

New Year 2022

# Wheelhouse News

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

I've been promising a new Wheelhouse News for quite a while now, and every time I think I'm ready to put this edition to bed, I read a new article where I think, "Oooh, this would be a good one for my athletes to read ...." and the release of the newsletter gets delayed. So, at long last we have the latest newsletter jam packed with articles to read. I've attached links to dozens of articles about products, events and research on endurance training, longevity, healthy eating, and recovery. Happy reading!

## Classes, Training Events and More

- **Progressive Cycling® Phase III has started, but you can still join.** There is no discount for joining a session already in progress, but you can still join (better late than never), the Wednesday late afternoon, Thursday evening and Saturday morning classes. Members sign up [here](#), non-members sign up [here](#).
- **Endurance athletes** rely on The Wheelhouse for long training rides during the cold, dark New England winters. Last weekend's movie ride was 3 hours, and the one in February will be 3.5 hours. **If you have a long event planned for late spring/early summer 2022, you can ride by yourself in the basement, or you can join us for a long group ride by signing up [here](#).**
- As of this writing **masters swim** at the Y is [open for registration](#). The website seems to suggest that the program is sold out, but we have swimmers who immediately cleared the waitlist upon registration so it's worth a try. And if it is sold out, by putting your name on the waitlist you are letting them know that if they open more lanes, we will fill them!

*"The greater danger for most of us isn't that our aim is too high and we miss it, but that it is too low and we reach it." -Michelangelo*

## Follow a Plan, Do the Work

Training for an athletic event that will take 3 hours or more is a challenging journey and depending on the event, a long process. Most coaches recommend following a periodized training plan with a minimum of a 16-week buildup that includes building an aerobic base of fitness, increasing a once-a-week long workout, fine-tuning your training with faster, spicier workouts, and tapering about two weeks before the race. But implementing those elements on a weekly basis is like putting a puzzle together that requires the appropriate mix of training volume and intensity, as well as rest and recovery. Doing too much, too soon, or trying to run too hard too soon, can lead to fatigue, injuries, and overtraining.

## CYCLING

Because cycling is a non-weight bearing sport, it is one that can be done at any age. But also because it is a non-weight bearing sport, it can put **cyclists who do no cross training at risk for low bone density**. The link between serious cycling and poor bone health is well established, but researchers are still debating what to do about it. How Cyclists Can [Avoid Low Bone Density](#)

**Report: To Sustain the Cycling Boom, U.S. Must Build Up American Bike Manufacturing.**

Economists for the bipartisan think tank Coalition for a Prosperous America revealed that a stunning 97.1 percent of bikes sold domestically today are imported from other countries, with China alone accounting for 86.3 percent of the U.S. market. [StreetsBlog](#)

**Jan Ullrich hospitalized after relapse, according to report.** Cycling legend Jan Ullrich has been taken to a hospital, following a reported relapse into alcohol addiction. The 48-year-old was reported by the newspaper *Bild* to have been in Cuba, celebrating his birthday with friends. [Cycling Weekly](#)

**UCI begin 2022 by banning more women's team jerseys due to colour clashes.** The UCI has rejected the pink jersey of Basque squad Bizkaia Durango, shortly after offering the same verdict to the jerseys of Andy Schleck-CP NVST-Immo Losch and British team AWOL O'Shea. [Cycling Weekly](#)

**And there's this fun story:** Cyclist [survives mauling](#) from brown bear in Alaska

## CANNABIS

News about cannabis is showing up everywhere, and not just in High Times or Rolling Stone. [This article](#) from Johns Hopkins features former pro triathlete Joanna Zeiger who is now an epidemiologist studying the effect of cannabis on pain and recovery.

**Is cannabis performance enhancing?** A new study out of the University of Colorado Boulder hopes to shed some light on how cannabis, which is now legal outside of sport, impacts exercise. [Canadian Running](#)

**Scientists want to pay people to exercise while stoned for an upcoming study.** Researchers at the University of Colorado Boulder are currently recruiting men and women who regularly exercise while high on cannabis to study the potential benefits of the practice. [Yahoo! News](#)

Are Workout 'Highs' Real? Study Finds [Cannabis-Like Substances](#) Released After Exercise (don't try to reverse-engineer this, though).

