

The Houston Marathon Recovery Plan

Your training plan schedules the work. This one schedules the repair. Sixteen weeks of recovery, phase by phase, built for the specific reality of a Houston build: you'll run your hardest base miles in September heat and race in January cool. Most plans ignore that. This one is built around it.

WKS 1-4

BASE

Sept · hot, humid
recovery job: heat

WKS 5-10

BUILD

Oct-Nov · cooling
recovery job: spacing

WKS 11-14

PEAK

Nov-Dec · cool
recovery job: sleep

WKS 15-16

TAPER

Jan · cold mornings
recovery job: restraint

RACE

January
flat, fast course
then: the week after

THE ONE IDEA BEHIND ALL SIXTEEN WEEKS

Fitness is built in the gap between hard efforts, not during them. A hard run leaves microscopic muscle damage; the repair project that follows runs on its own schedule, and soreness from it builds over 24 to 72 hours, usually peaking near the 48-hour mark. String hard days together before that window closes and the damage compounds: quality sessions decay into junk miles, and the week-12 version of you inherits the debt. Runners who reach January strong are rarely the ones who trained the hardest. They're the ones whose hard days stayed hard because the days between them did their job.

HOW TO USE THIS PLAN

- Keep your club's training plan for the running. Use this alongside it for everything between the runs.
- Each phase page tells you the recovery job that matters most in those weeks, because it changes as the build progresses.
- The tools on the last page (readiness test, hydration math, weekly template) work in every phase. Print them, use them weekly.
- Weeks here are counted from a typical 16-week Houston program starting in September. If your program runs 18 or 20 weeks, stretch the base phase; the rest maps the same.

Training guidance, not medical advice. If you have a medical condition or new, sharp, or persistent pain, see a professional. These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

What the research supports (and what it doesn't)

Everything in this plan leans on established exercise science or on published studies we cite by name. Where something is coaching wisdom rather than research, we label it. You should get to know the difference.

THE RECOVERY WINDOW

Delayed-onset muscle soreness builds over 24 to 72 hours after hard or unfamiliar effort and typically peaks around 48 hours. That's textbook exercise physiology, and it's why day one after a long run lies to you and day two tells the truth. Most training plans space quality sessions at least 48 hours apart for exactly this reason.

SLEEP, FOOD, FLUIDS: THE LOAD-BEARING THREE

- **Sleep** is when the bulk of muscle repair and hormone-driven adaptation happens. No supplement, massage gun, or ice bath substitutes for it. Treat sleep in peak weeks like a scheduled workout.
- **Refueling**: eating carbohydrate and protein within roughly an hour of a long run restocks glycogen and starts the rebuild. A real meal beats a perfectly timed snack.
- **Fluids**: in Houston humidity you can lose several pounds of sweat on one long run. The hydration math on page 6 turns your bathroom scale into a rehydration tool.

TART CHERRY: THE STUDIED RECOVERY INGREDIENT, CAVEATS INCLUDED

68%

smaller increase in muscle pain reported by relay-race runners drinking tart cherry juice twice daily for 8 days vs placebo. Kuehl 2010, J Int Soc Sports Nutr.

4% vs 22%

strength loss over four days, tart cherry vs placebo, after a muscle-damage protocol. Worth knowing: that trial used an arm exercise in college students, not running. Connolly 2006, Br J Sports Med.

IL-6 & CRP

inflammatory markers significantly lower in marathon runners taking tart cherry concentrate vs placebo. Howatson 2010, Scand J Med Sci Sports.

The honest caveats, because they change what you should do: these studies used **juice or concentrate, taken daily for about a week** around the effort. No study shows a single dose doing anything, and no head-to-head trial proves any extract dose equals the juice protocols. If you use tart cherry in any form, consistency is the mechanism. The full breakdown, including what the science does not show, is at mightymoosenutrition.com/pages/the-science.

HEAT ADAPTATION IS REAL, AND IT'S YOUR SEPTEMBER FRIEND

Bodies adapt to training in heat over roughly one to two weeks of consistent exposure: sweat starts earlier, plasma volume expands, the same pace costs less. That's why September in Houston feels brutal in week one and merely hard in week three. The flip side: heat raises the recovery cost of every session while you adapt, so early-phase easy days need to be genuinely easy.

