## WELCOME

## EPIC Training for an EPIC Ride!

Ready to get ready? This 12-Week CT Challenge Training Plan will guide you to success in July. Before starting this plan you should have 2 to 3 weeks of "base" training, totaling at least 250 miles of riding to ensure you are ready. You should be capable of riding four days per week for a minimum of 45 minutes at moderate intensity, and you should be able to set aside 4 to 14 hours per week to train, though most weeks are less than 10 hours in duration The workouts are simple yet challenging and they will certainly make sure you are ready for the CT Challenge!

## Expectations

A common mistake that many people make when preparing for a big cycling trip is they focus on the bike weekend rides too much. These are important for sure, but keeping consistant with your training throughout the work-week, is more important. Don't miss those workouts!

## Types of Training Days

ENDURANCE RIDES
The main focus is to increase your body's reliance on fats as fuel. This should be LOW INTENSITY (aka. easy!) Find a flat route and keep your heartrate in your endurance zone while doing your best to keep the cadence at 80-90 rpm. Eat and drink 150-200 calories per hour. Endurance rides provide a great time to focus on your form. Think about maintaining a flat back, a high and relaxed cadence, a relaxed upper body and neutral head position on the bike.

- AEROBIC STIM

These sets of "tempo" intervals are steady-state efforts where your goal is to focus on maintaining your tempo zone and a cadence of at least 80rpm. The key to doing these intervals well is to make sure you DO NOT go too hard, and you don't go above your target heart rate (or power range). If in doubt, err on the side of going easier, not harder!

- HILL CLIMBS

Find a climb that is at least 3-6 min long. Select a gear that allows you to spin at 80 rpm while going up the hill (look at your cadence monitor!) Make sure that your HR stays in your Lactate Threshold Zone while on the climb. If your HR gets too high, then you need to find a more gradual climb! Maintain good form for the intervals; No bobbing the upper body back and forth. After each interval is over, shift into an easy
gear and go back down to the bottom of the hill. Make sure you spin the legs out at 85+ rpm while resting between intervals.

- THRESHOLD, OR "LT" Intervals These are harder than tempo intensity, but they are still done at a steady pace. Use care! It can take a few minutes to get your HR up to the target intensity, but that doesn't mean you are not working in your "zone". These feel like an 8 out of 10 .
- GROUP RIDES

You must do them! Group riding skills will play a major role in your ability to complete and enjoy the CT Challenge for two main reasons. One, you will need to be comfortable riding in close proximity to other riders. Two, your ability to ride in a pace-line will help you share the work load with your fellow riders in order to make it to the finish line.

- ACTIVE RECOVERY RIDES

Keep the cadence high (80 to 90), stay relaxed and in your Active Recovery heartrate zone. The idea is to increase the blood flow through the legs to promote recovery. If time is tight 30 minutes will be well worth it.

## THE FIRST STEP IN SMART TRAINING

A Heart Rate Monitor is a powerful tool. We suggest that all endurance athletes use a heart rate monitor to help them gauge their efforts the right way. They are available at any bike shop or sports goods store!

Step 1) Go out and get that Heart Rate Monitor! Ask your local bike shop or sporting goods store for a simple, low-cost model.
Step 2) Establish your Heart Rate Training Zones.
Step 3) Use the monitor to gauge your workouts so that you are working out at the optimal intensity. Believe it or not, training harder doesn't mean you're training smarter! Use the heart monitor to limit yourself and get more out of every workout!


What makes a heart rate monitor so valuable is its ability to quantify your efforts. A heart rate monitor (HRM) measures your body's level of exercise intensity by simply measuring how many times your heart beats per minute. At different levels of intensity, your body uses different fuel to produce energy (fat+oxygen, sugars+oxygen, or just sugar). At the highest intensity your body burns just stored sugars without the help of incoming oxygen. The byproduct of this is fast fatigue! Using a HRM can keep you in a lower, fat utilization zone. It can help to keep you in the right zone for steady state endurance training. It will also help in limiting your time in the hardest zones which in turn will guarantee that you fresher for the next workout.

