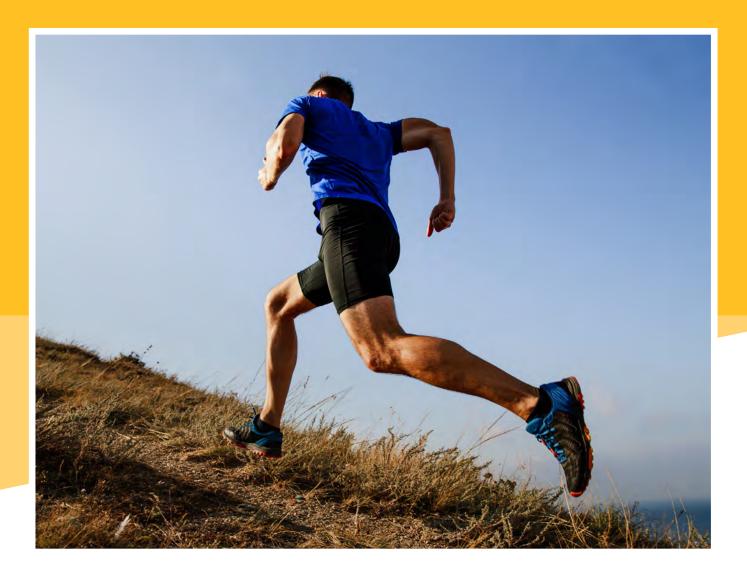
# **Personal Training for Marathon Runners** MOTIVATION, CROSS-TRAINING, AND NUTRITION





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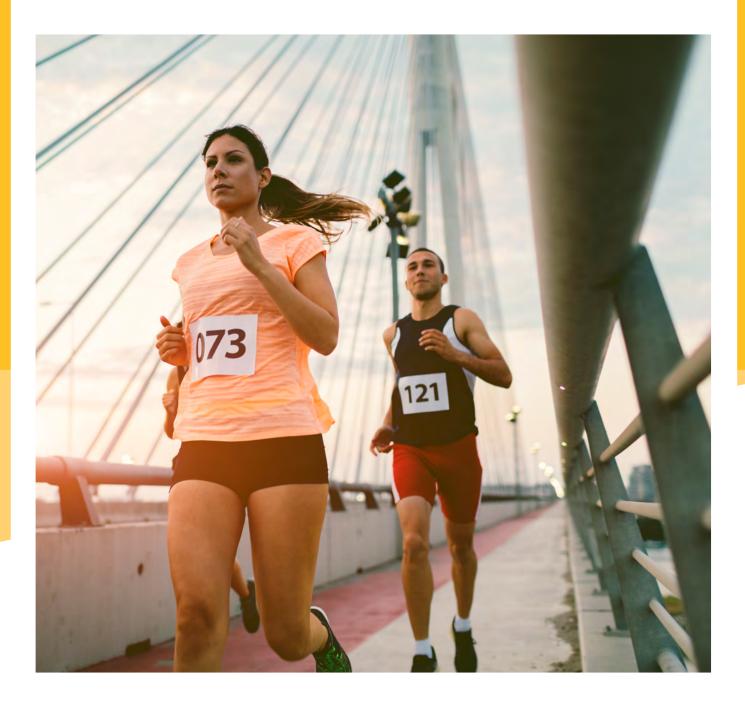
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# **Registering for a Race**





As soon as you have that all important "goals conversation" with your client, it's time to mention the next 5k, half marathon, marathon, or other race events in your area.

The Journal of Sport Behavior recently published an article, "Motivational Differences Between Half, Full and Ultramarathoners" in which the study authors found the following:

- First-time marathon finishers ran for one of two reasons—to improve their health or to achieve a personal goal.
- Women were more motivated to run for weight loss, self-esteem, psychological coping, or affiliation.
- Men were more motivated by competition or goal achievement.

You'll notice the above goals probably overlap with your clients' goals. Well, registering for a race is great for keeping clients engaged, accountable, and driven to achieve their goals and not give up.