WEEKS 1-4 · BASE · SEPTEMBER

Recovery job #1: survive the heat honestly

- **Give heat adaptation its two weeks.** Run by effort, not pace; your September 10:30 mile may be your October 9:45. Racing your own watch in week two is how recovery debt starts.
- **Weigh in, weigh out** on long runs from day one (math on page 6). Houston sweat rates surprise almost everyone; knowing yours turns rehydration from guessing into arithmetic.
- **Sleep cool, whatever it takes.** Hot nights degrade the exact sleep that repairs hot-weather training. Fan, cold shower before bed, coolest room in the house.
- **Down-week discipline:** most programs cut volume every fourth week. Take the cut. Base-phase heroism is the most common way Houston builds go wrong by November.

BASE-PHASE WEEK TEMPLATE

AFTER...	THE NEXT 48 HOURS
Long run (Sat/Sun)	Refuel within the hour · rehydrate by the math · legs up 10 min · early night · Monday genuinely easy or off · expect day-two heaviness Tuesday
Quality session (midweek)	Same protocol, smaller scale · next hard effort no sooner than 48 hours later
Easy days	They're already recovery. Don't let them drift to medium; medium is the pace that costs you twice.

WEEKS 5-10 · BUILD · OCTOBER-NOVEMBER

Recovery job #2: protect the spacing as long runs grow

- **The 48-hour rule earns its keep now.** Long runs stretch toward 14-18 miles and each one costs more. Run the 5-point readiness test (page 6) before every quality session; a 0-2 score means the workout moves, not the plan fails.
- **Fuel during long runs, not just after.** Practicing race-day fueling from week 5 both improves the runs and shrinks the damage you carry out of them. Nothing new on race day means rehearsing now.
- **Watch the four debt gauges weekly:** morning resting heart rate creeping up, sleep quality dropping, general soreness that stops fading between sessions, and dread where motivation used to be. Two or more trending wrong for a week: insert an extra easy day. That is maintenance, not weakness.
- **Life note for this phase:** cooler mornings arrive mid-October and pace gets seductive. The plan's easy paces still apply; you just get them cheaper now.

Training guidance, not medical advice. Sharp, one-sided, or worsening pain is different from ordinary soreness: back off and get it looked at.

WEEKS 11-14 · PEAK · NOVEMBER-DECEMBER

Recovery job #3: sleep like it's a workout

- **These are the biggest weeks of the build**, and they land on Thanksgiving and the holiday season. The training stress is scheduled; the life stress isn't. The lever you control is sleep: protect a consistent window even when the calendar doesn't cooperate, and treat two bad nights as a reason to soften the next quality day.
- **Peak-phase soreness accounting**: at this volume some background heaviness is normal. The signal that matters is direction. Soreness that fades between sessions is training; soreness that accumulates week over week is debt. The four gauges from the build phase are your dashboard.
- **Recovery routines stop being optional here**. Whatever your between-runs routine is (refuel window, legs up, stretching, daily supplement, early nights), the peak phase is where consistency pays or its absence compounds. Anything worth doing in week 12 was worth starting in week 1.
- **20-miler protocol**: your longest run deserves your best recovery week. Plan the following two days as the easiest of the phase before you run it, not after.

WEEKS 15-16 · TAPER · JANUARY

Recovery job #4: restraint

- **The taper cuts volume, not everything**. Typical marathon tapers reduce weekly mileage substantially over the final two to three weeks while keeping some short, familiar intensity so your legs stay sharp. Follow your program's version; don't freelance extra rest or extra work.
- **Taper phantoms are normal**. Random twinges, restless energy, sudden conviction that you've lost fitness: nearly every marathoner gets them. Fitness doesn't evaporate in two weeks. Trust the build.
- **Bank sleep before race week**. The night before the race is usually short and nervous, and that's fine: the sleep that matters most is the several nights before it. Make week 15 your best sleep week of the entire build.
- **Nothing new now**. No new shoes, foods, supplements, or heroic stretching routines. The taper is for arriving at the start line boring and ready.

RACE WEEK, HOUSTON EDITION

January race mornings in Houston are typically cool, sometimes near freezing at the start and warming through the morning: throwaway layers at the start, and don't overdress because mile one feels cold. The course is famously flat and fast, which means even pacing is rewarded and blown pacing has nowhere to hide. Hydrate normally all week (pale straw, not clear), eat familiar carbs the final two days, and get off your feet the day before as much as the expo excitement allows.

