

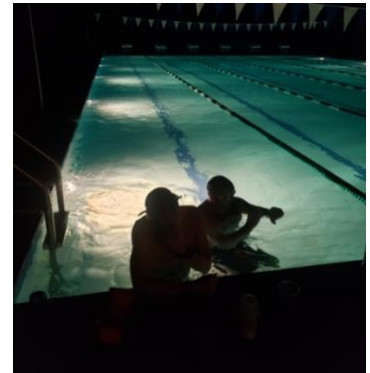
Fall 2021

Wheelhouse News

Training tips and hacks, inspiring stories of trials and success, and information on being part of our adventures.

Although Mike & I didn't do as much traveling as we have during previous summers, we did manage to get to the Finger Lakes for some cycling and to cheer on our athletes doing Musselman 70.3 in Lake Geneva, NY. We also spent 10 days in the Colorado and then the Pacific Northwest. So, not nothing. We also were able to increase our masters sessions at the beautiful outdoor pool at the Boys & Girls Club of Marshfield, where in September we held the 100 Hundreds Swim Event. (photos below)

As we have for the past 20 years, we were able to hold the weekly [Thursday Night Time Trial](#) from May – August, with the [Time Trial Championship](#) on August 19th. Trish Cundiff and Dan McCabe broke their own course records and are still the record holders.



So the time trials and outdoor swimming are temporarily set aside again, but we continue to swim, bike, run, lift, row and stretch – we just do most of it indoors now. We'd love to have you join us if you haven't already, and you can sign up for Progressive Cycling® or masters by following the links below. It seems like in the last 6 weeks I've had more training articles land on my desk than I've seen in a while. I've read and analyzed and I'm forwarding the most interesting and most valid to you in the newsletter. Enjoy!

Classes, Events and More

- We are back indoors for **masters swim** and, after more than a year away due to covid, we are back at the Y. The program is sold out, but you can still sign up and get on the waitlist. By putting your name on the waitlist you are letting them know that if they open more lanes, we will fill them!
- **Progressive Cycling® Phase II starts the first week in November.** Tuesday night is sold out, but there is room in the Wednesday late afternoon, Thursday evening and Saturday morning classes. Members sign up [here](#), non-members sign up [here](#).

Recognizing an Injury Before it's a Problem

Raise your hand if you're fighting off an injury that is affecting your training. Maybe it's a little soreness in your Achilles, tenderness in your heel or a sting in your shin. It's important for athletes to recognize an injury before it escalates so we combat and treat it early. That can mean the difference between a "shut it down" ailment or just some extra foam rolling.

This new article from the Mayo Clinic, "[Symptoms of Common Running Injuries](#)" is a good place to start. It covers muscle pulls (an overstretching of a muscle that causes pain and limited range of motion), shin splints (pain in the shinbone), and Runner's Knee (a dull pain that becomes more acute after jumping or stairs). There are lots of other resources out there if you want to serve as your own triage doctor, including "[The 8 Most Common Running Injuries](#)" from Healthline or [Quick Fixes for the 15 Most Common Running Injuries](#) (paywall) from Runner's World. (did you notice that these are all run related?)

Know your limits, or your injuries will teach them to you

*"Healing is a matter of time, but sometimes it is also a matter of opportunity."
~Hippocrates*

So many athletes go into their workouts with a do or die mentality, expecting their toughness to pay off with big results down the line. But let's face it, we're not all Army Rangers on a life-or-death mission. Those folks don't have the option of calling it quits when the pain is too much, but we do. When we're hitting the gym or training for an event, a "never quit" mindset can sometimes do more harm than good as described in this new piece: "[Why Your Work Ethic May Be Sabotaging Your Success.](#)"

Discipline is what gets you into the habit of training in the first place, but it's also what will give you the ability to say "enough is enough" when something feels wrong. Richard Lovett explains why he was thrilled when one of his athletes bailed near the end of a workout due to hamstring pain.

