

## VeloSano Training Guide

# “The Weekend Warrior”

By Dr. Matthew Kampert

---

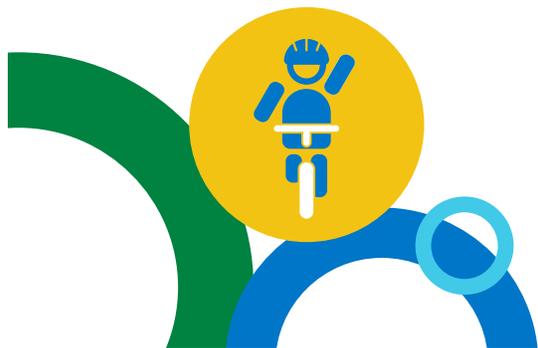
This guide includes training suggestions for your chosen distance for “Bike to cure” benefitting VeloSano. If you are new to bicycling, I suggest reading the following article for background information, safety tips, and injury prevention:

<http://health.clevelandclinic.org/2013/08/how-to-getback-to-bicycling/>

This plan will get you ready for your VeloSano ride with minimal time and energy commitment. The Weekend Warrior schedule is not really the “Right” way to do it, but hey, I realize everyone has busy lives with limited time and this plan will help get you ready mentally and physically to enjoy your VeloSano experience. With just two workouts per week, you can be ready to “Bike to cure”.

### The Details

Your rides will basically include one long, slow ride per week and one ride with hills or “intervals”. Intervals are short periods of higher intensity exercise, usually 2 to 5 minutes in length that are separated by rest periods. You should continue riding throughout these sessions, but reduce your pace significantly during the rest periods. Try doing intervals of varying lengths and intensities. A good way to add intensity is to ride into a headwind or up a small hill. You will also notice that one (additional) day per week is designated as a cross-training day. Cross-training is important to prevent injury and burnout. If you’re a true “weekend warrior” you can even do this on the same day as one of the rides. The best cross-training activities are weightlifting, yoga, jogging, swimming, or walking.



## Commonly Asked Questions

### Am I allowed to “draft” off of other cyclists?

Drafting is permitted during the VeloSano events, but this can be a dangerous activity. Only practice drafting after you are very comfortable on your bicycle, with experienced cyclists, and only under good conditions. Keep in mind that while you are drafting, you are riding with 20-30% less effort, so you will probably not be gaining as much fitness during this activity as you would if you were riding alone. But if you choose to draft during the event, be sure to practice beforehand. Work on maintaining a smooth steady pedal-stroke, a very straight line, and always looking ahead of your group to anticipate changes in pace. Avoid looking only at the person right in front of you, and avoid slamming on your brakes suddenly!

### How hard should I be going on my slow rides? My fast rides?

#### REFER TO GRAPH 1

This depends on several factors including your age, fitness and level of experience. **Intensity can be categorized into 5 distinct “training zones” listed in Graph 1**, and monitored in several ways, including heart rate (bpm), rating of perceived exertion (RPE), Pace (mph), and even power (Watts). Monitoring your heart rate to remain within the appropriate training zone throughout your ride will require a heart rate strap or a smartwatch. This method takes into account your age and fitness to provide an affordable objective measure. By monitoring your resting heart, you will be able to appreciate improvements in fitness as your resting heart gradually declines as your cardiovascular system becomes stronger and more efficient. On the other hand, an elevation in resting heart rate could be an early warning sign of overtraining, indicating the need to focus on more recovery between training sessions. Additionally, exercising heart rates can provide insight into hydration status. As you become dehydrated from increased water loss through sweating, the amount of blood the heart can pump each beat also decreases, and as a result the heart compensates by increasing heart rate. This increase in heart rate for the same level work is referred to as “cardiovascular drift”, and can significantly impair your performance.

Training intensity can also be measured based upon how hard you feel you are working through your “rating of perceived exertion” using a scale from 0-10. To measure time, speed, distance as well as revolutions per minute (rpm), cadence, or power (watts) consider getting a bike computer. The information this tool provides helps track progress and builds confidence throughout your training. You can also download one of the many popular fitness tracking apps to your smartphone, which could sync with your heart monitor in addition to providing speed, distance and pace through GPS on your phone.

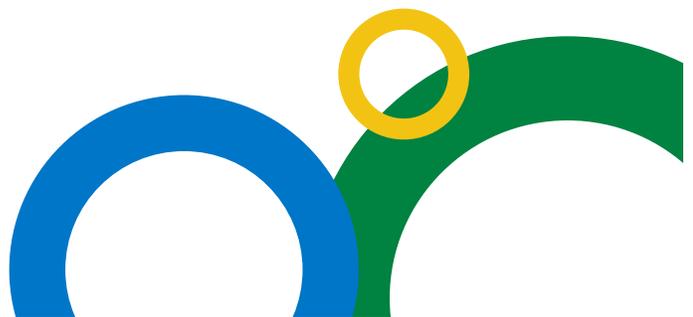
### What about nutrition and hydration?

