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PowerBar Playbook Series | Canadian Version



SPORTS NUTRITION FOR TRIATHLON

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You survived the swim and made up time during the bike leg. The good news is that you're in the hunt — the race leaders are within sight. The not-so-good news is that you've got 26-plus grueling miles (42.2 km) to go on foot in the heat and humidity. Such is the life of an Ironman triathlete. Fortunately, you've trained for this day. Now you just need to stick with your race strategy and stay within yourself. The stakes are high. The difference between a Top 3 finish and the rest of the field will be what you can summon from the tank over these next few hours.

PowerBar athlete
LUKE MCKENZIE



PHOTO BY: LARRY ROSA

Triathlons, especially the Ironman variety, can chew you up and spit you out. The training alone can quickly do you in. If you enter a competition inadequately hydrated or fueled, or fail to keep pace with your fluid and fuel needs on course, then your race day could end much sooner than expected.

But if you've got hydration and fueling strategies that are tailored to race-day conditions, and you've been put to the test during months and months of training, then you've got a fighting chance to be at your best on this day, and maybe get that shot at a podium finish.

PowerBar athlete
JULIE DIBENS

PHOTO BY: RICH CRUISE

PowerBar athlete
MATT LIETO

PHOTO BY: RICH CRUISE

PowerBar athlete
ANDY POTTS

PHOTO BY: LARRY ROSA

THE PHYSICAL CHALLENGE

Triathlon competitions vary in distance, and therefore in the length of time that it takes to complete them. The most common races are:

- Sprint distance — 750 m swim, 20 km ride, 5 km run
- Olympic distance — 1.5 km swim, 40 km ride, 10 km run
- Half Ironman distance — 1.9 km swim, 90 km ride, 21.1 km run
- Ironman distance — 3.8 km swim, 180 km ride, 42.2 km run

While winning times in a sprint distance triathlon can be under an hour, an Ironman triathlon has the fastest finishers toiling on course for 8–9 hours or more. And those just looking to finish might be out there for 14 hours or more.

Triathletes often train for months before ever setting foot at a racing venue. And with three sports to master — swimming, cycling, and running — many triathletes work out twice daily to ensure that all three disciplines are trained regularly. In the professional ranks it's not uncommon for athletes competing in Ironman events to train up to 40 hours a week, including up to three workouts daily.

With that kind of daily effort, recovery from one workout to the next is critical to realizing efficient training gains and being ready for the next session. Failing to meet the energy demands of daily training can lead to unwanted weight loss, persistent fatigue, and frequent colds, all of which undermine training. Yet with such time-consuming workout schedules, many triathletes end up missing out on meal opportunities.

Each workout also puts a serious dent in carbohydrate fuel stores, and those reserves need to be replenished on a daily basis in order to continue to progress in training. Sweat losses are virtually guaranteed to be high, especially in the heat and humidity. Unreplaced fluid losses due to sweat can lead to dehydration, which not only undermines training but can have very serious health consequences as well.

Competitions require the same hydration and fueling strategies employed during training, but they have the added challenges of travel logistics, eating and sleeping in unfamiliar surroundings, unpredictable weather, and race-day nerves.

Add it all up and it's clear that training for and competing in triathlons can very easily leave you dehydrated and physically drained, long before you've completed your workout or crossed the finish line. But that doesn't have to be the case. In fact, there are simple strategies that you can implement during workouts and competitions that can help provide energy needed to compete and help you prepare for endurance activities. This is your guide.

KEY PRINCIPLES OF SPORTS NUTRITION

The three most important principles of sports nutrition for triathletes are to:

1. Hydrate
2. Provide fuel for your muscles before and during exercise
3. Promote recovery afterwards

HYDRATION ^{10,11}

Contracting muscles produce the force needed to propel you forward, whether that's through water, on the bike, or on foot. But those working muscles also produce internal heat that must be dissipated quickly in order to avoid overheating. Sweating is a mechanism for ridding your body of heat, but it causes you to lose the very same fluids and the electrolyte sodium that you need in order to remain hydrated. Dehydration is the single largest contributor to fatigue when training or racing, and it impacts your performance when you lose just 2% of your body weight due to fluid loss. For a 150-lb (68-kg) triathlete, a 2% weight loss equates to just 3 lbs (1.4 kg). Training and racing, especially in the heat or humidity, can easily result in losses exceeding this 2% threshold. Making matters worse, your sense of thirst during exercise doesn't kick in until well after you're dehydrated and already suffering the consequences. Fortunately, dehydration can be avoided, but it requires adhering to a disciplined hydration plan before, during, and after training and racing.

