

Tomato pomace as a functional ingredient in cookie making

MUDAIR AHMAD BHAT, HAFIZA AHSAN, LUBNA MASOODI, OMAR BIN HAMEED AND REHANA SALEEM

Tomato pomace, a by-product of tomato juice industry, is a rich source of fibre and polyphenols. Also in view of the antioxidant property of pomace, it would play an important role in prevention of diseases. Tomato pomace procured from Food processing training centre (FPTC) SKUAST-K, Shalimar, contained 87.20% moisture, 1.10% ash and 6.20% of dietary fibre. Finely ground tomato pomace was incorporated in wheat flour at 5%, 10%, 15 %, 20% and 25% levels for development of cookies. Water absorption increased significantly from 58.20% to 67.30% with increase in pomace from 0% to 25%. Dough stability decreased and mixing tolerance index increased, indicating weakening of the dough. Resistance to extension values significantly increased from 330 to 625 BU whereas extensibility values decreased from 120 to 42 mm. Cookies were prepared from blends of wheat flour containing 0–25% tomato pomace. The diameter and spread factor of cookies increased from 53.25 to 53.80 mm and 77.1 to 81.02, respectively with increase in pomace content from 0% to 25%. The thickness of cookies decreased with increase in pomace levels. Volume of cookies decreased with incorporation of tomato pomace. Cookies prepared from 25% of tomato pomace had dietary fibre and total phenol content of 10.23% and 6.20 mg GAE/100g as compared to control indicating that tomato pomace can serve as a good source of both polyphenols and dietary fibre.

Key Words : Tomato pomace, Farinograph, Cookie, Dietary fibre, Total phenol content

How to cite this article : Bhat, Mudair Ahmad, Ahsan, Hafiza, Masoodi, Lubna, Hameed, Omar Bin and Saleem, Rehana (2017). Tomato pomace as a functional ingredient in cookie making. *Food Sci. Res. J.*, 8(2): 254-259, DOI : 10.15740/HAS/FSRJ/8.2/254-259.

MEMBERS OF RESEARCH FORUM

Author for correspondence :

MUDAIR AHMAD BHAT, Sher-e-Kashmir University of Agriculture Science and Technology, Shalimar, SRINAGAR (J&K) INDIA
Email : mudasagar@gmail.com

Associate Authors' :

HAFIZA AHSAN, LUBNA MASOODI, OMAR BIN HAMEED AND REHANA SALEEM, Sher-e-Kashmir University of Agriculture Science and Technology, Shalimar, SRINAGAR (J&K) INDIA