

AS Ida-Tallinna Keskhaigla Ravi 18, 10138 Tallinn Rg-kood 10822068 Tel 666 1900 E-post info@itk.ee www.itk.ee

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.