Dehydration is the single largest contributor to fatigue when training or racing.

FUELING ^{12,13,14}

Your primary muscle fuels when training for and competing in triathlons are a combination of fat and carbohydrates. Even the leanest of triathletes have plenty of fat reserves tucked away. Carbohydrate fuel stores are a different matter. At best, you probably have only about 2,000 calories' worth on reserve, and an Ironman triathlete will likely burn anywhere from 8,500 to 11,500 calories during an Ironman triathlon competition! Carbs are present in your body in two forms: Glucose circulates in your bloodstream, and bundles of glucose called glycogen are stored in your liver and muscles. Long training sessions

PowerBar athlete
TIM HOLA

PHOTO BY: LARRY ROSA

and back-to-back workouts can literally wipe out these carbohydrate fuel reserves. When that happens, you “bonk,” or “hit the wall,” and have no choice but to drastically slow your pace or even stop. Therefore, it’s critical that you start your training and racing with carbohydrate fuel reserves fully replenished, and that you refuel during exercise in order to provide you with energy needed and help you prepare for high-endurance activities.

RECOVERY ¹⁰

Recovery is the post-exercise process of reloading depleted carbohydrate fuel stores, repairing muscle tissue damaged during exercise, building new muscle tissue in response to training, and rehydrating with fluids and sodium. It’s during the recovery process that you achieve the gains from training and get ready for your next workout or race. Your body is ready to begin recovery the minute that you finish working out or racing, but the process only starts when you provide the key nutritional components.

PRACTICAL SPORTS NUTRITION STRATEGIES FOR TRIATHLON

Fortunately, there are easy-to-implement sports nutrition strategies that can help you prepare for and remain strong when training and racing. They can also help ensure that you fully recover after exercise so that you’re ready for whatever comes next.

BE WEIGHT SMART

If you are an elite triathlete in the throes of heavy training, getting enough calories and carbohydrates on a daily basis can be a challenge. Small and frequent meals, snacks between workouts, and eating while training on the bike are often necessary in order to meet your needs for calories and carbs. Carry a cooler to your training venue, and pack it with sandwiches, bagels, fruit, and a recovery beverage. And make sure that your workout bag, backpack, or briefcase has an assortment of energy/protein bars, gels, bites, and chews.

If you are more of a recreational triathlete, be sure to balance your intake of gels, bars, and sports drinks with your carbohydrate and calorie needs so that you achieve and maintain a desirable weight.

If you are new to the sport or just coming back after a layoff, there might be a need to trim excess body fat. Don’t try to accomplish this feat during periods of heavy training. It can result in loss of muscle mass, slower recovery, and an increased chance of illness and injury. And for women it can also result in hormonal imbalances leading to menstrual dysfunction and permanent loss of bone mass and strength. Instead, make weight loss a goal of the off-season or early season, before training gets too intense. To cut calories, trim your consumption

PowerBar athlete
BELINDA GRANGER

PHOTO BY: LARRY ROSA

of high-fat foods and sauces, alcohol, and sweets. Maintain your intake of nutrient-loaded carbohydrate sources such as whole-grain breads, whole-grain cereals, fruits, vegetables, and low-fat dairy products. These provide the carbohydrate fuel that you will need for the lower-intensity training that you are doing.

Finally, remember that heavy caloric loads are for heavy training. When you cut back on your training or racing, such as during the off-season, do the same with calories. This will help prevent unwanted weight gain.