## How Do I Determine My Training Zones?

These are general guidelines for training zones based on a person's Maximum Heartrate.
Recovery Zone: Below 65\% of Your Max HR
Endurance Zone: 65-75\% of Your Max HR
Tempo Zone: 75-82\% of Your Max HR
LT Training Zone: 83-87\% of Your Max HR
Anaerobic Zone: 85\%+ of Your Max HR
More HRM Tips

- Always allow for at least 15 minutes of warm-up time. Your heart needs this time to "settle in".
- Don't be concerned if it seems your heart rate varies a bit from one ride to the next. This is normal as many factors determine your HR.


## One More Thing...

Stretching is important for bike riding too! Take 5 minutes after your ride to stretch the legs, arms, neck and shoulders. Just go easy at first and stretch with care.

2022 CT CHALLENGE TRAINING PLAN

## WEEK 1

Total Weekly Duration
5.5 Hours

Weekly Intensity Score
3 (outo f 10$)$

## Your First Week

- Welcome to your first week of training. The goal of the first week is to ease you into focused training. We're starting out your interval training relatively easy, but it will get harder soon enough! Life sometimes gets turned upside down, so it is inevitable that you might miss a day, but you need to get in the 90 min endurance ride at some point in the week.
- Training and Riding Questions? Contact CCNS coaches and learn more great training tips for all of your cycling and training goals!


## Weekly Training \& Nutrition Tip

- Since carbohydrates are your main source of energy, you need to ensure that you are eating high-quality carbs. Carbohydrates are measured on the Glycemic Index Scale which ranges from 0-105. The lower the number is on the scale, the lower the insulin response your body will have. In other words, the lower you go on the scale, the healthier the carbohydrate is for your normal meals. You will need carbohydrates on the higher end of the scale for quick energy during your training and century. Within the Glycemic Index Scale, carbohydrate choices should be nutrient dense. This means whole grain breads, and pasta; NOT white bread, white rice, pastries, etc.
 for exercise \& training.


## Endurance

75 total minutes in

## A Day Off! A

complete rest day.

WEDNESDAY

## Aerobic Stim

60 minutes, with 3
$\times 5$ min intervals in your tempo zone. Spin easy between intervals for at least 3-5 minutes in your active recovery zone.

THURSDAY

## Endurance

60 minutes in your Endurance Zone. This should be an easy ride but you should still drink at least one full bottle during it!

FRIDAY

## Active Recovery

 Day.An OPTIONAL 20
min spin in your recovery zone.
your Endurance Zone, with 10 min of "Tempo" included. All while aiming for a cadence of 80-90 rpm.

2022 CT CHALLENGE TRAINING PLAN
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## WEEK 2

Total Weekly Duration
6.75 Hours

Weekly Intensity Score
4 (outo f 10$)$

## A Slight Step Up

- This week features two 90 min endurance rides during the week. These steady but easy rides are the most important rides of the week! Try to keep the pedals turning over as much as possible during these rides!
- Training and Riding Questions? Contact CCNS coaches and learn more great training tips for all of your cycling and training goals!


## Weekly Training \& Nutrition Tip

- How much should you be eating during your rides? An intake of 200 calories of carbohydrates each hour, after the first hour of training, is ideal. This is best done mostly with simple sugars, which are absorbed quickly. It is also a good idea to incorporate either fructose or complex carbs during exercise, which provide a consistent and steady flow of carbs into the system. Carbohydrates, especially in liquid form, move easily through the stomach and into the intestines, where they are digested rapidly. Solid forms of carbohydrates need to be broken down and turned into liquid form before continuing into the intestines, and that is where some people have
trouble with an upset stomach during intense training. Consuming a sports drink containing 6-10\% carbohydrate solution helps maintain your energy stores and is easy on the stomach.


EAT AND DRINK!
If you weigh 150 pounds
you should aim for 200 calories of carbs \& drink 16-18 ounces per hour.

## A Day Off! A

complete rest day.

## Aerobic Stim

60 minutes, with 3
$\times 7$ min intervals in your tempo zone. Spin easy between intervals for at least 3-5 minutes in your active recovery zone.

## WEDNESDAY

## Endurance

90 minutes in your Endurance Zone. This should be an easy ride but you should still drink at least two bottles during it!

