

## WINTER TRAINING - SOME PRACTICAL ADVICE BY Club President DR. GORDON WRIGHT.

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### Main purposes of Winter Training.

A time to recover and recuperate from the racing season

A time to improve some weaknesses in your fitness profile

A time to improve the 'on the bike' aerobic power base: this is the all important sustainable aerobic power

So to make the most of the winter period you need to plan. But before you plan you need objectives:

### So ask yourself.

What do I want to 'realistically' achieve next year?

Where am I now & what must I do to reach my goals?

### Winter training needs:

Many riders need to rest and recuperate from the stresses of the racing season, but also to put back what the racing season neglects [often a slow erosion of the 'aerobic power base, particularly late in the season].

### The objectives of winter training.

To try and hold on to the hard earned 'core' on the bike fitness.

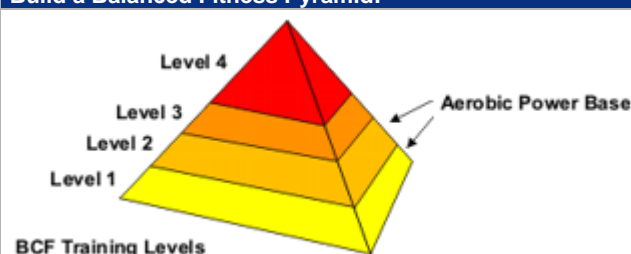
To improve basic aerobic power, if possible, but at least maintain it.

To improve basic all round strength.

To recover from the ravages of the racing season.

To build the foundation of the training Pyramid that will be your performance structure for the whole of the next season.

### Build a Balanced Fitness Pyramid:



A large well structured and solid training base gives you a strong foundation on which to build for higher performance summer racing.

A small foundation [the pyramid base] leads to a lower performance peak next summer - its that simple.

### A winter training programme should include off the bike training.

Circuit training to improve all round fitness [usually much neglected during the season 1- but not at the expense of winter riding. Weight training to improve basic strength [also very neglected during the season]. [I strongly recommend that you seek specialist advice on a winter weight training programme - join a good local gym].

### Essential on the bike training.

Training at level 2 to improve or at least maintain the aerobic power base. Training to improve local muscular endurance [long periods in the saddle on low gears - at a good purposeful club run pace]. Club run riding for relaxation [the important social side to riding] Riding to specifically maintain or improve skill mostly for new riders]

### You must work out the time available.

The days each week when you can train on and off the bike. How many hours each day are reasonably available for you to train?

- What Circuit & Weight training classes [or facilities] are available to you.
- When they are available for use
- Which days will be rest days from training

### You must be realistic with your estimate.

If you are ambitious then you need to set challenging but realistic goals. Start too high & your winter programme will fall apart. 'Planned and gradual progression' are key.

### On the bike winter training strategy.

Emphasise level 1 and level 2 training. You need as much controlled level 2 as possible [mostly lower to middling Level 2] if you need to improve your aerobic power base. Building aerobic power is a long term process - it can take months to have a big impact; it is not a quick fix process, so the winter is the time to do something about building on or at least trying to hold on to this all important foundation for the next season.

But you must recover fully between each training session, ie. : you must avoid overtraining, that is doing too much too soon. Good recovery is absolutely essential to get the full benefits of the overcompensation effect from a previous training load. Level 2 training can only be done effectively by having a knowledge of your Level 2 heart rate range - so get a heart monitor. If you do not have a monitor then Level 2 training is at a sweaty work out rate that still allows easy conversation.

### Essential feeding and hydration.

If you put in Level 2 sessions beyond 1 hour in duration then you must feed & hydrate yourself properly with complex carbohydrate solutions. So you must take carbohydrate drink whilst doing this level of training, preferably as glucose polymer ego a 5% to 8% solution of Maxim, PSP22, HiFive or TechFuel powder dissolved in water. You need to take 1/2 gram [half a gram] of MAXIM powder [or equivalent] for each kilogramme of body weight for each hour of training - dissolved in water to around 8% strength of solution.

Example: if you weigh 70 kilograms and plan for a two hour L2 session then take 70 grams of MAXIM [1/2 times 70 times 2] dissolved in a full [& large 750 ml] bottle of water and drink all of it during the ride. This would be around 9% strength. Drink more water with carbohydrate in the first hour after the training ride [up to 30 gms of glucose polymer]. This is the most effective period for glycogen replacement.

