

Weekly tips for IMBA Training Plan participants

Week 1: Welcome!!

Hi, Welcome to the IMBA Team-Based Fundraising Program for either a 24 Hour Race or a Cross-Country race. If you are receiving this email you should have been signed up for one of the six 15-week training plans that are being offered. The correct plan for you will be based upon your race (24 Hour Race or regular Cross-Country race), Experience level, and whether you are racing Solo or Duo, or on a 4-5 person Relay Team.

The plans offered are for:

- 24 Hour Racing - Beginner Relay Team member
- 24 Hour Racing – Expert/Sport Relay Team member
- 24 Hour Racing - Beginner Duo or Solo Racer
- 24 Hour Racing - Expert/Sport Duo or Solo Racer
- Cross-Country – Beginner Racer
- Cross-Country – Expert/Sport Racer

After your training plan account is created, you can log into your account through <http://www.boulderperformance.net> using the Client Login box by entering your Username and Password. When you login you will be automatically directed to the Training Peaks site, where you can view your training plan.

Navigating your Training Plan website account:

Once you are logged in, at the top of the webpage you can go under “Start”, then “Getting Started” to learn a bit more about how to utilize your training plan online account.

At the top under “Training”, go to “Workout Calendar” to see your 15 week plan. It is shown as a monthly calendar 4 weeks at a time. You will see a specific workout for each day of the week.

If you go under “Training”, then “Daily Log”, you can see each day’s workout, and you can enter any information from the ride such as ride time, distance, average HR, athlete’s comments, and more.

I hope you are already excited about your training and your race!!

Please refer to the attached document “Introduction and Overview.doc”, for more detailed descriptions about your training plan and workouts.

Week 2: Lactate Threshold Heart Rate testing

This is the second installment of your IMBA Training Plan weekly tips from Boulder Performance Network.

The topic this week is testing in order to determine your training zones. It's quite simple really, all you need to do is go find your favorite climb, preferably on a paved or dirt road, and go as hard as you can for 30 minutes. The exact protocol is described in the attached Introduction and Overview document (which you can download from www.boulderperformance.net or also when you log on to your Training Plan). Your average heart rate in the last 20 minutes of the test is your lactate threshold.

So why do we want you to do a test? Well if you've looked at any of the training plans we've set up you'll notice that most rides are defined by a "zone" from 1-5. These zones refer to different heart rate levels that are determined from your lactate threshold value. Training in the different zones results in different benefits to your cycling ability. We've targeted the zones in the training plan that will help you most in your race.

Testing is the first thing you should do before starting any of the training plans so take at least a couple of days off so you're well rested and then get out and do a test. Have fun!

Week 3: Determining Heart Rate Training Zones

I hope everyone's training is going well and you are getting a feeling for the intensity and pace of the various workouts prescribed in your training plans. At this point hopefully everyone has had a chance to do a Heart Rate (HR) test, or at least a Perceived Exertion (PE) test, to figure out what riding at your Lactate Threshold (LT) feels like. All your HR zones are based off of your HR at LT.

After you complete this test, take the HR at LT that you determined from the test (see email below and also attached document for testing protocol if you have not had a chance to test yet)

To determine your HR zones, start with the HR at LT number you determined from your test.

Training Zone		% of LTHR	Perceived Exertion
Active Recovery	(Zone 1)	< 81%	1 and 2
Endurance	(Zone 2)	82 - 88%	3 and 4
Tempo	(Zone 3)	89 - 93%	5 and 6
Lactate Threshold	(Zone 4)	94 - 100%	7 and 8
VO2max	(Zone 5)	101+%	9 and 10

Example of how to compute HR zones - based on a tested LTHR of 172

Zone 1	<140 bpm	(bpm = beats per minute)
Zone 2	141 - 153 bpm	
Zone 3	154 - 160 bpm	
Zone 4	161 - 171 bpm	
Zone 5	172+ bpm	

After you determine your HR Training Zones, be sure to write them down and keep them in a place you can refer to them often when needed.

