

4:30 Marathon Training Plan

20-week

Prior to starting this plan, you should:

- ★ Have a base of 15-20 miles per week
- ★ Be running consistently 4-5 days a week
- ★ Equivalent paces (not required but can be used as a benchmark to determine if this plan is a good fit for you): 2:15 half marathon, 60 minute 10k, 30 minute 5k, or 8:45 mile time trial
- ★ Peak mileage: around 45 miles per week

TERMINOLOGY

Amica

NM NEWPORT
MARATHON

10% Rule:

The 10% rule refers to the rule of increasing your mileage by "no more than 10%" each week to maintain safety. For example, if you run 20 miles on week one, you would run no more than 22 miles the following week. This is a general rule of thumb & can depend upon your experience level. For more experienced runners, you may be able to build a little quicker.

RPE Scale:

The RPE scale (rate of perceived exertion) rates the level of effort that a run is done at based on feel. Typically it ranges from 1-10, with 1 being a nice and easy walk (extremely low effort) to 10 being an all-out sprint that could only be sustained for a few seconds (extremely high effort). All runs can be placed somewhere on this scale based on feel & effort.

Long run:

The longest run of the week. This is the most important run of the week during key training periods: race training (when building up to a specific race mileage) and base-building (when attempting to increase your base mileage). This type of run builds your endurance, efficiency, and mental toughness for race day.

3:1 Work to Rest:

This rule states that there should be at least one down week for every 2-3 weeks of hard work or building. This is important year-round, but it is especially important when attempting to build mileage or fitness. Every few weeks, a runner should take a down week to focus on rest and recovery, as well as to avoid burnout and injury.

Down week:

Down weeks, otherwise known as cutback weeks or recovery weeks, are defined as the weeks in your plan where mileage and intensity will be intentional cut back to prioritize rest and recovery before continuing to build. Mileage should typically be reduced anywhere from 15-30% but this can vary depending upon the race & the runner.

Easy pace:

Your easy pace should feel like a 2-3 RPE and should be anywhere between 60-75% of your max heart rate. You can find your max heart rate by taking your age and multiplying it by .7 and then subtracting this number from 207. For example, a 25 year old would take $25 \times .7 = 17.5$. Then $207 - 17.5 = 189.5$ max heart rate. The easy pace heart rate would be 60-75% of this, which would be 113 - 142 heart rate. If you find that your heart rate frequently creeps above YOUR range, slow down.

TYPES OF RUNS

Long run:

- This will range from runner to runner depending upon what you are training for.
- This should push you to your challenge zone or fatigue.
- Your aim should be to build distance and endurance - speed is not as paramount here.
- Your long run can increase slightly each week depending upon what you are training for.

Tempo Run:

- A run usually somewhere between 15-30 minutes about 45 seconds slower than race pace. Should be between your medium and high effort.

Fartlek Run:

- Otherwise known as "speed play"
- Typically less structured than intervals & has random bursts of speed followed by recoveries

Progression Run:

- This is a run that starts at a particular pace and ends at a faster pace.
- Example: Mile one (8:00/mile), Mile two (7:45/mile), Mile three (7:30/mile), etc.

Easy & Recovery Runs:

- Comfortable conversation pace, builds endurance and cardio, comfortable mileage.
- Should be done 2-3 mins slower than your race pace

Hills & Incline:

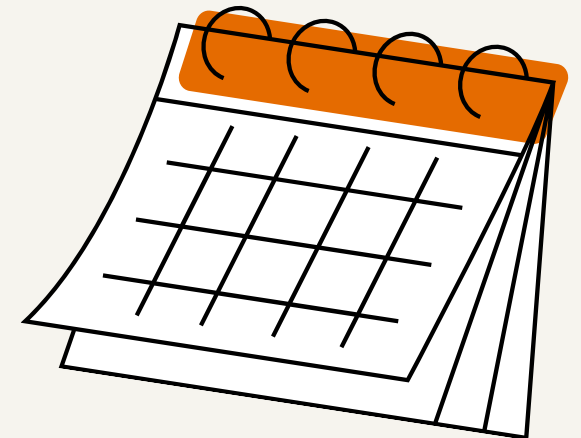
- Should add an element of elevation to your run. Normally done at tempo-pace to build speed and strength.
- Hill repeats: 4-10 reps up and down a hill & recover going downhill (jog or walk).
- Shouldn't be done too often - but incorporated mindfully when your legs are rested.