## RUNNING

**Your brain benefits from just a 10-minute run.** A study out of University of Tsukuba in Japan says a short run can elicit a positive mood, increase brain function and enhance arousal levels. [Canadian Running](#)

**Study says trail running doesn't decrease your risk for injuries.** Recently a group of researchers

compared the shock-absorbing forces on dirt and gravel with paved surfaces and found that while there are plenty of benefits to trail running, reducing injury risk isn't one of them. [Canadian Running](#)

**How long does it take to get out of running shape?** Most runners worry that if they break, all of their training will go to waste, but a study in the Journal of Physiology suggests that what changes is the body's ability to consume and process oxygen. [Canadian Running](#)

**New Study On The Menstrual Cycle And Athletic Performance.** A December 2021 study in *Frontiers in Physiology* by a research team led by Ritva S. Taipale-Mikkonen looked at the question: do changes during the menstrual cycle impact running performance? [Trail Runner](#)

**10 Amazing and Evidence-Supported Health Benefits of Running.** Running can give you a longer life, better sleep, enhanced immunity, improved moods, and more—it's even good for your knees and lower back. [Podium Runner](#)

**Olympic Medalists Headline 2022 Boston Marathon Women's Field.** Kenyan runner Peres Jepchirchir, the 2021 Olympic gold medalist in the marathon, and her country-woman Joyciline Jepkosgei, headline the Boston Marathon elite women's field for 2022, along with American Molly Seidel, who won Olympic bronze last summer. [Runner's World](#)

Most of us who set out to become competitive runners have a goal of running *longer* events. Race calendars are chock full of half-marathons, full marathons and ultra-marathons. Some athletes, however, are obsessed dropping their one-mile time. Check out this story from Outside magazine a couple of years ago: "[How Our Totally Average Runner Broke the Sub-Five-Minute Mile.](#)" The author of the piece owned a PR of 22:39 in the 5K and 1:49 in the half marathon before he started training for the mile in earnest. He relied on a steady diet of hill intervals and 100M and 200M sprints to get down to his goal. The takeaway is that if you set a goal and then set up reasonable steps to achieve that goal, **every step is important.**

## WEIRD RUNNING NEWS

**Study: Listening to Drake Significantly Slows Down Runners.** As part of a promotion for the shop's new activewear, Pour Moi rounded up a number of runners and had them repeat the same three-mile run over and over again over a trial period, each time to the tunes of a different artist. [InsideHook](#)

**After Nearly 36-Hour Search, Missing Ultrarunner Earl Blewett Found at Florida 100-Mile Race.** Around 9:30 p.m. on Saturday, December 18, 57-year-old ultrarunner Earl Blewett disappeared during the Ancient Oaks 100 Mile race in Florida. [iRunFar](#)

**Study finds reverse running to be a fitness trend in 2022.** PureGym, a chain of health clubs in the U.K., conducted a study based on Google searches of new trends and fads in the fitness industry, with 'reverse running' seeing a 50% increase in searches. [Canadian Running](#)

## TRAINING AND FITNESS

The term '[Overtraining](#)' is often misunderstood. You'd be forgiven for thinking that it just means training too hard, but in reality, it's much more complicated than that. [This article](#) explores how overtraining is related to under-eating. Our friends at Inside Tracker have published another

article about how under-fueling affects athletic performance [here](#).

No question that consistent aerobic and strength training are vital for a long and healthy life. But no matter how meticulous your training and recovery, the human body will experience a breakdown of the weaker parts – with ligaments and tendons being particularly vulnerable. One frequent ailment we athlete's see is an injury to the meniscus, the cushy piece of tissue that absorbs impact between your lower and upper leg bones.

The good news is that scientists recently announced progress in the ability to actually regrow damage meniscus tissue: "[Piezoelectric material shown to help regrow knee-joint cartilage](#)." By using embedded electric stimulation, UConn researchers were able to produce new tissue that performed as well as the original issue stuff. If you're looking for more info on protecting and treating your knees, you may want to check out this new story from Backpacker magazine: "[Weak in the Knees? Here's How Hikers Can Prevent and Treat Joint Pain](#)."

