Assessment of quality parameters and microbial characteristics of Cape gooseberry pulp (Physalis peruviana L.) subjected to high hydrostatic pressure treatment

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© 2015 Published by Elsevier B.V. on behalf of The Institution of Chemical Engineers. The aim of this investigation was to determine the effect of high hydrostatic pressure (HHP) on dietary fiber, total phenolic (TPC), Vitamin B and E contents, antioxidant capacity (AC) and microbiological characteristics of gooseberry pulp immediately after processing (300-400-500 MPa/1-3-5 min) and after 30 days of storage at 4 °C. Initially, treatment at 300 MPa/1 min reduced the microbial counts to non-detectable levels (<1.0 log CFU/g). An increased of soluble dietary fiber was observed for all the treatments compared to control samples. Moreover, a notable increase in B3 and B6 contents were observed respect to control samples. After refrigerated storage, the insoluble dietary fiber (IDF) to soluble dietary fiber (SDF) ratios were similar to those presented at Day 0. Although the values of TPC were lower than at Day 0, an increasing tendency due to treatments was observed. Regarding antioxidant c