Lovett believes having the foresight to stop when needed is what separates great athletes from those whose careers are cut short by injury. Your body can send all kinds of signals to tell you it needs a break, so take a look at "[4 Times It's Totally Okay To Quit Your Workout.](#)" One of the keys is to differentiate between pain that's expected, and pain that could spell injury. Pay attention to all the sensations you experience when you train, so that when something out of the ordinary occurs, you're able to decide quickly if it's your sign to call it quits for the day.

But if all this talk about injury has you concerned, you might like this article from Podium Runner: [No Running Doesn't Wear Down Your Cartilage it Strengthens Your Joints.](#) Still not convinced? A plethora of articles touting running, walking and hiking as beneficial to soft tissue have landed on my desk in the past few weeks, and it's no surprise, since the pandemic inspired thousands of people to get out and get active. It's important to approach any new activity with moderation and temperance but getting injured isn't a sign that you should give up activity.

This new story in Canadian Running explains why. It's better for your knees to be pounding the pavement than propped on the couch: "[Good news: running doesn't damage your cartilage.](#)" It seems intuitive that running frequently would grind down cartilage, but it appears that humans really were born to run. One study looked at 90 participants of different activity levels, ranging from non-runners to collegiate level competitors. They found no association between running and reduced cartilage thickness. Many studies have reported similar results, but that's not to say runners will all avoid knee injuries. There is a condition called "Runner's Knee," after all.

Learn about it in "[Patellofemoral Pain Syndrome \(Runner's Knee\)](#)" from Johns Hopkins. It's often caused by running with improper form, muscular imbalances, or overuse, and the result is pain and tenderness in the kneecap area. If you find yourself with Runner's Knee, you're going to want to incorporate some icing and heating into your recovery. If you're serious about it, you should check out this radical knee brace: "[Hyperice X Review: Hot-to-Cold Contrast Knee Therapy On The Go.](#)"

Collagen supplements for connective tissue health

Most people associate collagen with skin care ads in glossy magazines. For athletes, however, the science behind collagen is much more promising. It has been proven to boost connective tissue health, particularly as athletes age. Collagen is the most abundant protein in our bodies, found all throughout the connective tissue. Check out the "[Science of Collagen: 101](#)" and : "[Top 6 Benefits of Taking Collagen Supplements](#)" to see why adding extra collagen to your diet can be so beneficial for maintaining mobility at any age. Research on the subject is still relatively new, but there are some tangible benefits. Collagen supplements can reduce the joint pain that comes from degenerative conditions like osteoarthritis. In addition to improving joint health, collagen can support **bone density**, as it's a critical part of our bone structure.

Is ibuprofen dangerous?

Even though many endurance athletes will pop an Advil or 2 *before* training, that is a bad practice according to this article in Men's Health: "[Why You Should Never Take Painkillers Before Working Out.](#)" I have always discouraged my endurance athletes from bringing ibuprofen with them during marathons, centuries or Iron-distance races and I was shocked to hear that some athletes will routinely take NSAIDs before a long workout.

The Ultra-Trail du Mont-Blanc made worldwide headlines last week when they made this announcement: "[UTMB bans painkillers at all events.](#)" UTMB is one of the most respected trail running organization in the world, so their announcement carries a lot of weight. The rationale is that endurance athletes should not be "self-medicating" in the middle of a stressful event without the advice of a medical professional. Taken in excess, NSAIDs like ibuprofen can harm the kidneys, [cause rhabdomyolysis](#) and lead to renal insufficiency.

The new UTMB® Mont-Blanc health policy states that In order to protect the health of the participants and to contribute to a clean sport, the organization of the UTMB® Mont-Blanc has set up the QUARTZ Event Program, which states specific medical rules which, if not met by runners, will prohibit them from taking part in any of the races.

[READ MORE](#)

Can We Reverse the Aging Process?

A new piece just dropped from the Fitt Insider that describes how to slow or even cease the aging process: "[Issue No. 147: The Quest to Live Forever](#)." Everyone agrees that researching cancer and other age-related diseases is valuable work. Longevity scientists, however, argue that there's a more efficient solution to these problems. By slowing the aging process itself, you take away the main cause of many of these terminal conditions, which will save humanity lots of time, money and heartache. Researchers often frame the problem in terms of chronological vs. biological age. The former is contingent on the inevitable passage of time, but the latter can be altered with diet, exercise, and biological intervention.

