

ENDURANCE

BY HAMMER NUTRITION

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NEWS



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A Sticky History

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NATC

Trials Season Recap

BEING FRANK

A WORD FROM BRIAN FRANK

“We at Endurance News believe that there are no shortcuts and success can only come from hard work.”

Welcome to the 133rd issue of Endurance News!

At the start of every year, I find myself feeling optimistic and looking forward to all of the new things I see coming to fruition after so much time and effort. As we hit the ground running for our 36th year (2/3 of my life), we'll be introducing new kits, soft goods and accessories, new products and more. You'll find all of this and so much more in this issue. **Your contributions continue to be the highlight of this publication and something you won't find in any other magazines. Your feedback and support are what keeps me going and guides this brand!**

There were some late season results that missed the last issue, like Victor Sheldon winning another National Championship! I also neglected to include my Observed Trials season wrap up, so you'll find that along with a season preview on these pages.

We'll be changing up our distribution to get you your orders faster, minimize the number of miles each product travels from manufacturer to end user, hopefully limiting skyrocketing freight costs. The loss of our Midwest DC at the end of last year and trying to ship ALL of our direct to consumer orders out of Montana was a disaster and not sustainable. The goal is to get back to delivering every consumer-direct order in 1-3 business days and being able to ship the same day each order is received.

This year, we've had to make a lot of price changes, mostly increases, but a notable and massive decrease of 25%, across the board on all of our CBD products. When it comes to price increases, I only do that when costs increase. That's why **Hammer Bars**[®] saw their first price increase since they were introduced in 2004! Same is also true of a lot of our other products. When my costs started rising at the end of 2020 (and continually through to 2023), I procrastinated on raising prices and just absorbed the shortage. Same for shipping charges –we took a big hit. Call



it my 35th anniversary gift to our clients.

So, as you look through the web site, keep in mind that anywhere you see a price increase, it was desperately needed and only increased as much as necessary. I am not trying to be sneaky about this; I'm not engaging in shrinkflation nor anything else.

I've also done A LOT of competitor price comparisons and not surprisingly, they have already raised their prices. Hammer products, at 2023 pricing, are still some of the most reasonably priced, premium quality products in the marketplace.

The CBD price reduction was not anticipated until beginning of this year, but I was able to do that as of 10/1/22, and then take an additional 5% off during our annual Family and Friends sale. Many of our new and improved body care products also saw price decreases. I hope this is demonstrative of my unwavering commitment to offer you the best quality products, at the best prices possible, and still stay in business.

Of one thing you can be sure; prices may go up, but quality will never go down.


Meanwhile, the casava tapioca maltodextrin **Recoverite® 2.0** and **HEED® 2.0** are in the pipeline and clients are loving the improvement, I hope you will too. However, we've found that the **Perpetuem® 2.0** will not compress into Solids, no matter how much pressure is used. So, we are going back to R&D to develop a new formula just for



Alice Ripley Infelise. 1940-2023. Health crusader, midwife, homeopathist, endurance swing dancer, my Mom and hero.
- In loving memory.

the solids and hope to have those on the shelves by Q2.

Wishing you the best for a healthy, successful 2023!

Enjoy the read and pass it along to a friend or two. 

Brian Frank

Brian Frank
Owner and Founder of Hammer Nutrition



JOSH HENRIE

Hammer Ultra Adventurist Josh Henrie, sets his sights high while showing off a new slimmer frame. Looking good Josh!



Endurance News depends on authentic photos from our readers and your photo submissions are always welcome! To be featured in the next issue of *Endurance News*, email your hi-res photos to photos@hammernutrition.com.

Dear Hammer,

Something I regret is that when I lost my weight a little over 3 years ago I didn't document it, mostly because I was embarrassed. I have always promoted body positivity no matter where you are in life or what journey you are on. This year I have battled with injuries and lost my way a little bit with other things going on in my life. But today is an important moment for me, I'm embracing on where I am. However, I'm not where I ultimately want to be and it's time to make it happen for 2023. So on this journey I'm not going to be afraid of what I look like, because it is me. I'm going to get photos done on a regular basis and do a Timelapse of now and until the timing is right to unveil the process of how the body can change and what dedication can accomplish. I'm inspiring myself to improve—to reach things I thought I couldn't accomplish. Hope this inspires anyone who struggles with their Thyroid like I do. **Time to Hammer down!**

- Josh Henrie

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ENDURANCE NEWS

The informed athlete's advantage since 1993

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MISSION

Endurance News provides informative and inspirational content to help endurance athletes like you achieve peak performance and health. The views expressed favor a healthy diet, hard training that emphasizes quality over quantity, and prudent supplementation to improve health and performance. Back issues are available at hammernutrition.com.

OUR GUIDING PRINCIPLES

Service: From day one, we've strived to treat each client fairly, honestly, and individually. Your trust is our top priority.

Education: We educate and empower athletes with free, easily accessed information on health and performance.

Principles Before Profits: Profits never take priority over our values. If it says "Hammer Nutrition," it's good for you.

OUR CORE VALUES

Innovation: Our development of new, cutting-edge products and categories has led the field since 1987.

Product Integrity: Our consumables are researched, tested, and USA-made to the strictest standards.

Read our complete mission statement online at hammernutrition.com/company/mission-statement



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PREMIUM INSURANCE CAPS

by STEVE BORN

First published on Endurance News Weekly

In my nearly 22 years at Hammer Nutrition, I've found that there are three main excuses why people don't take a multivitamin/mineral supplement:

- **1** They feel that because they already eat a “healthy diet,” a multivitamin/mineral supplement is unnecessary.
- **2** They believe that taking a multivitamin/mineral supplement won't do anything to boost athletic performance.
- **3** They're convinced that taking a multivitamin/mineral supplement is a waste of time because of the constant message trumpeted from many so-called “experts,” who say that doing so just causes “expensive urine.”

The first reason is absolutely incorrect; it is virtually impossible to obtain all of the nutrients your body requires from your daily diet. Three main reasons why this is true:

- **1** Studies show that food alone may not supply all of the micronutrients we need to prevent deficiency, let alone to achieve optimal health.
- **2** Much of our diet comes from foods grown far away, picked when unripe, and then shipped. Nutritional content is questionable and usually depleted.

- **3** Even if we could obtain all of the nutrients we need from our diet, it's unlikely that any of us eats an ideal diet with much consistency.

The first point is of primary importance. Forget about providing enough nutrients to promote optimal health—many people do not eat enough quality food to meet the minimal Reference Daily Intake (RDI) micronutrient requirements for preventing deficiency-related disorders. Dr. Bill Misner's hallmark paper, “Food May Not Provide Sufficient Micronutrients to Avoid Deficiency” is but one effort in pointing out this startling problem.

The research of distinguished nutritional scientist Bruce Ames, professor of biochemistry and molecular biology at the University of California, Berkeley, also presents a hypothesis that implies micronutrient deficiency may eventually deteriorate the quality of whole human cell health. A portion of Professor Ames' abstract reads as follows :

“Inadequate dietary intakes of vitamins and minerals are widespread, most likely due to excessive consumption of energy-rich, micronutrient-poor, refined food. Inadequate intakes may result in chronic metabolic


I've often referred to **Premium Insurance Caps**, Hammer Nutrition's multivitamin/mineral supplement, as “the most boringly beneficial product we make.” The reason for that unique distinction is because it's not the most glamorous supplement you can take; there's nothing as ultra-cool in the product as there is in, say, **Fully Charged** or **Anti-Fatigue Caps**.

But while **Fully Charged**, **Anti-Fatigue Caps**, and other supplements in the Hammer Nutrition line may have a more direct impact on improving athletic performance, if you're not covering your basic nutrient needs (vitamins and minerals), those other products won't ever realize their full value—and you will never get maximum benefits from the time and energy you spend in your workouts.

disruption, including mitochondrial decay. Deficiencies in many micronutrients cause DNA damage, such as chromosome breaks, in cultured human cells or in vivo. Some of these deficiencies also cause mitochondrial decay with oxidant leakage and cellular aging and are associated with late onset diseases such as cancer.”

So, when you hear someone tell you that you can get all the nutrients you need from a healthy diet, keep in mind the sobering words of Drs. Misner and Ames.

As far as the second excuse for not taking a multivitamin/mineral supplement—“they’re boring and won’t or don’t make me faster” (or something like that)—think about it a bit more: If you’re not covering your nutrient needs—and it’s pretty clear that basically no one is, especially athletes—you increase the potential for a number of negative athletic performance and health issues to occur. At the very least, this means you won’t get the full value from all of the hard work you put into your training because your body doesn’t have the nutrient support it needs to fully recover. It could also very well result in a compromised immune system, which is definitely something to avoid because that could translate into missed training days due to illness.

The third excuse is just flat-out wrong. When you take a multivitamin/mineral supplement, your urine will turn a bright yellow. This is NOT your body “peeing out all the vitamins.” That bright yellow color is due to the riboflavin (vitamin B2) component in a multivitamin/mineral supplement. Among its many functions, riboflavin helps co-enzymes break down carbohydrates, fats and proteins. As the flavins in riboflavin are utilized in the body to metabolize carbs, fats and protein they pass along flavin rings which have a neon yellow color, which simply means that the flavins in riboflavin are doing their job in metabolizing carbohydrates, protein, and fat. 

Read the complete article with references and more on *Endurance News Weekly*.



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SUGARGATE

REVISITED

by Endurance News Staff

2023

Over 50 years ago, the Sugar Research Foundation (SRF) funded Project 259, a study that examined and compared the effects of gut bacteria and cardiovascular health after rats consumed either a starch-containing diet or sucrose (table sugar). The study's early results showed that sucrose negatively altered the microbiota of the sugar-fed rats to the point where it increased their levels of triglycerides. When elevated, triglycerides are a primary culprit for clogged arteries, which can lead to cardiovascular disease. This effect was not seen in the rats consuming the starch-food diet. Another negative result of the early stages of the study showed that, compared to a starch diet, the high-sugar diet boosted the activity of an enzyme, beta-glucuronidase, which is linked to bladder cancer. These were not the results that the SRF was hoping for.

When researchers from the University of California at San Francisco discovered a plethora of documents from Project 259—all of which, of course, reflected negatively on the sugar industry's interests—they found that Project 259 was cut short, the funding ceased, and the results were never published. By shutting down the project without disclosing evidence of sugar's harm, the SRF (which eventually changed its name to the International Sugar Research Foundation, or ISRF) had essentially covered up sugar's role in cardiovascular disease.

In a paper published in *PLOS Biology*, lead authors Drs. Cristin E. Kearns and Stanton A. Glantz of UCSF stated:

“Project 259 demonstrated that sucrose, by stimulating urinary beta-glucuronidase, may have a role in the pathogenesis of bladder cancer. Beta-glucuronidase is an enzyme, and high levels in the urine were

known to be associated with bladder cancer in the 1960s.

Evidence emerged in the 1950s and 1960s that linked sugar consumption to heart disease, but the sugar industry was interested in casting doubt on that evidence. In Project 259, they were proving that to themselves.”

It gets worse, though, as Drs. Kearns and Glantz also uncovered that the SRF had “sponsored” (i.e., paid for) research by Harvard scientists to refute concerns about sugar's possible role in heart disease, to make sugar seem less unhealthy, and instead claim that fat in our diets was the real villain. John Hickson, a top sugar industry executive, discussed a plan with others in the industry to shift public opinion by releasing the “research,” published in the *New England Journal of Medicine* in 1967, and influencing legislation.

Amazingly, one of the Harvard researchers, the now-deceased Dr. Frederick

J. Stare, bolstered the idea that sugar was a harmless substance by including recommendations such as:

- Sugar is “a quick energy food...put a teaspoon in [your] coffee or tea three or four times a day.”
- Coca-Cola is “a healthy between-meals snack.”
- “All Americans should drink a cup of corn oil a day.”
- “Eat your [food] additives. They’re good for you.”
- “We get as much food value from refined foods that have been enriched as from natural foods, and sometimes more.”

Regarding the published NEJM published research, Dr. Glantz stated,

“It was a very smart thing the sugar industry did because review papers, especially if you get them published in a very prominent journal, tend to shape the overall scientific discussion.”

He then bluntly added,

“The kind of manipulation of research is similar to what the tobacco industry does. This kind of behavior calls into question sugar industry-funded studies as a reliable source of information for public policy making. This case illustrates that, like the tobacco industry, the sugar industry has a long history of suppressing scientific results that do not support its economic interests.

All we know is that the plug got pulled, and nothing got published. We don’t know what would have happened had this study come out differently and shown no effect of sugar. So I would bet it would have been published, and they would be thumping the drums about it.

Continued on page 10



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SUGARGATE

Revisited

Continued from page 9

Our study contributes to a wider body of literature documenting industry manipulation of science. Based on ISRF's interpretation of preliminary results, extending Project 259's funding would have been unfavorable to the sugar industry's commercial interests. The significance of the study's emergence, more than 50 years later, is the level of skepticism that must be adhered to when examining industry-funded studies as the scientific community continues to debunk corporately-manufactured ideas of what constitutes healthy eating habits."

Combined with a relentless promotion that sugar wasn't the cause of health issues, one must wonder how many people unnecessarily succumbed to sugar-related diseases and death.

Of course, we can't blame Dr. Stare for all the deaths resulting from excess sugar consumption. Still, the statistics are staggering and disturbing: Even as far back as 2006, deaths from coronary heart disease, diabetes, and stroke specifically caused by elevated blood glucose were estimated to be approximately 3.2 million annually.

Nearly 17 years later, those figures have undoubtedly grown, and by a significant amount.

While decades of research have shown sugar's detrimental effects on health, once again, it appears that "Big Sugar" has been manipulating the science—even burying the results of their

own project. If sugar is innocent, why would the sugar industry suppress evidence or pay off scientists to produce a research paper whose sole purpose was to shift the blame away from sugar?

Project 259 truly revealed the sugar industry's hypocrisy, with Dr. Kearns suggesting that had the preliminary results been confirmed and published, a more in-depth examination of sugar being a carcinogenic food would have resulted. Interestingly, research conducted in the latter part of 1960 studied artificial sweeteners to determine if similar cancer-causing effects would occur. When the artificial sweetener, cyclamate, was found



to increase bladder cancer risk in rats, it was banned soon afterward. Sugar, it would seem obvious, got a big-time pass, even though its results on bladder cancer risk were similar to those found for an artificial sweetener.