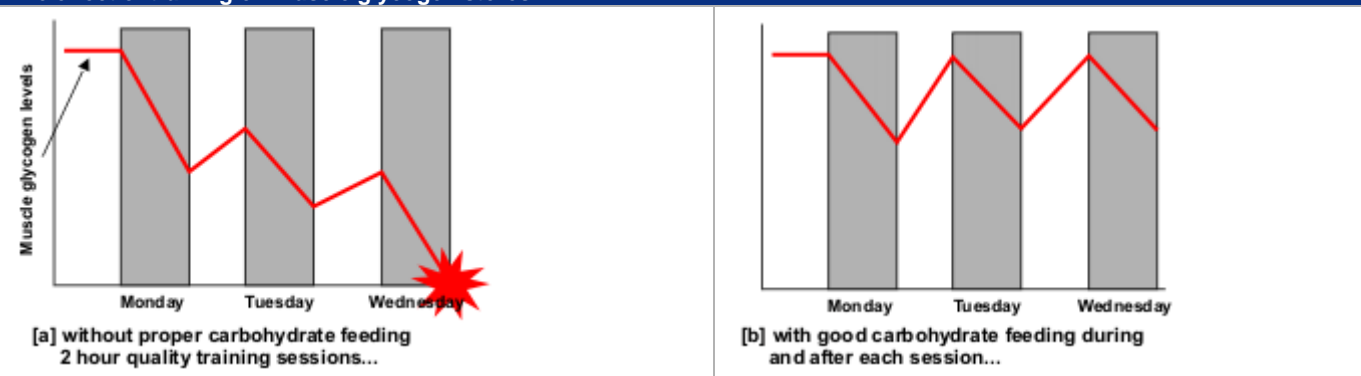
The diagrams which follow show what can happen to Glycogen levels if you train at Level 2 for two hour periods on three successive days. This is only an example and is not a recommendation to do three successive sessions - only to show you the serious glycogen depletion that could take place if you do not drink adequate carbohydrate fluid. If you run out of Glycogen on a long winter run then you are in serious trouble.

If you get a nasty case of the knock [known as bonk or more correctly hypoglycaemia] during a winter ride it can result in a serious hit to your immune system. The result - you go down with a cold or worse a flu virus if flu is around and your training is disrupted for many weeks or even longer. This happened to one of our members a couple of years back who followed the so called 'good advice of a former top pro rider who said "just drink water on long rides". Don't let this it happen to you - it could ruin your whole next season.

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### The effect of training on muscle glycogen stores:



### Plan for progression and endurance overload

You must build progression in to your training, by volume or intensity or a combination of both. if there is no progression then your training will stagnate, and you will very slowly lose form over the winter period.

Training consistently against a given heart rate will ensure good progression. For example, if the middle of L2 for you is around 140-145 beats per minute then repeating L2 training sessions at this heart rate will ensure progression providing the total volume in the week is sufficient. The reason? - As you get more aerobically fit you will go faster at the same heart rate and a larger volume of good training work is done in the same time by going further.

The reason: as you steadily get fitter then you will go slightly faster each time - provided you keep to your target heart rate.

Note: on long rides - 2 hours plus you will get 'heart rate drift' - it gradually goes up without any increase in riding effort. It is partly due to slow dehydration and also in part to gradual fatigue.

### How much training is enough?

How much Level 2 should you do each week? It all depends on your state of fitness, your age, stage of physical development and the goals for the next year.

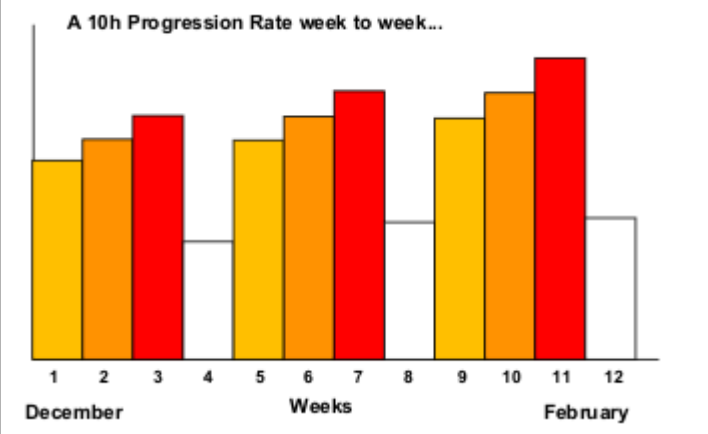
As a very rough and ready rule, the equivalent of 6 sessions a week of 60 minutes each session of good middle 12 will probably ensure you hold on to most of your current core fitness through the winter [but you will still lose much of your top end fitness] .

Less than than 6 hours per week of 12 and you will slowly lose gain 'core' fitness. but everyone is different. So there will be some variation. In addition to the above volume of quality level 2 work you also need some long steady rides at level 1 - the long winter club runs are ideal for this - 3 to 4 hours each Sunday in good company.

If you are really serious about winter riding then you should build up the training load [volume] progressively over three to four weeks then have an easy week for full recovery, then build the load again over a similar four week period but at a slightly higher load [in hours of level2] than the previous cycle, and so on through the winter. This way you can build a very good overall base of good endurance mileage.

The following diagram illustrates this principle of 'Phased Training' in what we called a 'Periodisation approach', that is targeting training periods eg winter, early spring etc., where each period concentrates on a particular training need such as endurance power, speed etc. This diagram shows the sort of pattern you should try and adopt over the winter period around three months to gradually build up a volume of quality endurance miles.

## How much training is enough?



A 12 week period of gradually building a solid foundation of endurance mileage with recovery weeks 1 in every 4: