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## Cape Town Cycle Tour 2017 Training programme

## First Timer Sub-4

This plan is appropriate if you are

- A past participant of the Cape Town Cycle Tour or similar distance mass road race events in the past
- Curious about your real performance potential and would like to see what you could achieve with a scientific training approach
- Training regularly at the moment (6-9 hours per week) and can currently comfortably manage a 2:30hr ride
- Participate in weekend group rides
- Have a normal body weight for your build, age and height
- Riding a entry to mid-level road bike
- Ready to commit to 4-5 training sessions per week, with longer rides on the weekend
- Planning to race several $85-100 \mathrm{~km}$ races leading up to the Cape Town Cycle Tour
- Aiming to finish in Sub-4 hours

To gain optimal benefit from
this program the use of the bike computer with a cadence meter is recommended.

## Secrets to Success

1 | Set your goals
What are your goals? What do you need to do to achieve them? You're more likely to reach your destination when you know what it is and have a clear route map on how to get there.

## 2 | Prepare for Success

Optimize your seeding/start position. This is one of the most significant determinants of your finish time. If you haven't been racing much this season and you know you're going to be a back marker, consider joining a charity bond group (like Qhubeka), Ride for a Purpose and "jump the queue", legitimately.

3 | Do as little as possible
The world's best pro's know that efficiency in racing is key. You only have a finite number of matches to burn, use them wisely.

- Save energy: coast on the downhills, soft pedal whenever possible, you're your momentum, take the short line and draft off the peloton.
- Take your pull in the paceline, but temper your workhorse ambitions
- Save your energy for the final climbs, Chapmans Peak and Suikerbossie.


#### Abstract

About the Author: Dr Carol Austin, Head of Performance Support and Medical at Team Dimension Data for Qhubeka, Africa's first World Tour professional road cycling team. Carol leads a team of sport scientists, medical doctors, and paramedical assistants tasked with optimising the riders' fitness, form, health and wellness. She joined the team in 2008, and under her leadership of the sports science strategy the team has progressed from national level to world tour performance, notably 5 stage wins in the 2016 Tour de France. Follow Carol on Twitter @drcarolaustin1.


