

Portable Urine Metabolomics Analyzer for Athletes

The device analyzes metabolic changes related to the body's immune response. These changes occur during:

- intake of sports supplements,
- extreme physical exertion, overheating or hypothermia,
- inflammatory processes.

Why It Matters

- To detect when the body is approaching a **danger threshold**, beyond which physical load may start causing harm.
- To understand how well the body is coping with training stress.

Practical Value

- Helps prevent overtraining and hidden fatigue.
- Enables more accurate selection of supplements, training intensity, and recovery timing, with real-time monitoring of the body's condition.

Biomarker F9/F2 Value	Interpretation
15,0 - 20,0	Normal . The body is recovered and functioning within a healthy range.
30,0 - 45,0	Elevated . Indicates an increased immune response. Caution is advised; extreme physical exertion should be avoided.
>60,0	Critical level (comparable to severe infection in active phase). Strong immune activation, high risk of overload – intense training may be harmful.

Typical training load dynamics with periodic sports supplement intake (days 1, 4, 6, 8, 11, 13, 15).