# **The Process Behind Giving Up**

Goal disengagement is a cycle that many are familiar with. In the late 1970s, Klinger discovered what he called the four-phase "incentive-disengagement cycle" (Brandstatter et al., 2013). This often occurs when a client faces setbacks and adversity while working towards a goal. Here's how it typically happens:

- Phase 1: Invigoration. The client tries harder to reach their goal.
- Phase 2: Aggression. The client feels angry about their lack of progress or compounding adversities.
- Phase 3: Depression. The client begins to distance herself from the goal.
- Phase 4: Recovery. Commitment to the old goal dissolves and the client starts looking for a new goal.

### **How Will Registering for a Race Help?**

Our ISSA Certified Fitness Trainer textbook explains the concept of goal orientation in detail and states, "A goal can be seen as the bridge between wanting to achieve something and actually achieving it." Whatever your client's stated goal is, you can create a plan to help them go the distance, whether they choose to register for a 5k, 10k, or a half or full marathon.

As you create their program, keep the following in mind, to prevent clients from disengaging from their goals, it is important that you:

- 1. Help clients feel competent in their exercise routine.
- 2. Reinforce the multiple benefits of exercise beyond the initial "bucket list" goals.

These two concepts are part of self-determination theory (SDT). You can read more about this in our blog post <u>"How Do I Keep Clients Motivated?"</u>



# **Get your Clients Up and Running**

Successful behavior modification programs enhance commitment by requiring "skin in the game" from participants. It is well known that people will work harder to avoid a negative consequence—like losing their registration fee—than they will to achieve a goal. Helping a client select their event and complete the online registration is the first step to getting them committed to their goals.

Another way to get your client to buy-in is to add a layer of intrinsic motivation. Choose a favorite charity to raise money for and create fundraising teams. Encourage clients to create a team t-shirt or to dress up in crazy costumes for the event—all to raise awareness for others in need. It feels good to give, so as charity partners your clients will have more incentive to start and finish their training.

Reinforce a client's motivations by creating mottos or mantras for your clients to chant while they are running. Have each team create a hashtag to track each other and their workouts on social media. This helps them internalize those positive affirmations and develops comradery (known as affiliation and belonging in SDT) among clients.

## **Make it Easy for Clients**

It's your job to find the races in your area that are appropriate for each client and to stay abreast of upcoming events, but the online registration process is nearly the same for all races. Your clients will find it hard to object to that half marathon if you take all the guesswork out of the equation.

Here's a process to help clients register for their first race:

- 3. Don't make the client search for the online race registration page. Send them the online registration link.
- 4. Let them know they will be asked to provide basic contact information like name, mailing address, phone number, email address, and age. (Age data is used by race organizers to create age groups for medals.)
- 5. They may be asked to select the team they will be racing with. Make this part of the registration process easy by giving them detailed instructions and the correct team name.
- 6. They may also be asked to provide an expected completion time. This helps race organizers put them into the correct heat. Help ease your client's stress by suggesting a moderately challenging time that they could accomplish by the event date.
- 7. Your client will also have to sign a waiver that releases the race organizers from any liability should anyone get injured during the race.
- 8. The last step of the registration process is paying the entry fee. Again, this is your client's skin in the game, they may need a little help clicking that "pay now" button.



#### **OVERCOMING OBJECTIONS**

If your client has never competed in a race, they may be nervous. You can calm their fears and get them running by answering the following FAQs.

#### How Much Does It Cost to Participate in a Race?

The registration fee varies depending upon race distance, the number of runners, location, etc. The fee often covers some of the costs of the race, such as t-shirts for runners, age group medals, timing chips, race bibs, insurance, security, portable potties, water stations, and online registration platforms. The entry fee will cost anywhere from \$30 to \$250. There may be additional costs for travel, lodging, and meals if the race is out of town.

#### How Are Races Timed?

Timing chips are attached to the race bib or tied into the shoelace. Once a runner crosses the start line, special software begins the time clock and when the runner crosses the finish line the software stops the time clock. These times are stored and can qualify runners for their next race (the Chicago marathon?) as long as they don't go over the time limit.

#### **Other Details**

Once your client completes the online registration process, they will receive a confirmation email with all the details for the event. The email should include the following:

- Race packet pick-up information
- Directions to the event
- Parking details
- Race start time
- Award categories and age group specifications including time limit
- Inclement weather information
- Race policies such as cancellations, transferring your race number, etc.
- Qualification details

Love helping clients overcome their barriers to health and fitness? Level up your training with the <u>ISSA's</u> <u>Transformation Specialist certification</u>. Learn how to coach and influence behavioral patterns as they relate to your client's wellbeing so you can help them hit their goals faster!