Training guidance, not medical advice.

The week after: where next season starts

Every training plan ends at the finish line. But the marathon is the single largest dose of muscle damage in the entire sixteen weeks, and how you handle the following days decides whether it becomes a foundation or an injury setup.

DAY BY DAY

WHEN	WHAT
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First hour	Keep moving 10-15 minutes (the walk to food counts). Rehydrate with electrolytes. Eat real food as soon as your stomach allows. Warm, dry clothes fast: January finish-line chill is real.
That night	Expect poor sleep (soreness, adrenaline, celebration). That's fine. Get horizontal early anyway.
Days 1-2	Walk daily, gently. Stairs backwards is a legitimate technique, not a joke. Eat like you're still training, because biologically you are. Soreness peaks around day two: expected, not alarming.
Days 3-7	Easy walking, easy cycling or swimming if you're itching to move. No running yet for most runners; nothing hard for anyone. The engine feels ready before the chassis is.
Week 2+	Short, easy jogging when walking feels completely normal. Build gently. Most programs suggest several weeks of easy running before structured training resumes.

COACHING LORE, LABELED AS SUCH: the old "one easy day per mile raced" rule (roughly 26 days before hard racing again) isn't a research finding, but it survives because it errs on the side that costs you nothing.

TWO THINGS NOBODY WARNS FIRST-TIMERS ABOUT

- **The post-marathon dip.** A flat, aimless, mildly blue stretch in the week or two after a goal race is extremely common. Months of structure and purpose just ended; the feeling is real and it passes. Planning your next goal (not necessarily a marathon) helps more than analyzing it.
- **The invincibility trap.** Around day 4 or 5, legs feel surprisingly fine and runners talk themselves into a "shakeout" that becomes a workout. Deep repair is still running in the background. The runners who race well again in spring are the ones who let January finish its job.

Training guidance, not medical advice. Pain that is sharp, one-sided, or getting worse after the race deserves professional eyes.

The weekly toolkit

THE 5-POINT READINESS TEST (DAY 2 AFTER ANY HARD EFFORT, BEFORE THE NEXT ONE)

One point for each yes: **1.** Soreness is general, even on both sides, and fading rather than building. **2.** Walking downstairs feels controlled, no rail-bracing. **3.** Two decent nights of sleep since the effort. **4.** Morning resting heart rate within about 5 beats of normal. **5.** Eating normally and you want to run today, rather than dreading it.

5: green light, run it as planned. **3-4:** start the warm-up, decide after 10 easy minutes. **0-2:** easy day; the workout moves to tomorrow and your fitness goes nowhere in 24 hours.

THE HYDRATION MATH (CRITICAL SEPTEMBER-OCTOBER)

- Weigh before and after long runs, same clothes. Every pound lost is about 16 oz of fluid you finished behind.
- Replace with 20-24 oz per pound lost over the next 2-4 hours, paired with sodium so it stays with you. Sipping beats chugging.
- Two or three sweaty runs of data and you'll know your personal sweat rate per hour. From then on you can plan intake before you lace up, which in a Houston September is a competitive advantage.

THE DAILY CONSISTENCY SLOT (IF A RECOVERY SUPPLEMENT IS PART OF YOUR ROUTINE)

Whatever you take, the research pattern across recovery ingredients is consistent daily use around hard training, not single doses before big days. Pick a time you'll never miss, anchor it there, and don't skip days in your hardest weeks. We make **Runners' Relief** (4,000 mg tart cherry per serving, every dose printed on the label) on exactly that logic, and the same consistency rule applies to anything you choose.

FREE TOOLS THAT PAIR WITH THIS PLAN

- **The 48-Hour Window playbook** · mightymoosenutrition.com/pages/the-48-hour-window · the full science of the between-days
- **Recovery Load Budgeter** · your training load vs your recovery budget, in numbers
- **Joint Age Calculator** · two minutes, honest read on accumulated miles
- **The science page** · every study we cite, including the limits · </pages/the-science>

Made by Mighty Moose Nutrition, a mother-and-son company in Houston, TX. Real humans: support@mightymoosenutrition.com · Good luck in January. Protect the window.

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