Sadly, the deceptive practices and influences of the sugar industry still appear to be happening. For example, in 2015, a paper was published in *PLOS Medicine* that revealed how the sugar industry influenced the National Institute of Dental Research (NIDR). In 1971, the NIDR launched a program called the National Caries Program (NCP), designed to identify interventions to eradicate tooth decay within a decade. As it turned out, research that could have been harmful to sugar industry interests was omitted from priorities identified at the program's launch. Instead of exploring the benefits of less sugar consumption, the focus shifted to other more-costly and less-plausible possibilities, including finding a vaccine for tooth decay.

In their conclusions, the authors wrote, "The NCP was a missed opportunity to develop a scientific understanding of restricting sugar consumption to prevent tooth decay. A key factor was the alignment of research agendas between the NIDR and the sugar industry. This historical example illustrates how the industry protects itself from potentially damaging research, which can inform policymakers today."

Continued on page 62

**“Sugar IS special
alright—in a
sinister, toxic kind
of way.”**

-Dr. Bayne French, MD DC

Big sugar will tell you otherwise, but don't be swayed by their deceptive claims.



**STOP THE
SUGAR CYCLE!**

***You have the will, we
have the way.***

At Your Service Since 1987

And Still Going Strong

by STEVE BORN

2023 marks the beginning of Hammer Nutrition's 36th year in business. That's a very long time, especially for a nutrition company, but it doesn't come as a surprise to us. Why? Because since day one, Hammer Nutrition's Founder & CEO, Brian Frank, has NEVER compromised his position:

"Superlative products and the expertise to put them to their best effect are certainly key, but how a company interacts with its customers is even more important. From day one, we've strived to treat every client exactly how we want to be treated when we are on the other side of the counter—fairly, honestly, and individually. We do everything possible to ensure that is what you experience when you do business with us. Our reputation for 5-star customer service has been earned by living this principle every day for the past 30+ years. I still read every feedback

submission we receive and work directly with my staff to ensure that every issue is handled to my satisfaction. It takes a lot of work and resources to maintain my standards, but it's the only way I'm willing to run my company. We treat you like you are important to us because you are... Guaranteed!"

Now, anyone could make a statement like that, but Brian is the only person who backs it up with his actions. I personally know this to be 100% true because I've known Brian since darn near the beginning of his company and also because I've been his employee, coming up on 23 years this April. In all this time—first as a client and sponsored athlete, then as his employee—I know for a fact that Brian has never deviated from his business model. Never. His earlier-listed quote is the only way he'll run the business, and his oft-used saying, "people before profits," has always been

the very heart of how Hammer Nutrition does business.

Brian is undoubtedly an extraordinarily gifted businessman — his business acumen is off the charts—as are his marketing skills. You don't stay in business for very long without those two things. However, as important as they are, what really makes Hammer Nutrition light years ahead of all other companies is the following:

1) Brian's relentlessness in producing nothing but the finest quality products he can. As part of his R&D staff, I can tell you with complete honesty that he compromises nothing. If any raw material for any product isn't EXACTLY the way it should be, if it doesn't meet our exacting specifications for quality and purity, it's rejected until it does—end of story.

Continued on page 63



LEAVE US A REVIEW!

We love hearing from you and reading your praise, but more importantly we value learning how we can better serve you.

You can leave us a review on the product detail page for every product on our website.

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Here are a few examples of what over 13,000 of you have been saying just so far this year!

*"My race went really well and the nutrition strategy you provided was great! I maintained a steady calorie intake and added **Endurolytes[®] Extreme** tablets, roughly one an hour. I switched to **Hammer Gel[®]** for the run, and used **Perpetuem[®]** for the bike. I'll be using **Perpetuem[®]** from now on and telling everyone about it! I really appreciate your taking time to chat with me while preparing". - Aimee M.*

*"**HAMMER** is my go-to fuel on the bike and beyond. Before, during, up the mountain, through the valley. Use it, share it, and don't forget it! My fave is Hammer Gel[®]! Apple Cinnamon, Espresso, and Peanut Butter for the win!" - Shawn D.*

"What separates Hammer Nutrition from other companies is their support for the clients. Their customer service is a rare find in today's automated world. Brian Frank has assembled a team the genuinely adheres to taking exceptional care of people. When you become a Hammer client, you join the Hammer family as well." - Mike B.

*"I just tried **Hammer CBD** and couldn't be happier with the results. I sleep so soundly and wake rested, ready to go. FINALLY! Your team set me up with the AutoShip program so I'll never run out - it was super easy. Thank you Hammer for providing quality products and exceptional service." - Terry M.*

"I've used Hammer products since 1995. I've tried other brands and nothing else compares when it comes to fueling". - Philip D.



Improved Vitamin D Level equals Lower Cardiovascular Disease Risk

by STEVE BORN

If you're not currently taking Hammer Nutrition's **Enduro D** supplement, here's a darn good reason to start—A recent study published in the *European Heart Journal* reveals a profound benefit: Researchers estimate that an improvement in serum levels of vitamin D to 20 ng/mL may prevent up to 4.5% of all cases of cardiovascular disease.

Vitamin D is converted in the liver to 25-hydroxyvitamin D, which is the circulating form of vitamin D that is used to measure vitamin D status, listed in nanograms per milliliter, or ng/mL. Even more astounding is that 20 ng/mL is considered by many experts to be at the low end of the “normal range.”

Other research, however, shows that the preferred healthy range is 30-60 ng/mL. Therefore, based on this study, even a marginal increase in vitamin D status—to the “low end of normal” (20 ng/mL) appears to yield some incredible benefits. Of course, that leads to the question: How much greater would the increase in benefits be if one were in the “preferred” 30-60 ng/mL range?

In this particular study, nearly 45,000 men and women with

cardiovascular disease and over 250,000 men and women without cardiovascular disease were involved. Researchers used the Mendelian randomization method, which genetically predicts subjects' serum 25-hydroxyvitamin D level to estimate the effects of improved levels on cardiovascular disease risk.

Nearly 52% of the subjects had 25-hydroxyvitamin D levels that were deficient (i.e., <20 ng/mL). Their levels were increased via supplementation so that they reached the 20 ng/mL “standard.” The results were outlined by lead researcher, Dr. Elina Hyppönen:

“Our results are exciting as they suggest that if we can raise levels of vitamin D within norms, we should also affect rates of cardiovascular disease. By increasing vitamin D-deficient individuals to levels of at least 50 nmol/L [20 ng/mL], we estimate that 4.4 percent of all cardiovascular disease cases could have been prevented.”

The study concluded: “While improving vitamin D status among people with the lowest concentrations is likely to have the strongest effects, a population-wide approach



“Hammer Nutrition’s Enduro D supplies a generous 50 mcg of vitamin D3, along with efficacious amounts of vitamin K2, which work hand-in-hand to deliver multiple health benefits.”


to eradicate vitamin D deficiency could reduce the burden of CVD [cardiovascular disease].”

Summary

There are dozens upon dozens of health benefits associated with sufficient levels of vitamin D in the body, with this most recent research clearly showing how even “minimal standard” vitamin D levels help to reduce the risk of cardiovascular disease.

A 25-hydroxy vitamin D blood test is the way to determine your vitamin D status, and allows you to know how much vitamin D you need to consume to bring you into the “preferred healthy range” of 30-60 ng/mL. As a guideline, The Endocrine Society states that to maintain serum 25-hydroxyvitamin D levels of 30 ng/mL, “adults might need at least 37.5 to 50 mcg (1,500–2,000 IU) per day of supplemental vitamin D.”

Hammer Nutrition’s **Enduro D** supplies a generous 50 mcg (2,000 IU) of vitamin D3, along with efficacious amounts of vitamin K2, which works hand-in-hand with vitamin D to deliver multiple health benefits.

Lastly, to ensure that you’re getting the most from the vitamin D you consume via supplements or food, make sure you’re also supplementing with Hammer’s **Essential Mg.**  References available upon request

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- Toby B.



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Dave Conover

Hello Hammer friends, I have been using Hammer products for close to 25 years. They have always been of high quality, consistent and over time I know exactly how they will perform and what I need to effectively train and race.

The VIP service makes it so simple to have what I need during each quarter sent to me automatically and if an adjustment to the order is needed it is easily accommodated.

In 2021 and 2022 I competed in a number of Kinetic Multisports triathlons in the Mid-Atlantic region and garnered AG first in each race. I also competed in the 2022 IM 70.3 Puerto Rico taking AG first and qualifying me for 70.3 Worlds. At USAT Nationals in 2022 I placed 8th on the Olympic

distance triathlon and accepted a spot on 2023 Team USA that will compete next year in Spain. My 2021 season also yielded USAT All American honors (and it looks like that will happen again in 2022).

Hammer has been there for me over the years and at 72 I hope to compete and fuel with Hammer for years to come.

Sincerely,
Dave Conover





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How To Hammer provides all the vital information you need to Hammer to the next level. The final word on usage, with advanced details and specific applications.



#howihammer



@travel.run.repeat



Jill_*all the feels* not sure if im screaming in pain or I'm excited. It could be both. Marathons bring out all the emotions. #nycmarathon #howihammer



@flintstone1913



Chris Flint_Final event of the year. Tunnel Hill 10 Miler is such a unique and beautiful run. I decided after a warmup mile to set the pace that had me tied for 3rd in my AG a few years back and I just couldn't hold it on Saturday. It was a great 2022. Now for some R&R for a month and get back after it! #howihammer #hammerfamily



@runner_blogger_az



Jeremy Heath_Another half marathon in the books! Paced for the first time at the @az48marathon and it was a beautiful day for it. Happy Running friends! #hammernutrition #howihammer



@nikolepbarnes



Nikki Barnes_I can't help but start to plan my future in sailing... as I get bigger! How can I be a great mom while being a great athlete? The worries come and go but something that always calms me is the confidence in my plan, my family and myself. 6 months down, 3 to go. #hammernutrition #howihammer #pregnantathlete

WHEREVER YOU GO,
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Use the hashtag #howihammer to share your photos!



@mika.runs.wild



Mika Beggs_ Our first ultra race was nothing short of brutal and amazing. Nutrition was on point and supplements were a life saver (yay!! @hammernutrition) and hydration was top notch. #hammernutrition #howihammer



@ledeyoung



Laurie DeYoung_ We had to sneak in one more singletrack adventure before the weather turns for good! So much fun at @mohicanstatepark - it was worth the drive to experience old-school trails...and check out one trail that's so new, it's not even on the map yet! #howihammer #hammerfamily

RACE RECIPE

JOSH ROPER

2022 LEADVILLE TRAIL 100 MTB



The thrill of the finish! Professional Moto Trials Rider and Hammer athlete Josh Roper completed his first-ever Leadville Trail 100 in August. Arguably one of the toughest MTB Endurance Races in the nation, Josh pushed to the finish with the help of family, friends, and Hammer products! In March of 23', Josh will begin the professional NATC Moto Trials Season in hopes of making a run at his first-ever Pro title, Keep Hammering Josh!

FUELING RECIPE

PRE-RACE

Fully Charged • Cherry Bomb Heed®

DURING

Hammer Gel® • Hammer Bars®
Endurolytes® Extreme Capsules
Cherry Bomb Heed® • Perpetuem®

RECOVERY

Recoverite® Chocolate • Stretching

RESULTS

Finish Time: 11:53:57
Chip Time: 11:38:38
Avg Pace: 8.4 MPH

Position: 1020/1251
Distance: 105 Miles
Elevation Gain: 13,000 Ft

"I want to give a huge shoutout to @hammernutrition for all the help and support. During the event, their products gave me full energy when I thought I had nothing left in the tank. Thank you guys!"

SOS 5 SECRETS OF SUCCESS FOR ENDURANCE FUELING

#1 Pre-Exercise Fueling

Many an athlete has paid a hefty performance price for mistakes in the area of pre-exercise fueling. No more! In 34 years, we've yet to have one athlete tell us our pre-exercise fueling recommendations didn't work. Actually, we've heard nothing but glowing reports from athletes who are blown away by how much better they feel and how much more endurance they enjoy.

For higher-quality workouts and better race results, consistently apply these time-proven "Dos" and "Don'ts" right away!

1. DO finish all calorie consumption 3 hours before exercise begins

Weeks of consistent training and immediate post-workout refueling builds and maximizes your stores of muscle glycogen, the first fuel the body uses when exercise begins. Because your glycogen supply is limited, you'll want to use it very efficiently. Eating less than 3 hours prior to the start of exercise promotes faster depletion of muscle glycogen and inhibits fat utilization, both of which will negatively affect your performance.

2. DON'T sacrifice sleep to eat

Muscle glycogen levels remain intact—not one calorie has been depleted—even after a full night's sleep, so it's unnecessary to intentionally wake up early just to eat. Instead, if eating a pre-exercise meal 3 hours prior is not logistically feasible, consume a small amount of fuel such as **Hammer Gel**® about 5 minutes prior to the start. By the time those calories are ingested, insulin is released, and blood sugar levels are elevated,

you'll be well into your workout or race, and glycogen depletion rates won't be negatively affected.

3. DON'T overeat



The goal of the pre-exercise meal is to top off your liver glycogen, which has been depleted during your sleep. Accomplishing this doesn't require the consumption of a mega-calorie meal. No more than 300-400 calories is needed. You can't add anything to muscle glycogen stores at this time (you'll just be topping off liver glycogen stores), so stuffing yourself is counterproductive, especially if you've got an early morning workout or race.



4. DO avoid simple sugars, high fat, and high fiber

Give your body the right fuel, which means complex carbohydrates and perhaps a small amount of protein. Simple sugars (sucrose, glucose, fructose) provide unwanted junk calories. Avoiding fat-laden and high-fiber food minimizes the potential for stomach distress and unscheduled bathroom breaks during your workout or race.

5. DO stay properly hydrated

Consume between 10-17 ounces of water (don't forget to include a serving of **Fully Charged!**) each hour prior to the start. Finish your fluid consumption about 20-30 minutes before you start to allow time for a quick bathroom break.

6. DO take your first dose of Endurolytes® or Endurolytes® Extreme 15-30 minutes prior

This will cover your first hour's requirements for electrolytes, allowing you to focus on getting into a nice smooth rhythm when you begin. EN

RACE DAY PROTOCOL EXAMPLE

If your event starts at 8:00 AM:



6:00 PM
NIGHT BEFORE

Enjoy a light, healthy dinner with no refined sugar, saturated fats, or alcohol.



5:00 AM
3 HRS BEFORE

Enjoy a 300 - 500 calorie light, easily digestible breakfast.