#### References

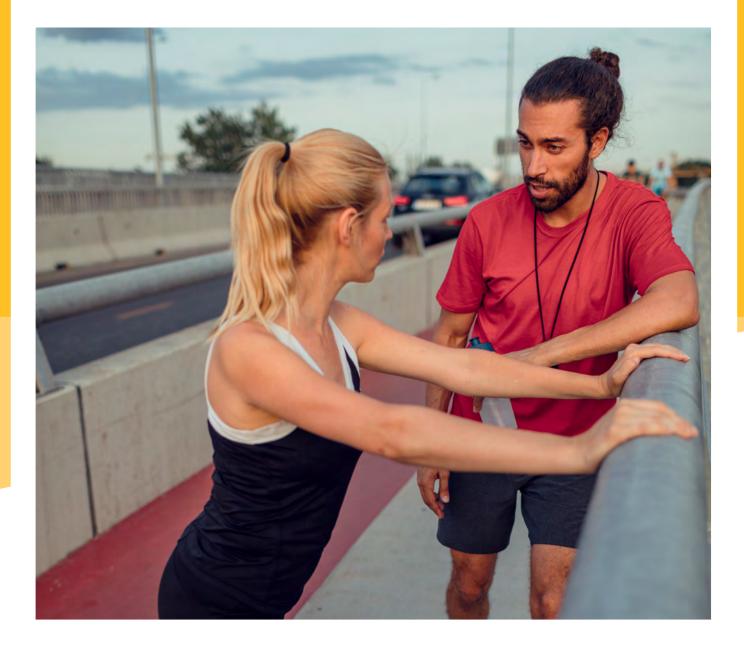
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# **How to Help Clients Training for a Marathon**





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### **UNIT TWO**

One great way for your clients to keep themselves motivated and focused on their health and fitness is to have a goal to train towards. One common goal that comes up from time to time is trying to run a marathon.

This can seem like a crazy challenge, but for many able-bodied individuals, it isn't outside the realm of possibility. It's a challenge that's as much mental as it is physical, and will be very demanding.

So, how do you help your clients who are looking to run a marathon?

## What Makes Marathon Training Unique?

The distance is what separates marathon runners, or marathoners, from shorter-distanced competitions, like 5k races.

The distance is one that many will never touch, even when walking. It is a grueling course that forces the runner to build up physical and mental endurance to get to the finish line. Even experienced runners will often struggle in a marathon.

But legs are not the only thing taxed by marathons. The entire body in one way, shape, or form will be engaged. Imagine just the effort it takes to swing your arms or keep your core engaged for several hours at a time. A proper <u>marathon training plan</u> will ensure that the entire body is prepared for the impact of the race.

# **Safety Concerns for a Training Program**

There are a host of problems that can get in the way of safely training. Even before race day itself, marathon training programs are rigorous to the extreme.

First, your client needs to get permission from their doctor before starting a marathon training program. Clients need to ensure they are in good enough health to train safely.

Furthermore, experience is often an important factor. Your legs need time to develop to take the impact that running such distances will entail. If they haven't had much experience running more than 3-5 miles a day, then they need to likely start with shorter races and build up.

<u>Running injuries</u> are no small matter. On the light end, you can expect clients to deal with common issues like shin splints and even stress fractures. On the heavy end, you could be looking at possible ligament tears, joint injuries, and a whole host of other issues.

Checking in on their day-to-day health is going to be imperative to ensure any tweaks to a marathon training schedule are made early, to prevent small injuries from becoming large ones.

So, for those who are beginner runners, you might consider getting them to get their feet wet with a shorter race, like a 5k or 10k run. And even those who would consider themselves to be intermediate runners might want to tackle a half marathon before committing to a full marathon.

UNIT TWO / HOW TO HELP CLIENTS TRAINING FOR A MARATHON





Finally, when it comes to running shoes, make sure that your clients are getting the types of shoes they need for their own feet. Everyone is different, every brand unique, and when it comes to running shoes, marathon runners should get sized by a professional if they haven't before.

### What Marathon Training Plans Look Like

Many marathon training schedules take place over 16-20 weeks, depending on ability level.