Perceived Exertion (PE) Training Zones: (in case you don't have a HR monitor to train with you can still base your intensity and pace off of PE)

PE is usually determined on a Scale of 1 to 10. With 1 being very, very easy, and 10 being so hard that you can only keep up that intensity for a few seconds at a time. When your breathing is a bit labored, and you can carry on a conversation but it is in halting words and breaths, you are probably at or very near to your LTHR. Usually this state would be given a PE rating of 7 or 8. So to determine your PE Training Zones, even if you don't have a HR monitor, do the 30' test described above and remember how it feels about 20' into the test and rate that on a 1 to 10 scale. Concentrate on your breathing. When your breathing is very ragged and talking in multiple sentences is almost impossible, you are probably above your LTHR and riding in your VO2max zone. If your breathing is heavy, but you can keep it steady, and you can carry on a conversation but have to pause every now and then, then you are probably riding at your LTHR. You need to remember how these states feel as you will need to apply your PE sensations to the workouts in this Training Plan.

Week 4: Technical Skills

One day a week on your schedule you will see we have scheduled a Technical Skills/Technique practice session. This is a great chance to have a fun workout without worrying about Heart Rate zones, Perceived Exertion, maintaining constant exertion, etc (not that intervals aren't fun!! Right?)

As you all know, mountain biking requires fitness, but sharply refined bike handling skills can make a huge difference in how fast you are on the trail when riding and racing. And when you get tired in the middle of a race, sloppy skills can be further exaggerated by fatigue and before you know it you can end up in a patch of cactus!

So take this weekly workout to practice your bike handling skills and improve your confidence in trail sections that might have intimidated you in the past. This is your chance to conquer these - if a section of trail frustrates you, then take your time and keep repeating it. Try a different line, different gearing, work on shifting body weight around as necessary over front or rear wheels. Break things down as necessary. Maybe you attempt the first section a few times before you try and string together multiple difficulties. When you feel confident in that section of trail, and then go work on another section.

If you have a patient friend who is a better bike handler than you, maybe you can talk them into riding with you and helping you work on sections as many times as needed.

Sometimes watching someone else ride a difficult section gives you the technique and correct line to try it yourself.

There will always be trail obstacles that are un-ride able for all of us, no matter our skill level. So this workout is also a great chance to work on bike dismounts and remounts. Practice coming to a stop quickly while unclipping from your pedals at the same time, jumping off your bike, shouldering or walking with the bike as necessary to get around the obstacle, then quickly jumping back on your bike, clipping back in, and getting back up to speed quickly.

Take advantage of this unstructured workout to have fun and gain confidence.

Week 5: Intervals

This week I want to talk about the importance of intervals in your training. You may be wondering why we include interval workouts in a training plan for a race that is multiple hours long, especially when the intervals are only 3-12 minutes long and you'll be racing for much longer than that. Well the simple answer is that they are a very efficient way to make you go faster. Even though during interval training you are riding harder than you will be most of the time in an endurance race, the interval efforts improve your ability not only to ride at the effort of the interval, but also at all efforts below that.

For instance, when you do lactate threshold, or zone 4, intervals your body is undergoing physiological changes such as increased blood plasma volume, increased muscle capillarization, increased muscle glycogen storage and increased stroke volume. All of these adaptations not only help you ride faster at lactate threshold but they also help you become more efficient and faster in the tempo and endurance zones (2 and 3). In a race of 2 hours or more you will spend a lot of time in zones 2 and 3 so it's important to be fast and efficient in these zones, but you will also spend some time in zone 4 and above getting through a hard climb or tricky section. Thus, doing lactate threshold and VO2 max intervals prepare you for the harder sections of the course while at the same time make you faster for the long haul over most of the race.

