

## 1. Research project objectives

The main aim of the undertaken research will be elaboration of analytical method which will provide a new analytical tool for investigations on samples of equestrian dietary and nutritional supplements in order to detection of non-steroidal anti-inflammatory drugs (NSAIDs) and investigation of samples of thirty purchased equestrian supplemental products for the presence of doping substances belonging to NSAIDs, anabolic-androgenic steroids (AAS) and stimulants forbidden in equestrian sports.

## 2. Basic research carried out under the project. Reasons for undertaking this particular subject

In the scientific literature associated with the widely understood issue of doping in sport there are much information on investigation of samples of dietary and nutritional supplements designed for athletes in order to control the presence of doping substances. Unfortunately, there is little information about analysis of samples of this type of equestrian preparations. Therefore, it may be stated that the proposed project have an essential influence on complement the knowledge of the subject.

Dietary supplements are products intended for ingestion that contain “dietary ingredients” intended to add further nutritional value to supplement the diet. Foodstuffs intended to meet the expenditure of intense muscular effort, especially sportsmen are commonly called “nutrients”. The conclusion from the analysis of the data from the literature may constitute a basis to state that dietary and nutritional supplements may be intentionally or unintentionally contaminated with substances prohibited in sport. An attempt to hide information about presence of doping substances in supplemental products by not declaring their presence on the labels or using unusual vocabulary leads to using doping without being aware of it, inadvertent positive doping cases, unfair competition and health hazards.

An international study performed in 2000 and 2001 on six hundred thirty four nutritional supplements designed for athletes which were purchased in thirteen different countries showed that about fifteen percent of the nutritional products were contaminated with compounds forbidden in sport. Detection of doping substances in dietary and nutritional supplements designed for athletes contributed to the growth of interest in equestrian supplements.

Currently on the market there are many equestrian dietary and nutritional products whose effects have not been confirmed by reliably conducted research. Moreover, in order to growing interest, there are still produced new products of this type.

The fight against doping and the inappropriate use of medications is not only limited to ensure fair competition but concerns moral and ethical aspects related to the administration of doping substances to horses. The undertaken actions will affect the growth of public awareness about the threat from equestrian dietary and nutritional supplements which reduce the risk of inadvertent doping.