Overall, weeks will contain a similar theme throughout, with run distances steadily increasing throughout training. However, they are not always about daily mileage, but rather physical and mental toughness. Eventually, weekly mileage will become important, but initially, it's about getting their legs conditioned properly. This is why it's so important to balance their regular fitness programming with their running programming.

For beginners, each week breaks down into various types of runs, from basic jogging to speed work and long runs. Being that marathons are long-distance races, it becomes necessary to increase mileage and pace throughout training.

Usually, there will be several miles per day of focused training during the week with a weekend day selected for the long run. These will start humbly at 2-3 miles (once the trainee can run that distance), and will eventually accelerate to up to 20 or so miles before the race.

Most marathon training schedules are set so that the actual distance of the marathon isn't attempted until race day itself.

## How You Can Help Most as a Personal Trainer

When talking about personal training, your best value to your client is going to be to work on <u>strength training</u> that will help their bodies to supplement the running program. Think about the basic movement of running.

The runner's core will be engaged most of the time, their back will keep their frame upright and breathing properly, and the arms will be swinging for several hours.

Additionally, it can be helpful on lighter days to add some leg resistance, but this is dependent upon their running schedule. The biggest risk factor you're going to look at will be in terms of overuse injuries.

You want to develop your client's blood vessels to optimize their VO2 max as well as push their lactate threshold ever higher—an essential component of completing a marathon.

#### **WORKING WITH RUNNING COACHES**

Just like everything else in life, it can be helpful to have a coach. A running coach may offer slightly different services than a personal trainer. Running coaches conceive of their clients' lives through specifically the lens of performance while running. This is in terms of nutrition and exercise.

UNIT TWO / HOW TO HELP CLIENTS TRAINING FOR A MARATHON



### **UNIT TWO**

This doesn't mean a personal trainer won't be able to help—some trainers know how to plan a running program, plus they know the essentials of fitness. However, it can be helpful for a trainer to work in coordination with the client's running coach to ensure all bases are covered, and that they aren't receiving contradictory advice from two different sources.

The best advice here is to let the coach determine the running schedule, then for you, the personal trainer, to take the off days and put together a cross-training program.

#### **OVERALL, DO NO HARM**

Overtraining is very possible, especially for new marathon runners. It can be helpful, from a safety perspective, to monitor heart rate during workouts. This can help to direct future workouts to help them achieve the cardiovascular strength necessary to succeed at race pace.

Experienced <u>endurance</u> athletes likely have lower blood pressure, but for new athletes, this probably should be monitored from time to time to ensure that the significant increase in activity doesn't adversely affect them.

Also, just to reiterate, make certain that your client has the permission of their doctor to train for and compete in a marathon. Only a doctor can make that determination; checking blood pressure is simply a precaution to ensure that, in between doctor's visits, they are staying in a healthy range.

#### **ENCOURAGEMENT AND POSITIVITY**

In addition to the excruciating physical effort required to compete in a marathon, strong mental focus and stamina are also essential. So, make sure that your client is taking time to focus on spiritual and mental wellbeing in their lives.

Hitting plateaus and days when they simply won't want to train do not have to derail the entire process. Their ability to recover from the lows during a grueling schedule will help them to bounce back on race day.

The best way you can help here is to be a constant source of <u>encouragement</u> and positive energy. At the end of the day, it's their will that will get them across the finish line. Train that no differently than you train their bodies, and they will be ready to tackle anything the course throws at them.

Love working with athletes and want to take your training to the next level? Check out the <u>ISSA's</u> <u>Strength and Conditioning course</u> to help athletes achieve their optimal performance!





# **Cross-Training for a Marathon**





Marathon runners are endurance athletes of the highest caliber-whether it's a pro or a beginner attempting their first actual marathon. Even for experienced runners, marathons can be a bear. The training volume required is extensive and specific.

There's a key role that personal trainers can play in a client's efforts to train for a marathon. Sometimes, a client will have already engaged a running coach to give more specific and expert advice that is purely within the scope of running. In this case, you'll work with the running coach to develop a well-rounded training plan. Or, you as the personal trainer may take on the entire marathon training plan.

Either way, let's start with the basics of a marathon training plan. This will give key context in terms of running workouts, gym workouts, and rest days.

