

Endurance training for Formula 1 driver



1-Introduction :

Endurance training is the body's ability to maintain aerobic effort. The anaerobic threshold or red zone corresponds to the threshold at which point the oxygen in the blood supply is insufficient to allow the transformation of the lipids and carbohydrates into energy to be used by the muscles. Endurance is an aerobic procedure. The higher the anaerobic threshold, the greater the endurance. The value of the threshold therefore gives the endurance level. It is the oldest and simplest to use for the training of athletes. It affects the breathing capacity, cardio vascular, muscular and even psychological capabilities. Its aerobic efficiency has been proven. Nevertheless, physical exertion may be presented as anaerobic while driving.





2- Endurance training-why?

- For aerobic physical development
- To set up the foundations upon which we will build the future stages of physical development.
- To better tolerate the workload which may later be added to.
- To be able to endure a long period of exertion.
- To develop the necessary psychological capacity required for long period of exertion, eg. Grand-prix.
- Under a certain threshold, it may be used for recovery
- It has psychological qualities
 - Calming thanks to the cyclic and continuous aspect.
 - It develops psychological long term benefits.
 - It helps to diminish stress and anxiety
- It contributes to increase VO₂max (the amount oxygen the body is capable of utilizing in one minute) and to increase the anaerobic threshold (the threshold at which point the oxygen in the blood supply is insufficient to allow the transformation of the lipids and carbohydrates into energy to be used by the muscles).





3- When ?

- During the second part of the winter break just after the recovery period which follows the previous grand prix
- Between the grand prix
 - As recovery
 - as micro training cycles
 - during summer break (between Hungaria and Belgian grand prix)
 - To unwind during competition week



4- How ?

- Running
- Cycling
- Swimming
- Cross country skiing
- Rowing
- As endurance training with body building



Conclusion:

This method may be used as a general physical preparation. It is particularly important during the second stage of the winter break which is a development period. It is a base upon which we are able to build qualitatively in the future. This method is the most often used by drivers. However, it does not take into consideration the specific demands of this sport which is subject to considerable changes of rhythm and many anaerobic periods– *Benoit Campargue (Sport Management System)*