

BIOACTIVE COMPOUNDS AND ANTIOXIDANT ACTIVITY IN GUAVA (*PSIDIUM  
GUAJAVA L.*) PULPS

Polinati,R.M.<sup>1</sup>; Faller,A.L.K.<sup>1</sup>; Fialho,E.<sup>1</sup>

<sup>1</sup>DNBE, Instituto de Nutrição, UFRJ, Rio de Janeiro, Brazil.

Experimental and epidemiological studies indicate that consumption of bioactive compounds from vegetables is related to lower incidence of chronic diseases. The aim of this study was to analyze free and total polyphenols, lycopene, antioxidant activity (AA), total soluble solids (TSS) and pH of guava obtained *in natura* and by two different industrialized frozen pulps. The results showed higher contents of free and total polyphenols in *in natura* fruit in relation to industrialized ones. The fresh fruit resulted in 198,9mg and 214,5mg of gallic acid equivalent (GAE) /100g for free and total polyphenols, respectively, whereas the frozen pulps varied from 91,65 to 172,87 mg of GAE/100g FW. The lycopene content was 66,34mg/kg FW for *in natura* pulp and 27,17 and 53,30mg/Kg FW for the industrialized ones. The AA was measured in three different times and in the first 15 minutes the AA from one industrialized pulp was three times lower than the others samples. During 30 and 60 minutes the AA diminished compared to the initial time and remained constant for all the samples. The pH of pulps was approximately 3,0 and the TSS varied from 7,5 to 9<sup>0</sup> Brix. In conclusion, the best consumption of guava pulps would be *in natura* and it is considered an important dietary source of antioxidants.

Keywords: guava, polyphenols, lycopene and antioxidant activity.

Supported by: FUJB, FAPERJ and CAPES.