Passionate about learning how the body works and how to make it look, perform, or function better? Sign up for ISSA's Personal Trainer Fast Track program. It's an incredible course you can complete online from the safety of your home in as little as 4 weeks!

### What it Takes to Finish

Ultimately, we're mainly going to discuss plans in terms of beginner marathon runners. This is because you can always add load and intensity, but first it's important to know where it all begins.

To start, a marathon is a race totaling 26.2 miles. That's quite a distance to cover on foot, whether walking or running. Remember that finishing the race is the objective. This means that a walk/run strategy will be incredibly useful to ensure that runners are being safe while developing the muscles needed to cross the finish line.

Runner's World has a great resource for the specifics of a basic running plan for beginners. It takes place over 16 weeks and clearly balances out running days and rest days. When you see rest days in the schedule, just remember that it's a rest from running, making cross-training an ideal opportunity for growth. We'll get more into what that cross-training looks like, but overall, you're looking to supplement a plan like the one found here.

It might surprise you how little mileage there is in a marathon training plan like this. That's because a lot of what goes into completing a marathon is psychological. So, don't forget that in addition to providing workouts to your client, you need to be training their minds, as well. Mental toughness is often what separates those who finish from those who don't.

Positive thinking will not overcome an injury, though. So, make sure to keep it positive, but don't go overboard. Injured runners can't really train. Safety is a trainer's first duty to their client.

Sometimes, it's advisable, too, to start off with a half marathon to build the runner's stamina and confidence. This is a decision that only your client can make, but in some cases, especially if your client has a lot of extra

**UNIT THREE /** CROSS-TRAINING FOR A MARATHON





weight to shed, half marathons can be a great way to scale up to a full marathon. That first half marathon can make all the difference in the world for beginners.

# What Cross-Training Looks Like

In short, there are many aspects to potential <u>cross-training</u>. A lot of it will come down to what your client enjoys doing. If they're looking to be competitive, you might focus on one particular direction. If they're looking to break up the monotony of running while still getting in the physiological benefits of running, then this will require a different approach as well.

#### IF THEY WANT TO GO FOR BROKE

Let's say that your client wants to be competitive, even though it's their first race. Whereas they might not take a top ten spot, they can probably finish in a respectable time for a beginner. And remember, no matter what, for a client's first ever marathon, finishing the race will set a PR, or personal record, that they can try to beat in the future.

In this case, you're going to want to really focus on the supportive muscles and alternative forms of aerobic exercise.

Balancing intensity and safety is paramount here. Overall, balance is the key regardless. One of the major challenges in this plan is putting together enough cardiovascular fitness along with resistance training. On race day, your client will use every muscle in their body to get across the finish line. So, make sure that you aren't neglecting any muscle groups. The arms in the swing help to propel the runner forward. Even keeping the core and head in alignment can be exhausting for that amount of time and impact. Leg day is still important, but don't neglect the upper body just because it's a run.

One great way to measure intensity is to <u>use a heart rate monitor to evaluate performance</u>. This will give you an objective measure of effort put in over time.

But always remember that race pace isn't the goal with most of the running sessions. This is important, but is something they should build up to, not something that's pushed from day one.

This mindset is going to be important early on. Most of us have used the phrase, "it's not a sprint, it's a marathon" when advising clients. Well, now it's literal. So, make sure to balance intensity with consideration of the runner's health, safety, and fitness level.

#### **BREAKING UP THE MONOTONY**

This section isn't just good advice for those trying to ease themselves into marathon running. It's also good to break up the monotony of more intense training plans. But the focus can be less on specific goals and more on what the client enjoys.



Again, it really comes down to intensity. These clients might want a more laid-back approach to a training plan while still achieving the objective of crossing the finish line. There is absolutely no shame in being this type of marathon runner. They're running a marathon. Period. That, in and of itself, is a respectable goal and an accomplishment. There is no "easy" way to finish a marathon.

With the difference in intensity in mind, let's break down the specifics.

#### CROSS-TRAINING FOR CARDIOVASCULAR ENDURANCE

Running performance, in a lot of ways, comes down to endurance. But there are many ways to build endurance beyond hitting the pavement.

