix all her other athletic interests.

"I didn't want to do any more marathons, and I like swimming, and triathlons were just getting started," Hayes said.

And Hayes didn't waste any time immersing herself in her new-found sport.

Judging by the way Hayes talked about triathlons, one would guess she would probably do every one she possibly could. But she is limited to about five a year, she said, largely because she retired from her nursing career in 1995 and still works part time.

Over the years, triathlons have taken Hayes all over the Pacific Northwest and through British Columbia, Montana and Idaho, among other places. Triathlons have also taken Hayes as far away as Michigan and Hawaii.

These days, Hayes, who is one of a "handful" of serious local triathletes, mostly competes in local events. She regularly races in Montana as well as in other races in eastern Washington and Idaho.

Hayes qualified for the World Championships by placing third last year at the 2001 USA Triathlon National

Championships in Coeur d'Alene, Idaho, in the 65-69 age group. She also placed sixth in the same event this season.

In Cancun, Hayes will face extraordinary heat by Montana standards and will compete with an expected 3,000 other athletes from 75 countries. As always, she will race in the Olympic-distance triathlon, which consists of a 9/10-mile swim, a 24-mile bike and a 10-kilometer run.

The World Championships kick off with a parade of athletes today, while races will be held Saturday and Sunday.

Hayes admitted being a little intimidated by the size of the event. But her competitive spirit has not been hampered.

"I don't just want to race it to finish," she said. "I want to be competitive. There are about three women I really want to beat."

Note: Molly placed 2nd in the 70-74 age group at the ITU World Championships Triathlon in Cancun, Mexico on November 9, 2002. Way to go Molly!



A Winter Wonder

Our athlete profile in this edition of ENDURANCE NEWS is with **Jeannie Wall** of Bozeman, Montana. I (Steve) have been friends with this amazing athlete for several years and I've no doubt that she's one of the best Nordic skiers and all-around athletes in the country. In 2002 alone, she's accomplished the following:

Champion

American Birkebeiner
Nordic Ski Marathon

Champion

Moose Chase Nordic Ski Marathon

Runner Up

West Yellowstone Rendezvous
Nordic Ski Marathon

Champion

Jackson Hole Randonee Rally
Ski Mountaineering Race

In addition, she was a member of a top five team competing in the Salomon Winter Adventure Race and climbed four peaks in the St. Elias Range in Alaska, one of which was a new route. Whew! A formidable list indeed and it doesn't even take into account her mountain biking or ultra running!

1. Jeannie, how long have you been into Nordic skiing? How long have you raced?

My first race was in college and my second was the Birkebeiner [a.k.a. Birkie, in Wisconsin]. For the most part I learned skate skiing on my own. In 1993 I did the Boulder Mountain Tour, three more long races, and qualified for the '94 Olympic Trials in Anchorage. I placed 6th in two skate races, just missing making that Olympic team. After that, I raced on a Marathon team for a few years all while working full time for Patagonia in Ventura. In Nov. of 94, I moved my job to Bozeman, but my responsibilities with work had expanded to the point that although I

jumped into the '98 Olympic Trials, I was not able to train effectively at all for them. I had ankle surgery in the fall of '99 and did not race the winter of 2000. I hired Torbjorn Karlsen to coach me and began my first real training in the fall of '00 to try for the '02 team.

2. For the 2002/2003 season what are your primary goals in Nordic skiing?

My goal this year is to learn as much as possible about technique and training for both skate and classic. I want to improve my skiing and my specific fitness level and be focused one more season. My plan is to race Nor Am's and Nationals, return to the Boulder Mountain Tour and the Birkie, and finish with a couple of randonee races in late spring. The World Championships would be awesome, but with the complex points system of the USSA, it is nearly impossible to make the team as a distance skate specialist, no matter how good your results in distance events.

3. What are your future goals in the sport? Any thoughts of future Olympic Trials?

Are you kidding? After only five races in my life, I beat a US ski team member in a skate race in the '94 Olympic Trials in Anchorage. I took sixth in two skate races and narrowly missed making the team. The only word I got from the USSA was second hand and amounted to "too bad she's so old," I was 26 at the time. What future does anyone in our country have in this sport? Instead, I intend to keep racing for myself, maybe even do a worldloppet tour. My real hope is to be able to give back something to this sport besides enthusiasm. I'd like to work on making it more equitable for women and "older" (over 25 years old) skiers, and to fight to get young skiers the opportunities and support they so desperately need in this country.