7:30 AM
30 MIN BEFORE

One serving of **Fully Charged** in water, and any additional supplements (eg: **Anti-Fatigue Caps**)



7:50 AM
10 MIN BEFORE

One serving of **Hammer Gel**®, 2 **Endurolytes**®, or 1 **Endurolytes**® **Extreme** with water

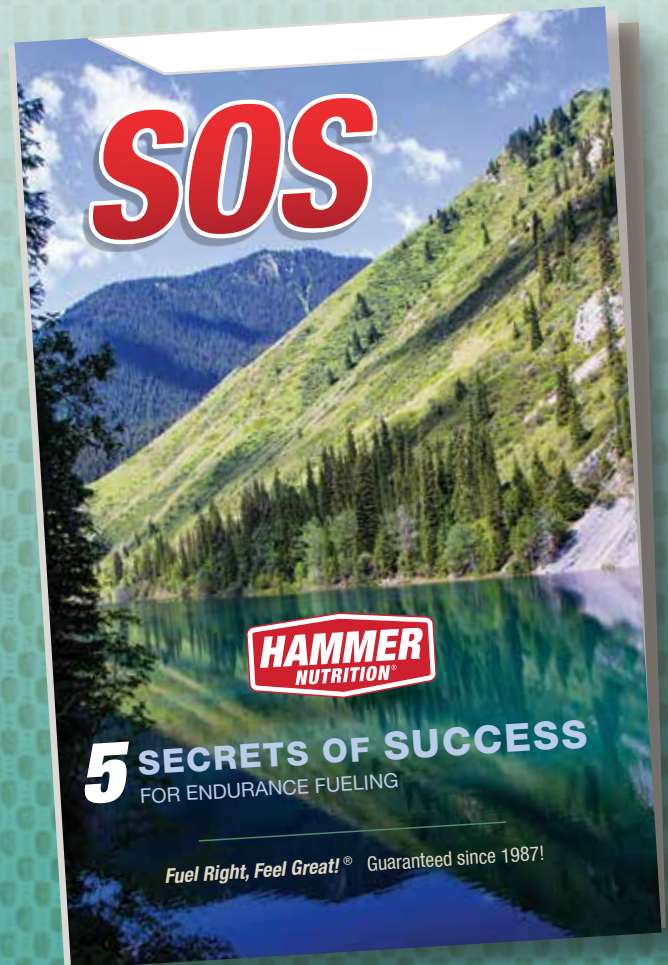


8:00 AM
HAMMER TIME!

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endurance fueling...

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THE BOOK!**



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- Concise Information
- Time-Tested Advice



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Get Your Sleep! It's THAT Important

by STEVE BORN



The conclusions of a recent study involving 8,000 participants: 50+ year-old individuals who sleep 5 hours or less a night may be at risk for several serious and chronic health conditions, ranging from heart disease to cancer.

The research, published online October 18 in *PLOS Medicine*, found that compared to those who slept 7-8 hours, individuals who slept less than 5 hours had a 30% increase in many health issues including:

- Arthritis
- Cancer
- Chronic kidney disease
- Chronic obstructive pulmonary disease
- Coronary heart disease
- Dementia
- Depression

- Diabetes
- Heart Failure
- Liver Disease
- Parkinson's disease
- Stroke

Those in their 60's who slept less than 5 hours were shown to have a 32% higher risk, while those in their 70's, a 40% increased risk was found.

Lead investigator, Dr. Séverine Sabia, PhD, states, "It is important to take care of our sleep." Dr. Sabia noted that the source of the sleep problem must be addressed, but for those who don't have a medical reason for insufficient sleep, she further went on to say that "Healthy sleep habits are a must. These include keeping a regular sleep schedule, a healthy lifestyle — physical activity and light

exposure during the day, and a light dinner — and avoidance of screens for a half hour before sleep."

While allowing for the fact that "chronic diseases often coexist, particularly at older ages, it remains unclear how sleep duration may be associated with risk of multimorbidity," Dr. Sabia also emphasized, "Sleep is important for the regulation of several body functions, such as metabolic, endocrine, and inflammatory regulation over the day, that in turn, when dysregulated, may contribute to increased risk of several chronic conditions."

Hammer Nutrition's Sleep Trio Kit

Hammer CBD – Our clients consistently tell us that they haven't experienced a more powerful, yet safe and natural


way to enhance sleep quality and duration. The phytocannabinoids in Hammer CBD augment the body's natural production of cannabinoids while influencing the CB1 receptors, allowing them to function better. This dramatically helps promote calmness, relaxation, and better-quality sleep and support for the immune system.

REM Caps – For nearly two decades, the unique and safe, non-habit-forming nutrient combination in REM Caps has helped thousands of people enjoy more sound, restful, and productive sleep. The main component in REM Caps' main ingredient is melatonin, which research has shown significantly reduces the amount of time needed to fall asleep, boosts the amount of time spent asleep, and increases sleep duration.

Essential Mg - Of the hundreds of roles magnesium plays in the body, one of the primary benefits for aiding sleep is that it helps the muscles and nerves to relax. Magnesium supplementation, especially when combined with other nutrients—such as those found in REM Caps—has been shown to reduce incidences of insomnia.

Summary

I am oftentimes reminded of the words of highly respected coach Nate Llerandi, who labeled the lack of quality sleep the ultimate performance killer. Coach Llerandi states, "Sleep deprivation can put you in one of the deepest holes you'll ever experience. It goes hand in hand with overtraining, erratic training, and poor performances." Dr. Bill Misner elaborates: "Deep sleep patterns may mean the difference between big anabolic gains and none at all! Both bodily repair and anabolic growth occur only during quality rest, and when deep sleep patterns become routine. While lack of sleep can have dire consequences, adequate sleep provides only positive, healthful benefits."

It's obvious: if you're not obtaining the right amount of high-quality sleep every night, not only is your athletic performance being sabotaged, so too is your overall health! To ensure that you obtain the right amount of high-quality sleep, put the Hammer Nutrition **Sleep Trio Kit** to work for you! 

Sleep Tonight. WIN tomorrow!



The Total Trio for sublime deep sleep
Boost recovery and be well rested for the next challenge.

- Essential Mg
- REM Caps
- CBD Tincture 750mg

Sleep Trio Kit **\$84.95**



*"The **Sleep Trio Kit** is one of my favorite Hammer products. Taking these before bed helps me transition to sleep and get solid sleep. Good quality sleep is the cornerstone of recovery"*
- Online Reviewer.

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Lower Cholesterol Levels By Up To 30%

by Endurance News Staff

It's no wonder why many people are confused about cholesterol because it's necessary for many aspects of human health while also being associated with several negative health consequences. For example, if we were to take a poll on cholesterol in general, we suspect that most people would lean more towards "negative" instead of "positive."

CHOLESTEROL POSITIVES – Among its numerous roles, cholesterol is essential for:

- **The formation of all bodily steroid hormones**
- **Healthy brain function**
- **The myelin sheath that wraps around and protects neurons, which are primarily involved in transmitting information through electrical and chemical signals**
- **Providing antioxidant support**
- **Helping to counteract excessive stress**

CHOLESTEROL NEGATIVES

– Among other negative health consequences, excess cholesterol is associated with an increased risk of:

- **Atherosclerosis is the buildup of plaque in the walls of arteries, which obstructs optimal blood flow.**
- **Hypertension (aka, high blood**

pressure).

- **Gallstones are lumps of gallbladder that can cause severe abdominal pain.**
- **Age-related macular degeneration, a disease that affects central vision, is the most common cause of severe loss of eyesight.**
- **Prostate cancer.**

QUESTION: What increases cholesterol to excessive amounts?

ANSWER: While some cholesterol production, including excess amounts, is genetically inherited, the consumption of trans fat is clearly the main culprit. Unlike other types of fats, trans fats are not essential for life, and their consumption is not recommended. Trans fats can be found in nearly all processed foods, including fast food, snacks, fried food, and baked goods. Additionally, it is believed that people who consume high amounts of animal-sourced saturated fats, with minimal amounts of plant foods, have higher cholesterol than those whose diet contains ample amounts of fresh fruits and vegetables.

How to significantly lower cholesterol... by up to 30%!

Continued on page 26

Race Caps still reign Supreme!



- Prolongs endurance
- Helps increase energy
- Supports overall health

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"I use Race Caps Supreme as part of my pre, mid, and post exercise regimen. It keeps me focused throughout my workouts, with energy to spare."
- Daron T.



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Lower Cholesterol Levels

How to significantly lower cholesterol... by up to 30%!

Continued from page 24

1) DIET FIRST.

The most important thing is addressing the diet and correcting dietary errors, primarily excess intake of omega-6 fatty acids. Oxidized blood cholesterol is associated with cardiovascular health disease, and excess linoleic acid (LA) causes cholesterol to oxidize.

Linoleic acid is an omega-6 essential fatty acid, and while it is necessary for human health, excess amounts are associated with numerous health disorders, including the earlier-mentioned oxidized blood cholesterol.

Conversely, omega-3 fatty acids—EPA and DHA, found in fish, and alpha-linolenic acid (ALA), found in plant sources—are associated with a number of health benefits. The recommended ratio of omega-6 to omega-3 ratio is 4:1; however, most people's diets contain an omega-6 to omega-3 ratio of 20:1 (or higher), much higher than what people are genetically adapted to, and a ratio that is hugely responsible for excessively high cholesterol amounts.

The primary culprit for the omega-6 excess? Increased use and consumption of industrially processed seed oils referred to

as vegetable oils. An expert on the subject, Dr. Chris Knobbe, states that these industrially processed seed oils “drive the oxidation. They're pro-oxidative, proinflammatory, and toxic, but of all of these, it is oxidation. That is by far the worst.”

Cardiovascular research scientist, Dr. James DiNicolantonio, agrees and refers to these omega-6 seed oils as “drivers of coronary heart disease.”

He summarizes,

“Omega-6 polyunsaturated fat linoleic acid consumption has dramatically increased in the western world, primarily vegetable oils. Numerous evidence shows that omega-6 polyunsaturated fat linoleic acid promotes oxidative stress, oxidized LDL [the “bad” cholesterol], chronic low-grade inflammation, and atherosclerosis. In addition, omega-6 is likely a primary dietary culprit for causing CHD (Coronary Heart Disease), especially when consumed as industrial seed oils, commonly referred to as vegetable oils.”

To reestablish the proper balance of omega-6's to omega-3's—helping to protect against serious health outcomes and return us to a much healthier state—we need to greatly reduce or eliminate the consumption of the following oils:

- Canola oil
- Corn oil
- Cottonseed oil
- Grapeseed oil
- Peanut oil
- Rice bran oil
- Safflower oil
- Soy oil
- Sunflower oil

It's important to remember that most-to-all these highly processed seed oils are found not only in oil form but in processed/fast foods as well, so we also need to strive to eliminate them from our diet. As Dr. Catherine Shanahan states, “More than any other ingredient, vegetable oil is what puts the ‘junk’ in junk food.”

2) CONSISTENT EXERCISE.

Master athletes are reported to have lipid profiles similar to young adults, decreasing their risk of heart disease. One study compared the effects of exercise between 61 master athletes and 51 overweight, sedentary men. The results:

- **Plasma high-density lipoprotein cholesterol (HDL-C, the “good” cholesterol) concentrations were 42% higher in the master athletes than in the overweight, sedentary men.**



- Triglyceride (TG) concentrations were 51% lower in the master athletes than in the overweight, sedentary men.
- Plasma low-density lipoprotein cholesterol (LDL-C, the “bad” cholesterol) levels were 9% lower in the athletes than in the overweight, sedentary men.

Additionally, the American College of Sports Medicine conclusively states,

“Endurance training can help maintain and improve various aspects of cardiovascular function and enhance submaximal performance. Importantly, reductions in risk factors associated with disease states (heart disease, diabetes, etc.) improve health status and contribute to an increase in life expectancy.”

3) NUTRITIONAL SUPPLEMENTS.

A number of nutrients/substances are reported to help lower elevated cholesterol levels. These include:

- Coenzyme Q10 and Trimethylglycine – Race Caps Supreme
- Acetyl-L-carnitine – Mito Caps
- Eicosapentaenoic Acid (EPA) and Docosahexaenoic Acid (DHA) – Enduromega
- Bifidobacteria longum and Lactobacillus acidophilus – Digest Caps
- Vitamins B3, B5, B6, and C, and the minerals magnesium and chromium – Premium Insurance Caps
- Vitamin C – Endurance C
- Magnesium – Essential Mg, Premium Insurance Caps, Endurolytes® products, HEED®, Recoverite®
- Chromium – Chromemate, Premium Insurance Caps, HEED, Sustained Energy, Perpetuem®, Recoverite®

Continued on page 62

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Improve your overall health by avoiding PROCESSED SEED OILS

by STEVE BORN

First published on *Endurance News Weekly*

We need two essential fatty acids (EFA) for life—omega-6 fatty acids and omega-3 fatty acids. Our bodies cannot make either of them, so we must obtain these fatty acids from dietary sources. Omega-6 is important because they produce specific molecules (prostaglandins and leukotrienes) that are, in appropriate amounts, necessary for proper immune system function. Omega-3s

also produce prostaglandins and leukotrienes; but, they're less inflammatory and are associated with many health benefits.

While both are necessary in the human diet, most people consume an excess of omega-6—and their omega 3 intake is woefully lacking. While research points to a 1:3 or 1:4 omega-3 to omega-6 ratio as ideal, most people's diets show a 1:20 ratio or even higher. Dr. Artemis P Simopoulos explains:

“In the past three decades, total fat and saturated fat intake as a percentage of total calories has continuously decreased in Western diets, while the intake of omega-6 fatty acid increased and the omega-3 fatty acid decreased, resulting in a significant increase in the omega-6/omega-3 ratio from 1:1 during evolution to 20:1 today or even higher. A balanced omega-6/omega-3 ratio is vital for health.”

Clearly, a 20:1 omega-6 to

omega-3 ratio is very much out of balance. This imbalance causes excess inflammation and oxidation throughout the body, significantly disrupting optimal health and increasing the likelihood of chronic diseases, including obesity, diabetes, heart disease, cancer, and more.

The primary culprit for the excess? Health-destroying amounts of omega-6 fatty acids. The increased use and consumption of industrially processed seed oils referred to as vegetable oils. An expert on the subject, Dr. Chris Knobbe, states that these industrially processed seed oils “drive the oxidation. They're pro-oxidative, proinflammatory, and toxic, but of all of these, it is oxidation. That is by far the worst.”


Cardiovascular research scientist, Dr. James DiNicolantonio, agrees and refers to these omega-6 seed oils as “drivers of coronary heart disease.” He summarizes:

“Omega-6 polyunsaturated fat



linoleic acid consumption has dramatically increased in the western world, primarily vegetable oils. Numerous lines of evidence show that the omega-6 polyunsaturated fat linoleic acid promotes oxidative stress, oxidized LDL [the “bad” cholesterol], chronic low-grade inflammation, and atherosclerosis. Omega-6 is likely a primary dietary culprit for causing CHD (Coronary Heart Disease), especially when consumed as industrial seed oils, commonly referred to as vegetable oils.”