|  | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WEEK 1 | $\begin{aligned} & 19 \text { Dec } \\ & \text { REST DAY } \end{aligned}$ | 20 <br> Moderate GB 2-2:30 or EB 2:00 with $3 \times 5 \mathrm{~min} \mathrm{SS}$ with 5 min RBI. | 21 <br> RB 0:30 +30 min Core Training | 22 <br> EB 2:00 with 3 <br> $\times 6 \mathrm{~min}$ Tempo <br> with 5 min RBI | 23 <br> REST DAY | 24 <br> Moderate GB <br> 2:30 on hilly <br> route | 25 <br> EB 1:30 with 3 <br> $\times 5 \mathrm{~min}$ SP with <br> 5 min RB |
| WEEK 2 | $26$ <br> REST DAY | 27 <br> Moderate GB 2-2:30 or EB 2:00 with $3 \times 5 \mathrm{~min} \mathrm{SS}$ with 5 min RBI. | 28 <br> RB 0:30 +30 min Core Training | 29 <br> EB 2:00 with 3 x 8 min Tempo with 5 min RBI | $30$ <br> REST DAY | 31 <br> Moderate GB 3:00 on hilly route | 1 Jan <br> EB 1:30 with 3 <br> $\times 5 \mathrm{~min}$ SP with <br> 5 min RBI |
| WEEK 3 | $2$ <br> REST DAY | 3 <br> Moderate GB 2:30 or EB 2:00 with $4 \times 5 \mathrm{~min}$ SS with 5 min RBI. | 4 <br> RB 0:30 +30 min Core Training | 5 <br> EB 2:00 with 3 x 10min Tempo with 5 min RBI | 6 <br> REST DAY | 7 <br> Moderate GB <br> 3:00 on Hilly <br> Route | 8 <br> EB 1:30 with 3 <br> $\times 5 \mathrm{~min}$ SP with <br> 5 min RBI |
| WEEK 4 | 9 <br> REST DAY + Sports Massage. This is a 5-day recovery period. Take it easy. | $10$ <br> Easy EB 1:00 | 11 <br> RB 0:30 +30 min <br> Core Training | $12$ <br> Easy EB 1:00 | $13$ <br> REST DAY | 14 <br> Moderate GB <br> 2:30-3:00 on <br> Hilly Route | 15 <br> EB 1:30 on Flat to Rolling Route with $3 \times 8 \mathrm{~min}$ Tempo with 5 min RBI |
| WEEK 5 | $\begin{aligned} & 16 \\ & \text { REST DAY } \end{aligned}$ | 17 <br> Moderate GB <br> 1:30 or EB 1:15 <br> with $4 \times 5 \mathrm{~min}$ SS <br> with 5 min RBI | 18 <br> RB 0:30 +30 min Core Training | 19 <br> EB 1:30 with 3 <br> $\times 5 \mathrm{~min}$ TC at <br> 80-90rpm with <br> 5 min RBI | 20 <br> REST DAY | 21 <br> Moderate GB <br> 3:00 on Hilly <br> Route | 22 <br> EB 2:00 on Flat to Rolling Route with $3 \times 8 \mathrm{~min}$ Tempo with 5 min RBI |
| WEEK 6 | $23$ <br> REST DAY | 24 <br> Moderate GB <br> 1:30 or EB 1:30 <br> with $4 \times 6 \mathrm{~min}$ SS <br> with 4min RBI | 25 <br> RB 0:30 +30 min Core Training | 26 <br> EB 1:30 with 4 <br> $\times 5 \mathrm{~min}$ TC at <br> 80-90rpm with <br> 5 min RBI | $27$ <br> REST DAY | 28 <br> Moderate GB 3:30 on Hilly <br> Route or 1:30 EB if racing tomorrow | 29 <br> Value Logistics (Gauteng) The Fast One 97 km or EB 2:00 on Flat to Rolling Route with $3 x$ 8min Tempo with 5 min RBI |
| WEEK 7 | $\begin{aligned} & 30 \\ & \text { REST DAY } \end{aligned}$ | 31 <br> Moderate GB <br> 1:30 or EB 1:30 <br> with $4 \times 6 \mathrm{~min} \mathrm{SS}$ <br> with 4min RBI | 1 Feb RB 0:30 +30 min Core Training | 2 <br> EB 1:30 with 4 $\times 5 \mathrm{~min}$ TC at 80-90rpm with 5 min RBI | $3$ <br> REST DAY | 4 <br> Moderate GB <br> 4:00 on Hilly <br> Route | 5 <br> EB 2:00 on flat to rolling route |
| WEEK 8 | 6 <br> REST DAY + Sports Massage. This is a 5-day recovery period. Take it easy. | $7$ <br> EB 1:00 | 8 <br> RB 0:30 +30 min <br> Core Training | $9$ <br> EB 1:00 | 10 <br> REST DAY or 1:30 EB if racing tomorrow | 11 <br> The 99er <br> (Western <br> Province) <br> 102km <br> or GB 3:30 on <br> Hilly Route | 12 <br> RB 1:00 if raced yesterday or EB 1:30 with with 4 $\times 5 \mathrm{~min} \mathrm{HAc}$ with 5 min RBI |
| WEEK 9 | $13$ <br> REST DAY | 14 <br> Hard GB 1:30 or EB 1:30 with 2 sets of $6 \times 20 \mathrm{sec}$ SI with 10sec RBI and 6 min RBS | 15 <br> RB 0:30 +30 min <br> Core Training | 16 <br> EB 1:30 with 4 <br> $\times 5 \mathrm{~min} \mathrm{HAc}$ with <br> 5 min RBI | $17$ <br> REST DAY | 18 <br> Hard GB 3:30 on Hilly Route or 1:30 EB if racing tomorrow | 19 <br> Dishchem Ride for Sight 116km or EB 1:30 with with $4 \times 5 \mathrm{~min}$ HAc with 5 min RBI |


