

STUDIES ON CYTOTOXIC ACTIVITY OF CAMEL MILK WHEY PROTEIN AS A NUTRACEUTICAL AGAINST HeLa CELLS

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ABSTRACT

The present study was based on cytotoxic properties of camel milk and its whey against the cervical cancer-derived cell line, HeLa. High concentrations of camel milk and whey were cytotoxic against these cells. Camel milk whey inhibited the migration of these transformed cells, increased the activity of caspase 3, fragmented DNA by PCD, and regulated the CYP1A1 oncogene at the transcriptional level. Thus, camel milk whey can be considered as a potent nutraceutical with anti-cancer property.

Key words: Camel milk, casein, caspase, cytotoxicity, HeLa cells, nutraceutical, protein, whey