Blood tests package for recreational athletes

The blood tests package determines:

- Creatinine is the end product of muscle metabolism. The amount depends on the size of the muscle mass. Helps assess the functioning of the kidneys.
- Urea is the end product of protein cleavage. Reflects the amount of protein cleavage in the body. Could refer to training that has severely damaged the muscles, kidney disorders.
- High values of uric acid may indicate renal failure, high physical workload, and weight loss.
- Sodium, potassium, calcium
    - Sodium takes part in water and acid-base balance regulation. It could help to determine both water deficit and excess (heart and kidney failure).
    - Potassium takes part in the metabolism of the muscles, heart, kidneys, and central nervous system, determines the tone of smooth and skeletal muscles.
    - Calcium is one of the most important minerals inside the body. A reading above the norm may indicate the thinning of bones. A reading below the norm may indicate vitamin D deficiency. Low calcium content in the blood may cause muscle cramps.
- Iron, magnesium, phosphate

    - 70% of the iron inside the body forms a part of hemoglobin. In case of iron deficiency, the oxygen carrying capacity of red *blood cells* is reduced.
    - Magnesium takes part in muscle and nerve functioning. Magnesium deficiency causes muscle weakness and proconvulsiveness.
    - Phosphate is essential for the activation of several enzymes. It helps to assess vitamin D metabolism disorders.
- C-reactive protein – sensitive risk marker for inflammation and cardiovascular diseases.
- To evaluate cardiovascular disease risk, the co-occurrence of inflammatory diseases should be excluded.