

***"Simplified testing procedure for new potentially performance enhancing peptide hormones"***

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**Project Overview**

Several new performance enhancing peptides have necessitated particular attention of doping control laboratories. These peptides own significant energy modulating properties by acting as insulin receptor modulators (S507, S519). Athletes will benefit from these modulations and availability is given via internet-based sources for the non-approved candidates or via the pharmacy for approved compounds. For this study, peptides will be purchased, in-vitro metabolized and characterized by mass spectrometric methods. Afterwards, simple and fast detection methods will be developed by means of solid phase extraction and mass spectrometry. Ideally, it is aimed that these simplified methods will be combined with the already established assays for large peptides (insulin, GRFs etc.) to obtain one single multiplexed initial testing procedure for a large number of different prohibited peptides.