

Periodisation of Training

The issue of programme design has been referred to as a problem of organisation and management (Siff 2000). With this in mind the long-term challenge of managing training is commonly approached via the concept of periodisation. The fundamental objective of periodisation of training is to maximise the training effect, manage fatigue and prevent accommodation or overtraining (Plisk & Stone 2003). This process of 'training stress/fatigue management' involves the use of short, medium and long term planning and classically involves the cyclical manipulation of volume and intensity of training. Within this planning and management process other considerations that are relevant include demands of the sport, individual responses to training and the individual stages of development (Plisk & Stone 2003).

Although evidence exists to support periodisation methods, it has tended to focus on short-term studies (8-12 weeks) and on previously trained subjects. Whether such an approach is relevant or more effective with untrained or novice subjects remains to be established.

Some controversy exists regarding the 'western' approach to what was originally deemed to be an eastern European (Soviet) training methodology. Although training cycles / phases date back to the early writings of the Greeks and Romans, the Russian Matveyev has been credited with a modern interpretation of this approach and the term 'periodisation of training'. Questions have been raised regarding the specific interpretations of Matveyev's work and ideas, along with direct criticisms of his thinking. Authors such as Verkhoshansky have strongly criticised the application and principles suggesting they are now dated and far from the most effective way of training elite athletes within modern sport. Others such as Zheljzkow counter Verkhoshansky's arguments stating that many successful athletes have been trained with the principles outlined by Matveyev.

Although debate will and should continue, fresher thinking may now enhance the periodisation concept. Plisk and Stone (2003) discuss the relationships and connections to Game Theory, a 'planned unpredictability to outmanoeuvre the body' and suggest the concept of 'co-opetition. The aforementioned Verkhoshansky proposed the 'conjugate' or 'coupled successive system' as a viable method for elite athletes whereby a concentrate block of unidirectional training is undertaken; this contains a specific targeted overreaching with the objective of a delayed training effect being achieved. Others such as Siff (2000) discuss the obsession with numerical calculations within the programme design paradigm and highlight the need for objective input within the management process. Siff refers to this as 'cybernetic periodisation' where subsequent training input is modified based on the previous outputs of the system.

In practice, we are likely to encounter many more novices than we are elite athletes. With regard to periodisation this may mean that in most cases it is a management tool of only limited value, since the adaptational window of the client is so large. When working with elite athletes this window is far smaller and there is a natural progression to micromanagement (Plisk & Stone 2003). It is within this arena that the carefully administered application of training stress and subsequent recovery becomes ever more subtle and important and the development of more specific cycling and phasing of training will be required for continued athletic progress.

References & Suggested Reading:

Plisk, S.S., Stone, M.H. (2003) "Periodisation Strategies" *Strength & Conditioning Journal* 23(6) 19-37

Siff, M.C. (2000). *Supertraining*. Supertraining Institute, (5th ed.). Denver USA

Verkhoshansky, Y.V. (1985) *Programming and Organisation of Training*. Livonia, Michigan Sportivny Press

Zatsiorsky, V.M. Kraemer, W.J. (2006). *Science and Practice of Strength Training*. (2nd ed.). Champaign, Illinois: Human Kinetics

© Gary Stebbing 2006