| $\checkmark$ | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WEEK 10 | $20$ <br> REST DAY | 21 <br> Hard GB 1:30 or EB 1:30 with 2 sets of $6 \times 20 \mathrm{sec}$ SI with 10sec RBI and 6 min RBS | 22 <br> RB 0:30 +30 min Core Training | 23 <br> EB 1:30 with 4 <br> $\times 5 \mathrm{~min} \mathrm{HAc}$ with <br> 5 min RBI | $24$ <br> REST DAY | 25 <br> Hard GB 4:00 on Hilly Route | 26 <br> EB 2:00 on Flat to Rolling Route with $2 \times 8 \mathrm{~min}$ Tempo with 5 min RBI |
| WEEK 11 | 27 <br> REST DAY. This is a 5 -day recovery period. Take it easy | 28 <br> EB 1:00 | 1Mar <br> RB 0:30 +30 min <br> Core Training | 2 <br> EB 1:00 | $3$ <br> REST DAY | 4 <br> Moderate GB 2:30 on Hilly Route | 5 <br> EB 2:30 with 2 <br> sets of $6 \times 20$ sec <br> SI with 10sec RBI and 6 min RBS |
| WEEK 12 | 6 <br> REST DAY | 7 <br> Moderate GB <br> 1:30 or EB 1:30 <br> with $3 \times 6 \mathrm{~min}$ SS <br> with 4 min RBI | 8 <br> RB 0:30 +30 min Core Training | 9 <br> EB 1:00 with 3 <br> $\times 5 \mathrm{~min}$ HAc with <br> 5 min RBI | $10$ <br> REST DAY | $11$ <br> Easy EB 1:00 | $12$ |

## Explanation of terms

Explanation of abbreviations:
RBI = Rest Between Intervals, RBS = Rest Between Sets

## Training sessions

The Total Workout Time is described by the Training Session (RB, EB, GB) time e.g. EB 1:30 + tempo $3 \times 10$ min with 10 min RBI means that the total workout time is 1 hr 30 min inclusive of three 10 -minute tempo intervals done within this time.

Recovery Bike (RB)
Duration: 45min-1:00 hours
Terrain: Flat to rolling
Effort: Very easy, RPE 1-2, able to speak normally
Cadence: Very light gear, 75-95rpm
Endurance Bike (EB)
Duration: 1-4:00 hours
Terrain: Flat to rolling or indoor trainer
Effort: Easy to moderate pace, RPE 4-5, able to speak normally
Cadence: $85-100 \mathrm{rpm}$ on flat, $75-90 \mathrm{rpm}$ on climbs
Group Bike (GB)
Duration:2:30-4:00 hours
Terrain: Flat to rolling
Effort: From easy to hard, RPE 4-7
Cadence: 85-100rpm on flat, $75-90$ rpm on climbs

## Pre-Race Warmup

Terrain: Flat or on an indoor trainer
Description: Start with 20 min of easy EB riding at $85-100 \mathrm{rpm}$.
Then complete the following routine: 5 min tempo at 80-85rpm, $5 \mathrm{~min} \mathrm{RB}, 3 \times 2 \mathrm{~min} \mathrm{SS}$ with $2 \mathrm{~min} \mathrm{RBI}, 3 \times 20 \mathrm{sec} \mathrm{SI}$ at $100-110 \mathrm{rpm}$ with 20 sec RBI. Finish up your remaining session time with easy RB. You should finish up this session feeling fired up and ready to race (not tired). Effort: varies from easy to maximal efforts, RPE 4-10+

## Specific intervals

Specific intervals are completed within the time given for the training session e.g. EB 1:30 $+3 \times 10 \mathrm{~min}$ Tempo with 10 min RBI means that the total workout time is 1 hr 30 min inclusive of three 10 -minute Tempo intervals which will be done within this time.

