NUTRITION AND SPORTS: A BIOCHEMICAL APPROACH

*Bianco, A.A.G.; Beton, D.; Carvalho¹, A.Z.; Koide, T.; Miyamoto, S.; Ribichich, K.F.; Rodrigues, L.O.;
Silva, F.H.L.; Tejada, E.C.S. and Torres, B. B.*

Departamento de Bioquímica, IQ, USP, C.P. 26077, 05508-900, São Paulo, SP. ¹Departamento de Química Fundamental, IQ, USP.

This work presents a course dedicated to the pedagogical instruction of graduate students (Ensino de Bioquímica - QBQ 5711) in which they have to plan and teach a 30 hour-discipline for undergraduate students. The graduate students have to choose a subject for the discipline and, in 2003, the chosen subject was Nutrition and Sports: a Biochemical Approach, which is not specifically broached in regular disciplines. The discipline was structured in the basis of collaborative learning, thus, the 75 enrolled undergraduate students (from different courses as Nutrition, Sports, Pharmacy, Chemistry and Biology) were organized in small working groups. The students were given a study guide produced by the graduate teachers (available in Portuguese at <http://www.sbbq.org.br/revista/mtdidaticos.php>), in which the following contents were covered: muscle contraction, O₂ up-take, oxidative stress and anti-oxidant response, cramp, hydration, doping and nutritional supplies. In the final activity the students had to evaluate critically myths and true facts in 80 statements usually associated to physical activities and sports. The discipline was evaluated through questionnaires. From the analysis of the answers of both undergraduate and graduate/teachers students it is possible to conclude that the discipline was well conducted and succeeded. These results emphasize the relevance and contribution of this kind of discipline to the pedagogical instruction of the graduate students and also to the increase of undergraduate students interests in Biochemistry.