To understand the details, check out "[Defining Chronological and Biological Age](#)." That's all good in theory, but for those of us who can't afford cutting edge sci-fi operations to reduce our cell's age, what can we do? Find all sorts of practical answers in "[10 Ways to Hack Your Biological Age to Look & Feel Younger](#)." Companies like [Thorne](#) or [Base](#) will analyze a blood sample to determine your biological age/make-up and ideal nutrition plans. In addition to nutrition and sleep, certain workouts appear to impede aging more than others. Adding to the growing list of HIIT benefits, research shows those workouts boost mitochondria regeneration up to 69%, slowing cell aging significantly. There is also a new piece out in The New Yorker that provides some perspective: "[Costa Ricans Live Longer Than Us. What's the Secret?](#)" The Central American nation spends less per capita on healthcare than the U.S. but produces better outcomes by tightly coordinating public health with medical treatment.

"We don't stop playing because we grow old. We grow old because we stop playing." -

George Bernard Shaw

Research Suggests Lowering Protein Requirements for Masters Athletes

While the research overwhelmingly points to the fact that aging *sedentary* people need more dietary protein, it appears that aging athletes (> 60yrs) do not. A recent [review paper](#) written by Daniel Moore in the publication 'Sports Medicine' has applied greater scientific scrutiny to the age-old recommendation that older adults should consume more protein. Read the full article [here](#).

New theory behind weight gain

For years we accepted a basic truism: when you consume more calories than you expend, your body weight increases. It turns out the truth about weight gain might be nuanced. According to an article in Medical News Today called "[Obesity and weight loss: Why overall calorie intake may not be so important](#)", there are some subtleties

involved in gaining or losing weight. The term Carbohydrate-insulin model, or CIM for short, is a theory that claims that the consumption of highly processed carbs affect hormones and blood glucose levels, signaling the body to store more fat. This increased body fat drives appetite, and a feedback loop of weight gain ensues. For a list of some common culprits, check out "[17 processed foods to avoid.](#)"

That's not to say caloric surpluses aren't part of the equation, just not the *only* cause, according to the CIM. While simple carbs are an essential energy source for endurance athletes, it's important to limit their intake to training and racing. By choosing complex, unprocessed carbohydrate options for the rest of your food intake, you can curb the effects described by the CIM and still have the fuel to get you through a run. Check out "[11 Great Carbohydrate Sources for Runners](#)" for some options. Let's follow this up with:

A guide to burning calories

You still may need to track caloric intake vs. calories burned as part of your fitness journey. Tracking calories burned, however, can get complicated if you participate in a variety of activities. Most adults can walk about 4,000 steps in 30 minutes which will burn around 100 calories. But what if you are hiking, biking, playing tennis or lifting weights? Caloric burn can be trickier to track. A new analysis from CNET gives a helpful starting point: "[What exercise burns the most calories?](#)" The highest burners per minute are cardio exercises like running, hiking, and cycling. In fact, depending on the amount of weight you carry, hiking can burn massive amounts of energy, making it a great option for those looking to lose some weight with a relatively low impact activity. If you want to know how much exactly, check out "[How Many Calories Do I Burn Backpacking?](#)" which provides a calculator that's quick and easy to use.

HIKING

*"Two roads
diverged in a wood,
and I — I took the
one less traveled by,
and that has made
all the
difference."* —
Robert Frost

Once upon a time, when I was obsessed with running, I thought hiking was something I would do only when I couldn't run any more. I thought it wouldn't be strenuous enough for me to consider it a serious workout. I know – what can I tell you? That was then.

After completing the Via Degli Dei in Italy and several hikes through the Grand Canyon, I can tell you, I'm hooked. Mike and I try to do an epic hike wherever we travel. It's as hard or as easy as you want it to be, and it's a great way to get outdoors no matter the weather.

