



Prof. Dr. Elmar Wienecke

**PERFORMANCE
EXPLOSION
IN SPORTS
AN ANTI-DOPING-CONCEPT**

**MEYER
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SPORT**

THE AUTHOR



Prof. Dr. Elmar Wienecke is a certified trainer with a doctorate in sports science. He received his doctor's degree at the Cologne Sports Academy in Cologne, Germany, in the area of sports medicine/cardiology/fitness training and kinetics. His personal negative experiences in sports due to numerous torn ligaments in ankle and knee led to his premature athletic disablement.

With his meticulous work ethic and an interest in science, he initially decided to become a soccer coach. He has been licensed as a German Bundesliga coach since 1989. He coached for several years in German regional league clubs and briefly in the 2nd League Bundesliga. He ended his occupation as a trainer at the age of 33, and founded SALUTO, which today is considered a center of excellence for health and fitness in Germany. Between 1994 and 2010, he and his team tested a total of 9,150 competitive athletes, 6,434 recreational athletes and 16,870 non-athletes.

Today his visionary training and nutrition concepts for top athletes produce results on an international level. As the initiator of clinical studies, research projects in the area of micronutrient therapy and the unique European prevention concept for youth and top athletic talent, he also lectures and conducts seminars all over Europe. At the end of 2008, he received an honorary professor's degree from the department of physical education and health at the largest Rumanian sports science university.

Performance Explosion in Sports

For better readability, we have decided to use the masculine (neutral) form of address, but the information also refers to women.

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Prof. Dr. Elmar Wienecke

Performance Explosion in Sports

An Anti-Doping Concept

**Revolutionary New Findings
in the Area of Micronutrient Therapy**

**Training Continuity
Training Optimization
Injury Prevention through
Personalized Micronutrients**

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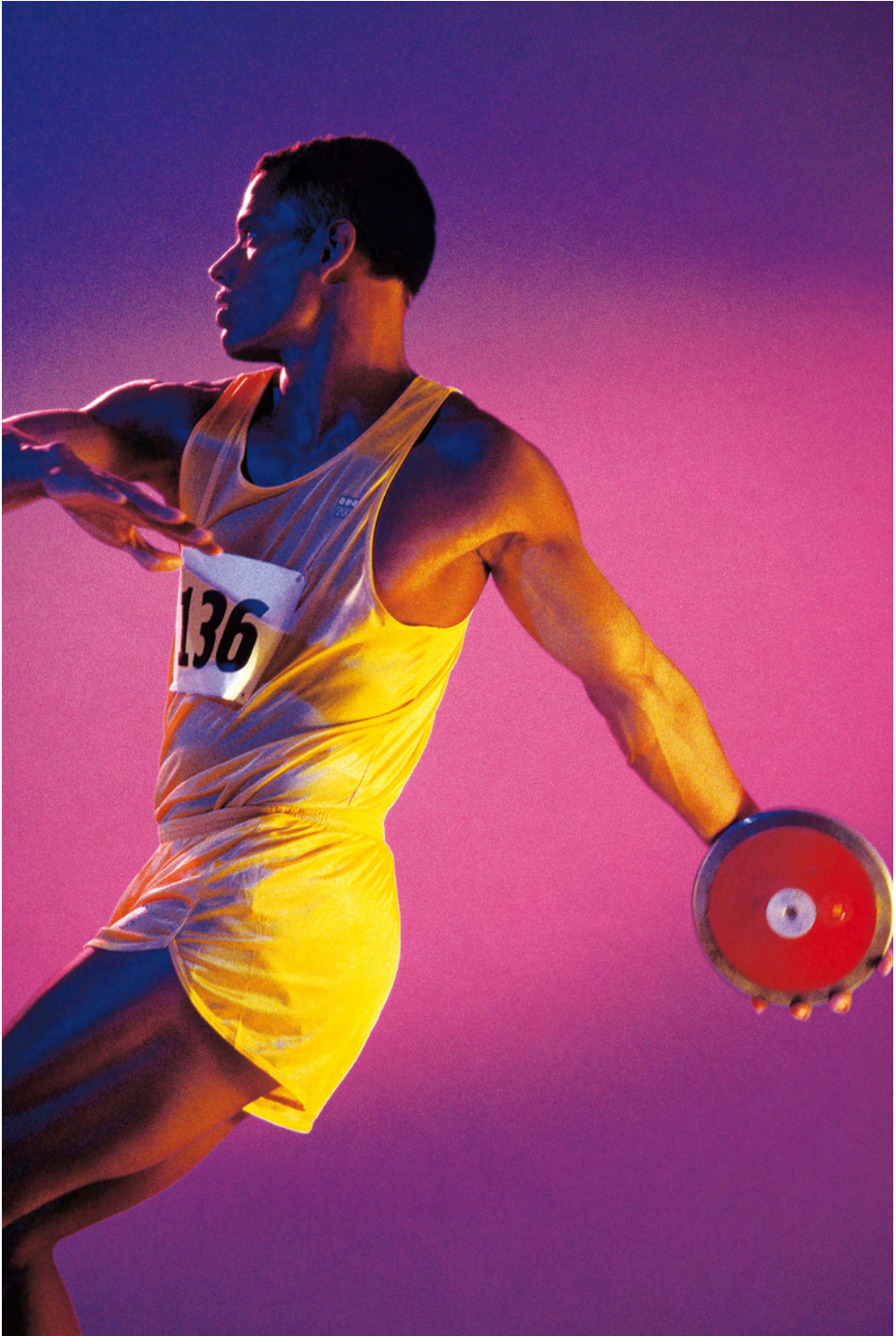
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Preface