DRINK UP AND TOP OFF BEFORE EXERCISE

Before a training session or race, consume carbohydrates to top off your fuel stores, and drink fluids to ensure that you're hydrated. But you'll want to do both in a way that leaves you feeling comfortable.

Most athletes feel best eating their pre-exercise meal about 2–4 hours before the action starts; experiment during training with timing and quantity of carbohydrate intake in order to find the approach that works best for you. The pre-exercise meal should contain familiar carbohydrate-based foods and fluids that are low in slow-to-digest fat and fiber. If you have pre-race jitters and no appetite, a liquid meal supplement can provide an easier-to-tolerate alternative to a full meal.

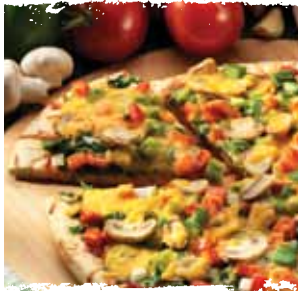
To ensure that you are fully hydrated going into a workout or competition, consume 15–21 fl oz (430–600 ml) of water or sports drink at least 2–4 hours before exercise. This will lead to urine production if you are well hydrated. If it doesn't, or if the urine that you produce is dark like the color of apple juice, drink another 8 fl oz (230 ml) about 2 hours before exercise. A light-yellow, "lemonade" urine color is consistent with adequate hydration. Also, it's generally fine to sip water or a sports drink right up until the race in order to top off fluid levels, especially if conditions are hot or humid.

PowerBar athlete
TIM DEBOOM



PHOTO BY: PEARL IZUMI

If you get hungry in the hour before a training session or race, or if time is running short, such as before early-morning workouts, make sure that you have easy-to-digest, carbohydrate-based snacks on hand. Examples include a PowerBar Sport Energy bar, PowerBar Energy Bites, PowerBar Energy Gel, PowerBar Gel Blasts Energy chews, and other on-the-go options such as a fruit smoothie or a meal replacement drink. Aim for 40–60 grams of carbs.



IDEAS FOR CARBOHYDRATE-BASED MEALS BEFORE TRAINING OR RACING

(2–4 hours before exercise)

- Cold or hot cereal with fruit or fruit juice and low-fat or nonfat milk
- French toast or pancakes with maple or fruit syrup
- Toast with jam or honey, low-fat yogurt
- Breakfast burrito (scrambled eggs, salsa, low-fat cheese in a flour tortilla) and fruit juice
- Bagel or English muffin with jelly and/or peanut butter, banana, and fruit juice
- Pasta or cheese ravioli with low-fat, tomato-based sauce; French bread or low-fat breadsticks; steamed vegetables; low-fat/nonfat milk; pudding snack; and canned fruit
- Grilled chicken sandwich with frozen low-fat yogurt, and baked potato with low-fat sour cream or salsa
- Turkey sub sandwich with tomato, lettuce, and mustard; baked chips; fruit juice; and low-fat frozen yogurt
- A slice of thick-crust veggie pizza, low-fat gelato, and canned peaches
- Baked or grilled lean beef, chicken, turkey, or fish; steamed rice; dinner roll; cooked green beans; low-fat frozen yogurt; and fruit juice

IDEAS FOR CARBOHYDRATE-BASED SNACKS

(before or during exercise)

- Fruit smoothie made with mango/banana/berries and low-fat or nonfat milk or yogurt
- Fruit or vegetable juice
- Small roll or sandwich made with a banana and honey
- Low-fat or nonfat yogurt, or fat-free frozen yogurt, gelato, or sorbet
- PowerBar Sport Energy bar
- PowerBar Energy Bites
- PowerBar Fruit Energize bar
- PowerBar Energy Gel
- PowerBar Gel Blasts Energy chews

PowerBar athlete
SAMANTHA MCGLONE



PHOTO BY: JOHN SEGESTA



MATCH YOUR HYDRATION AND FUELING PLANS TO THE CHALLENGE

During a workout or race, avoid consuming so much fluid that you end up gaining weight, as that's a sign that you've consumed too much. Also, don't lose more than 2% of your pre-exercise body weight. This body-weight range is your hydration zone, and it's where you perform at your best and avoid the adverse health effects of dehydration and overhydration.

