The purpose of this study was to determine the in vivo glycemic index of carob tablets with healthy subjects and to determine the in vitro glycemic index of carob tablets and carob flour by the hydrolysis index. Seven healthy volunteers consumed portions of carob tablets containing 26g of available carbohydrate. Their capillary blood was taken at intervals after carob or glucose consumption. The glycemic hydrolysis index by an in vitro technique was based in the release of glucose after enzymatic treatment of carob tablets and carob flour. The determination of the fiber content was performed using the enzymatic-gravimetric method. By the in vivo determination, the estimated glycemic index of carob tablets could be considered low (55). By the in vitro determination, the estimated glycemic index ranged from 40.1 ± 0.02 of carob tablets to 40.6 ± 0.05 of carob flour. The total fiber values obtained for carob flour samples were from 42.6% ± 0.49 to 42.9% ± 0.68 with no statistical significant differences between samples. Carob tablets and carob flour could be classified as low glycemic index food and low glycemic load food. Carob flour is a high fiber food, containing mainly high levels of insoluble fiber.

Keywords
Glycemic index, Glycemic load, Carob, Dietary fibers, Ceratonia siliqua L.