## Strength Pedal (SP)

Terrain: Long, gradual hill 4-6\% grade
Description: In a heavy gear, pedal steadily at a low cadence while maintaining a moderate heart rate. Focus on pedaling smoothly through the entire pedal stroke. You should feel like you're riding through treacle! This on-the-bike strength training interval will improve your climbing strength and performance.
Power Zone: Endurance to Tempo
Cadence: 50-60rpm
Effort: moderate, RPE 6, just able to speak in sentances
Tempo (Tempo)
Terrain: 1-3\% grade or indoor trainer
Description: Tempo intervals are efforts aimed at increasing your threshold power. Focus on maintaining sustained, constant effort and power throughout within the prescribed cadence zone.
Power Zone: Tempo
Cadence: 80-90rpm
Effort: RPE 6-7, able to talk in short phrases

## Steady State (SS)

Terrain: Flat or indoor trainer
Description: A challenging interval at lactate threshold. Focus on maintaining the intensity of the effort steady for the entire duration of the interval.
Power Zone: Threshold
Cadence: 90-100rpm
Effort: Strong-Very Strong effort, RPE 7-8, able to speak in short phrases

Threshold Climb (TC)
Terrain: On a steady climb, 4-8\% gradient
Description: A challenging interval at your climbing lactate threshold. Focus on maintaining the intensity of the effort steady for the entire duration of the interval.
Power Zone: Threshold
Cadence: 80-90rpm
Effort: Hard - Very Hard, RPE 8, only able to speak in words

## Hill Acceleration (HAc)

Terrain: 4-6\% grade climb simulating the longer climbs on the route
Description: These 5min HAc intervals will prepare you for the "finish group" defining sections of the course. Ride at effort level you can just sustain for full duration of the climb. Wind up the speed by accelerating hard by increasing your cadence for the last 10 sec of each minute through cadence for the last 10 sec of each minute.
Power Zone: Threshold - VO2max
Cadence: 80-90rpm increasing to $90-100 \mathrm{rpm}$ during 10 sec accelerations
Effort: Very hard effort, RPE 8-9, only able to speak in words

Speed Intervals (SI)
Terrain: Flat to slight downhill
Description: Repeated maximal speed and intensity intervals completed in sets. These intervals develop your aerobic and anaerobic fitness. Focus on accelerating quickly, and then maintaining your power and speed for the full duration of the interval. The short RBI will not allow for complete recovery so expect to feel the burn. You are challenging your body to buffer accumulated $\mathrm{H}+$ ions, and training your mind to accept momentary suffering in race situations.
Power Zone: Anaerobic
Cadence: 100-110rpm
Effort: Extremely hard - Maximal, RPE >9-10+, not able to speak

## Rating of Perceived Exertion (RPE)a

The intensity of your training session is described according to the following Rating of Perceived Exertion (RPE) scale.

Your RPE should reflect how heavy and strenuous the exercise feels to you, combining all sensations and feelings of physical stress, effort and fatigue. Do not concern yourself with any one factor such as leg pain or shortness of breath, but try to focus on your total feeling of exertion. For each workout an RPE is given. Before your training session refer to this scale so that you're reminded of the intensity of the training session and specific intervals. While training, assess your feeling of exertion as honestly as possible without thinking about what the actual physical load is. Your own feeling of effort and exertion is important, not how it compares to other people's.
a Gunner Borg's Ten Point Category-Ratio Scale
of Perceived Exertion

| Perceived Exertion Score | Description |
| :---: | :---: |
| 0 | Nothing at all |
| 0.5 | Extremely weak |
| 1 | Very weak |
| 2 | Weak (light) |
| 3 | Moderate |
| 4 | Somewhat strong |
| 5 | Strong (heavy) |
| 6 |  |
| 7 | Very strong |
| 8 |  |
| 9 |  |
| 10 | Extremely strong |
| * | Maximal |