You can stay in your hydration zone by matching your fluid intake during exercise to your sweat rate. This generally requires about 14–27 fl oz (400–800 ml) every hour of exercise, preferably in smaller amounts taken frequently. But fluid needs vary based on factors such as body size, pace, and weather conditions. So it's best to calculate your sweat rate for the various conditions in which you train and race. For an easy guide to calculating your sweat rate, use the [Sweat Rate Calculator](#) at www.powerbar.com/src.

For training sessions and short-distance triathlons that last less than an hour and are in moderate temperatures, plain water is usually adequate for hydration. But for workouts and races that last an hour or longer, or anytime you're exercising in hot or humid conditions, a sports drink that provides carbohydrates, fluids, and sodium is the preferred hydration option.

PowerBar athlete
FELIPE BASTOS



PHOTO BY: LELAND BLACK

The advantages of a sports drink over plain water are many:

- It provides carbohydrates to help sustain your blood glucose level during exercise.
- Athletes typically consume more fluids when their hydration beverage is flavored.
- Sodium and carbohydrates cause the ingested fluid to be absorbed more quickly.
- Sodium also helps maintain your drive to continue drinking fluids when exercising, which is crucial to meeting your fluid needs.
- Sodium helps you retain the fluid consumed.
- Sodium is a key electrolyte that is lost in sweat. A low sodium level has been associated with muscle cramping in some athletes.

The cycling leg of a race or training session represents your best opportunity for fluid ingestion, but don't go overboard. Taking in too much can result in abdominal fullness, bloating, and nausea as you transition to the run. Aim to consume a minimum of 2l fl oz (about 600 ml) per hour when you're on the bike — but, of course, training is the place to refine your hydration strategy.

When running, a sports drink and energy gels are the most practical **fuel options.**

When it comes to powering muscles, for training sessions and triathlons lasting less than an hour, you can probably get by with the carbohydrate fuel reserves that you already have on board (glycogen and blood glucose). For longer workouts and competitions, fueling during exercise can provide you with energy needed and help you prepare for high-endurance activities. Aim to consume 30–60 grams of carbs per hour for sessions lasting 1–2 hours, and 45–90 grams of carbs per hour for sessions lasting longer than 2 hours. Cycling offers the best opportunity to down carbs, which can come from what you're eating and drinking. In fact, having options in addition to your sports drink while you're on the bike is likely to promote carbohydrate intake. Jam or honey sandwiches, bananas, and dried fruit — as well as energy bars, bites, gels, and chews — are examples of carb-based foods that are commonly consumed by triathletes while on the bike. When running, a sports drink and energy gels are the most practical fuel options. But make sure to select an energy gel that provides sodium along with carbohydrates, such as PowerBar Energy Gel. These gels are designed to be consumed every 20–45 minutes during exercise, along with fluids, and they provide the carbohydrates and sodium of a sports drink.



PRACTICE HYDRATING AND FUELING DURING TRAINING

There's no question that starting a workout or race fueled and hydrated, and then rehydrating and refueling during exercise, is a critical sports nutrition strategy. But take the opportunity to experiment with different types and timings of foods and beverages during training. Make small adjustments, as needed, and trial those as well. The objective is to have hydration and fueling regimens on race day that you know will work for you given the conditions in which you will be competing.



PROMOTE RECOVERY

As soon as you finish a workout, make recovery your first priority, especially if you've got another workout or two planned within 24 hours. Recovery is where you realize the gains from your hard work, but you need to provide the nutritional components, including carbohydrates to restore depleted carbohydrate fuel stores, protein to repair and build muscle tissue, and fluids and sodium to rehydrate.