To reestablish the proper balance of omega-6 to omega-3, we need to reduce or eliminate the consumption of the following oils: Canola oil, Corn oil, Cottonseed oil, Grapeseed oil, Peanut oil, Rice bran oil, Safflower oil, Soy oil, Sunflower oil.

It’s important to remember that most (if not all) of these highly processed seed oils are found not only in oil form but in processed/fast foods as well, so we also need to strive to eliminate such foods from our diet. As Dr. Catherine Shanahan states, “More than any other ingredient, vegetable oil is what puts the ‘junk’ in junk food.” 

“More than any other ingredient, vegetable oil is what puts the ‘junk’ in junk food.”



The Omega-3's you need



- Supports overall health
- For aches and soreness
- Pure essential fatty acids

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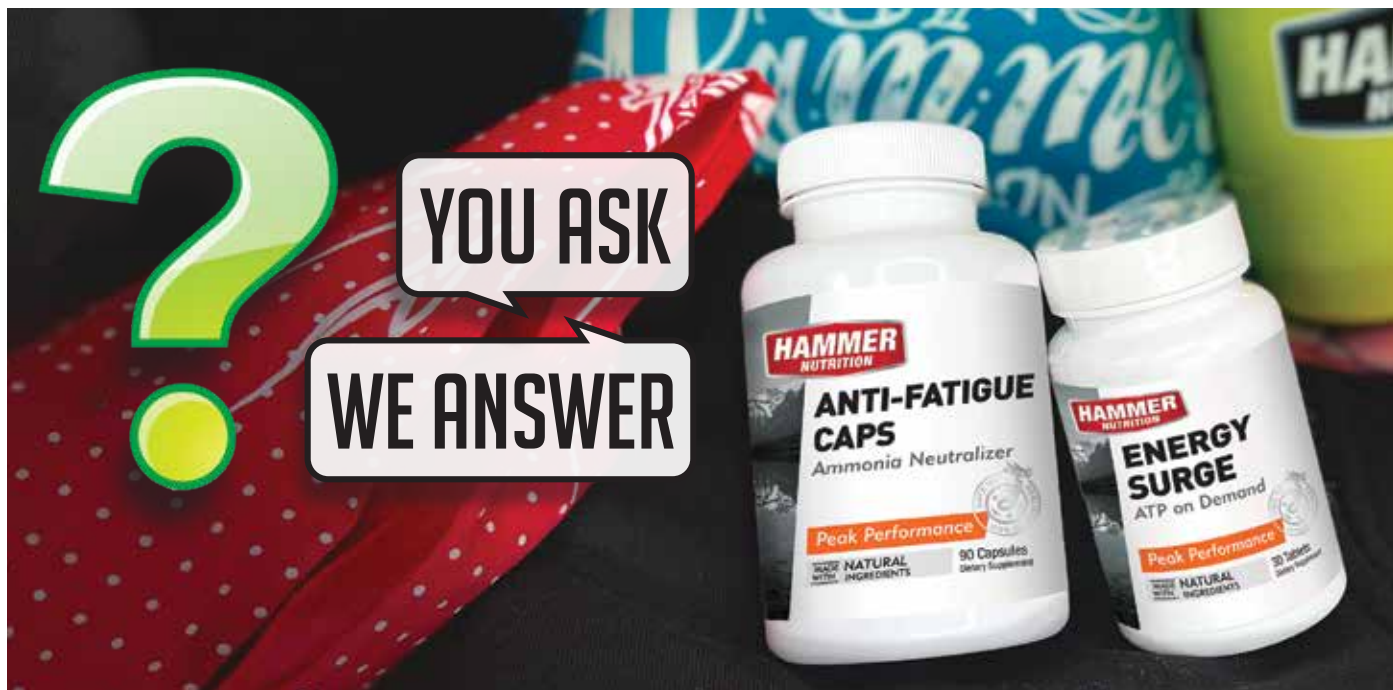
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QUESTION

What is the difference between Energy Surge and Anti-Fatigue Caps?

ANSWER

Energy Surge

contains adenosine 5'-triphosphate (ATP), the principal molecule for storing and transferring energy in cells. It is often referred to as the energy currency of the cell. When you take a tablet of **Energy Surge** it supplies a quick-acting dose of pure energy. **Energy Surge** is what I refer to as a “use it when you need it supplement,” which simply means that there is no specific dosing protocol that needs to be followed. You can take 1-2 tablets shortly before a workout or race begins and every hour during. Another good time to take Energy

Surge is shortly before you get to a particularly difficult part on the course... that's a really good time for some quick energy.

While hourly dosing and also prior to a tough climb (for example) are great applications for **Energy Surge**, I believe that the product reveals its best benefits during the latter parts of a workout or race. That's when our body's natural ATP-producing capabilities have diminished. Taking **Energy Surge** at that time helps to “kick start” the body's ability to produce its own ATP more efficiently.

Anti-Fatigue Caps

is a completely different product than **Energy Surge**, as it supplies three nutrients—potassium/magnesium aspartate, l-citrulline, and OKG—that help neutralize the negative effects of excess ammonia, a primary culprit in premature fatigue.

Information about the ingredients in this unique product:

Potassium/Magnesium Aspartate

A well-known nutritionist says it best regarding aspartic acid: “Because aspartic acid increases stamina, it is good for fatigue and plays a vital role in metabolism. It is good for athletes and helps to protect the liver by aiding in the removal of excess ammonia.” Studies (Agersborg and Shaw 1962, Hicks 1964, Gaby 1982) show this combination provides substantial benefit for the prevention of fatigue. Aspartic acid also combines with other amino acids to form molecules that absorb toxins and remove them from the bloodstream, aids the function of RNA and DNA, and helps to protect the liver. Additionally, the potassium/magnesium aspartate compound increases production of a key substrate,

Energy Surge and Anti-Fatigue are two of Hammer Nutrition's "Peak Performance" products, and can be used together in workouts and competitions, providing a powerful "one-two punch" to help increase energy and enhance endurance.

oxaloacetate, which is involved in energy production. Lastly, the compound provides the minerals potassium and magnesium to help provide protection against cramping.

L-Citrulline

L-Citrulline is an amino acid that is found plant foods such as watermelon, onions, and garlic. L-Citrulline helps in the removal of ammonia in the muscles and liver, and, like aspartic acid, is beneficial in alleviating fatigue. L-Citrulline is a precursor for the endogenous production of l-arginine. Increased blood levels of arginine significantly boost nitric oxide (NO) content.

NO acts as a potent vasodilator, relaxing the arteries, and allowing them to widen. Vasodilation is responsible for increased blood flow to tissues such as muscle fibers, which supports enhanced athletic performance and cardiovascular health.

OKG

Both ornithine and alpha-ketoglutarate (OKG) provide a readily available, non-ammonia-producing source of glutamine in the body. Glutamine is depleted at high rates during exercise but cannot be replaced with regular glutamine as it produces ammonia on its own. OKG increases the amount of glutamine in the muscle and also helps prevent muscle catabolism. Colgan writes, "Both ornithine and alpha-ketoglutarate act in the body as an ammonia scavenger."

Suggested Dosing:

2-4 capsules 20-30 minutes prior to exercise, with additional doses of 1-2 capsules every hour. **EN**

Energy on Demand



- **Increases power output**
- **Improves repeatability of high-intensity efforts**
- **Helps you finish strong**

30 Capsules \$24.95



*"Is there a Hammer product that doesn't work? If so, I haven't found it. Recently rode my bike around Lake Michigan and **Energy Surge** gave me the boost I needed each day to keep me going." - Raelene.*



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"A great combination of ingredients. All I know is that I have hardly been sick since I have been taking them and that says a lot. Thanks Hammer!" - Merville H.



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IRON

The Double-Edged Sword Mineral

by STEVE BORN



Why don't Premium Insurance Caps contain iron?

Do I need to take iron supplements?

To answer these questions, we need to delve a bit more into this oftentimes misunderstood mineral.

Iron is found in every cell in the body, as it is an important mineral for nearly all bodily functions. Most of the body's iron is in the form of hemoglobin, the protein molecule in red blood cells that carries oxygen from the lungs to the muscles and other body tissues. A smaller portion of iron is found in myoglobin, a type of hemoglobin that is found in muscle tissue and in the oxidative enzymes within the mitochondria. Both myoglobin and oxidative enzymes are major components in energy production. Iron is also very important in immune system function.

There is no doubt that iron is an extremely important nutrient, especially for endurance athletes. An iron deficiency can negatively affect oxygen transport to the muscles if below-levels of hemoglobin are

detected. An iron deficiency can also impair energy production if myoglobin and mitochondrial enzymes are sub-normal.

We all need iron—but it's crucially important to understand that “too much” is far more problematic than “not enough.” Here's why:

Excess iron generates massive free radical reactions, which damage cell membranes, DNA, mitochondria, and organs, leading to serious health consequences: liver disease, cancer, and more. For example, a growing body of evidence implicates iron in neurological disorders such as Parkinson's disease and Alzheimer disease. In addition, excess iron is linked with the process of atherosclerosis—the hardening of the arteries caused by a buildup of plaque—which then leads to cardiovascular disease (CVD). Iron “build-up” in the body is particularly problematic for men, whose iron stores start to rise in adolescence. In women, iron stores typically start to increase around the age of 45. Bottom line is that all of us, courtesy of the aging process, are at risk for excess iron stores in our bodies.

The Optimum Daily Intake (ODI) for iron is 15-25 mg for

men and 20-30 mg for women, an amount that is easily achieved with diet. In fact, it is very easy to exceed these amounts, which is why many people most likely have too much iron in their bodies. This is especially true for those who consume red meat, the source of heme iron, which is absorbed at significantly higher levels than non-heme iron, the plant form.

While those who consume a vegetarian/vegan diet may (key word “may”) be somewhat short on iron, those who consume red meat with consistency are at a much greater risk for iron overload and the associated health issues, especially CVD. Studies have shown that only heme iron was associated with an increase in cardiovascular disease. Another study found a 60% increase in the risk of a fatal heart attack in men who ate red meat six days a week compared to men who ate meat less than once a week.

Because most of us are likely to be at “excess iron” status, iron is not formulated in Premium Insurance Caps or any other Hammer Nutrition supplement.

Additionally, unless a CBC (Complete Blood Count)/Chemistry Profile blood test reveals a deficiency, iron supplements are not recommended.

Here are some steps we can take to help ensure the iron in our bodies is at an acceptable level:

1) Exercise consistently. Of the nearly countless benefits associated with physical training, one is that iron is reduced via numerous mechanisms in as short as six weeks.

2) Donate blood. Blood loss is the most effective way of ridding the body of excess iron, and donating blood is an effective way to accomplish this.

3) Decrease red meat consumption. Limiting your intake of red meat and increasing your whole vegetable consumption is both an immediate and long-term way to maintain ideal iron "status."

4) Take supplements that contain nutrients that are both antioxidants and iron chelators. Antioxidants will help neutralize the negative effects of free radicals, thus providing protection for the entire body, and nutrients that chelate (bind) with heavy metals are able to help remove some excess iron from the body. Such nutrients include:

- All of the flavonoids found in **Endurance C**
- Quercetin and turmeric, found in **Tissue Rejuvenator** and **Vegan Tissue Rejuvenator**
- R-alpha lipoic acid and acetyl l-carnitine, found in **Mito Caps**
- Milk thistle extract and n-acetyl cysteine (NAC), found in **LSA Caps**

SUMMARY

Like many things in life, balance is key, and "if a little is good, more is not necessarily better." This most definitely applies to iron, the "double-edged sword" mineral, as small amounts are necessary for optimal health and athletic performance, while excess amounts present a serious and potentially fatal threat to health. **Premium Insurance Caps is the ideal way to obtain the vitamins and minerals you need**, but without the unnecessary iron, and taking proactive steps to minimize iron intake and rid the body of excess iron is an extremely wise strategy to employ. EN

Less pain, More gain!



- Targets soreness and irritation
- Optimizes mobility and flexibility
- Maximizes and improves recovery

Tissue Rejuvenator
120 Capsules \$34.95 each

Vegan Tissue Rejuvenator
120 Capsules \$37.95 each



"I've been taking Tissue Rejuvenator daily for 2.5 years and it has greatly improved my quality of life. I'm 55 years old, an avid hiker and 2.5 mile daily walker, pain FREE! I haven't opened a bottle of ibuprofen since I've started it." - Lisa R.



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COFFEE

Show Your Liver Some Love!

by STEVE BORN

DRINK COFFEE



The liver is not only the largest organ in the human body, it's arguably the hardest working one, responsible for performing more functions than any other organ. Perhaps its most well-known function is to detoxify, filter, and help remove harmful toxins, chemicals, and bacteria in the blood, as well as toxins that we are exposed to on a daily basis. Here are just a few of the numerous functions the liver is involved with:

- Carbohydrate, protein, and fat metabolism
- Produces bile, which helps to break down fats

- Assists in the assimilation and storage of fat-soluble vitamins such as A, D, E, and K
- Maintenance of electrolyte and water balance
- Creates "Glucose Tolerance Factor" (GTF) from chromium. GTF is vitally important for insulin to function properly in regulating optimum blood sugar levels.
- Manufactures carnitine, which is the nutrient that shuttles fatty acids into the mitochondria to be converted to ATP.

Given all of the beneficial work that the liver does, it just makes sense to do things that will protect this all-important bodily organ. One of the best things we can do? Drink coffee!

A roundtable report from the Institute for Scientific Information on Coffee—"Looking after the liver: coffee, caffeine and lifestyle factors"—provides some exciting information about the connection with coffee consumption and liver health, as well as the mechanisms involved in helping reduce the risk of liver disease.

Findings highlighted in the report include the results of studies, including:

- Meta-analyses that have shown up to a 40% decreased risk of liver cancer for coffee drinkers as compared to those who do not drink coffee.
- Research from both Italy and the United States that reveals a consistent association with coffee consumption and a reduced risk of cirrhosis, a complication of liver disease which involves loss of liver cells and irreversible scarring of the liver. Coffee drinkers may enjoy a lower cirrhosis risk of anywhere from 25% - 75%

- Research that suggests a link between coffee consumption and risk of chronic liver disease, with an average risk reduction of 25-30% in low coffee consumers, and up to 65% in high coffee consumers.

