

CYCLE PREPARATION PERIOD TRAINING

To take full advantage of the Preparation Period Training, or any other training, it is important that your training levels are determined, this will avoid wasted effort.

The levels we will use are as follows, shown as a percentage of Maximum Heart rate (MHR) i.e.

Level 0 – 55 – 65% MHR
Level 1 – 65 – 75% MHR
Level 2 – 75 – 85% MHR
Level 3 – 85 – 95% MHR
Level 4 – 95% + MHR

So we need to establish your individual training levels and for the purpose of this programme I suggest you either carry out a DIY max heart rate test or use the well known formula:

$$\text{Max Heart Rate} = 220 - \text{Age} \quad (226 - \text{Age for women})$$

It should be stated that this formula is not accurate for most of the population, but it's better than nothing! A more accurate formula is thought to be $(205.8 - [0.685 \times \text{age}])$. I'll leave it up to you which one you use.

I have used a DIY version in the past and this is shown below:

But first a serious warning – if you are in any doubt whatsoever about any aspect of your general health, particularly your heart muscle and other major organs then do not attempt to undertake this test. Please don't take this warning lightly. If there is a niggling doubt at the back of your mind then at the very least consult your doctor or even ask for a full medical.

To do the test you will need a turbo trainer, bike, reliable heart rate monitor, paper & pen, & someone to help you.

Ensure the bike is well fixed to the turbo and that all the gears are working perfectly. Check that the tyre is inflated to the pressure you will always use when testing, say 100 psi. Test that the monitor is working well and that the signal from the transmitter belt is showing strongly on the receiver. Have your helper standing by with pen and paper and make sure he/she knows exactly what to do before you start.

Your helper will need to do the following:

- a). Keep an accurate record of your heart rate every minute.
- b). Remind you to change gear every two minutes
- c). Ensure you are maintaining the correct cadence at all times
- d). Encourage you verbally toward the end of the session
- e). Instruct you to STOP immediately if he/she can see any problem arising during the test

What to do!

1. Warm up briskly in a small gear for approx 10 mins
2. Engage the big ring and the lowest of your top 6 gears (52x18?) and pedal at a consistent cadence of 95rpm for 2 mins
3. Change up one sprocket whilst maintaining the same cadence
4. Continue by changing up one sprocket every two mins until you cannot continue because of total exhaustion
THIS MUST BE 100% PLUS, ALL OUT EFFORT!!!!
5. Change into small gear and keep your legs moving, do not stop immediately the test finishes, it is dangerous to do so.

Note: Instead of using cadence you can use speed or power (watts) if you have this facility on your turbo. This would mean increasing your effort by 1 mph or 20 Watts every two minutes instead of changing into a higher sprocket.

When you have finished put the information into a simple graph.

Before actually reaching your true max you will have passed through a stage which is known as the aerobic, lactate or ventilatory threshold or more commonly the point at which you go into oxygen debt. Just below this point is the optimum level for time trialling!

Once you have arrived at your true max, simply insert the attained figure in the Personal Heart Rate Table shown below to personalise your own training levels. This will form the basis of your training over the Preparation Period (& later).

The more accurately you are able to work in conjunction with your personal levels, the less training you need to do (train smarter!).

Whichever method you use you will eventually arrive at a Heart Rate Table which can be used for your training. An example of mine is shown below:

<i>John Gabriel MHR Table, Based on MHR of 182 (lab tested)</i>	
Level	Heart Rate Range
Level 0 – 55 – 65% MHR	100 – 118 bpm
Level 1 – 65 – 75% MHR	118 – 137 bpm
Level 2 – 75 – 85% MHR	137 – 155 bpm
Level 3 – 85 – 95% MHR	155 – 173 bpm
Level 4 – 95% + MHR	173 + bpm

YOUR PERSONAL HEART RATE TABLE

Based on MHR of xx	
Level	Heart Rate Range
Level 0 – 55 – 65% MHR	
Level 1 – 65 – 75% MHR	
Level 2 – 75 – 85% MHR	
Level 3 – 85 – 95% MHR	
Level 4 – 95% + MHR	

THE TRAINING

Ok once you have determined your training levels you are ready to get on with the real work.

The suggested training for Period 1 (weeks 1-4) is shown on the attached sheet and consists of a 7 day cycle so you can start on whichever day you wish to suit your personal circumstances. Traditionally however days 7 & 1 are weekends to take advantage of the available sunlight. I have shown an alternative to the long ride on day 1 if the weather is too bad so no excuses for lying in bed!

The sessions are pretty self-explanatory and do leave time for training for the other aspects of triathlon but if you are incorporating other sessions be mindful to avoid too many hard days back to back if possible avoiding the potential of overtraining. Remember this is a Cycle Improvement Programme, not a triathlon training schedule. The X Train sessions could be used to train the other disciplines. Traditionally this period of the year is used for preparation and attention to technique, plenty of time for killer sessions nearer the season start.

If you are racing i.e. cross countries (maybe on day 1) then by all means race and just adjust the road session to one hour (but not every week!).

You can start whenever you wish but w/c Sunday 6 November is the suggested start date and w/c Sunday 22 January the final week, as follows:

Period 1

Week 1 – 6 November
Week 2 – 13 November
Week 3 – 20 November
Week 4 – 27 November

Period 2 – SCHEDULE WILL BE POSTED ON CLUB WEBSITE IN MID-LATE NOVEMBER

Week 5 – 4 December
Week 6 – 11 December
Week 7 – 18 December
Week 8 – 25 December

Period 3 – SCHEDULE WILL BE POSTED ON CLUB WEBSITE IN MID-LATE DECEMBER

Week 9 – 1 January
Week 10 – 8 January
Week 11 – 15 January
Week 12 - 22 January

I suggest you spend the time before the schedule starts establishing your training levels, getting used to turbo training and working with heart rate monitor and cadence meter.

A good test of your progress could be the Ely Hardriders '25' mile Time Trial on Sunday 12 February 2006.

I've attached a Training Diary which you can use to record your sessions. I suggest any missed sessions are put in red (as a reminder!). You don't need to send me your completed diaries but feel free to do so with any queries you may have.

GOOD LUCK.

For the more serious

Maximum Heart Rate Using a Laboratory Test

The most accurate method of establishing your MHR is by a Kingcycle or Ramp test under controlled conditions at a testing lab. There are two locally at UEA Sportspark (contact Dave Cosford on 01603 592398) or at University of Essex Human Performance Unit (contact Tom Cudmore on 01206 873254). Tests cost from £50-70 but also give you lots of other good information.

Joe Beer's Training website at www.JBST.com/MAXtest.htm also gives the protocol for a very good DIY test.

Finally

This Preparation Period come FOC as part of my British Cycling Coach Development. If you are interested in individual cycling coaching after this period feel free to contact me, however there will be a fee. Also I will be unavailable from late January until early March as I'll be in New Zealand.