Carbohydrates

To speed the reloading of your depleted carbohydrate fuel stores, consume 0.5 gram of carbohydrates per lb (1.1 grams per kg) body weight within 30 minutes of finishing exercise. During heavy training, you can repeat this every hour for 3 hours, or you can transition to your usual carbohydrate-based snacks and meals. For a 150-lb (68-kg) triathlete, that equates to about 75 grams of carbohydrates immediately after exercise, and then again hourly for 3 hours or until you resume regular meals. You can also rapidly refuel by consuming smaller amounts of carbohydrates more frequently if that leaves you feeling more comfortable.

Total carbohydrate intake for the day will depend on your level of training:

Intensity Level of Training	Daily Carbs Needed	Example for 150-lb (68-kg) Athlete
Low	2.3–3.2 grams per lb body weight (5–7 grams per kg)	345–480 grams of carbs daily
Moderate to Heavy	3.2–4.5 grams per lb body weight (7–10 grams per kg)	480–675 grams of carbs daily
Extremely Heavy	4.5–5.5 grams per lb body weight (10–12 grams per kg)	675–825 grams of carbs daily

PowerBar athlete
ANDY POTTS



PHOTO BY: RICH CRUSE

Protein

Taking in protein after a workout will provide the amino acid building blocks that are needed in order to repair muscle fibers that get damaged during exercise and to promote the development of new muscle tissue. Although protein requirements vary between individuals, try to consume a minimum of 15–25 grams of protein within an hour after exercise in order to support the muscle rebuilding and repair process.

Fluids and Sodium

Weigh yourself before and after exercise in order to gauge your net loss of fluids, and replace this fluid by gradually drinking 16–24 fl oz of a sports drink, recovery beverage, or water for every lb of weight lost (1,000–1,500 ml/kg). Consume sodium sources along with your fluids, as rehydration will be more effective when sodium is included with the fluid and food that you consume as you recover. If your loss of fluids consistently exceeds 2% of your body weight, try to increase your fluid intake a bit when exercising, in order to avoid dehydration.



PowerBar ProteinPlus protein powder drink mix is a convenient option for jump-starting recovery. Just pour two scoops of ProteinPlus powder and 17–24 fl oz (500 ml) of water into your sports bottle and shake. In seconds you'll have the carbs, protein, sodium, and fluids to start reloading, repairing, and rehydrating. So as soon as you cross that finish line or finish that workout, down ProteinPlus powder drink mix and get on the road to recovery.

The following recovery options provide a moderate amount of carbohydrates and protein in order to promote recovery. Mix and match from the list below to meet your needs.

RECOVERY OPTIONS

Food	Protein
2 oz of pretzels dipped in 2 tablespoons of peanut butter	14 grams
Turkey sandwich with 2 oz of turkey	20 grams
2 rice cakes with 2 oz of low-fat cheese slices	16 grams
2 oz of string cheese with 1 apple	14 grams
1 cup of low-fat yogurt	11 grams
Low-fat chocolate milk — 10 fl oz (300 ml)	10 grams
PowerBar Recovery bar	12 grams
PowerBar ProteinPlus Bites — 1 pouch	20 grams
PowerBar ProteinPlus protein bar	24 grams



Food values USDA database.¹⁵ PowerBar values based on analysis.

PowerBar athlete
HILLARY BISCAIY



PHOTO BY: LUKE MCKENZIE



KNOW YOUR EXTRA-ENERGY OPTIONS

Carbohydrate Loading ^{12, 13}

If you're going to be in a triathlon that will require every last gram of muscle glycogen and more, carbohydrate loading might be right for you. Carbohydrate loading is a technique by which you taper your training before a race while increasing your intake of carbs. Done right, the net result is a significant boost in your stores of muscle glycogen. That can translate into a significant performance benefit. For more on carbohydrate loading, and to learn how to load effectively, click on [Carbohydrate Loading](http://www.powerbar.com) at www.powerbar.com.