THURSDAY
FRIDAY

## Endurance

60 minutes in your Endurance Zone. Keep your cadence over 85rpm as much as possible!

SATURDAY

## Aerobic Stim

75 minutes, with 3
$\times 10$ min intervals
in your tempo zone. Spin easy between intervals for at least 3-5 minutes in your active recovery zone.

SUNDAY

## Endurance

90 min in your Endurance Zone. You should eat at least 200 calories on this ride.

2022 CT CHALLENGE TRAINING PLAN

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## WEEK 3

Total Weekly Duration
6.75 Hours

Weekly Intensity Score
5 (out of 10 )

## Your Third Week

- This week sees the addion of a second day of mid-week intervals, Tuesday and Wednesday! Also important this week, is getting past the 60 min mark on both Saturday AND Sunday! The schedule is 6+ hours, but if problems arise, attempt to get in at least 4 hours total and $2+$ hours over the weekend.
- This week sees the introduction of LT Stim intervals. Make sure you start these easier, rather than harder. Ease into the target intensity and finish each minute out as best as you can!


## Weekly Training \& Nutrition Tip

- Mental Approach: No doubt about it, riding 150+ miles is tough, but if you take the right mental approach the ride can be an enjoyable and rewarding experience. If you can make it past the halfway mark each day, there is no reason you can't do each and every mile! During the second half of the trip your legs are going to be tired and your body will be aching over all (even with a proper fitting bike). Coming to terms with this before starting will help you prepare for the challenges that lie ahead. It will take some determination but, remember, your exertion is temporary and the satisfaction will last forever.


PREPARE MENTALLY
Do your research by looking up the details of the ride routes. Check out great websites such as RideWithGPS.com and Strava.com to learn more about the route.

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY | SUNDAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A Day Off! A complete rest day. | LT Stim 60 minutes, with 3 $\times 4$ min threshold intervals. These can be done going up a steady climb. Try to keep your cadence over 80rpm! | Aerobic Stim <br> 75 minutes, with 4 $\times 6$ min intervals in your tempo zone. At least 5 min easy between each interval. | Endurance 60 minutes in your Endurance Zone. This should be an easy ride but you should still drink at least one full bottle during it! | Active Recovery <br> Day. An <br> OPTIONAL 30 <br> min spin in your <br> recovery zone. | LT Stim <br> 90 minutes, with 4 $\times 5$ min threshold intervals, with less than 3 min recovery between each! Steady endurance pace otherwise. | Endurance <br> 90 min in your Endurance Zone. Remember to eat at least 300 calories on this ride. |

2022 CT CHALLENGE TRAINING PLAN

## WEEK 4

## A Rest Week!

- This is your first rest week! You've put in three great weeks of steady training, so now it's time to back off the overall training stress and give your body a chance to recover! Note that we're NOT taking a week completely off the bike. It's important that you keep your cardiovascular system going to make sure that you properly recovery and maintain your fitness.


## Weekly Training \& Nutrition Tip

- Relax and Recover: One the key thing a rider can do for his or her recovery is to relax. During hard workouts, muscles have nerves that stimulate them to contract called motor units. When these motor units are stimulated over and over and over to their maximum potential, they have a hard time stopping the firing process after a while. After a race, a person may notice much more muscle tone in his or her legs, which sadly doesn't last for more than a day. This is only a reaction of the motor units which are still stimulated from the hard workout and telling the muscles to contract slightly. This is bad for the
recovery process. Tense muscles don't get as much blood flow as relaxed ones. Relaxation stimulates blood flow and allows the recovery process to take place.


## A Day Off! A

complete rest day.

TUESDAY

## Endurance

45 minutes in your Endurance Zone and aiming for a cadence of 80-90 rpm. 2022 CT CHALLENGE TRAINING PLAN

## WEEK 5

Total Weekly Duration
7.5 Hours

Weekly Intensity Score
6 (out of 10)

## Group Rides

- If you are not in the habit of attending a group ride, now is the time to start! Group rides are very important for both your fitness and your skill development. Next to endurance, they are probably the most important workout for you! Ideally, 10 or more riders constitute a solid group ride. If the average speed of the group ride is higher than if any one rider went solo, than that's a good group ride!