So if you haven't done any of the intervals on the plan yet then get out and do some in the next few weeks. You can improve very quickly with just a few interval sessions so there's still time. And if you have been doing the intervals I hope you're feeling stronger than ever.

Week 6: Eating and Drinking on the bike

This week I want to discuss the important of nutrition while riding/racing. There is no faster way to decrease short-term performance than the dreaded bonk and/or dehydration. If you have experienced it you know what I am talking about. One minute you are cruising along feeling strong and fit. Then a few minutes later it's like someone turned off the light switch and you can barely get out of your own way. Once you bonk, it can take hours to recover. So follow the advice below as you do your long weekend training rides. Training rides are the perfect time to get your food and hydration strategy for the race dialed in.

Food: = Fuel = Energy. It is impossible to race a 24 hour event without food (and fluids) and constant refueling. Also, I have found that in the course of 24 hours and lots of riding, that what tasted good and satisfied me early in the race, just doesn't do it 18 hours into the event. So I always suggest bringing a huge variety of food (hot, cold, bland, spicy, salty, etc), so that you have something that might hit the spot depending on what sounds good at the time. For team riders you want food for both riding (gels, bars, drink mixes, etc), but equally important is to have off the bike food you can eat in between your riding shifts to speed recovery of muscle fiber damage and refuel your glycogen stores so that you are ready to go out and ride again when your turn comes. For Solo racers, the majority of your fuel will probably come from on the bike foods; but it is always nice to have a hot bowl of soup or warm spaghetti in the middle of the night also. The key for on the bike foods though, is to make sure you have tried everything out in training BEFORE the race, so you know ahead of time what works for you. Drink mixes are especially important, because a lot of the really sweet and concentrated drink mixes can upset your stomach a few hours into the race, especially if it is hot.

Food/Hydration: - FOR THE SOLO RACER (though some applies to team racers also)

Rule #1: Do what works for you and that you have done in the past!

When on the bike drink at least 2 – 2.5 water bottles (32 – 40 fl/oz) per lap. You should be urinating frequently, and make sure to have some type of electrolyte mix in the water as you need to replenish those, and electrolyte capsules are great also.

Aim to ingest 250-300 calories per hour (when riding) of easily digestible food (gels, bars, bananas, drink mix, etc). That doesn't sound like a lot, but the body doesn't digest much more than that when doing physical activity. Eat foods that appeal to you and warm stuff at night is good (spaghetti, soup, etc). Again, eat foods that are easy to digest and aren't gut bombs that will just sit in your stomach. It doesn't sound like a lot of calories, but come night time you will be sick of eating so you have to force yourself to EAT and DRINK.

3 hours before the start eat a substantial (don't overdo it though) meal with protein, fats, and carbohydrates.

Week 7: Pre-Race Planning

What all do I need to bring? (geared towards 24 Hour Racers)

So it is just a few weeks out from the big 24 hour race. Over the last 12-16 weeks you have been disciplined and followed at least a loosely structured training plan, eaten healthy, and tried to get adequate sleep and recovery. You are feeling fit and excited about the upcoming race. Your body and mind are ready for the race, but are you logistically ready? Whether on a team or racing Solo, traveling to a 24 hour race and bringing everything you might possibly need takes a bit of planning. After all, there usually aren't bike shops and grocery stores next to the race course. Once you are out at the race venue and camped out, you need to make sure you have all your bases covered.

Bike: I probably don't need to mention this, but I will. Hopefully at least a week before the race you or your local bike shop has been able to thoroughly clean and inspect your bike for any potential issues. It should be shifting well (now is a great time to replace your chain and cassette if they are worn out), your brakes should be functioning and have plenty of pad life left (if not, again time to put new brake pads on), your shocks should have proper air pressure and function correctly. Basically, make sure your bike is in as like-new condition as you can make it.