PowerBar C2MAX Energy Blend for Faster Fueling ^{15, 16}

For typical endurance exercise of a couple of hours or less, the recommendation for refueling is 30–60 grams of carbs per hour of exercise. But if your training session or competition exceeds the 2-hour threshold and your pace is fast, you might benefit from an enhanced delivery of carbohydrate fuel to your working muscles. Research has shown that consumption of a 2:1 ratio of glucose to fructose during extended endurance exercise enhances delivery of carbohydrate fuel to your muscles and improves endurance. PowerBar makes it easy to take advantage of this cutting-edge research with PowerBar C2MAX Energy blend. C2MAX features a 2:1 glucose-to-fructose blend and has been found to deliver 20–50% more energy to muscles than glucose alone and to improve endurance performance by 8%. You can find C2MAX in PowerBar high-performance products designed to be taken during exercise. We suggest that you consume C2MAX carbs when taking in carbs at a rate greater than 60 grams per hour. Learn more about the science at www.powerbar.com.

Caffeine ¹⁷

In many athletes, including triathletes, caffeine works to boost performance. The exact mechanisms are still being studied, but the benefit seems pretty clear. Consuming caffeine before or during endurance exercise can help reduce the perception of how hard you're working. Translation: You might be able to swim, ride, and run faster or farther — or maybe both — without necessarily feeling like you're working harder. A couple of caffeine caveats are in order: First, you don't need tons of the stuff to get an effect. Second, some athletes are sensitive to caffeine and should avoid it. To learn more about caffeine and how to use it effectively, search [Caffeine and Athletic Performance](http://www.powerbar.com) at www.powerbar.com.

DAILY NUTRITION TIPS

- Aim for a well-balanced diet with a variety of carbohydrates, lean protein, and healthful fats.
- Carbohydrate-based foods should be the focus of your meals.
- Drink up early: Every morning when you wake up, have a large glass of water.
- Keep up your energy levels: Eat 5–6 smaller meals per day.

Sports Nutrition Plan			
	CARBS	PROTEIN	FLUID
BEFORE	<ul style="list-style-type: none"> • 2–4 hours before training/competing, have a carb-based, low-fat, low-fiber meal • To top off energy stores, have a carb-based snack 30–60 minutes before training/competing (aim for 40–60 grams of carbs) 	<ul style="list-style-type: none"> • 2–4 hours before training/competing, have a moderate-protein meal 	<ul style="list-style-type: none"> • Start hydrating 24 hours prior to training/competing • Drink 14–20 fl oz of water or sports drink (400–600 ml) 2–4 hours before training/competing • Drink another 8 fl oz (240 ml) prior to your practice
DURING	<ul style="list-style-type: none"> • 30–60 grams of carbs per hour for sessions lasting 1–2 hours • 45–90 grams of carbs per hour for sessions >2 hours 	<ul style="list-style-type: none"> • Not required 	<ul style="list-style-type: none"> • Calculate your sweat rate as your guide: go to www.powerbar.com/src • Aim for about 20 fl oz (600 ml) per hour while on the bike • Drink small amounts about every 15 minutes • For training sessions >1 hour and when weather is hot and humid, use a sports drink with sodium and carbs
AFTER	<ul style="list-style-type: none"> • Within 30 minutes after training/competing, have 0.5 gram of carbs per lb body weight (1.1 grams per kg) • Repeat hourly for 3 hours, or transition to carb-based meals or snacks 	<ul style="list-style-type: none"> • Within an hour after training/competing, have 15–25 grams of protein 	<ul style="list-style-type: none"> • Gradually drink about 16–24 fl oz per lb body weight lost (1,000–1,500 ml per kg body weight lost)
DAILY	<ul style="list-style-type: none"> • Low-intensity training: 2.3–3.2 grams of carbs per lb body weight (5–7 grams per kg) • Moderate- to heavy-intensity training: 3.2–4.5 grams of carbs per lb body weight (7–10 grams per kg) • Extremely heavy-intensity training: 4.5–5.5 grams of carbs per lb body weight (10–12 grams per kg) 	<ul style="list-style-type: none"> • 0.5–0.8 grams per lb body weight (1.2–1.7 grams per kg) 	<ul style="list-style-type: none"> • Hydrate continuously throughout the day

This food plan is intended to give general macronutrient and fluid guidelines while you are training and racing. It is not designed to be any particular caloric level. For a personalized daily food plan, use PowerBar PowerCoach to determine your caloric needs and to obtain a daily sports nutrition plan just for you.