We are all familiar with this: a twinge, a pang, or any number of other little discomforts that frequently prevent the athlete from achieving his optimal potential. But even serious injuries without external force, such as torn ligaments in the knee, shoulder or ankle, have dramatically increased in recent years in all sports.

The dream of winning the championship, the need for success as an acknowledgment of personal strength, the lucrative financial offers, all have resulted in athletes increasingly using banned substances to create a competitive edge for themselves, both in recreational as well as performance sports. The doping problem extends to all sports. A former competitive athlete claims that nowadays winning is impossible without these substances. What an absurd misjudgment!

In fact, the key to effective injury prophylaxis and possible performance explosion lies with simple optimized preventative measures. The engine of a car won't run without gas, and it's the same with the performance development and injury prophylaxis of athletes. Athletes are unable to meet their full potential without micronutrients. There exists a connection between the cellular nutrient concentration and degeneration of bradytrophe tissue (ligaments, snears, cartilage). This will be confirmed with special parameters (i.a. pyridinium crosslinks). However, to date scientists deny these correlations. According to statements by international scientists, "little knowledge" exists on the positive effects of a specific micronutrient supply in athletes. It is still in its infancy.

In the past ten years, our institute SALUTO and its cooperation partners have examined 9,150 athletes (i.a. European champions, world champions) and 6.434 recreational athletes from all different sports, and by means of a unique European prevention program for young star-athletes (national level youth and junior team handball players), were able to acquire new and highly interesting findings in the area of micronutrient therapy. Of note were the dramatic cellular micronutrient deficiencies of top athletes and many recreational athletes. Ambitious athletes live dangerously in the truest sense of the word, without the "optimal" fuel (micronutrient supply).

Contrary to previous findings from interdisciplinary research in sports medicine, sports and nutritional science, our present research results show that a good diet and an optimal customized micronutrient concentration clearly reduce the risk of injury, increase the athletes' performance, and can lead to performance consistency.

Together let us delve into the fascinating world of micronutrient therapy in athletes. The goal is a definite performance increase by tapping into existing potential through natural means. Do not rely on the dietary methods of yesterday and specifically implement your own anti-doping concept. A condensed version of many of the findings, background information and practical tips introduced here can be found in the appendix or can be downloaded as a PDF file (available from the publisher with corresponding code number).

Clean, injury-free and successful sports are no myth or fairytale but can become a reality!

Regards,
Prof. Dr. Elmar Wienecke
Sports Scientist



Photo: Polka Dot-Images

1 Introduction

1.1 The Anti-Doping Concept – the personalized micronutrient formulation

Athletes live dangerously! The higher the training intensity and volume of competitive athletes, the higher the danger of training interruption due to frequent infections and injuries to the connective tissue (ligaments, tendons and cartilage). Of the 9,150 competitive and 6.434 recreational athletes examined by SALUTO, 72% of all injuries were sustained without external force. These are injuries to various connective tissue structures of the tendon-ligament apparatus and the musculature.

There are obvious correlations between the concentration of cellular micronutrients (amino acids, vitamins, minerals, trace elements), the degeneration of bradytrophic tissue structures (ligaments, tendons, various cartilage substances), injury susceptibility (see pg. 101, 102, 108), the status of the immune system, and the performance consistency of competitive athletes.

Definite links can be seen between optimal micronutrient formulation and the repression of inflammatory and degenerative changes in competitive athletes with the aid of special laboratory parameters such as COMP (cartilage oligometric matrix protein) and the pyridinium crosslinks. The athletes taking the customized micronutrient formulation clearly exhibit lower COMP values after four months than the group of competitive athletes that took doses of micronutrients according to DGE guidelines. The results of the pyridinium crosslinks in urine show a similar effect (see pg. 108).

In our experience structural changes in the tendon and ligament apparatus and the various cartilage structures can only be seen several years later with the aid of MRT images (and not, as was previously thought, after 4 to 8 months). Future long term testing of athletes with the aid of MRT images and the listed special blood parameters will have to confirm these correlations.