## Weekly Training \& Nutrition Tip

- Group Riding Tip: If you feel good enough to go harder on a climb, resist the urge to push the pace on climbs when riding with others if you want to be welcome back to the group ride next week! Instead, win friends and push the pace on the flat and downhill sections, when people can benefit from your draft!
- Where to Start? If you're not familiar with any group rides that in your area and at your skill level, try your local bike shop! Almost all local bikes shops are a great social hub for the local cycling community. Beginner group rides are held often and you'll be surprised how eager people are to help you learn how to ride comfortably in a group!

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY | SUNDAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A Day Off! A complete rest day. | Aerobic Stim 90 minutes, with 4 $\times 6$ min intervals in your tempo zone. At least 5 min easy between each interval. | LT Stim <br> 60 minutes, with 3 $\times 5$ min threshold intervals. Do these on flat to rolling terrain, with a cadence of 80-90 rpm. | Endurance, Form Dev 60 minutes in your Endurance Zone and aiming for a cadence of 80-90 rpm. Complete $5 \times$ 3 min intervals in the drops! | Active Recovery Day. An OPTIONAL 30 min spin in your recovery zone. | Group Ride <br> 2 hours Work on group riding skills and push yourself riding with others, especially on the hills! | Endurance <br> 1.5 hours in your Endurance Zone. Remember to eat at least 300 calories on this ride. |

2022 CT CHALLENGE TRAINING PLAN

## WEEK 6

Total Weekly Duration
8.25 Hours

Weekly Intensity Score
7 (outo t 10)

## Your Sixth Week

- This week sees a step up in endurance and a bit in workouts. Also, Tempo Intervals are now 10 min long! The endurance ride is still a critical part of your training. If a scheduling conflict arises, make sure you get in one hill climbing workout and one tempo workout, along with your most important ride endurance.
- Training and Riding Questions? Contact CCNS coaches and learn more great training tips for all of your cycling and training goals!


## Weekly Training \& Nutrition Tip

- Are you improving your ability to do hard intervals? For many cyclists, initial improvement in completing LT intervals does NOT come from going harder. Instead, try to be more steady than the last round of intervals. Raising your average cadence is another great way to improve the quality of these important intervals!
- Dreading the hills? Here are some tips: Don't be afraid to do "hill repeats" on the same climb! Knowing the road is a great way to gain mastery of climbing. Try to keep your cadence above 80 rpm or so whenever possible. Too slow of a cadence only makes for more of a weight-lifting type of effort in your legs. Try to stay relaxed, especially in your upper body. Tension in your hands and arms will lead to fatigue in your legs and keep you from that great "dancing on the pedals" feeling.


## TUESDAY

## Aerobic Stim

90 minutes, with 3
x 10 min intervals
in your tempo
zone. At least 5 min easy between each interval.

WEDNESDAY

## LT Stim, Climbing

## Practice

75 minutes, with 4 $\times 5$ min threshold intervals. Do these on a climb! Keep your cadence over 80rpm if possible.

## THURSDAY

## Endurance

60 minutes in your Endurance Zone and aiming for a cadence of 80-90 rpm. Complete $5 \times$ 4 min intervals in the drops.

FRIDAY

## Active Recovery

Day. An
OPTIONAL 30
min spin in your recovery zone.

SATURDAY

## Group Ride

2 hours
Work on group riding skills and push yourself riding with others, especially on the hills!

## Endurance

2 hours in your Endurance Zone. Remember to eat at least 300 calories on this ride.

2022 CT CHALLENGE TRAINING PLAN

## WEEK 7

## Group Ride Week \#2

- This is another group ride week. Is the group ride you are part of right for you? The correct ride will be one that pushes you to work HARD for a few minutes at a time. Distance is less of a consideration! Inversly, a group ride that is too fast can leave you behind early on, where you won't benefit from that positive motivation as much.
- Training and Riding Questions? Contact CCNS coaches and learn more great training tips for all of your cycling and training goals!