Professor Graeme Alexander, senior advisor to the British Liver Trust, states that "it is important that we understand how coffee, one of the most popular drinks in the world, and diet affects the disease. Research suggests that coffee may reduce the risk of liver diseases."

Judi Rhys, Chief Executive of the British Liver Trust adds: "Liver disease is a silent killer as often there are no symptoms until it's too late. Coffee is something that is easily accessible to everyone and regularly drinking it—filtered, instant or espresso—may make a difference in preventing and, in some cases, slowing down the progression of liver disease; it is an easy lifestyle choice to make."

SUMMARY

Loaded with antioxidant power, as well as literally thousands of phytochemicals (which may take science quite a long time to find out all of the benefits they may provide, alone or in tandem), it seems apparent that having a couple cups of high-quality coffee daily—caffeinated or decaffeinated—is a very healthy part of one's diet. Ongoing research shows that the liver, especially, may be the chief beneficiary of coffee's powerful benefits. EN

53x11 Coffee anyone?

References available upon request



Hit the road ahead
always "Ride Ready"



- Fair trade
- 100% organic
- Shipped *fresh* within days of roasting

All 53x11 blends are available in 12 oz. Ground or Whole Bean bags \$14.95 / bag.



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Visit hammernutrition.com/products/coffee for more information on all of our varieties, and sign up to have your coffee delivered automatically each month.

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LSA CAPS

(LIVER SPECIFIC ADVANTAGE)

Available again and better than ever!



by STEVE BORN

It's been a bit of a wait for this awesome product to come back into stock. But it's here now, and with the inclusion of Porcini Mushroom Powder (*Boletus edulis*) and Schisandra Berry (*schisandra chinensis*) Extract, this amazing product is even better than before!

We designed **LSA Caps** because the need was obvious—The liver is not only the largest organ in the human body; it's unquestionably the hardest working one, responsible for performing more functions than any other organ. Perhaps its most well-known function is to detoxify, filter, and help remove harmful toxins, chemicals, and bacteria in the blood, as well as toxins that we are exposed to daily.

Traditional Chinese Medicine refers to the liver as “The General,” which is a great analogy because, like a strong general, the liver protects the rest of the body's organs and systems (the soldiers) against external invasions (toxins) and attacks (pathogens, which are microorganisms that can cause disease). When your liver function is not working optimally, it can negatively affect almost every area in the body.

Everyone, athletes especially, put a lot of demands on this most-important organ, which is why we unflinchingly believe that all would benefit from daily use of **LSA Caps**.

About the two new additions to **LSA Caps**:

- **Porcini Mushroom Powder (*Boletus edulis*)** – More than any other food source, mushrooms contain the highest levels of ergothioneine and glutathione, which

“When your liver function is not working optimally, it can negatively affect almost every area in the body.”



many nutritional scientists believe to be the two most potent antioxidants there are. Of all mushroom species, porcini mushrooms have the highest ergothioneine/glutathione concentration.

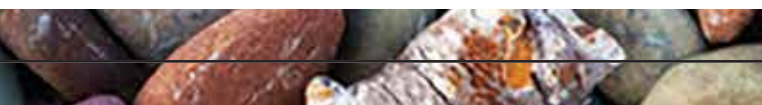
• **Schisandra Berry (schisandra chinensis) Extract** – The fruit of this deciduous woody vine powerfully supports optimal levels of glutathione.

The benefits of both ergothioneine and glutathione are far too numerous to mention here (it'd take pages to list them all), but it goes without saying that supplying the body with these two potent amino acid antioxidants is one of the wisest strategies we can employ to support an incredibly wide range of health needs. With both ergothioneine and glutathione now in the **LSA Caps** formula—courtesy of the porcini mushroom powder and schisandra berry extract combination—this already outstanding product has taken a quantum to leap to become even better.

SUMMARY

Dr. Michael Tierra, a highly respected holistic health practitioner, describes the liver as “an important citadel for the function of the immune system, our frontline defense against environmental and metabolic toxins.” I really like Dr. Tierra’s description of the liver as a citadel because I think it’s 100% appropriate and accurate. A citadel is a strong castle in a city or town that shelters people from harm. As your body’s citadel, the liver does its job dependably and quietly, keeping other organs and systems safe and functioning properly. This is precisely why **LSA Caps** has a high-ranking spot in the Hammer Nutrition supplement line. EN

Learn more about **LSA Caps** on *Endurance News Weekly*.



Show your liver some love!



- Optimizes healthy functioning
- Supports the defense system
- Provides powerful antioxidant reinforcement

120 Capsules **\$34.95**



*“At 58 years old, my recent blood test result showed liver enzyme levels like a 19 year old. Think I’ll stick with the Hammer **LSA Caps!**” - Alex C.*



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6 REASONS WHY TAPIOCA IS TOPS!

by STEVE BORN

The original **Perpetuem®** and **Sustained Energy** formulas used corn-derived maltodextrin (complex carbohydrate), which was actually a very good maltodextrin. Regarding the GMO issue, which we've received a number of emails about, here's the deal:

By the time it goes from source material (corn) to “finished product,” it has been extensively processed, so much so that the DNA of the corn is degraded and all that is left is the carbohydrate component, which of course is the maltodextrin. The protein component in the corn is completely gone, and with it all the lectins and allergens. Batches of the finished maltodextrin product from the manufacturer we use go through a test called PCR (polymerase chain reaction), and in every case no GMO residues, pesticides, or herbicides—even in parts per billion (ppb)—are ever detected. It is a VERY clean finished product with no undesirables in there.

Now, even though corn-derived maltodextrin was definitely a good one, when we find an even better one--in this case, a tapioca (cassava root)-derived maltodextrin--we're absolutely going to go with it.



Advantages of a tapioca-derived maltodextrin:

- 1** Tapioca requires far less processing than corn.
- 2** Unlike corn, there is no GMO content in tapioca to begin with, so even though all the corn-derived maltodextrin we used in our products tested at 0ppb for GMOs, going with tapioca just saves us that hassle.
- 3** Tapioca maltodextrin has naturally lower amounts of sodium and higher amounts of naturally occurring potassium. Given that most everyone consumes far too much sodium as it is, having more potassium and less sodium is a definite plus.
- 4** Tapioca maltodextrin has a more-alkaline pH than corn-derived maltodextrin. Considering that we athletes are “acid-producing machines” during exercise, a more-alkaline pH is a highly desirable during-exercise feature/benefit.
- 5** Tapioca maltodextrin has a lower Dextrose Equivalent (DE), which means lower mono and disaccharide (short-chain sugar) content, and a much higher percentage of polysaccharide (complex carb) content--in essence, a more “complex” complex carbohydrate--for even longer-lasting energy and endurance.
- 6** Tapioca maltodextrin has same Glycemic Index (GI) as other forms of maltodextrin, so you get the fast-acting energy that you're looking for. EN

Now Better than Ever!



- Restores muscle glycogen
- Rebuilds muscle strength
- Reduces soreness & fatigue

32 Servings **\$69.95 each**
Single Serving **\$3.95 each**

■ Caffè Latte ■ Chocolate ■ Vanilla



"As an older athlete, I have relied more on rest and proper post-workout nutrition to stay competitive. Recoverite has been and continues to be an integral part of my training program. I use it as a delicious rehydration supplement post efforts and know I am rebuilding muscle mass everyday." - M. Burkhardi.

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WEIGHT LOSS WITH WHEY PROTEIN?

No way. **WHEY!**

by STEVE BORN

QUESTION: Does your whey protein have weight loss benefits if taken before bed?

ANSWER: Yes, it does! An article we previously posted on *Endurance News Weekly*, *Why Whey Helps with Weight Loss*, lists the ways that whey protein isolate (the kind we use in **Hammer Whey**) assists with weight loss.

Another component in **Hammer Whey** is the inclusion of a most-generous 6 grams of l-glutamine (amino acid; aka “glutamine”) per scoop. Taken near bedtime, glutamine allows for maximal release of Human Growth Hormone (HGH) during sleep, HGH being involved in a wide range of beneficial functions during the time while we’re sleeping, including weight loss.

Though most of the studies on glutamine supplementation focused more on obese people, when we’re overweight—even just a little—our body’s ability to produce HGH is severely impaired. As one site I reviewed stated, “Since glutamine is a natural way to increase the levels of HGH in your blood, it can help offset the impairment.

In turn, you can start to lose healthy amounts of body fat while increasing your lean body tissue.”

To obtain the full value of Whey Protein and the glutamine in it, you’ll want to consume it on an empty stomach, 2-3 hours or more after your last meal. It’s also important to mix Whey Protein in water only, as carbohydrates will blunt the weight-loss and HGH-producing effects.

Don’t Forget **Phytolean** and **ChitoLean**!

The days are still shorter, and for most of us it remains dark when we leave for work in the morning and dark when we get back home in the evening! Plus, it continues to be much colder in many areas of the country. These two factors may impact how often we’re able to exercise and for how long, which can negatively affect our metabolism.

Though most of us do our best to eat the healthiest diet possible throughout the year, when it comes to the winter months, many athletes resign themselves to weight gain, courtesy of training less and eating more (especially those tempting starch- and fat-laden foods and snacks).



Fortunately, Hammer Nutrition offers two outstanding products that provide a powerful assist in our weight loss/management efforts: **Phytolean** and **ChitoLean**.

The unique **Phytolean** formula contains an extract from the white kidney bean that has been shown to effectively block starchy carbohydrates from being absorbed and stored as fat. **Phytolean** also contains raspberry ketones, which enhance the breakdown (“burning”) of fat while also inhibiting fat storage. Two capsules of **Phytolean** will block 300 grams (that’s 1,200 calories!) of starchy carbohydrates from being absorbed and turned into stored fat.

Continued on page 64



With Hammer In the Kitchen, healthy eating never has to be boring!

Download your **FREE** copy Today!



"This cook book gave me the creativity I was lacking and all of the recipes were easy to follow. A convenient downloadable PDF is easily accessible. (And the protein waffles are GREAT!)" - Travis P.



Leave a review and post your creations!

#chefhowihammer



Deliciously Healthy Recipes



STEAMED SALMON AND ZUCCHINI

INGREDIENTS

- 1 6-oz. fillet of salmon
- 1 small onion, thinly sliced
- 1 medium zucchini, thinly sliced
- 2 thin lemon slices
- 1 tsp fresh or dried dill leaves
- 1 tomato, thinly sliced
- 1 cup white wine
- 1/2 cup water
- Pumpkin seed oil
- Salt and pepper to taste

PREPARATION

Cover the bottom of a steamer pan with onion, zucchini, lemon, dill, and tomato. Add wine and water. Place a steamer basket on top of the veggies and liquid. Bring liquid to a rapid boil, then reduce heat to low. Gently place salmon on top. Cover and cook about 10 minutes. Remove the fish. Use a slotted spoon to remove the veggies, reserving the liquid. To serve, spoon some of the reserved liquid over the veggies and salmon. Finish by drizzling pumpkin seed oil on top for a yummy and beautiful garnish.

LENTIL RISOTTO

INGREDIENTS

- 1 onion diced
- 3 Tbsp olive oil
- 1 Tbsp za'atar spice mix
- 2 tsp garam masala
- 1 tsp smoked paprika
- 1 cup risotto rice
- 1 cup green or yellow lentils soaked
- 2 tsp garlic powder
- 2 tsp stock powder or bouillon
- 3 Tbsp lemon juice
- 2 Tbsp soy sauce or liquid aminos
- 4 cups water
- 4 Tbsp nutritional yeast

PREPARATION

Soak lentils overnight, or give a quick soak for 30 mins in boiling water.

Combine onion, za'atar, garam masala, paprika and olive oil in a pan and fry until onions are translucent. Add the risotto rice, lemon juice, soy sauce, lentils, garlic powder, stock powder, and water.

Stir well, cover, bring to a boil and simmer gently for 25 minutes, or until most of the liquid is absorbed and the lentils are tender.

Stir in the nutritional yeast.

Serve and top with vegan parm, pumpkin seed oil, and other garnishes of your choice.

BANANA OATMEAL RECOVERITE® COOKIES

Makes 6-8 servings

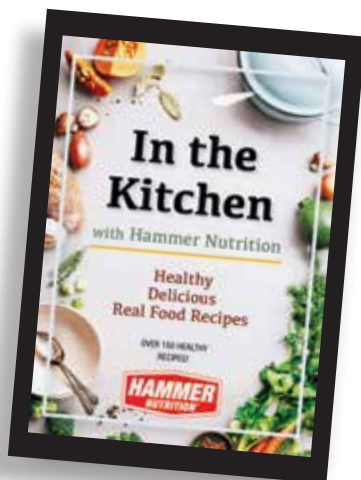
INGREDIENTS

- 2 large ripe bananas, mashed
- 2 cups rolled oats
- 1/2 cup **Chocolate Recoverite®** (or flavor of your choice) prepared
- Optional Chocolate Chips
- Raisins
- Walnuts

PREPARATION

Preheat oven to 350 F. In a large bowl, combine mashed banana with oats until smooth. Add Chocolate Recoverite®. Spray a baking sheet with nonstick spray. Drop dough by large tablespoons onto cookie sheet; flatten a bit. Bake 9-12 minutes until golden.

Cool on wire rack.



Download your
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In the Kitchen
today!



WOW

Daily Multivitamin Use Slows Cognitive Aging by 60%

Over the years, nutritional supplements—especially multivitamin/mineral supplements—have regularly been bashed by so-called experts, many of whom have stated that taking them is a waste of time and that we should stop wasting money on them. The fact is that research continues to reveal an extraordinary number of benefits from taking nutritional supplements, with some especially impressive research on daily multivitamin/mineral use.

The latest eye-opening research concluded that taking a multivitamin/mineral supplement daily for three years is associated with a 60%

slowing of cognitive aging. As most everyone knows, the brain is responsible for many functions that fall under “cognition”—thinking, learning, memory, attention, perception, processing information, and much more. It’s also important to know that cognitive decline is not a disease but instead a naturally occurring process.

While we may not be able to halt cognitive aging completely, we now know how we may be able to slow it down... way down!

This particular research on the effects of daily multivitamin/mineral use and cognitive function was a sub-study of a more extensive study that compared the effects of cocoa

by STEVE BORN

Another **OUTSTANDING** reason to take **Premium Insurance Caps** daily!



“ While we may not be able to halt cognitive aging completely, we now know how we may be able to slow it down... way down! ”

extract (500 mg/day cocoa flavanols) and a standard multivitamin/mineral supplement to placebo. The first part of the research focused on the effects of cocoa extract (CE) vs. placebo on the Global Cognitive Function (GFC) composite score, the overall summary of 19 separate tests, and the primary method in determining overall cognitive function. The researchers then studied the effects of daily multivitamin/mineral use vs. placebo on GFC.