Interval Runs:

- Short intervals of effort between periods of rest (example: Run 60 seconds, rest 30 seconds, repeat).
- While an interval effort can be short or long, it is advisable not to have an effort be shorter than 30 seconds and not longer than five minutes.
- Can easily be done on the track

Missed & Skipped Workouts:

- **Missed a day or two?** That's okay! If you missed a few days it's okay to just pick up right where you left off!
- **Coming back after an illness?** Depending upon how you're feeling - you can either attempt to run a short amount (less than 30 minutes) at your easy effort or you can take a few days off until you're feeling better & then resume when you're ready!
- **Having pain or feel like you may have an injury of some sort?** If you're having questionable pain - it's best to pause and take inventory of the situation.



Warm-up:

You should aim to warm-up for at least 5-10 minutes before each run or workout. This can be a combination of walking, jogging, and dynamic warm-ups. Experiment with what feels best for YOUR body & what YOU need. Warm-ups should be done at a lower intensity and slower pace to allow your body an opportunity to loosen up while gradually bringing your heart rate up.

DYNAMIC STRETCHING:

Should be performed by choosing 4-5 exercises or dynamic stretches and then completing one set of 10 repetitions for each exercise (or 30-60 sec).

- Knee hugs
- Hamstring scoops
- Figure four
- Side lunges
- Leg swings side to side
- Leg swings forward to back
- Toe walking
- Calf pedaling
- Runner's Lunge + Twist
- Forward Lunge + Twist



Cool-down:

A proper cool-down will help to reduce heart, return breathing to normal, bring your body temperature back down to normal, and most importantly - return muscles to their optimal resting lengths. The types of exercises and activities that one uses during a cool-down typically relates to the type of exercise performed & the intensity of the exercise.

Cool-down activities include static stretching, foam rolling, and easy recovery movement (light walk). These should target overactive muscles or muscle groups used. Here are some examples:

STATIC STRETCHING:

Should be held for 30 seconds. Perform 1-3 sets of 30 seconds for each exercise.

- Tricep stretch
- Quad stretch
- Seated calf stretch
- IT band stretch
- Downward-facing dog
- Hamstring stretch
- Butterfly stretch
- Figure four
- Calf stretch

SELF-MASSAGE & FOAM ROLLING:

Should be held for 30 seconds on each tight spot. You can complete 1-3 sets of 30 seconds on each spot. Foam rolling first can help to increase flexibility during the static stretches.

Training Fuel:

When your weekly long run becomes longer than 60 to 70 minutes at once, you'll want to start bringing along hydration, electrolytes, and carbs (drink mixes, gels, chews, etc).

CARBS:

During your runs, you'll want to practice taking in anywhere from 60 to 75 grams of carbs per hour. Start fueling around the 30 minute mark with 20-30 grams of carbs & continue fueling every 30 minutes.

SODIUM:

Every runner is different when it comes to sodium needs - but typically we need around 400 - 500 mg of sodium per hour. Most fuel options will have some sodium included - but you'll want to supplement if needed (Salt Stick is a great option).

HYDRATION:

Aim for anywhere from 12-16 oz of water per hour.

Carb Loading:

Carb loading is a strategy used by endurance runners to ensure the body has sufficient energy reserves available to sustain prolonged running. It involves consuming a high-carbohydrate diet 2-3 days leading up to the race.

To carb load, you'll want to take in around 80% carbohydrates and 20% protein and fat at each of your meals.

During a carb load - you need around 8-10 grams of carbs per kilogram of body weight.

