

Phytochemicals and Antioxidant Capacity in Guava (*Psidium Guajava L.*) Pulps

Submitted or Not to Heat Treatment

Polinati, R.M.¹; Gomes, L.S.¹; Fialho, E.¹

¹DNBE, Instituto de Nutrição, UFRJ, Rio de Janeiro, Brazil

Consumption of bioactive compounds (BC's) from vegetables and yours sub products is related to lower incidence of non-communicable diseases. The aim of this study was to characterize chemically guava pulps by total soluble solids (TSS), pH, soluble (SP) and hydrolysable (HP) polyphenols, tannins, lycopene and antioxidant capacity by DPPH (AC) of mature green (MG), ripe red guava (RG) and industrialized frozen guava pulps (IF-1 and IF-2) submitted or not to heat treatment. TSS content was higher for RG, being this value significantly different only for IF-2. For SP and HP weren't significant difference between all samples analyzed. RG presents the higher lycopene content (84,53mg/kg FW) and the heat treatment reduced lycopene content from 54% for RG thermally treated by 15 minutes and 49% for RG thermally treated by 30 minutes. Astringency given by tannins content wasn't different for most samples with values varying from 385 to 474mg/kg and AC was higher in all samples analyzed, and this factor wasn't influenced by ripeness degree of the fruit and heat treatment. In conclusion, MG, RG and IF red guava pulps are excellent source of BC's with high AC, even when subjected to heat treatment

Keywords: guava, polyphenols, lycopene, tannins, antioxidant capacity.

Supported by: FAPERJ.