While the CE findings were no different than placebo, there was a noticeable improvement in GFC composite score in the results for the multivitamin/mineral supplement vs. placebo. In addition, lead study researcher, Dr. Laura D. Baker, states “Daily multivitamin-mineral supplementation appears to slow cognitive aging by 60% or by 1.8 years.” The results “may have important public health implications, particularly for brain health, given the accessibility of multivitamins and minerals, and their low cost and safety.”

This new research is as impressive and important as the study that concluded that multivitamin/mineral users experience a 60%+ reduction in the number of sick days. And it adds to the “arsenal” of research that shows that daily use of **Premium Insurance Caps** provides extraordinary, wide-ranging benefits.

SUMMARY

At Hammer Nutrition, we always recommend that the first place to start your supplement program is with **Premium Insurance Caps**, and this new study solidifies that recommendation even more! More reasons why **Premium Insurance Caps** is the only multivitamin/mineral supplement you’ll ever need. EN

Your CBD Gold Standard



- Improves sleep quality
- Reduces aches and soreness
- Helps lessen recovery time



Balm starting at \$4.95
 Oil Tinctures starting at \$44.95
 Softgels starting at \$6.95



“Thank you **Hammer** for making **CBD** that I can trust and that does the job! The tincture keeps me calm, collected, and mentally refreshed - even 80 miles in.” - Travis M.



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US MOTO TRIALS' BRIGHT FUTURE

The King, The Heir, and The Prodigy

by BRIAN FRANK

Moto trials was described as “motorcycle ballet” in my favorite movie of all time, *On Any Sunday*. Another rider describes it to the uninitiated as motocross and golf having a baby. No matter how you tell it, these three riders are the present state and future of this little-known (in the US) form of motorcycle competition. I have been fortunate to assist them with fueling/nutrition on and off the moto.

The technicality and skill required to master these specialized motorcycles and the obstacles they navigate are unlike anything I've seen or had the joy of experiencing since I started riding motorcycles at the age of 4. The combination of strength, endurance, balance, fine motor skills, and 100% concentration make trials unique and so challenging – Ideal for a perfectionist like me who is obsessed with wheels. It's also not surprising that many US pro trials riders are engineers or studying to become engineers. Think of Malcolm Gladwell's 2008 book *Outliers* and his 10,000 hours to master the most complex skills theory. Trials and these three riders exemplify the commitment and focus needed to master this discipline.



Ryon Land knows the winning secret!

THE KING

Pat Smage has been at the pinnacle of US moto trials for over a decade, clinching his 13th National Championship title in 2022 and going for #14 this year! I started helping Pat in 2021 and found areas of improvement in his fueling, hydration, electrolyte, and injury management, hopefully allowing him to continue his winning ways in 2023. His favorite Hammer products are **Tissue Rejuvenator**, **Hammer Gel**®, **HEED**, **Endurolytes**®, and **Recoverite**®.

THE HEIR

Josh Roper comes from one of the original US trials families. His Mom and Dad still ride trials, and his older brother Brian was a pro for many years. As Josh climbs the ladder, he gets closer to Pat, hoping to beat him fair and square before he retires. Like all modern pros, Josh has honed his skills on a trials bike and cross-training on road and mtb, even finishing Leadville 100 this year after finishing 2nd in the Nationals behind Pat. I've had the pleasure of watching Josh's skills improve each year while helping him with his fueling. Consistent usage of **Endurolytes**® during comps was his big “Aha!”. He's always loved **Hammer Gel**®, **HEED**®, and **Recoverite**®.

THE PRODIGY

Ryon Land also comes from a trials family and has been encouraged from an early age by his Father, Dustin, and older brother, Dalton. At 13 years old, Ryon lives trials and has already shown natural abilities paired with a total dedication that could take him to the top of the sport globally. If he's not sleeping, eating, or doing schoolwork, he's riding trials! This past summer,



Pat and Josh study a section before riding it at MN national.

his performance attracted the attention of the Europeans. He was invited to compete in four rounds of the Spanish Junior National Championships in Spain. He easily won all four rounds and put the Europeans on notice that another Bernie Schreiber (The only US rider to win a Trials World Championship) was coming up!

In addition to competing in all eight rounds of the US moto trials championships, Ryon has been invited to compete in the entire Spanish Junior National Championship this year if he can raise funds to travel several times for the season that runs from February to October! They are setting up a GoFund-me page (see below) to help Ryon get to Europe so he can compete with the best riders in the world and show them that an American can reach the top step of the World Championships one day. Ryon loves **Hammer Gel**®, **HEED**®, **Hammer Bars**®, **Recoverite**® and puts some **Endurolytes**® **Extreme Powder** in his **HEED**® when it's extra hot!



From left: Brian Frank, Ryon Land, Nigel Parker (Expert rider, Josh's minder), and Josh Roper after a day of riding in Arizona.

The 2023 NATC AMA Trials National Championships features eight rounds and kick off this year with two rounds in north Florida at the end of March, followed by two rounds each in Colorado, Oregon, and finishing up in Rhode Island at the end of July. [EN](#)

FOLLOW THESE RIDERS ON SOCIAL

Josh Roper @Joshroper4 @Joshuaroper

Pat Smage @pat_smage @patsmage

Ryon Land @ryonland6 @ryonland

and **FOLLOW ALL OF THE ACTION** at [mototrials.com](https://www.mototrials.com)



To read more about Ryon and his 2023 quest to compete in Europe please scan the QR Code or visit: gofund.me/e3aceec1



Pat launches up a wall on his way to another win and another championship.

Phytonutrient-dense superfood



- One serving equals 5 pounds of whole-food greens
- Boosts energy
- Strengthens the defense system

90 Capsules \$24.95 each



"I eat dark green salads as much as I can but when I take Phytomax daily, I'm confident I'm getting what I need. Wonderful product!" - Lincoln M.

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FROM OUR ATHLETES

5 Questions with Jerrod Paulson

1. How did you get into racing? A couple old moto buddies started racing MTB back in 2016 and invited me out to the Over the Hump summer series at Irvine Lake in Orange County, CA where it all started in the beginner class.

2. How did you hear about Hammer Nutrition? I saw it at Victor Sheldon's Quick & Dirty series 3 years ago where I picked up some **Endurolytes Fizz®** and **Hammer Gel®**.

3. What are your go-to Hammer products? My go-to Hammer products are Fizz, **Heed®**, and **Anti Fatigue Caps**.

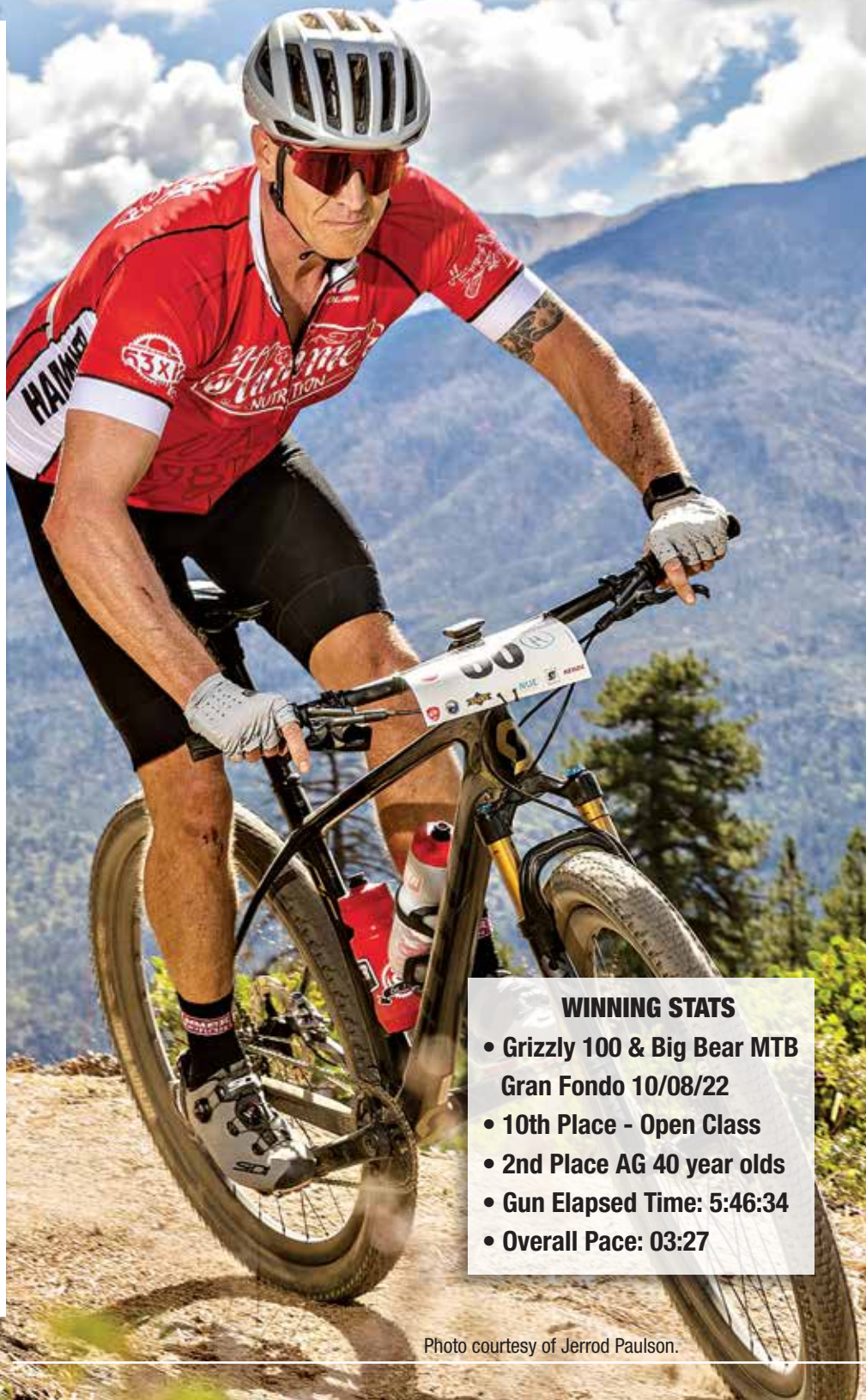
For the Grizzly 100, I added **Perpetuem®** - one bottle at mile 30 then again at about mile 45.

At mile 24 I drank a large bottle of Heed with Fizz, and took 4 Anti Fatigue Caps, **1 Mito Caps**, and **2 Fully Charged** capsules. I also ate a **Vegan Protein Bar** at the start of the climb. From start to finish my body had everything for optimal performance - enough so, I could have done it all over again!

I was able to shave 3 and 1/2 hours of my time from 2020! **That's insane!**

4. I can't leave for a race weekend without... My essential Hammer Nutrition arsenal, massage gun, lucky tire pump, and sunscreen.

5. What keeps you motivated and Hammering everyday? The brutal competition I face every time I line up for a race keeps me motivated. I expect to win and feel I train harder than most. Hammer Nutrition keeps my body from breaking down and gives me the opportunity to pull off a win at every event.



WINNING STATS

- Grizzly 100 & Big Bear MTB Gran Fondo 10/08/22
- 10th Place - Open Class
- 2nd Place AG 40 year olds
- Gun Elapsed Time: 5:46:34
- Overall Pace: 03:27

Jessi Morton



Pre-race: **Hammer Gel®**

During race: **Hammer Gel®**,
Hammer Bar®, **Endurolytes®**, and
Anti-Fatigue Caps.

Post-race: Chocolate **Recoverite®**

The Antelope 50K started out at 8:00 am, with a long steep, 10 minute climb. The last ten miles

WINNING STATS

- Antelope 50K on 11/04/22
- 1st Place in female category
- 9th Overall with 4:38:27
- 50K in Syracuse, UT

-
- 2022 Bigfoot 200 Endurance Run
08/13/22
 - 2nd Place in female category
 - 10th Overall with 76:54:17
 - 200 miles in the Cascade
Mountains, WA

had a pretty big headwind and a slight incline, but I Hammered all the way to the finish!

With Hammer products, my tummy doesn't get upset - the Hammer Gels® and Hammer Bars® in particular digest so quickly, and **Endurolytes Fizz®** also helps settle my stomach.



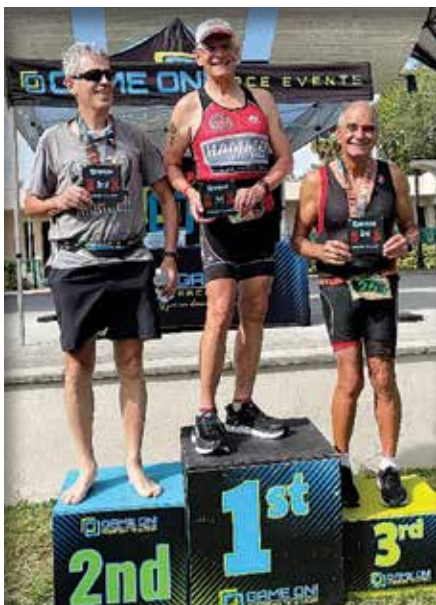
Jessi Morton tames the trails with steady energy mile after mile. Photos courtesy of Jessi Morton.

With Hammer Endurolytes® I feel amazing! Finally, I could not compete, train, nor recover without Recoverite®. It is hands-down the best recovery drink on the market!

Read Jessi's full Race Report here online:



Jack Finucan



Jack Finucan takes center stage and top tier for his age group. Photo courtesy of Jack Finucan.

WINNING STATS

- Riverfront International Distance Triathlon 10/06/22
- 1st in AG 65-69
- 28th in male category
- 39th Overall with 2:33:56
- Swim time: 18:38
- Cycling time: 1:09:49
- Running time: 1:02:39
- 15K in Indian River, Cocoa, FL

Pre-race: **Endurolytes® Extreme Anti-Fatigue Caps**, **Perpetuem® 2.0**, **Perpetuem® Solids**, and Chocolate **Hammer Gel®**.

During race: **Perpetuem®**, **Endurolytes® Extreme**, **Anti-Fatigue Caps**, and **Tropical Hammer Gel®**.

The Riverfront International Distance Tri on the Indian River was my 186th triathlon to date, the last race of the season, and my longest for 2022.

Despite an eventful swim with jellyfish, scattered Atlantic rain showers, and one wicked hamstring cramp, I Hammered to the finish and WON!

