ATHLETES’ HEALTH IN ENDURANCE SPORTS

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The next 60 minutes...

- Preventive Medicine in endurance sports: exercise physiology, overloading and health
- Practical steps to prevent injury and illness
- Team model for elite and junior athletes
Preventive Medicine: Exercise physiology, overloading and health

- Upper limb stress injuries
- Lumbar spine
- GE reflux
- Respiratory infections
- Asthma, Allergies
- TOTAL LOAD
- Energy balance
- Anemia
- Hormonal balance
- Mental health
- Lower limb stress injuries
High ventilation

Dry air

Cold air

Inflammation

Poor air quality

Microbes

Allergens
Load Management

- Control in every day life: calendar, daily routines, travel days, social life
- Training program: variability, loading cycle, movement control, tissue recovery
- High quality diet, energy balance, meal schedule, hydration
- Well and enough sleep – regular sleep cycle and evening routines
- Clean hands – soap wash for 20 seconds!
- Warm and dry skin, healthy teeth
- Healthy airways
- Environment control – air-conditioning, dusts, weather, crowded places
- Fast reaction when needed!
Female hormonal balance in endurance sports

**Challenges**
- High energy consumption
- Advantages of lower weight
- Esthetics
- Lack of knowledge
- High goals on junior level
- Repeating same mistakes

**Negative manifestations**
- Relative energy deficiency
- Amenorrhea
- Low bone mass, stress fractures
- Overloading syndrome
- Eating disorders
- Lost talent in sports
Regular menstrual cycle

+ 46 XX
+ Anatomy of female genitals
+ Function of hypothalamus-pituitary-ovaries - axel
+ Appropriate body composition and mental well-being

Menstrual cycle reflects woman’s fertility, lifestyle habits and overall health!
Steps to improve female athletes’ health??

- Improving knowledge
  - Estrogen is a female anabolic hormone
  - Normal hormonal environment improves training effect and recovery
- Securing hormonal development
  - Versatile training methods, limiting the amount of impact in training
  - Re-thinking body composition (when, how, how much?)
- Controlling relative energy balance
- Prolong the off-season period
- Improving collaboration in coaching and health care
- Protocols to intervene amenorrhea and eating disorders
Preventive medicine is not rocket science. It is about repeating same daily routines over and over again.

Thank you!

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