The most recognized athletic activity in October in Orono, Maine is thru-hikers completing the 2,200 mile Appalachian Trail on the summit of Mt. Katahdin. If you've read Bill Bryson's "[A Walk in the Woods: Rediscovering America on the Appalachian Trail,](#)" you know that he was woefully, but hilariously unprepared for his journey. A better plan may be found in the guide from REI: "[How to Train for Thru-Hiking.](#)" Clearly you need a good aerobic base but carrying a 50-pound backpack over uneven terrain calls for stability and core training moves like side plank raises, push-ups with a single arm row and step back lunges.

As with most difficult sports endeavors, mental preparation is just as important as physical preparation. "[Training Your Brain for the Appalachian Trail](#)" offers excellent advice that unless you "find your why," it is unlikely you will succeed on the AT. As for gear prep, the most popular footwear on the AT has been the Altra Lone Peak trail running shoe. Reviews and details on the iconic shoe may be found [here](#).

My personal favorite hiking shoe for most hikes is the [Inov-8 Trail Shoes](#). They have really great grip which for me is critical as most trails have either fine, crushed gravel or areas of slick mud. You might also want to pick up a pair of [gaiters](#) to keep the crud out of your shoes!

Be Even More Prepared

We love urban hikes almost as much as we love wilderness hikes, but if you prefer to get out of the city, remember that steep trails with rocks and gravel are not without risk. If you plan to tackle a remote or challenging hike, you might want to consider becoming a certified [Wilderness First Responder](#). Don't take my word for it though. Read this new article from Gear Junkie: "[Wilderness First Responder: Why You Should Take an Outdoor Survival Course](#)." Even if you're not planning a multi-day expedition off the grid, the skills attained in this course could save a friend or family member in many common scenarios.

STAYING MOTIVATED WHILE PUSHING THE LIMITS

*"Remember that
guy who gave up?
Neither does
anyone else."*

Some of the most famous people in history created their legends by pushing limits. We grew up learning the names of the farthest-sailing explorers, the record-shattering athletes, and the boldest, most innovative creators. It makes sense, then, that pushing your own limits would be so gratifying. For years we've been obsessed with going faster (which sometimes leads to injury), so what about going farther?

Raising the max distance of your swim, bike, run or hike can be both challenging and satisfying, which is why you should read "[How to run for longer without getting tired: increasing stamina and mental resilience](#)." Understanding what causes discomfort during long training days is one key to overcoming it.

A while back I wrote [All The Motivation You Need](#) which is meant to argue against the need for motivation and for the act of developing a training habit that will keep you going when motivation fades. But how do you get motivated to create the habit?

Audio entertainment while on the go has never been easier. When it's safe to do so, a great playlist – either music or a podcast – can keep you going when mental fatigue sets in. Load something onto your phone and pair it with wireless earbuds and viola! Instant distraction. Some of my favorite people to listen to are Tim Ferris, Peter Attia and Dr. Rhonda Patrick.

Sometimes reading or seeing a movie about someone's struggles during their training for an incredible adventure will inspire you to keep going. The scenes of intense training that always look compelling when someone else is doing it!

Audio books – or books in any format for that matter – are always a good source of inspiration. If you thought cycling across *the country* by bike was a big deal, do a google search for riding around *the world* by bike and you'll find that several people have done it, including Boston woman Annie Londonderry who circumnavigated the globe by bike in 1894-95.

One of my favorite books about **distance cycling** was [This Road I Ride](#) by Juliana Burhing. Burhing escaped the Children of God cult with two of her sisters and wrote the book, *Not Without My Sister*. Years later she was working as a lawyer in London and read [Full Tilt](#) by Dervla Murphy, an account of her ride from Dunkirk to Delhi. It was a clarion call to “travel for travel’s sake”, as Robert Louis Stevenson put it.

If **long distance swimming** piques your interest, you might want to read [Swimming to Antarctica](#), by Lynne Cox. Cox, who was born in Boston in 1957 is best known for being the first person to swim the Bering Strait between the United States and the Soviet Union, a feat which has been recognized for easing the Cold War tensions between US President Ronald Reagan and Soviet leader Mikhail Gorbachev

You may also find **run inspiration** from the Runtastic division of Adidas in their guide: [“6 Tips on how to master the long run”](#) or this post from Long Run Living: [“11 tips for becoming a better distance runner.”](#)

You might remember ..