For those who want a bit more of a challenge, you could use an exercise like swimming. Swimming engages the entire body while training the lungs to be more efficient in how they process oxygen. For this reason, you could have swimming workouts during the running rest days. This could be for distance, time, or intensity. The good news with swimming is that you likely aren't going to get injured by pushing harder, like you could with running.

As such, swimming days are great ways to push the envelope, or just work on a slow and steady pace, depending on the outcome your client desires.

This works with other aerobic fitness exercises, too. You can do this with cycling, an elliptical machine, and a rower. This is a great way to train and keep joints safe from impact.

#### **RESISTANCE CROSS-TRAINING**

When it comes to a marathon, it's important that your training plan focus on more than just the cardiovascular effort. It's also important to add in some sort of resistance training, as well.

You should look at this in phases. As the body develops a tolerance for longer distance, the type of strength training or weight training that you employ should change. For instance, initially, you will want to build up your general strength, and then you will progress into more functional and endurance-type workouts. Finally, you will taper off in the two weeks leading up to race day.

When putting together your programming, it should follow this strategy, based on a 16-week training plan:

#### Weeks 1-4: Building Your Base

In this phase, stick to the basics and the larger, more total body exercises. This includes deadlifts, squats, upperbody presses, rows, etc. Focus on heavier loads that are about 50-70% of your one-rep max.

**Programming Recommendation:** 2-3 gym sessions per week; all weights based on 1RM

**UNIT THREE /** CROSS-TRAINING FOR A MARATHON



- Deadlift 3x6
- Squat 3x6
- Lunge 3x6
- Bench Press 3x6
- Bent Over Rows 3x6
- Planks 4x60 seconds

#### Weeks 5-10: Grow Your Base

Once you have the base started, now it's time to expand it. The focus now shifts to increasing volume. Ideally, you will use the same exercises, but increase the number of sets and reps for each exercise.

#### Programming Recommendation:

2 gym sessions per week; based on body condition and rest days; slightly lighter load

- Deadlift 4x10
- Squat 4x10
- Bench Press 4x10
- Bent Over Rows 4x10
- Planks 5x60 seconds

#### Weeks 10-14: Change it Up

Now it's time to focus on more functional resistance exercises as well as supportive musculature. Also, this is where some HIIT exercises can be beneficial in terms of training your anaerobic threshold to be able to better perform on the road.

**Programming Recommendation:** 2 gym sessions per week; circuit training

Complete 5 rounds with 1-minute rest in between rounds:

- Dumbbell lunge 20 reps
- Dumbbell above the head press 20 reps
- Dumbbell raised-calf squats 20 reps
- Dumbbell rows 20 reps
- Dumbbell sumo squats 20 reps

Core Circuit; Complete 3 rounds with 1-minute rest in between rounds:

- Plank x 60 seconds
- Seated Medicine Ball Twist x 60 seconds
- V-Ups x 60 seconds



#### Weeks 15-16: Race Prep

At this point, it isn't about expanding or pushing yourself, it's about maintenance leading up to race day. You will want to taper everything down so that you still engage all your muscle groups, but don't enter into a race with soreness or overused muscles.

Programming Recommendation:

- Light bodyweight exercises and stretching
- Push Ups 3x20
- Bodyweight Squats 3x50
- Walking Lunges 3x25
- Crunches 3x25
- Injury Prevention

### **Training for Overall Health**

During all of this, it's essential to keep your client's health and wellbeing in check, from nutrition to injuries. Training for an endurance event requires more attention to nutrients and <u>hydration</u> than the average workout.