STEP 1:

Take your bodyweight & convert to kilograms

STEP 2:

Multiply by 8 and again by 10 to find your range

STEP 3:

Aim for this amount of carbs in the days leading up to the race

Pro Tips:

- Stay away from foods with too much fiber before runs & during your carb load (this can cause GI issues)
- Include some high carb drinks (Skratch, Gatorade, Cheribundi) to help you reach your carb goals without feeling too "full" or "heavy" during the carb load
- Don't worry about calories or the scale - weight will naturally increase due to water retention (this is a GOOD thing).
- Include some variety so you don't get too bored & don't be afraid to experiment.

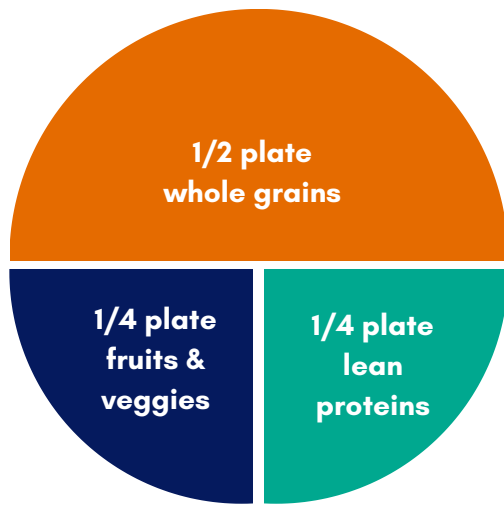


PERFORMANCE PLATE

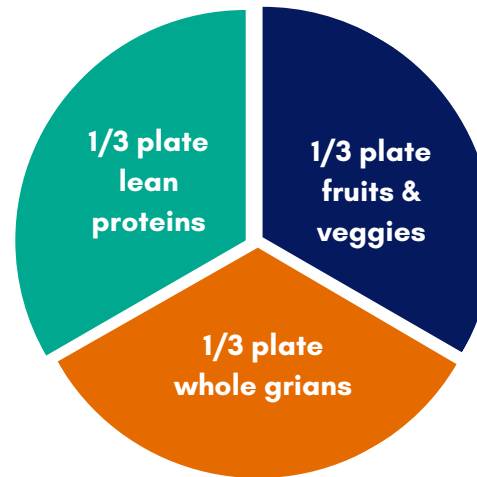
Amica

NM NEWPORT
MARATHON

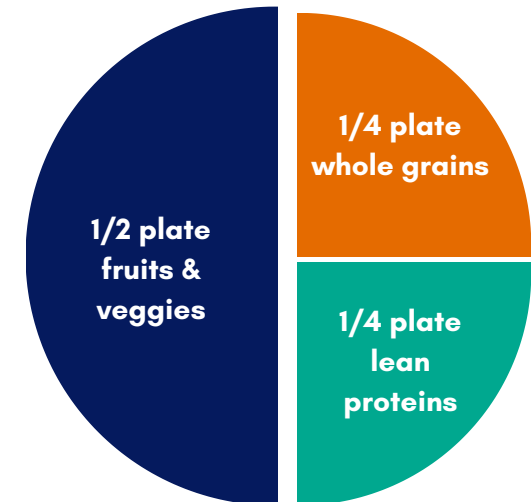
HARD TRAINING DAYS



MODERATE TRAINING DAYS



LIGHTER TRAINING DAYS

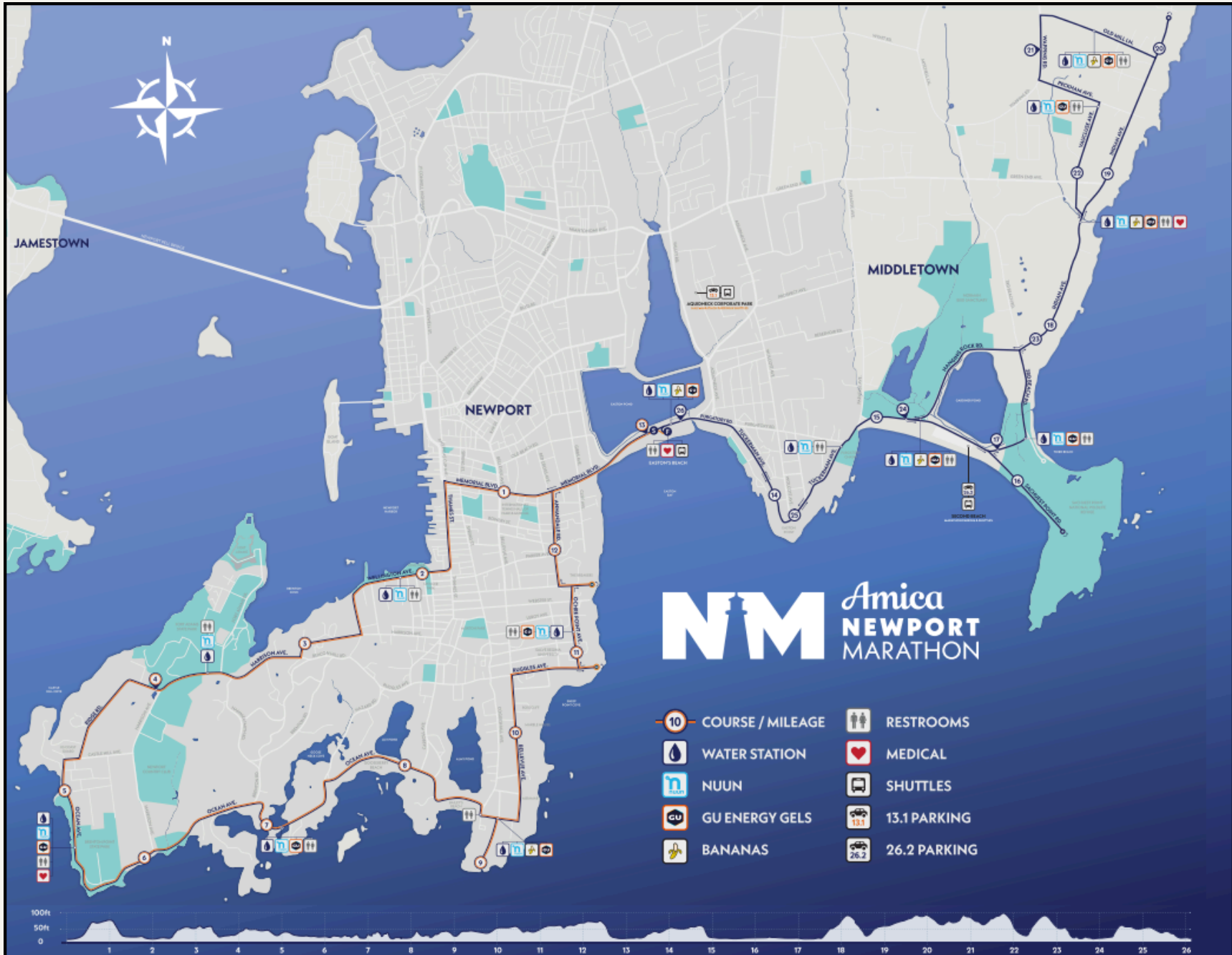


- Nutrition & fuel needs look different depending upon your output training
- During harder days, your energy needs increase & you need more carbohydrates
- Fruits & veggies, as well as protein, are needed to repair muscles & recover
- Hydration: 91 oz is a general guideline, with about 20% of that naturally coming from fruits, veggies, and water-rich foods
- Healthy Fats: Should be consumed in moderation: Olive oil, butters, etc.

COURSE

Amica

NM NEWPORT MARATHON



Tip 1: Do a dress rehearsal

Do a dress rehearsal for your race! Wear what you plan to wear and carry what you plan to carry. This way you will feel confident and comfortable, knowing that your race outfit won't chafe you up and will be comfortable come race day.

Tip 2: Research the fuel on your course

The Newport courses offer fuel and water stations to assist you with your fuel plan - but make sure you have a PLAN for how you'll use on course fuel + your own fuel on race day.