Read Jack's full Race Report here online:



FROM OUR ATHLETES

Chris Curtis



Chris Curtis, NOGI Brown Belt Masters1 Heavyweight Champ of the World. Photos courtesy of Chris Curtis.

Pre-match: **Race Day Boost, Anti-Fatigue Caps, Endurolytes Fizz®.**

During match: **Energy Surge, Fizz.**



Post-match: **Premium Insurance Caps, Race caps Supreme, PSA Caps, Mito Caps, Tissue Rejuvenator, and Hammer CBD.**

WINNING STATS

- 2022 NOGI Jiu-Jitsu World Championships - 12/08/22
- Results Break Down
 Match 1 : Win 3-0
 Quarter Final : Win 9-4
 Semi Final : 10-0
 Final : 10-0
- NOGI Heavyweight Champ of the World
- Anaheim, CA

Read Chris's impressive full report here online:



Brock Walaska

WINNING STATS

- 2022 Ironman 70.3, - 10/15/22
- Overall 90th out of 2,125
- 40-44 AG Finish 22nd out of 205
- Overall Elapsed Time: 4:44:51
- Swim: 30:38
- Bike: 2:31:42
- Run: 1:32:02
- Wilmington, NC

Why : “This was my COVID comeback race. While the course is historically fast, I didn’t know what to expect after the challenges I had this summer. There were several times back in August and early September when I almost withdrew from

the race due to the fitness I had lost, fluctuations with my heart rate, ongoing sleep issues, and overall fatigue. I dealt with many, many frustrating days and I’m very grateful for the support of my family and friends who encouraged me to keep moving forward.

Thank you to Hammer Nutrition and TriDot for providing the nutrition, the training plan, and the knowledge to not only rebuild my fitness safely but help me come back stronger.

I strictly followed my race day nutrition plan and stayed within my power and heart rate zones which allowed me to set a personal record in each discipline and finish the race

within ONE second of my RaceX predicted finish time! Without a doubt, data optimized training is the real deal.”



Brock Walaska shows off his Ironman hardware. Photo courtesy of Brock Walaska.

Kunal Patel

WINNING STATS

- 2022 Grindstone 100 - 09/18/22
- 100 miles with 23,000 feet of elevation gain
- Top 10 out of 209 participants
- Overall time: 23:21
- Swoope, VA

Pre-race: 30 minutes before the race he took 4 **Endurance BCAA+**, 15 minutes before he had 1 **Hammer Gel** and 1 **Endurolytes** Extreme.

During race: He had a bottle of concentrated **Perpetuem** and **Endurolytes** Extreme and taking a sip every 20 minutes. He took 1 **Endurolytes** Extreme Capsule every hour and **Endurance BCAA+** when needed, especially towards the end.

Post-race: 2.5 scoops of **Recoverite** with 1 **Endurolytes** Extreme and 4 **Endurance BCAA+**.



Kunal Patel makes a grueling trail run look like a walk in the park. Photo courtesy of Kunal Patel.

Jennie Phillips



Jennie Phillips tops the podium - AGAIN! Photo by Brian Fessenden.

WINNING STATS

- Ride Santa Barbara Gravel Beta - 10/22/22
- Distance of 64 miles with 7,800 feet of climbing
- 1st place female on Gibraltar for all courses (100mi paved, 100km paved, 100km gravel)
- 6th place overall
- Santa Barbara, CA

Pre-race: **Premium Insurance Caps**, **Anti-Fatigue Caps**, **Endurance BCAA+**, **Race Caps Supreme**, **Mito Caps**, **Hammer Gel**, **Fully Charged**.

During race: 1 bottle with 2 scoops **Perpetuem**, 1 bottle with 1 scoop **Perpetuem** and 1 scoop **HEED**, 2 **Hammer Bars**, **Hammer Gel**, and 1 extra packet of **HEED**.

Post-race: **Recoverite**, **Tissue Rejuvenator**, **Super Antioxidant**.

Jake Elkins

WINNING STATS

- Dirty 30 - 10/29/22
- 30 mile MTB race
- 1st in men's open category
- 2nd in all men's
- 2nd overall
- Overall time 1:48:53
- Escondido, CA

Pre-race: **Hammer Endurolytes** and **Tropical Hammer Gel**.

During race: Melon **HEED** and an Almond Raisin **Hammer Bar**.

Post-race: Orange-Vanilla **Recoverite**, **Essential MG**, and **Enduro D**.

Jake Elkins has followers eating his dust! (literally). Photo courtesy of Jake Elkins.





Running “AMUK”

by Marius Van Rensburg



Most people would be happy to complete one 100 mile ultra-trail footrace in their lifetime. Maybe even to complete one 100-miler in a year. But in South Africa, the race directors of four of the 100 - mile ultra-trail footraces joined forces and came up with an idea similar to the triple crown of 200 - milers in the USA – to complete four 100 milers in a calendar year, collectively known as AMUK. To run amok is to run riot or wild; to behave in a frenzied, out-of-control, or unrestrained manner. Amok comes from a Malay word for “frenzied” and was adopted into English, and at first spelled amuck, in the second half of the 1600s.

Addo Elephant Trail Run (Known as Africa’s Wildest Ultra and oldest Ultra) As you run through the Addo Elephant

National Park - you might run into or see one of the Big 7 (Elephant, Lion, Leopard, Rhino, Cape Buffalo, Southern Right Whale, and Great White Shark) while you’re out on your race!

- **100 miles (South Africa’s oldest 100 Mile Ultra)**
- **5,640m Elevation gain**
- **31% DNF**

Ultra-Trail Drakensberg. Run through the South African Highlands at over 11,000 ft in elevation in the Drakensberg mountains. You start in the “Mountain Kingdom” of Lesotho before running back into South Africa. Encounter breathtaking views along your journey on epic spots such as Sani Pass.

- **100 Miles (Africa’s highest race)**
- **5,638m elevation Gain**
- **7,015M elevation descending**



Only six people have completed AMUK, and Marius is the first South African to do it.

MacMac Ultra (Known as Africa’s Freshest Ultra) Starting in the old mining town of Pilgrims Rest, you find your way through some of the most beautiful valleys, over mountains, grasslands, and lush indigenous forests, traverse multiple river crossings (which once was home to the Nile Crocodile) and plantations. The scenery of this race is spectacular.

- **200 Miles**
- **15,000m Elevation gain**
- **90hr Race Time limit**

Karkloof 100 mile Trail Endurance Race, as you travel through ancient forests, wetlands, and grasslands. This race will keep the whole family entertained with a flatter and faster route than the three mentioned earlier (but don’t be fooled, it’s still a tough 100miler!). Pacers are allowed from 50miles until the finish line. This is the perfect grand finale of AMUK, with a vibe that



Marius encounters breathtaking scenery along Sani Pass & stream. Photos courtesy of Marius Van Rensburg.



gets the adrenaline pumping.

- 100 Miles
- 3,500m elevation gain
- 36hr Race Time limit

Only six people have completed AMUK, and Marius is the first South African to complete the AMUK+.

Physical and Mental Prep

Each race has unique characteristics and challenges, so my physical prep for a race would be adapted depending on the terrain, the elevation and altitude, and the temperatures. For a race like Addo, where

the heat is scorching, I would instead train during the hottest time of the day; for Ultra-trail Drakensberg, I would try to train at the highest possible altitude available to me (even though I still have a day job), for MacMac I frequently trained on the route, recce-ing the beautiful area during the months leading up to the race — knowing what to expect during large sections of the race helped with the race planning regarding nutrition. For example, a 5km technical section of trail will require a different nutrition than a runnable 5km.



Read Marius' complete story online here:



Laura Sancho Cartin Taekwondo



Laura Sancho Cartin from Costa Rica is a Hammer Nutrition athlete in taekwondo on her ten-year journey towards the 2024 Olympics in Paris. This has definitely been Laura's year!



“I use Hammer because they meet all the requirements I need during my training and competitions. In addition, **Recoverite**® really helps me recover after the weigh-ins, to arrive in good condition to compete.”

- Ranked 4th worldwide for Taekwondo
- Gold in Puerto Rico Open
- Gold in the Pan Am Series
- Gold in President's Cup 2022
- Silver in the Dominican Republic Open
- Bronze at the 2022 Pan American Championship
- Participated in the 2022 World Championships

Barbara Hernandez Open Water Swimming



- 2016 named in World's 50 Most Adventurous Open Water Women
- 2020 World Open Water Swimming Woman of the Year
- 2022 International Winter Swimming Association
- 1st place in 450m Freestyle at Ice swim Festival during the IWSA World Cup in Burgahausen
- 2nd place in the 100m Freestyle IWSA World Cup
- 2023 First Latin American woman to enter the Ice Hall of Fame



JORDAN TAYLOR

Professional Race Car Driver by Trade, Ironman Triathlete by Day



Jordan Taylor keeps an impressive pace. Photos courtesy of Jordan Taylor.

Jordan Taylor Ironman - Panama City Beach, FL Key Stats

- Overall: 61st out of 1,992
- AG 30-34: 11th out of 158
- First Ever Full Triathlon
- Finish Time: 10:20:33
- Swim: 1:11:59
- Bike: 5:09:51
- Run: 3:42:28

How did you get into both Ironman and 4 wheel racing?

I grew up around the race track. My Dad was a race car driver, so for as long as I can remember, Ricky and I were going to the track to watch Dad race. Just like any other kids would go to the football field or baseball field on the weekends, we would go to the track. It just seemed like a natural progression for us to follow in his footsteps. We fell in love with the sport from an early age and thankfully everything has worked out so far for us. As far as the Ironman, my brother, myself, and some friends decided to start training during the Covid lockdown. It was something for us to stay fit and motivated. Fast forward two years, and it finally all came together.



Racing runs deep in the Taylor family.

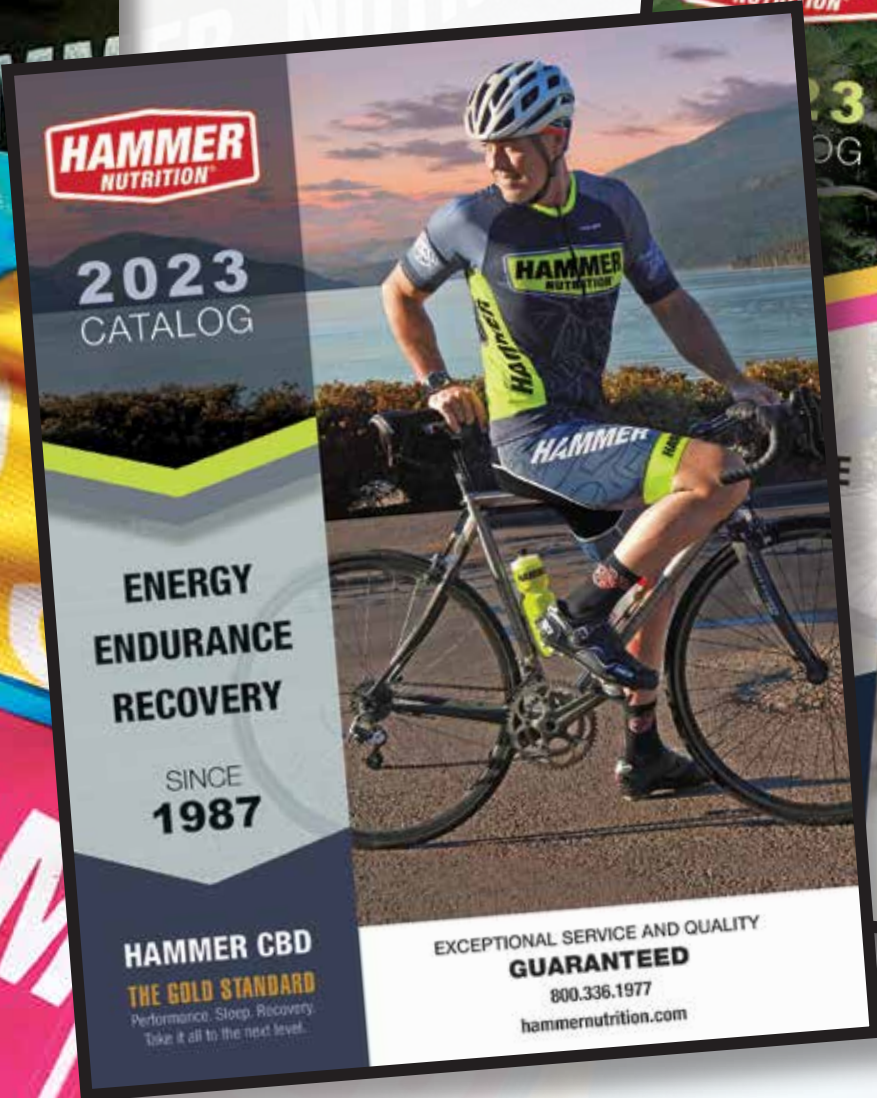


Jordan conquers Ironman with his Hammer fueling dialed in.

What are your go-to Hammer products?

I'd say my go-to products would be **Hammer Gel**® - Nocciola flavor, **Endurolytes**® **Extreme**, and **Recoverite**®. Those are three products that I use everyday in my Ironman training as well as at the race track. I live in Florida, so the **Endurolytes**® **Extreme** is pretty crucial for training in the heat. The race cars also get up to some extreme temps inside, so your sweat output can be pretty crazy. The **Endurolytes**® combined with the **Hammer Gel**® keep me going on those long workouts and long stints in the car. Then after a workout or after time in the car, a glass of **Recoverite**® goes down very well!

The 2023 CATALOG is here!



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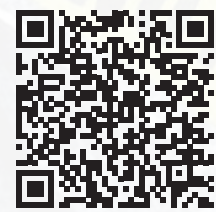
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HAMMER EVENTS

NEW EXCITING PARTNERSHIPS

We are most excited to extend partnerships in the ultra running segment with some stellar new and well established event organizations!

Devil on the Divide 50k



09/09/2023 - Empire, CO

This is your chance to run on beautiful sections of the Continental Divide in CO! This 50K race is one of the most beautiful and challenging trail racing events in the state of Colorado with breathtaking views to keep you going. Participants will reach a top altitude over 13,000 feet. Get your altitude training started!



Clawhammer Mountain 50K by Shining Rock Adventures

10/14/2023 - Pisgah National Forest, NC

First ultra in the beautiful Pisgah National Forest! It will take you to some of the most magical parts of the Pisgah National Forest. High quality trails lead you atop sweeping ridges, rock outcroppings, over bridges, creeks, across wetlands, and alongside rushing rivers. You'll glimpse at Looking Glass rock from six different vantage points and climb and descend almost 6,500 feet over the course of 50 kilometers.