Equipment: This covers everything except your bike, clothing and food. So this can be bringing an extra chain in case you break yours during the race, and extra pair of clipless pedal cleats in the unfortunate event yours falls off your shoe while racing (yes I have had that happen!) Spare light batteries and bulbs, chain lube, old rags, spare inner tubes (maybe even an extra tire or two), and if you have a portable work stand bring that also. Try to foresee any potential issue you might have to fix on your bike (so don't forget the toolbox with all of the tools). Also bring any gear to make things more comfortable in your little camping area. Folding chairs, blankets, tent/rain tarps, small burner for cooking hot food in the middle of the night, folding table, etc.

Clothes: At most 24 hour races, it can be very HOT in the daytime (90 degrees) and very COLD at night (30 degrees - Moab definitely has these extremes). So bring both bike and off the bike clothes to cover any potential weather conditions. Better to bring more than you need, than to not have it when you need it. If you are racing on a team and are racing in shifts, you want warm and dry clothes that you can immediately change into after your bike leg. A sleeping bag is great to curl up in, get warm, and try to get an hour or two of sleep in the middle of the night before you get woken up to get dressed and back out on the bike. And it is nice to have clean and dry bike clothes to put on, not your old sweaty and smelly clothes you wore your last bike leg. And don't forget that rain jacket, just in case! (It rained last year)

I definitely recommend writing out a huge list of ANYTHING and EVERYTHING you might potentially need, then bring as much of it as you have room for. You might be surprised what comes in handy at 3:30AM when it is below freezing! However, the MOST important thing you can bring is the right attitude!! 24 Hour racing is hard both physically and mentally. So bring a positive attitude, have fun, and be prepared to suffer a bit!

Week 8: Pacing and Sleep Strategies (for 24 Hour Racer)

So you might be thinking; Strategy for a race? Why do I need to have a strategy, don't I just go out and ride as hard as I can for as long as I can?

Well, yes, you do need a strategy unless you want to crash and burn at midnight and not be able to keep riding anymore. Of course then you can go get in your tent, curl up in your sleeping bag, and wake up when the race is over!

However, if you want to race smart, feel good (as good as you can feel in a 24 hour race), and still be strong at the end and hope for a good finish, strategy is huge! Strategy covers a few different areas. I will talk about pacing (Solo and team riders) and sleep (or lack of) in this article.

Pacing for the Solo Racer: This is perhaps the biggest mistake riders make, even more experienced riders who should know better. Everyone has heard of the story about the tortoise and the hare. Well, with 24 hour racing, the Solo racer is the tortoise. The race is 24 hours, not 4 hours, not 8 hours, nor even 16 hours. So you can't get caught up on your placing after 8 hours. Races are won with solid and consistent riding for the full 24 hours, and if you pace yourself right, hopefully you will have something in the tank to turn on the juice a bit come sunrise. You have to race the course and ride within yourself for the race, or you will end up slower, explode, bonk, quit, or all of the above!

The Start: Most 24 Hour races start with the LeMans style run, then you hop on your bike, then everyone goes as hard as they can. For the Solo racer who is pacing themselves and is cognizant that they only have so many "matches" to expend for the next 24 hours; well, getting caught up in the frenzied run just doesn't make much sense. You expend tons of energy running really fast, and it spikes your heart rate very early. Then you are getting on your bike about the same time all the really fast team riders (the hares) are starting out, and it is just hard to control yourself and not get caught up in the fast pace the top team guys (who are only racing for an hour or so before they get a rest) are riding. This (lack of) strategy will quickly lead to the Solo racer spontaneously combusting a few hours into the race

The smart Solo racer casually jogs the LeMans start, gets on their bike near the middle or back of the field, and instantly gets into THEIR rhythm and pacing, and doesn't worry about how fast others are going. Racing a 24 Hour race Solo is all about Endurance, so you want to get that diesel engine rolling, but keeping the revs down and look at the big 24 hour picture. I don't have room in this article to cover training zones, but the smart Solo racer will race the majority of their race in Endurance (zone 2) Heart Rate and/or Power zones.