### How high or low can you go? Heart rate and athlete performance

While the average American sits somewhere between 60 and 100 BPM, endurance athletes enjoy much lower numbers. Both resting and maximum heart rates are highly individual, but well-trained athletes tend to have a higher **heart rate reserve** (the difference between your resting and maximum heart rate). Within the heart rate reserve are our **training zones**, with the aerobic training zone being the biggest and most important to endurance athletes, while occasional bouts of training at a high heart rate can stimulate improvements to lactate threshold and VO<sub>2</sub> max.

But what can we learn from your Resting Heart Rate? According to this new story, "[Does Your Resting Heart Rate Determine How Long You're Going to Live?](#)," it can tell you a lot about your health, but even this doesn't paint the full picture. Track your RHR over time, and if you see it decreasing, you'll know your training is paying off. Getting within the healthy range is a sure sign of progress, but it's worth noting that resting heart rate does tend to lower with age.

Another metric worth considering is **heart rate variability** (HRV). It might seem counterintuitive but having highly variable resting heart rate is good. It means you're able to raise your BPM from low to high easily when you exercise. Improving HRV can be done by training in a variety of heart rate zones, and I find it best to do this with hard swim and bike intervals as it's easier on the body than hard run intervals. To learn more about tracking HRV check out the [Elite HRV website](#) which provides an easy way to track the effect your workouts are having on your cardiovascular system with no fancy equipment. To see how you stack up against your age group and world record holders alike, check out this "[Resting Heart Rate Table](#)."

## EVENTS

**US Team in World's Toughest Endurance Race** - [One Water Race](#), set to take place August 23-25, 2022, is a concept created to be the ultimate proof of human capacity, through a combination of adventure racing, orienteering, swim, and ultramarathon running. [MORE](#)

**Inaugural Space Force T-Minus 10-Miler 2022 Date is Set** - Set to take place Dec. 10, 2022, this 10-mile race will be a part of the Space Force birthday celebration each year, and will take place surrounded by space launch history, at Cape Canaveral SFS. [MORE](#)

**Swim For Alligator Lighthouse Named One of the Extreme Swimming Challenges Around the World by Swimming World Magazine** - One of four races to be mentioned, the race continues to gain popularity as a "bucket list" race for all, international open water swimmers. [MORE](#)

You've probably heard about **Everesting**: climbing the height of Mt. Everest (29,031.7 feet) by bike or on foot by completing repeats of a given hill. Doing one Everesting event is a feat, but because we know enough is never enough, we bring you Italian carpenter turned ultra-endurance athlete [Giacomo "Zico" Pieri](#) who, in June 2019, at age 46, was the **first person to complete a Quadruple Everesting** by climbing Monte Petrano (10.3 km at 7.7%) in central Italy no fewer than 45 times.

## HEALTH AND LONGEVITY

**Q:** "Who the heck wants to live to be 100?" **A:** "A 99-year-old."

More people are living to be 100, but the average U.S. life expectancy took a big hit in 2020 as Covid helped cause the biggest drop in U.S. life expectancy since WWII. If you want to run the numbers on **how long you are likely to live**, check out the [John Hancock Lifespan Calculator](#). Life insurance companies have billions of dollars at stake in getting that math correct, so it's one of the more reliable ways to predict your own longevity.

Speaking of centenarians, Julia "Hurricane" Hawkins, might be the quickest one on the planet. While most would be happy just to be walking **at age 105, Hurricane continues to push the boundaries for senior athletes**. In 2017, she became the 100m world record holder for women over 100 and recently set a new 100m record for women over 105 with a time of 62 seconds.

After the race she advised others to "stay healthy and keep running". She also added "It was wonderful to see so many family members and friends. But I wanted to do it in less than a minute..." Check out [this video](#) of Hurricane blowing away the record for your daily inspiration.

In other news, one of the biggest private equity financings in the health and fitness is **Restore Hyper Wellness** which raised [\\$140m in series C Funding in 2021](#). Our very own **Jay Oberton** owns 2 franchises in Massachusetts, one in Newton and one in Hingham. Restore Hyper Wellness offers treatments and diagnostics like biomarker assessments, IV drip therapy, intramuscular shots, mild hyperbaric oxygen therapy, cryotherapy, infrared sauna, red light therapy, compression, HydraFacial and Cryoskin.