4. I've noticed that your performances keep improving as you get older. Is there a specific key or keys for that being so?

I know for myself that years of endurance training and learning how to train and race and read my body are paying off. Granted, I started Nordic racing later in life, but I have been competing in some form since I was five. It also helps that I finally am working with a great coach, and focusing on the right kind of training. Proper nutrition and the use of the right fuels and

supplements have also played a very big role. My marathon times keep getting faster.

5. Which E-CAPS supplements and HAMMER NUTRITION fuels do you use and why?

I use Premium Insurance Caps daily as my staple for warding off sickness and generally making sure I'm not deficient in any one vitamin or mineral. I use the Race Caps and Enduro Caps for both racing and training and I use Hammer Gel for both as well. Sustained Energy mixed with Hammer Gel is the key to long races and training days and Hammer Pro Whey powder mixed with Sustained Energy and some skim milk is the ticket for me for my post workout recovery drink.

6. During the peak season, when you're doing the highest volume of training, what does a typical week look like?

I'm in the peak now and I average around 13 hours a week, but I can have weeks up to 21 hours as well. I'm trying to train smarter, not longer, though really long slow days are key for me. I do two to three interval sessions a week, mostly build-up intervals and only one where I'll go really hard. Otherwise, it's long and slow mixed with strength (gym and ice climbing) work. In between I work and I try to fit in yoga once or twice a week.

7. What are the toughest trails you've ever skied on and what makes them so tough?

I have to say that Eldora, CO ranks up there. Unless you're a local with three lungs, good luck! I would probably have to add the Nordic trails outside of Madison, WI near the ice age trails... there's nothing quite like skiing super steep, twisty turns on blue ice.

8. If a beginner skier wanted to get more into racing what suggestions would you give them regarding training?

Never ski at the same pace! In other words, you've got to go slow to go fast. Do two interval sessions a week, one hard, one moderately hard and do at least one long slow distance ski. Take at least one rest day every ten days minimum and mix things up just a bit! Run a little, lift a little and generally keep it interesting and fun.

Inside This Issue!

Learn about

- The safety and integrity of E-Caps
- The absorption of ATP
- Achieving maximum benefits from Race Caps
- Stress relief vs. fat burning in your workouts
- Consistency being key in training
- Steve Born's new cycling record
- Hammer Gel at Nordic Races
- pH and our products

Get to know

- Jeannie Wall • a sports sensation

The nd

One Final Thought

I have been racing bicycles for thirteen years, the last six years as a professional. I have been tested more times than I care to count. Not only am I subject to drug testing at the races, but I am also one of the selected athlete's for the USADA's Out of Competition Testing Program (which means they need to know where I am and how to get a hold of me for testing 365 days of the year, 24 hours a day).

Last year I was tested five times, three times at bike races and twice when they showed up at my house. Obviously, I have never tested positive and it would be disastrous if I did.

Six or seven years ago, I was taking a wide range of supplements from a variety

of companies. However, over the years I have reduced the number of supplements I take. More importantly, I am extremely cautious with the manufacturers of the supplements. If a company makes any kind of a pro-hormone product, I will not touch any of their supplements. This can be difficult to figure out because companies such as Joe Weider, who are huge in the pro-hormone industry, have a large number of supplement lines under a variety of names.

This year, Mercury was sponsored by a well known endurance supplement company that has two supplements that contain banned substances. As a result, I avoided all of the product from that sponsor. I wouldn't even touch their

post-race recovery drinks. Who knows if their products are tainted, but I cannot take a chance.

E-CAPS is the one supplement company I completely trust. If I am going to an event where I will probably be tested, I feel safe in taking the E-CAPS supplements. I still take an extremely small number of supplements E-CAPS doesn't provide, but I research the companies and their product history.

Adham Sbeih
Sponsored Athlete
Mercury Cycling Team