Pacing for Team Rider: So you are on a 4 or 5 person team, and you and your teammates have decided that everyone will only ride one lap at a time, so you might potentially be out there 5 or 6 times during the next 24 hours. This means you will have time for a nice break in between your riding shifts, where you can refuel and rest a bit. This strategy is almost 180 degrees different from those (insane) Solo racers! With a larger team, when you have 3 to 4 hours off the bike to sit around, you can afford to ride each lap very fast, knowing you will be able to refuel and rest. Still, your first few laps in a race, I would caution you to remember that it is a 24 hour race for your team, so don't get too caught up in the position of your team after 4 to 8 hours. Even with the rest and recuperation you get, you still don't get 100% recovery in between your laps. So the cumulative fatigue will build up over the race. I would advise you not to go into your Anaerobic zone (this is a pace above what we call your Lactate Threshold, so an Anaerobic pace is a very fast pace that cannot be sustained for more than a few minutes at a time – it is a maximal, short effort) early in the race. 24 Hour races are won and lost in the middle of the night and early morning, so save something for those times.

Sleep Strategies: For Solo riders, I have observed that the best riders, with correct and smart pacing, do their best when they do not sleep, or even lie down and rest. Stopping and sleeping feels great, but it is hard to get up again and get back on the bike in the cold night! Better to ride a bit slower, not be as fatigued, but be able to ride for the majority of the 24 Hours. Being able to get off the bike every other lap and sit down and eat is nice, but don't let yourself get too comfortable, as it is hard to stand back up and get going again. A 20 minute or so break in the middle of the night to change out into some clean and dry clothes and get off your feet can be very beneficial though. This strategy can be a bit individualistic, and after your first race you will know what works for you and what doesn't.

For Team riders, I recommend that when you finish your lap, you IMMEDIATELY change into dry and warm clothes, sit down, and refuel. Don't eat too much at one time, but enough to replace a lot of the sugars and glycogen you have burned through. Try to lie down as much as possible out of the sun, and at night if you can catch a few hours of sleep here and there and stay warm, it will definitely help you to feel fresher and more recovered when your turn to ride again comes up.

2 Weeks before your race: TAPERING!

I hope your training has been going well and you're starting to get prepared for your upcoming race! And that means it's time to start your taper.

Tapering is a reduction of training volume and intensity before a big race. The idea is that you want to allow your body to rest, recover and rebuild while at the same time maintain your fitness, sharpness and edge. A perfect taper gets you to race day with a combination of rested legs and a high level of fitness. Tapering is more art than science, so its effectiveness can vary from person to person, but everyone can benefit from some type of taper before a big event.

On the training plans we've provided for you you'll notice that there is one more long ride this weekend and some intensity, although less intervals than usual, early next week. This is the beginning of your taper for your race, so it won't be necessary for you to do any more long or hard rides. Some of the plans have a little intensity the week of the race but in general it's time to chill.

The bottom line is that it's much, much better to go into a hard race on the side of being rested rather than tired. So take plenty of days off the next two weeks to rejuvenate your body and mind so you can give it your best on race day(s).

Final Week before race: REST!!

Hope everyone is totally psyched about the race this coming weekend! All your training is done, and now is the time to REST HARD – get lots of sleep, eat healthy, and stay hydrated this week. A couple easy rides to keep the legs open this week is also advised and on your schedule.

Hopefully you have all the equipment, gear, and clothes you will be bringing already organized, or a list of everything you need to bring. Everyone has their own routine for a warmup, but at a minimum try to get in 30-45 minutes of rolling around before the start, with a couple of hard 30-40 second efforts to get the legs opened up and ready for the fast start. I usually take a gel shot about 15 minutes before the start to top off my glycogen levels, and would recommend that. Also make sure to get in a good breakfast about 2.5 to 3 hours before your scheduled start time to give yourself time to fully digest.

Good luck to everyone and leave it all on the race course!!