... the story of [Sha'carri Richardson's ban](#) from the Tokyo Olympics. After her ban, several activists spoke out on the need to reform the status of cannabis as a banned substance, arguing that in most cases, it offers no performance enhancement. If anything, it's typically detrimental for athletes, according to [“Cannabis in sport: a friend or a foe?”](#) Well, WADA has heard these concerns, and is willing to open the floor for discussion. While cannabis will remain on the banned list for 2022, they're conducting new research that could alter the decision in the future. Read about it in [“WADA to review cannabis ban.”](#)

Products and Apps

“Any sufficiently advanced technology is indistinguishable from magic”.

~ Arthur C. Clarke

- Bicycle industry engineer Tim Lane launched Digit Bikes this month, with a groundbreaking new suspension system, ANALOG, a unique multi-link mechanism delivering improved shock performance, improved chassis stiffness and improved reliability over existing suspensions. [MORE](#)
- Eyewear maker '100%' launched its 2021 Peter Sagan Limited Edition Collection, available in three premier sport performance styles: S3, S2, and Speedcraft, each with the new HiPER® Gold-Mirror lens mounted in the custom black and gold frame featuring the iconic SAGAN logo. [MORE](#)
- I was making some tweaks to my tri bike and I came across some drool-worthy aerobar set-ups that I thought I'd share with you: [Sync Ergonomics](#), [TriRig](#), and [WattShop](#) all have custom aerobars. *Cha-ching!*
- If you'd like to broaden the measurement of your healthy lifestyle beyond just tracking mileage, pace, segments, and heart rate, check out [“The 9 Best Health Apps of 2021”](#) from LIVESTRONG.

- **Ninja Mount** has developed a mount for your [Apple Air Tags](#) so you can 'find' your bike in the event of theft.

SHORT TAKES

- This article asks "[Is bike riding better for you than walking?](#)" We say, "why not both?" But if you want to compare like the rate of calories burned, percentage of max heart rate reached, etc. click the link to read the full article.
- Anyone who's done a marathon or Ironman will tell you that in the final miles of the race, there's nothing like a (flat) Coke to keep you going. But you might also want to read "[Are These Foods Making You Run Slower?](#)" While cycling usually doesn't cause as much gastric distress as running due to the lower heart rate, this info is good for distance cyclists as well.
- You may have heard that remarkably small bursts of intense exercise can have a big positive effect. If you need more evidence, here's a new piece that underscores that point: "[5 Major Effects of Exercising Just 15 Minutes Per Day, Says Science.](#)"
- Check out how many carbs Jan Frodeno ate while racing the Collins Cup in [this video](#) from James Bell at Nutrition Triathlon.
- Elite runner **Nell Rojas, 33**, who competed as a professional triathlete after college, broke the tape at the Cherry Blossom 1-miler in Washington, D.C. and then picked up the USATF 10-mile national championship. Rojas, who lives in Boulder, Colorado and is not sponsored, [finished in impressive fashion](#), outsprinting three-time Olympian and 1500m world champion Jenny Simpson in the final stretch of the race. She followed that up with a 6th place finish at the 2021 Boston Marathon (2:27) and was the first American woman!
- [The Incredible Story of How Female Cyclists Were Rescued from Afghanistan](#)
- Women's hearts may respond better to marathon training than men's hearts do. In [this study](#) of 52 marathoners (half men, half women) researchers found [that women who have completed multiple marathons](#) do not have reduced left ventricle function or aortic stiffness compared to male marathoners or female recreationally active athletes

Thanks for reading!

(Now, don't forget to click the [links above!](#))

Credits: Endurance Sportswire, Outside Magazine, Velo News, 6-minute mile, BAA, European Journal of Applied Physiology, Podium Runner, Peter Attia: The Drive, The Tim Ferris Show, Stanford University