ASSESSING READINESS IS AN EFFECTIVE WAY TO MANAGE ATHLETE'S PREPARATION ROMAN FOMIN AND VALERY NASEDKIN OMEGAWAVE, ESPOO, FINLAND

Introduction **Cost of Adaptation** - the physiological cost the athlete's organism pays for Without objective feedback on the changes taking place in the functional state adapting to training and non-training-related changes in the environment. of the athlete's organism in response to training sessions, a coach cannot prop-Loads – the total training load, characterised by volume and intensity. erly evaluate the athlete's Readiness for training and to implement training sessions accordingly. Hence, the knowledge and understanding of the adapta-To help achieve optimal athletic performance without associated health risks, tional changes that take place in the athlete's organism during and after train-Omegawave developed a unique technological solution for the most effective ing are key to enhancing the approach to the athlete preparation process. The management of the athlete's preparation. coach also needs to be able to manage these changes when and as required in The technology is based on a comprehensive, systematic, integrated approach order for performance objectives to be realised.

The Readiness Concept

Each athlete is unique, so the approach to the athlete's preparation must also be individually specific. Only by using principles of individualization and optimization of the training process will coaches be able to manage the quality of the athletes' reactions to training sessions and the preparation of the athlete as a whole. In addition, without specific physiological feedback on the athlete's functional state, coaches will be unable to select the optimal amount of volume and intensity of training, to effectively manage and correct training loads, or to organize recovery and recuperation activities in a timely manner.

• Central Nervous System / Direct Current Potential of the Brain Cardiac System & Autonomic Nervous System / HRV For an athlete to achieve peak performance, an effective, integrated systemic approach to athlete preparation is required. This approach should ensure Energy Supply Systems / Amplitude-Frequency ECG analysis Neuromuscular System / Jump tests that the athlete's levels of trainability and preparedness are continuously de-Sensorimotor System / Sensorimotor reactions veloped so that he or she can perform at their highest possible ability. Cre-**Overall Readiness during stress / Submaximal Physical Working Capacity** ating a proper methodology of training is a vital part of this complicated and multi-faceted approach, and it should be the primary task of any coach. test

The Concept of Readiness in Managing of the Training Process of Athletes Nasedkin V., Fomin R., 2013



tellectual factors.

Omegaulave

Somecomove

to the assessment of the athlete's Readiness for training loads. A fundamental element of the approach is the modern scientific perspective that the adaptation processes that occur in various systems should not be viewed in isola- Omegawave's Cloud technology uses the latest scientific and technological tion, but rather as a single systemic and integrated process.

Scientific methods

The Omegawave technology is based on the assessment of the Readiness of the following physiological systems and the organism as a whole.

- **Overall Readiness at rest**

Omegawave Cloud Technology

The Omegawave cloud technology offers new and unique opportunities for the fastest method of processing and assessing information, thereby allowing coaches and athletes to use it for optimal management of the training process.



For more information please contact: roman.fomin@omegawave.com or val.nasedkin@omegawave.com, or visit our website at www.omegawave.com

Using the individual Readiness information immediately available the coach is able to make timely and appropriate changes to the daily training plan. Specifically the coach is able to select the type and focus of training for the session, determine the optimal volume and intensity of exercise, and ensure optimal performance with minimal cost and risk to the athlete.

Cloud technology offers short- and long-term monitoring of the adaptational changes taking place in response to training. Coaches and athletes are easily able to see the trends of the development of the athlete's overall functional state and preparedness.

developments, placing the operational control of when, where and how often Readiness assessments are performed in the hands of the coach or athlete.

Advantages of Omegawave over Other Technologies and Methods

• Pioneering mobile technology and cloud service that uses a patented combination of specific scientific methods to comprehensively assess the overall **Functional State and Readiness** • Frequent, daily Readiness assessments can be measured in the field with minimal investment of time and exertion using non-invasive, safe, reliable, and easy to use technology • Omegawaves methods for assessing Readiness are validated by solid science and assessment data from more than ten thousand elite athletes • A team of elite coaches and leading scientists provide timely, expert support to assist with Readiness analysis and the preparation of guidelines and training plans