## Weekly Training \& Nutrition Tip

- What should I eat before a Group Ride? The answer is simple... The same exact meal you normally eat for breakfast or lunch each day! Give your body something to which it is already accustomed. If your stomach is used to a coffee and bagel, don't try forcing down a half pound of pasta with olive oil all
 over it! The benefits of the extra calories are outweighed by the risk of throwing off your stomach and comfort before the race. Get in the extra calories that you need on the bike during the workout.


## WEEK 8

Total Weekly Duration
4.8 Hours

Weekly Intensity Score
4 (out of 10 )

## Another Rest Week!

- Another rest week! This is another opportunity to rest and recover as we back off your total training volume. Make sure that you complete your "opener" workouts and endurance paced spins though!
- Training and Riding Questions? Contact CCNS coaches and learn more great training tips for all of your cycling and training goals!


## Weekly Training \& Nutrition Tip

- Make sure you take at least two FULL rest days per week! That means that you should avoid gym work, core work, and any other forms of cross-training too. You can only get stronger if you give your body time to recuperate. So, the rest days are equally important as the training days. If this approach sounds or looks unfamiliar to you, you can always mail CCNS and ask any questions you like. As you develop into a stronger rider and get in better shape, you will recover more quickly. The worse shape your body is in, the more time you need to recuperate.


## REST NEVER MEANS

Being lazy, un-organized, or unprepared. Make sure you take the extra time on rest days to get your bike repaired, stock up on your favorite ride food, and wash those cycling shorts!

## MONDAY

A Day Off! A
complete rest
day.

## WEDNESDAY

## Aerobic Openers

## Endurance

45 minutes in your Endurance Zone and aiming for a cadence of 80-90 rpm.

45 minutes, with 3 $\times 5$ min intervals in your tempo zone at 100 rpm , with 3 minutes of recovery in between.

THURSDAY

## Endurance

45 minutes in your Endurance Zone and aiming for a cadence of 80-90 rpm.

FRIDAY

## Active Recovery

Day. An
OPTIONAL 20
min spin in your recovery zone.

SATURDAY

## LT Openers

45 minutes, with 3
$\times 3$ min intervals in your LT zone at 85-95 rpm, with 3 minutes of recovery in between.

## Endurance

90 minutes in your Endurance Zone and aiming for a cadence of 80-90 rpm.

## WEEK 9

## Stepped Up Interval Work

- This week has a both intervals AND 2 group rides. Not to mention a long endurance ride at the end of the week. If you have a scheduling conflict, try to get in as much of the hill climbs as you can, and then the Sunday endurance rid of course!
- Training and Riding Questions? Contact CCNS coaches and learn more great training tips for all of your cycling and training goals!


## Weekly Training \& Nutrition Tip

- Always strive for nutrient dense food. Nutrient dense food is the amount of protein vitamins and minerals per calorie of food. It is the proportion of essential vitamins and minerals present per calorie of energy that food may give. Let's take an example, both 6 ounces of tuna and six strips of fried bacon each contain about 220 calories. Tuna gives an adult 100 percent of the protein and niacin, along with little bits of other vitamins that an adult may need. The bacon contains about 25 percent of the protein and 10 percent of niacin that an adult needs. The tuna is much more nutrient dense and has a considerably greater nutritional value.

2022 CT CHALLENGE TRAINING PLAN

## WEEK 10

Total Weekly Duration
8.75 Hours

Weekly Intensity Score
8 (out of 10)

## Week Ten

- You're less then two weeks out! Make sure that you continue to focus on making it out for the group rides and accomplishing your long endurance day this week. This is the biggest volume week and believe it or not, you are better off riding EASY on your recovery days, rather than taking them off completely. This is partly due to your body's daily production of endorphins!
- Training and Riding Questions? Contact CCNS coaches and learn more great training tips for all of your cycling and training goals!


## Weekly Training \& Nutrition Tip

- Summer is here! Riding in the heat means water loss! A 1\% water percent loss of body weight equates to 3-5\% off your ability to sustain higher "threshold" efforts.

During Sunday's ride this week, weigh yourself right before the ride, and then right after. If you hydrated enough during the ride, you would see less than 1 pound of water weight lost (for a rider weighing 150 pounds). Make sure you adjust your hydration for the next 2 weeks accordingly! Drinking enough is no doubt the number one thing you can to do to ensure a successful ride!
MONDAY
complete rest day.

