ABSTRACT

Title: Nutrition for endurance runners

Objective: The aim of this bachelor thesis is to explain the importance of training diet,

particularly a diet for marathon runners in the age of 30 - 40 years. Proposal of diet

composition for marathon runners.

Methods: I conducted a literature research of czech and foreign sources regarding

training diet to get relevant information. I also searched for scientific papers using the

internet database EBSCO and Scorpus.

Results: Recommended amount of carbohydrates increases with duration. 8 - 10 g/kg

of body weight is needed for a race lasting 2 - 4 hours. Recommended amount of

proteins is 1,2 - 1,6 g/kg of body weight. The amount of fats, recommended for

endurance running, is 1 g/kg of body weight.

The runner should be well hydrated. Dehydration decreases performance. It is

recommended to drink isotonic sport drinks with carbohydrates added.

It is recommended to eat polysaccharide snack with low glycemic index weighing 1

g/kg of body weight. Endurance performance can be enhanced by consuming 100 - 250

kcal of carbohydrates every hour after the first hour of the race. It is also recommended

to consume carbohydrates with high glycemic index and proteins (the ratio of

carbohydrates to proteins being 4:1) 30 to 90 min. after finishing the performance.

Medium chain fatty acids and caffeine protect muscle glycogen and extended endurance

performance.

Keywords: Endurance, running, nutrition, performance