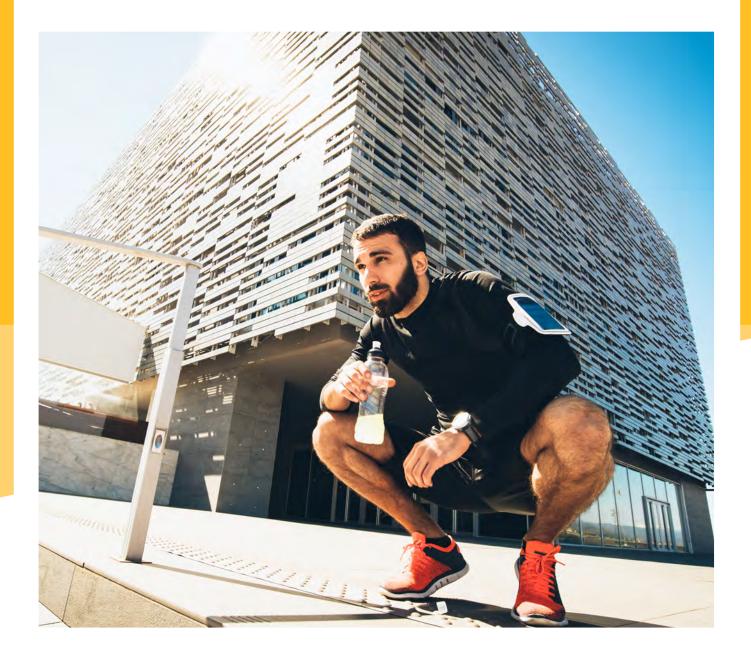
Also pay attention to issues like tenderness and pain. Common injuries like <u>shin splints</u> will require pushing through with special stretches, and attention to supporting muscles. <u>Yoga</u> can be a great way to increase the elasticity of the body which will make your clients more resilient. As always, make certain that your clients check with their doctor before starting any strenuous exercise regimen—especially training for a marathon.

As you prep your clients for their next race, don't let muscle pain or limitations get in their way. Sign up for the <u>ISSA's Corrective Exercise Specialist</u> course so you can keep your clients moving through common movement dysfunctions.





# Nutrition for a **Marathon Runner**







Marathon training and running a marathon is nothing less than a feat of both mental and physical strength, endurance, and stamina. The 26.2-mile run isn't something you just wake up one morning and decide to try. Becoming a marathoner takes time, dedication, and preparation. Proper physical preparation is important when training for a marathon. But equally important is having a proper nutrition plan.

# **Nutrition for Endurance Runners**

Food is more than simple nutrition. Food is fuel. Nutritional needs look different during the weeks of preparation leading up to the event, race week, the day of the event, and even during the event itself.

Physical preparation for running a marathon starts weeks, even months, in advance of the actual event. Nutritional preparation similarly needs to start weeks before the event itself. This time leading up to the event allows you to fuel your body so it can meet the physical demands being placed upon it.

Additionally, this window of time provides the space to figure out what nutrition works best for you. This includes not only foods and food products consumed, but timing as well.

#### **PRE-RUN NUTRITION**

Carbohydrates are probably the single most important nutrient in a marathon training diet. Endurance runners need about 7-10 grams of carbohydrates per kilogram of body weight during training. Runners should be closer to the upper end of this range as they get into longer runs. For a distance runner, about 55% of daily calories should be from carbohydrate sources during training and close to an upwards of 65% before a long duration event like a marathon. High amounts of carbohydrates ensure saturation of the glycogen stores within skeletal muscles. Glycogen is the storage form of carbohydrates and is used to fuel the body during exercise.

Fueling up before a long-duration event is critical. Encourage your clients to experiment with various types of foods before they plan to exercise. This will help determine what works best and feels best for their body. Try eating something high in carbohydrates that is relatively easy to digest. Digestion during exercise is challenging. The body is diverting blood to the working muscles and not really focusing much on digestion. To help with this, encourage your clients to avoid processed foods and foods that are high in fat and protein. These macronutrients will slow down the digestion process. Stick to easily digestible carbohydrates to keep digestion calm while running.

#### **MID-RUN NUTRITION**

If your clients are interested in training for a marathon, they need to get comfortable fueling during their runs. Their body must learn to accept food during training runs. This may be one of the biggest challenges that endurance runners face. Yet, for continuous endurance exercise that lasts more than 45, fueling during exercise is a must.



### **UNIT FOUR**

In order to run 26.2 miles, your body will need some refueling during that time. A helpful tip to remember is to fuel early and often. It is critical to build this into your client's training routine in the weeks and months leading up to the race. It is better to fuel early before you feel you really need it than to wait until you hit a slump and be waiting on that energy to come.

Think of it like taking Tylenol for a headache. It's best to take the Tylenol when you feel a headache coming on. You don't wait for the headache to arrive and then take the Tylenol, waiting 30 minutes for it to kick in. You take it early so that by the time you need it, it's already started working. It is important to stay ahead of feelings of exhaustion rather than trying to fight them when they are in full swing. Keep topping up the tank even if you think you don't need it. You do. And your body will thank you for it later.