TUESDAY

## Hill Climbs,

## Cadence Work

60 minutes, with 5
hill climbs or 6 min each, in your LT zone. Alternate your cadence during each climb between 70 and $85 \mathrm{rpm}!5$ min easy between climbs.

## WEDNESDAY

## Aerobic Stim,

## Form Dev

90 minutes, with 4
$\times 10$ min intervals
in your tempo zone. Stand up out of the saddle for 15 seconds every 3 min during these intervals!

THURSDAY

## Endurance

75 minutes in your Endurance Zone and aiming for a cadence of 80-90 rpm. Continue riding n the drops as much as you are comfortable doing so!

Riding at dusk or dawn? Make sure you have a blinking tailight and headlight!

Active Recovery

## Day. An

OPTIONAL 30
min spin in your recovery zone.

SATURDAY

Group Ride
2 hours
Work on group
riding skills and push yourself with others!


FRIDAY

SUNDAY

## Endurance

2.5 hours in your Endurance Zone. Remember to eat at least 300 calories on this ride!

2022 CT CHALLENGE TRAINING PLAN

## WEEK 11

Total Weekly Duration
10.75 Hours

Weekly Intensity Score
10 (out of 10$)$

## Your Last "Training Week"

$\square$ This is your last week of workouts! This week is the final "touch up" to your training. Attempt to get in as much of the ride time as you can. You have a big endurance ride on Sunday. Travel is coming up quick and you may have to-do's to care for. If you can not complete the 4 hours, make sure you get in something!

- Training and Riding Questions? Contact CCNS coaches and learn more great training tips for all of your cycling and training goals!


## Weekly Training \& Nutrition Tip

- You will notice there is no group ride this week. Instead, focus on completing the intervals Tuesday and especially Friday. You will find it's very different to ride at LT intensity on flat road versus hills. This is due to the constant "push-back" you get when you are on the climbs. Even though you may find it easier on hills, being able to maintain momentum on rolling terrain is a crucial skill that is worthy of practice.



## MONDAY

TUESDAY

## Hill Climbs,

## Cadence Work

75 minutes, with 6 hill climbs or 6 min each, in your LT zone. Alternate your cadence during each climb between 70 and $85 \mathrm{rpm}!5$ min easy between climbs.

## A Day Off! A

complete rest
day.

## WEDNESDAY

## Aerobic Stim,

Form Dev
90 minutes, with 5 $\times 10 \mathrm{~min}$ intervals in your tempo zone. Stand up out of the saddle for 15 seconds every 2 min during these intervals!

THURSDAY

## Endurance

90 minutes in your Endurance Zone and aiming for a cadence of 80-90 rpm. Continue riding $n$ the drops as much as you are comfortable doing so!

FRIDAY

Active Recovery
Day. An
OPTIONAL 30
min spin in your recovery zone.

## WEEK 12

Total Weekly Duration
N/A

Weekly Intensity Score
$N \backslash A$

## You Made It!

- This is the moment you have been waiting for! You are ready!

Getting in a short ride Tuesday and Thursday will help you stay ready for the big ride on Saturday.
Nail those intervals!
Depending on your travel schedule, being able to ride 30 min once you arrive in Montana will also be very helpful to keeping you ready for the big trip.

## Weekly Training \& Nutrition Tip

- Pre-Ride Prep: Most of your preparation should be done before the day of the ride. All forms of running around should be done well in advance. The first thing you should do upon arrival in Montana is make sure your bike is total working order. This means more than a visual inspection! Take it out for a short ride, up and downhill. This need not be a full-blown training ride but you should spend at least 10 min riding the bike and going thru every gear sprocket.


## A Day Off! A

complete rest day

WEDNESDAY

Active Recovery
Day. An
OPTIONAL 30
min spin in your recovery zone.

THURSDAY

Threshold Openers
45 minutes, with
$2 \times 5$ min intervals in your tempo zone. Then $3 \times 3$ min intervals in your LT training zone.

THE CT CHALLENGE!

## SUNDAY

A Day Off! A
complete rest
day.