#### REFER TO GRAPH 2

The VeloSano Rest Stops will be well stocked and well supported, but during your longer training rides, you should carry water or sports drink. For your longer rides (anything over one hour) you should bring a small snack such as an energy bar or some fruit. Be sure to consume familiar food and drinks on the event day, to avoid GI upset. It is important to be well fed and hydrate the days leading up to the event, because your body’s preferred fuel source is carbohydrates stored in your muscles in the form of glycogen. Post workout meals are crucial for replenishing these glycogen stores, which set the stage for next training session. It is best to consume higher glycemic carbs during and after training. During prolonged endurance events protein requirements also increase as the body begins to oxidize protein as an additional fuel substrate. With 1 hour of aerobic exercise at 55-60% of Heart Rate Reserve leads to a 25% increase in protein oxidation. Hydration also plays a key role in performance, with just a 1% decrease in body water resulting in a compromised ability to thermo regulate and dissipate heat during exercise, a 2% reduction can decrease cardiac output, cognitive awareness and time to exhaustion. **Consider following the hydration recommendations listed with Graph 2.**

### Which should I do if it is raining?

Riding in the rain can be dangerous, and it is usually not very pleasurable, but it certainly may happen! If you are new to cycling, I suggest that you take a rest day if it is raining, or substitute a walk or jog. Don’t try riding in the rain until you are very comfortable handling your bicycle. However, consider (eventually) doing at least one or two rides on rainy days so you can practice how to handle your bike on slippery roads. Be very cautious on turns, especially on painted surfaces such as crosswalks as they get slippery when wet. Leave extra time for stopping, and have your brakes adjusted so they can be applied very firmly. Dress with an extra layer of clothing or light rain jacket. Don’t ride with dangling clothing items that may become tangled in the wheels or chain. AVOID car traffic on rainy days. They often can’t see you.



## Commonly Asked Questions

GRAPH 1

HR Zone	Component	%HRmax	RPE	Pace
<b>ZONE 1</b>	Active Recovery	50-60%	4-6	Slow 8-10 mph
<b>ZONE 2</b>	Endurance	61-70%	6-7	Light 10-14mph
<b>ZONE 3</b>	Stamina	71-80%	7-8	Moderate 14-16mph
<b>ZONE 4</b>	Speed	81-90%	8-9	Fast 16-18mph
<b>ZONE 5</b>	Power	91-100%	9-10	Sprint >18mph

### Calculating Training Zone

**Heart Rate Range for a 40 year old cyclist with a Resting HR of 68.**

**Heart Rate Max**  
= 220 – Age (40) = 180

**Heart Rate Reserve**  
= HRmax -HRrest  
HRR= HRmax(180) – HRrest(68)  
= 112

**Intensity for Zone 2 (60-70%)**  
60% x 112= 67  
70% x 112= 78

**Add resting HR back**  
60% = 67 + 68 = 135  
75% = 78 + 68 = 142

**Zone 2 (135 – 142 bpm)**

GRAPH 2

HR Zone	Sustainability	Fuel Source	Fuel System
<b>ZONE 1</b>	Long Duration Hours+	Predominately Fat	Aerobic
<b>ZONE 2</b>	Up to an hour or more	Fat & Glycogen (carbs)	Aerobic
<b>ZONE 3</b>	Several minutes	Muscle glycogen (carbs) & some Fat	Aerobic Anaerobic
<b>ZONE 4</b>	30 Seconds to a few minutes	Muscle glycogen (carbs)	Anaerobic
<b>ZONE 5</b>	Seconds	Creatine phosphate	ATP-PC

### Nutrition Recommendation

**Carbohydrates:** 30-55% total calories  
4-6 g/lb BW

**Intense Training Days**  
More carbs  
Higher glycemic, lower fiber

**Recovery Days**  
Fewer carbs  
Lower glycemic, higher fiber

**Fats:** 20-35% total calories  
0.3 – 0.6 g/lb BW

**Proteins:** 25-35% total calories  
0.5 – 0.7 g/lb BW  
30g per meal

### Hydration Recommendation

**Pre-Workout**  
24 oz

**During Workouts**  
12 oz every 30 min

**Post Workout**  
16-24 oz / lb lost

**Sodium**  
300-600 mg/h



## Commonly Asked Questions

---

### **Do I really need to ride on hills? How steep or long should the hills be?**

This depends upon how hilly your event route will be and on what you have available for hills. Check out [velosano.org/the-ride](http://velosano.org/the-ride) to view your route using Ride with GPS for turn-by-turn and elevation details. When in doubt, start with smaller hills and ride up them more slowly. If you do not have hills nearby, try using a freeway overpass, or the road through a small river valley. You may also use a stationary trainer with increased resistance setting, or just ride on a flat road but use a higher gear for a short time. However, if you are preparing for one of the more hilly VeloSano routes, you should drive to a place with large hills at least once during the month of August. There is really no good substitute for the real thing! Also practice going downhill safely, and practice turning and stopping on downhills.

### **What if I miss a workout?**

You do NOT have to do extra training. Just simply pick up where you left off on the list of training sessions, OR just restart at today's date on the calendar. Maybe add in one extra session per week if you're ambitious. Off time is set-aside to help with recovery but can be used to make up some missed training.

### **Conclusion**

We hope you enjoy your VeloSano ride, but also enjoy the process of training for the event. Please ride safely, and always try to have fun. Once you've finished this event, we encourage you to pick another athletic goal for the fall or winter, and we hope to see you again next year at VeloSano!