It turns out that **mild hyperbaric oxygen therapy** is used to not only cure Scuba divers of the bends, but also to increase the amount of oxygen your blood can carry. Increased oxygen can lead to quicker healing and better performance. (Info from the Mayo Clinic is [here](#).) Star performers

like Michael Phelps and LeBron James have used the technique, according to this story: "[Five Athletes Who Use Hyperbaric Therapy During Training.](#)"

## How anxiety affects your nutrition

Without a doubt, anxiety can have a notable effect on your stomach and digestive system. If you feel like you're giving your body everything it needs with your diet, but still feel symptoms of nutrient deficiency, you should read "[How Anxiety Affects Nutrient Absorption, From A Nutrition Expert.](#)" In prehistoric times, stress meant you were in danger, and the bodily resources needed to perform digestive functions were redirected to your muscles so you could defend yourself or escape. But how can modern humans overcome the negative effects of ongoing stress and anxiety? One simple thing you can do is adjust the way you eat to evoke calmness at mealtimes. Check out these "[7 Ways to Slow Down and Really Enjoy a Meal.](#)"

It shouldn't be unreasonable to step away from your workspace when you take a lunch break, leaving the stresses of work on pause while you eat so you can recharge, and approach them with a clearer head when you return. Of course, what you eat is just as important as how you eat, so stock up on these "[Nine foods to eat to help reduce anxiety.](#)"

## Products

**Hustle Bike Labs' Eagerly-Awaited Avery REMtech™ Pedals Now Available for Pre-Orders** - The innovative hybrid pedal design uses exceptionally strong Rare Earth Magnets to secure a rider's shoes with the locked-down security and performance of a clipless pedal and the easy-release freedom and wide surface area of flat/platform pedals. [MORE](#)

A couple of weeks ago we discussed in class the [Chili Pad](#) – a **cooling mattress** that is touted as taking sleep quality to the next level. The Chili Pad and products like it have been flying off the shelf and if you struggle with getting a good night's sleep, one of these mattress coolers might be right for you.

When training indoors **your bike shoes and run shoes can get soaked!** You can dry them quickly by stuffing them with newspapers, but they can still be loaded with bacteria and it doesn't take long before they really start to stink. Thermic makes a series of products to warm and dry your sports apparel, including this shoe/boot [refresher](#) that uses heat and UV light to dry and sanitize your footwear.

## SHORT TAKES and RANDOM STUDIES

- **Acid reflux** is quite common among athletes since exercise can be dehydrating and it draws blood flow away from the digestive tract and slows digestion food. If you've ever experienced

heartburn during or after a workout, check out "[Heartburn and Acid Reflux After Running – Causes & Prevention.](#)"

- **A Few Minutes of High-Intensity Exercise Per Day Can Reduce Your Risk of Liver Disease, New Research Shows.** The study authors discovered that not only does moderate-intensity continuous training (MICT) improve liver health, but short and more intense exercises work, as well. [MSN](#)
- **How Exercise May Tame Our Anxiety.** A large-scale study from Sweden, of almost 200,000 cross-country skiers, discovered that being bodily lively halves the danger of creating scientific nervousness over time. [USA News Lab](#)
- The top [exercise science of 2021](#) suggests that **movement can help us live with greater stamina, purpose and cognitive clarity** for many years to come. A few standouts: You may need just a [few minutes](#) — or even [just a few seconds](#) — of high-intensity movement to maintain or improve your health. And [10,000 steps is just a number](#). Just try to walk for about 30 to 45 minutes most days.
- **How 'Muscle Memory' May Help Us Get in Shape.** Muscles develop a lasting molecular "memory" of past resistance exercises that helps them bounce back from long periods of inactivity. [New York Times \(paywall\)](#)
- **Study: how does lack of sleep affect running performance?** A recent study from *The Journal of Strength and Conditioning Research*, aimed to monitor the effects of sleep extension and sleep deprivation on endurance performance against heart rate indices like resting heart rate and heart rate variability. [Canadian Running](#)

**Thanks for reading!**

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

Credits: Endurance Sportswire, Outside Magazine, Velo News, 6-minute mile, BAA, Inside Tracker, Canadian Running, New York Times, Cycling Weekly, Velo News and more.