COMPARISON BETWEEN LEVELS OF DIETARY FIBER IN LEAFY VEGETABLES CULTIVATED IN ORGANIC AND CONVENTIONAL FORM

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Organic agriculture can be conceptualized as a cultivation method that establishes production system ecologically balanced and stable, economically productive and promotes the effective use of natural resources. These measures result in chemical safe food, ie, foods are free of toxic waste and are produced in harmony with the environment and the demand of the population. It is believed that was a difference between the nutritional composition of organic and conventional foods. This study aimed to quantify and compare the levels of Total Dietary Fiber (TDF) of two leafy vegetables, cabbage (*Brassica oleracea*) and lettuce (*Lactuca sativa*), cultivated under organic and conventional conditions, purchased in local commerce in Uberlândia-MG. To determine TDF, the non-enzymatic-gravimetric method (AOAC 993.21) was used. The TDF found in organic cabbage was 4.37 ± 0.28 g/100 g, and in conventional cabbage was 3.15 ± 0.12 g/100 g, with significant difference (F test/5%). Regarding organic lettuce and conventional levels of FAT were 1.76 ± 0.08 g/100 g and 1.57 ± 0.01 g/100 g, respectively, showing no significant difference at 5%. The increase in TDF content in organic cabbage can possibly be attributed to the increase of phenolic compounds produced naturally by plants to defend against attack of insects. We conclude that there are significant differences in TDF content between organic and conventional cabbage. However, further studies should be done for further explain on the differences in nutritional composition between organic and conventional varieties, including the determination of soluble and insoluble fractions of these fibers.

Keywords: conventional foods, organic foods, nutritional composition, dietary fiber, cabbage (*Brassica oleracea*).