PRODUCT FEATURES AND BENEFITS

Canadian Version

POWERBAR PRODUCTS WORK BEST IN COMBINATION:
Mix and match products to meet your specific training and exercise needs.

	DESIGNED TO DELIVER BENEFITS TO ATHLETES	PROTEIN IN GRAMS PER BAR/POUCH/TUB	CARBS IN GRAMS PER BAR	CONTAINS C2MAX	LOW SATURATED FAT (1 GRAM OR LESS)	0 GRAMS TRANS FAT PER SERVING	NO HIGH-FRUCTOSE CORN SYRUP	NO ARTIFICIAL FLAVOURS	
BEFORE & DURING EXERCISE		<div style="display: flex; justify-content: space-around;"> <div style="background-color: #4a7ebb; color: white; padding: 5px; text-align: center;">1 BEFORE</div> <div style="background-color: #0070c0; color: white; padding: 5px; text-align: center;">2 DURING</div> <div style="background-color: #70ad47; color: white; padding: 5px; text-align: center;">3 AFTER</div> </div>							
	PowerBar® Fruit Energize™ bar	Delivers more energy to working muscles/ Easy to digest*	6g/bar	46g/bar	X	X	X	X	
	PowerBar® Sport Energy™ bar	Delivers more energy to working muscles/ Easy to digest*	8-9.5g/bar	40-43g/bar	X	X	X	X	
	PowerBar® Energy Gel	Delivers more energy to working muscles/ Easy to digest*†	0g-0.3g/pack	27-28g/pack	X	X	X	X	
	PowerBar® Gel Blasts™ Energy chews	Fast energy	3g/pack	45g/pack	X	X	X	X	
	PowerBar® Energy Bites™	Delivers more energy to working muscles/ Easy to digest*	11g/pouch	58g/pouch	X	X	X	X	
	PowerBar® Harvest Energy™ bar	Long-lasting energy°	10g/bar	34-35g/bar		X	X	X	
	PowerBar® Triple Threat Energy™ bar	Long-lasting energy	10g/bar	27-28g/bar		X	X	X	
AFTER EXERCISE		<div style="display: flex; justify-content: space-around;"> <div style="background-color: #4a7ebb; color: white; padding: 5px; text-align: center;">1 BEFORE</div> <div style="background-color: #0070c0; color: white; padding: 5px; text-align: center;">2 DURING</div> <div style="background-color: #70ad47; color: white; padding: 5px; text-align: center;">3 AFTER</div> </div>							
	PowerBar® Recovery bar	Supports muscle recovery	12g/bar	30g/bar		X	X	X	
STRENGTH		Builds muscle ‡	20g/pouch	38g/pouch		X	X	X	
		Builds muscle ‡	24g/bar	37-39g/bar		X	X	X	
		Builds muscle ‡	20g/serving	7g/serving	X	X	X	X	

* PowerBar® C2MAX™ Energy blend is designed to have the same blend of energy sources found in breakthrough studies to deliver 20-55% more energy than glucose alone. In another study, these energy sources improved athletes' cycling times by 8%. (This study was done with a drink containing glucose alone vs. 2:1 glucose to fructose.)

† Some flavours contain caffeine. ° Only Harvest Energy bar double chocolate is dipped. ‡ Take ProteinPlus protein bars, Bites, or protein powder before and/or after resistance or strength training to help support muscle growth and repair.

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POWERBAR SPORTS NUTRITION FOR TRIATHLETES

Be your best as a triathlete by being fully hydrated and fueled before you start a workout or race, by rehydrating and refueling during exercise, and by promoting a full recovery afterwards. PowerBar sports nutrition products and tools can help you meet your hydration, fueling, and recovery needs.

For more detailed triathlon nutrition and training plans, check out IronmanPower.com.

PowerBar athlete
FELIPE BASTOS



PHOTO BY: LELAND BLACK



For more information and additional copies, go to: www.powerbar.com/playbooks

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