SHINING ROCK
adventures

This is a tough course, but participants will be rewarded with excellent trails and fully stocked aid stations.

AKTIVE Soles

If you are looking for challenging mountain running races in Alaska rugged land, look no further! AKTive Soles offers the following races:



- 08/06/2023 Hatcher Pass, AK, Willow: The Hatcher Pass Marathon is a mountainous run with a total elevation gain of 4,943ft. The last mile includes a steep downhill, and then one last uphill push to the finish line.
- 08/20/23 Veins of Gold, AK, Palmer: The race itself is about 9 miles with around 5,000 ft vertical gain. This race is challenging and covers a variety of terrain including steep uphill trail, loose rock, shale, tundra, dirt road and a tiny portion of paved road at the very end.



Come meet us at the Hammer booth at **24 Hours in the Old Pueblo!** We are proud to be fueling one of the largest 24 Hour events in the world. Ride the event that the mountain bike community has been raving about for years!

24 HOURS in the OLD PUEBLO - MTB

02/17/23 (3 day event)

Tucson, AZ

www.epicrides.com/events/24-hours-in-the-old-pueblo/event-guide

2023 LOCAL WHITEFISH MONTANA EVENTS

The Hammer team would love to see you at these amazing local events! Come race in our hometown of Whitefish, Montana and visit us at Hammer HQ!

The Whitefish Marathon

05/20/23

Boston Qualifying all-road, scenic course that starts and finishes at Depot Park in beautiful downtown Whitefish.

Whitefish Triathlon

08/23 - DAY TBD

USA Triathlon sanctioned event

Swim the Fish

08/12/23

1 mile, 1/2 mile, and 5K (3.1 miles) swim option. The races will take place on a loop course starting and finishing at Whitefish City Beach.

Whitefish Trail Legacy 50k

10/07/23 (two day event)

Climb to the summit of Big Mountain via the Whitefish Trail, and finish back at the Great Northwest Oktoberfest in Depot Park in downtown Whitefish!

UPCOMING EVENTS

- Grand Master Ultra - Ultra Running**
02/10/23
Mesquite, NV
www.grandmasterultras.com
- NE Rando Series - Skimo/Rando**
02/11/23
Bromley, VT
www.nerandorace.blogspot.com
- Sacagawea Classic - XC Ski**
02/11/23
Bozeman, MT
www.crosscutmt.org/sacagawea-classic
- Whispering Pine Trail Festival - Ultra Running**
02/18/23
Dunnellon, FL
www.ultrasignup.com/register.aspx?did=96635
- Mid Maryland Trail 50K - Ultra Running**
02/18/23
Elkridge, MD
www.bullseyerunning.com
- Oak Mountain 6/3 Hour MTB Race**
02/25/23
Pelham, AL
www.chainbusterracing.com/oakmountain
- Renegade Rambler - Gravel**
02/25/23
Farmsville, TX
www.greenvillegravel.com/home
- Crazy Desert Trail Race - Ultra Running**
03/04/23
San Angelo, TX
www.roadlizards.org/crazydesert
- Vertfest - Skimo**
03/04/23
Alpental, WA
www.snowgoatskimo.com/vert
- Nine Trails - Ultra Running**
03/18/23
Santa Barbara, CA
www.allwedoisrun.com
- Hell of Hunterdon**
03/26/23
Blawenburg, NJ
www.hellofhunterdon.com

OMEGA-3 FATTY ACID

The Heart's Best Friend

by STEVE BORN

Back in January of 2017, the results of a meta-analysis were published in *Mayo Clinic Proceedings*, defined as “one of the premier peer-reviewed clinical journals in general and internal medicine.” Sadly, the study generated little interest in mainstream media. However, though it’s been nearly 6 years since the study was published, the results are just as profound—and still 100% applicable—as they were back then.

BOTTOM LINE:

Increasing intake of the omega-3 fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) could help reduce coronary heart disease (CHD) risk for at least 1 in 4 Americans.

Headed up by Dominik D. Alexander, PhD, researchers reviewed 18 randomized controlled trials (RCTs) and 16 prospective cohort studies, which contained 93,000 and 732,000 subjects, respectively.

The study examined outcomes such as myocardial infarction, sudden cardiac death, and coronary death. The study compared the results of RCTs, which explore interventions under strict clinical conditions, to those of prospective cohort studies that are observational, and followed larger populations for longer periods of time.

Among the RCTs, there was a 6% overall reduction in the risk of any CHD event—fatal or nonfatal heart attack, sudden cardiac death, and angina—among those who received omega-3’s compared to those who did not receive these fatty acids. The reduction was even greater in high-risk study participants:

Those with high triglyceride levels who received omega-3 fatty acids experienced a 16% reduction in CHD risk.

Those who had elevated low-density lipoprotein (LDL) cholesterol - often referred to as “bad cholesterol”—had a 14% lower risk compared with participants who did not receive EPA and DHA.

When Dr. Alexander and colleagues analyzed the prospective cohort studies, they found that there was an 18% decreased risk of a CHD event with participants who had a higher intake of EPA and DHA, compared to those whose intake was lower. One of the CHD events—sudden cardiac death—was especially impacted



by omega-3 intake, with a 47% decreased risk associated with higher omega-3 consumption.


Dr. Alexander summarized, “What makes this paper unique is that it looked at the effects of EPA and DHA on coronary heart disease specifically, which is an important nuance, considering coronary heart disease accounts for half of all cardiovascular deaths in the U.S. The 6 percent reduced risk among randomized controlled trials, coupled with an 18 percent risk reduction in prospective cohort studies—which tend to include more real-life dietary scenarios over longer periods—tell a compelling story about the importance of EPA and DHA omega-3s for cardiovascular health.”

Dr. Harry Rice added, “There are important public health implications related to reducing the risk of coronary heart disease, and therefore we are encouraged by the results of this comprehensive analysis. It’s also important that the observed risk reductions were even stronger in patient populations with elevated triglycerides and LDL cholesterol levels, two risk factors that affect more than one quarter of the American population.”

SUMMARY

Adam Ismail, Executive Director of the Global Organization for EPA and DHA Omega-3s (GOED), states “The results [of this study] confirm that increasing omega-3s is a healthy lifestyle intervention that can contribute towards reductions in CHD risk. Remember that increasing omega-3 intakes is basically just improving the quality of one’s diet slightly, like reducing the amount of sodium or increasing your dietary fiber. It is a simple, inexpensive, and achievable change that most consumers need to make to optimize their health.”

It should be obvious that we all need more omega-3s in our diet. Fish is the ideal source of these essential fatty acids, but consuming sufficient amounts of high-quality fish on a regular basis is difficult and expensive.

Hammer Nutrition’s **EndurOmega** is the easy and affordable way to boost your consumption of EPA and DHA. The benefits it provides are numerous, so make sure EndurOmega is on your “take daily” supplement regimen. Your heart will thank you each and every day! 

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CONTINUED ARTICLES

SugarGate

Continued from page 11

Summary

The accumulation of over a half-decade of research has clearly shown that sugar is a major risk factor for coronary heart disease. Unfortunately, that information has been suppressed by the sugar industry and, sadly, continues to this day. Going back to the Project 259 incident in the mid-'60s, nutritional expert Marion Nestle wrote:

“This 50-year-old incident may seem like ancient history, but it is quite relevant because it answers some questions germane to our current era. Is it really true that food companies deliberately set out to manipulate research in their favor? Yes, it is, and the practice continues.”

Dr. Kearns added: she believes that had the preliminary results been confirmed and published, it would have caused more scrutiny of sugar as a carcinogenic food additive. In the late 1960s, artificial sweeteners were being examined over similar concerns. For example, a 1969 study found cyclamate, an artificial sweetener, increased the risk of bladder cancer in rats, and this sweetener was banned shortly afterward.

The sugar industry's intentional withholding of evidence regarding sucrose's negative health effects was widely reported in many mainstream outlets many years ago... and that was that it seems— “one

and done.” We also wrote about it back in *Endurance News* #108 when the news first came to light, and we write about it again now because it's such an important story, one that deserves more than a one-time discussion/article.

We also revisit “Sugargate” because we want to strongly remind you that sugar is not a harmless, benign substance; it's simply not good for your health or athletic performance and never will be. Dr. Bayne French states,

“Sugar IS special, in a sinister, toxic kind of way. I have observed similar findings in my adult patients. Athletes who fuel with simple carb/sugar show similar laboratory results to obese, poorly controlled diabetic patients: Elevated blood sugar and insulin levels, high triglycerides, low HDL (favorable cholesterol), small and dense LDL (bad cholesterol) particles, and high CRP (inflammatory marker).”

Big sugar will tell you otherwise, but don't be swayed by their deceptive claims. Excess sugar intake is a major factor in heart disease, the number one killer of Americans. In fact, a 2019 report from the American Heart Association states 121.5 million adults in the U.S. (48%) have cardiovascular disease.

There's no wonder why sugar is referred to as “The White Devil.” Don't be a victim! Don't be a statistic! Avoid sugar as much as you possibly can! EN

Cholesterol

Continued from page 27

- **Soy – Soy Protein, Sustained Energy, Perpetuem®**

- **Gamma-Tocopherols and Tocotrienols – AO Booster**

Conclusion

The combination of consistent exercise, optimal diet choices, and supplementation may reduce cholesterol levels anywhere from 8% to as much as 30%. In addition, a plant food-dominant diet added to regular exercise has been demonstrated to lower elevated cholesterol significantly. Nutrients in specific Hammer Nutrition products also help lower elevated cholesterol levels. EN

EN 132 REDACTION

From the Hammer Creative Department, we would like to extend a sincere apology to Dr. Bayne French. In issue #132, we experienced a technical anomaly while converting article text for *Lipids: A Different Perspective*. This caused the elimination of italicized text in place of traditional quotation marks, thereby giving the illusion of plagiarism.

Tech error or no, it is the responsibility of our department to catch such oversights. This piece has since been corrected and appears as such online, at *Endurance News Weekly*.

Thank you to Dr. French for your valued contribution, and to our readers for your understanding and continued following.

At Your Service

Continued from page 12

2) Brian's passion for exemplary customer service. In all the years Hammer Nutrition has been in business, that has never faded; if anything, it gets stronger with each passing month and year.

His zealously for treating customers by The Golden Rule is unequalled by any other CEO of any other company I know—he really is the one who puts the “us” in “customer service”—and that service is absolutely on par with the superior-quality products he produces and sells.

As I have said several times before, with some other companies, you get the typical (as an example), “Press 1 for supplements; press 2 for fuels; press 3 to leave a message,” and so on. This has never been the Hammer way, and it never will be. So you can expect that everyone who works for Hammer Nutrition will treat you like you are important to us, and that's because you are. It's really just that simple.

Whether you've got questions, concerns, suggestions, or a success story, give us a call or Live Chat with us. You'll be connected with a live person—a trained advisor—you'll be treated like a real person, not a number, and you'll experience the best customer support and service in the industry!

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Brian Frank mans the phones here at HQ, alongside his customer service team. Answering, advising, and being available for clients is of the utmost priority.

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Awesome! Highly recommend. Works great for cycling and running. - Dwayne G.



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CONTINUED ARTICLES

WHEyt Loss

Continued from page 42

The **ChitoLean** (pronounced: CHIT-uh-lean) formula is headed up by chitosan (CHIT-uh-san), a nutrient derived from shellfish that effectively binds with fat in the intestine and blocks absorption. This “fat blocking” effect not only assists with weight loss, but it also helps normalize cholesterol levels and aids in inhibiting unhealthy deposits of fat that accumulate in the lining of the artery wall.

With **Phytolean** and **ChitoLean**—and yes, you can use them both together! - you have an unbeatable weight-loss/weight-management combination!

Other Tips to Support Weight Loss

1) Eat 7-11 servings of whole fruits and vegetables daily, while decreasing your intake of meat and dairy. This dietary practice is associated with lower Body Mass Index (BMI) ratings, according to T. Colin Campbell’s comprehensive

“China Study” research. Dr. Campbell’s research showed that Americans eating 50-70% of their 1,950 daily calories from animal sources averaged a BMI of 27.0. The Chinese eating 90% of their 2,740 calories per day from whole plant foods averaged a BMI of 22.0.

2) Consume 25-30 grams of fiber daily. In addition to supplying numerous health benefits, consuming adequate amounts of fiber helps you feel fuller on fewer calories.

3) Include healthy fats in your diet. When you deprive your body of fat, it holds on to its fat stores more voraciously. Eating healthy fats (fish, avocados, seeds, and nuts)—and using **EndurOmega** daily—is good for your heart, satisfies your hunger, and helps your body release and burn its fat stores more liberally and efficiently.

4) Drink a glass of water prior to each meal. The water will take up space in your stomach, increasing the feeling of fullness, helping you to consume fewer calories when you begin eating.

Additionally make sure that you’re consuming enough water throughout the day. In addition to what you’re consuming during exercise, aim to consume fluids (mainly water) in amounts that reflect 0.5 to 0.6 of your body weight.

- Example: 150 lb. person should consume 75 ounces (150 x 0.5) to 90 (150 x 0.6) ounces daily, again, in addition to what is being consumed during exercise.

5) Eat more slowly. Recent research suggests this helps reduce the amount of food that’s consumed during a meal.

6) Alter your calorie intake occasionally. Consume slightly more calories than you normally would for a day or two, then consume a bit less than normal on a couple of days. This disrupts your body’s “thermostat,” helping prevent it from becoming super-efficient at burning the same number of calories day after day.

7) Finish eating by 7:00 pm. It is suggested that calories consumed after that time tend to digest poorly and/or be stored as body fat, due to the body’s natural drop in core body temperature measures and metabolism.

8) Brush your teeth immediately after eating. Once you take the time to brush and are enjoying the sensation of clean teeth and breath, you’re less apt to indulge in after-meal snacking.

9) Try to exercise in the morning. This raises metabolism and keeps it elevated, allowing you to burn more calories all day long. EN



2023 NEW KITS

- Cycling
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- Triathlon
- OutterWear

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Unisex sizing



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"I have always believed that if you are going to help promote Hammer, the least I can do is give you awesome quality, mostly US-made apparel, with minimal markup. It's just another way we like to say thank you for your support every day! Our clothing and gear are no different than our fuels and supplements; if it has a Hammer logo on it, you know it's the best!" - Brian Frank



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Jordan Taylor in his first ever Ironman Triathlon crosses the finish line in Panama City Beach, Florida back in November. He finished an impressive 61st place overall out of 1,992 and in 11th place out of 158 in the 30-34 age group. You can read his story on page 56 of this issue. Way to go Jordan, keep hammering!

Enjoy all of the many benefits



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