Tip 3: Add some **HILLS!**

The Newport courses are beautiful but both also feature their share of rolling hills - particularly the second half of the marathon. The total elevation gain is measured at 847 feet, with a maximum elevation of 105 feet and minimum of 3 feet.

Tip 4: Practice your pre race dinner/ breakfast

Early in your training block, start practicing dinners/ breakfasts the night before and morning of your long run! This way you can rule out foods that don't agree with you and find something that works well to avoid stomach issues the day of your race

Tip 5: Drink your carbs!

When you are carb loading, remember you can drink your carbs! Skratch labs offers many options for some great race-day carbs!

Tip 6: Bring throw away clothes

It is likely that your race starts early in the morning and potentially in the cold. It is also likely that you'll be standing around while waiting for your race to start. Bring a pair of pants/ extra long sleeve for while you wait to keep yourself warm at the start of your race!

RUN PLAN KEY

Amica

NM NEWPORT
MARATHON

Below you will find a list of stickers that may be used in your plan (*note: not all of them may apply to this specific plan*). These stickers provide additional information regarding the effort that a given run should be done at!



Easy effort: This indicates that the given run should be performed at your easy effort. This would be 60-75% of your max heart rate, a 2/3 out of 10 RPE, or 2-3 minutes slower than your 5K pace.



Practice race: This indicates that a practice race or a tune-up race could be completed at this point in your training plan. A tune-up race is meant to boost confidence & practice with pacing, fueling, and race day execution but shouldn't be at your "all out" effort. Rather, it should be at a controlled but hard effort.

PACE & EFFORT KEY

Amica

NM NEWPORT
MARATHON

Not sure what some of the terminology or paces in this plan mean? Refer back to this chart throughout your training for some assistance!

TYPE OF RUN	PACE PER MILE	PACE PER KM	RPE
EASY PACE	10:56 - 12:00/MILE	6:48 - 7:27/KM	2-3 RPE
MARATHON PACE (MP)	10:17/MILE	6:23/KM	5 RPE
HALF MARATHON PACE (HMP)	10:00/MILE	6:13/KM	6 RPE
THRESHOLD/TEMPO PACE	9:22/MILE	5:49/KM	6-7 RPE
INTERVAL PACE	8:26/MILE	5:14/KM	7-8 RPE
REPETITION PACE	8:02/MILE	4:59/KM	8-9 RPE

IMPORTANT REMINDER:

These are pace RANGES and should be treated as such. While it's important to train at harder efforts to improve, it's also very important to remember that your pace may vary depending upon a number of variables including (but not limited to): how you slept, what you eat, hormones, weather, stress, heat, fatigue, incline/altitude, terrain, and so many more.