Smaller snacks are best during a run as they are more easily digested and still fill up muscle glycogen and provide a boost of energy. Try to find something that provides easy to digest carbs like dried fruit or an energy gel. Experimenting during training will help your clients discover which foods work best for them while running. Runners should aim for 30-60 grams of carbohydrate intake per hour during their run. Experiment with using sports drinks, energy gels, chews, and bars. It depends on runner preference here and what you feel works best for your body. At the end of the day, it's about healthy eating and finding the right fuel to power your game plan.

#### **POST-RUN NUTRITION**

Focusing on pre-race nutrition as well as race day nutrition is critical for overall performance. But just as important, is fueling after completing a run. Try to consume a recovery snack of protein and carbs 30-45 minutes after a run. This is a very important window when your body is very responsive to nutrition and will utilize nutrients to rebuild and repair muscles.

Post-race nutrition is where protein intake becomes a bigger focus. Protein provides an edible upgrade for your legs and leg muscles. It helps the body build new muscle and recover quickly while also avoiding injury. Encourage your clients to find healthy protein sources whether animal or plant-based. Chicken is a great animalbased lean protein. It provides selenium which helps protect muscles against free-radical damage during exercise, and niacin which helps regulate fat burning while running. Protein will also help to stabilize blood sugars and keep you feeling fuller longer.

#### HYDRATION

Hydration is a key factor to consider when training and running a marathon. It's important to hydrate before, during, and after a long run. Fluids help to regulate body temperature, flush out waste, and ensure joints are healthy and lubricated. This is extremely important if you're going to be putting some miles on those legs.





### **UNIT FOUR**

Fluid intake must match fluid loss when running for endurance training. Hydration balance is a key component to performing well on long-distance runs. Too little fluid intake can lead to hypernatremia. This results in the sodium levels in the blood becoming too concentrated. Likewise, too much water can result in hyponatremia which dilutes sodium levels in the blood.

Understanding your sweat rate can help you prepare and understand your hydration needs while training. Sweat rate can be determined by tracking weight loss during a training run. Weigh yourself before and after a run to see how much fluids you lose during your training sessions. You can calculate your sweat rate by subtracting postrun weight from the pre-run weight and adding the volume of fluids consumed during your run. Try out this sweat rate calculator to determine your client's individual sweat rate. If your clients are training at a similar pace to their actual marathon race day pace, then their sweat rate should hold fairly similar. To prevent dehydration, you should drink amounts similar to your sweat rate.

Some runners may choose to consume a sports drink with electrolytes during their runs. Electrolytes are minerals such as sodium, potassium, chloride, and bicarbonate, which help to regulate nerve and muscle function. They also help in maintaining pH and water balance within the body. One thing to note is that large amounts of sodium are not typically lost during a marathon so be cautious of overdoing it as it may lead to hypernatremia.

Another addition some runners choose is caffeine. Some athletes choose caffeine before or during a race to boost their overall performance. This depends on individual differences in tolerance as well as perception. Only small amounts of caffeine are needed to provide optimal effects. The general recommendation is not to exceed a daily intake of 400mg of caffeine.

# **Nutrition Plan**

Following a few simple rules will help you have a successful running experience all the way from the start of your training to that oh-so-sweet finish line.

Preparation is key. Experimenting and finding which foods provide adequate energy for your runs and when to consume those foods is critical. This varies from person to person, so capitalize on those weeks of training leading up to the event to determine what works best for you. When race day comes, stick to the game plan you have developed and try not to stray off course. Race day is not the time to be experimenting with new foods. Stick to what you know.

Increase carbohydrate intake in the days leading up to the event. This means eating more carbohydrate-rich foods, not just more food. Be smart about the foods you choose. Nutritional choices have an impact on your race time of course. But they also influence your energy levels, avoiding dehydration, and optimizing your recovery.

Fuel early and hydrate often. Don't wait until you feel like you need it. Beat those needs to the punch and stay ahead of fatigue and exhaustion. Stick to your game plan and enjoy your achievement. And don't be afraid to indulge a little after those 26.2 miles. You've earned it!

**UNIT FOUR /** NUTRITION FOR A MARATHON RUNNER



#### **UNIT FOUR**

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