Week	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	Walk for 30 minutes	 3 miles	4 MILES: 1 mile warm up 8 x 200m (7-8 RPE) w/ 200m (2-3) easy recovery between each 1 mile cool-down	 3 miles	Rest Day	 3 miles	 6 miles
2	Walk for 30 minutes	 4 miles	5 MILES: 1 mile warm-up 6 x 400m (6-7 RPE) w/ 200m (2-3 RPE) recovery between each Cool down to 5 miles	 4 miles	Rest Day	 4 miles	 7 miles
3	Walk for 30 minutes	 4.5 miles	5 MILES: 2 mile warm-up 1 mile time trial (as fast as you can) 2 mile cool-down	 5 miles	Rest Day	 4 miles	 8 miles
4	Walk for 30 minutes	 3 miles	5 MILES: Progression starting at 2-3 RPE & increase effort each mile until you're up to 6-7 RPE - finish STRONG!	 3 miles	Rest Day	 4 miles	 6 miles
5	Walk for 30 minutes	 4 miles	5 MILES: 1 mile warm-up 3 x 1 mile (9:30/mile) w/ 2 minutes easy between each 1 mile cool-down	 4 miles	Rest Day	 4 miles	 10 miles
6	Walk for 30 minutes	 4 miles	6 MILES: 1 mile warm-up 5 x 1km (Marathon pace, half marathon pace, 10k pace, half marathon pace, marathon pace) w/ 1-2 minutes easy recovery between each Cool-down to 6 miles	 5 miles	Rest Day	 4 miles	 10 miles
7	Walk for 30 minutes	 4.5 miles	7 MILES: 1 mile warm-up 10 x 400m (7-8 RPE) w/ 200m (2-3 RPE) easy recovery between each Cool-down to 7 miles	 5 miles	Rest Day	 4 miles	 12 miles
8	Walk for 30 minutes	 4 miles	5 MILES: 1 mile warm-up 4 x 800m (7 RPE) w/ 400m (2-3 RPE) easy recovery between each Cool down to 5 miles	 3 miles	Rest Day	 4 miles	 8 miles
9	Walk for 30 minutes	 4 miles	7 MILES: 1 mile warm-up 4 x 1 mile (9:00/mile) w/ 2 minutes easy between each Cool down to 7 miles	 5 miles	Rest Day	 4 miles	 12 miles
10	Walk for 30 minutes	 5 miles	7 MILES: 1 mile warm-up 4 x 4 minutes (half marathon pace) w/ 2 minutes easy recovery between each Cool down to 7 miles	 6 miles	Rest Day	 4 miles	 14 miles

Week	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
11	Walk for 30 minutes	 5 miles	8 MILES: 1 mile warm-up 4 x 5 minutes (10:00/mile) w/ 2 minutes easy recovery between each Cool down to 8 miles	 7 miles	Rest Day	 4 miles	 16 miles
12	Walk for 30 minutes	 4 miles	6 MILES: 1 mile warm-up 4 x 800m (4:30/rep) w/ 400m easy recovery between each Cool down to 6 miles	 4 miles	Rest Day	 4 miles	 10 miles
13	Walk for 30 minutes	 5 miles	7 MILES: 1 mile warm-up 5 x 800m (4:30/rep) w/ 400m easy recovery between each Cool-down to 7 miles	 6 miles	Rest Day	 4 miles	 16 miles
14	Walk for 30 minutes	 5 miles	8 MILES: 1 mile warm-up 6 x 800m (4:30/rep) w/ 400m easy recovery between each Cool-down to 8	 7 miles	Rest Day	 4 miles	 18 miles
15	Walk for 30 minutes	 5 miles	9 MILES: 1 mile warm-up 8 x 800m (4:30/rep) w/ 400m easy recovery between each Cool down to 9 miles	 7 miles	Rest Day	 4 miles	 20 miles
16	Walk for 30 minutes	 5 miles	6 MILES: Progression easy to half marathon pace (6-7 RPE) FINISH STRONG	 5 miles	Rest Day	 4 miles	 12 miles
17	Walk for 30 minutes	 5 miles	9 MILES: 1 mile warm-up 10 x 800m (4:30/rep) w/ 400m easy recovery between each Cool-down to 9 miles	 6 miles	Rest Day	 4 miles	 16 miles
18	Walk for 30 minutes	 4 miles	7 MILES: 1 mile warm-up 3 x 1.5 miles (10:00/mile) w/ 2 minutes easy recovery between each Cool down to 7 miles	 5 miles	Rest Day	 4 miles	 15 miles
19	Walk for 30 minutes	 4 miles	7 MILES: 1 mile warm-up 4 x 1 mile (10:00/mile), w/ 2 minutes easy or standing rest Cool-down to 7 miles	 4 miles	Rest Day	 4 miles	10 MILES: 3 miles (2-3 RPE), 4 miles (marathon pace), 3 miles (2-3 RPE)
20	Walk for 30 minutes	 3 miles	5 MILES: 1 mile warm-up 3 x 1 mile (marathon pace) w/ 2 minutes easy or standing rest between each 1 mile cool-down	 3 miles	Rest Day	2-3 MILE OPTIONAL SHAKE OUT RUN (2-3 RPE)	26.2 miles