

## Sensory and nutritional evaluation of health drink for adolescent girls using underutilized foods

NEHA KAPOOR, ANITA KOCHHAR, MADHU AND VANDANA KOCHHAR

A health drink was prepared by using whey water, pearl millet, broccoli leaf powder, banana and jaggery at three different levels *i.e.* S<sub>1</sub> with 5g pearl millet, 2.5g broccoli leaf powder, 50g banana, 10g jaggery and 82.5 ml whey water, S<sub>2</sub> with 5g pearl millet, 3g broccoli leaf powder, 50g banana, 10g jaggery and 82.5 ml whey water and S<sub>3</sub> with 5g pearl millet, 3.5g broccoli leaf powder, 50g banana, 10g jaggery and 82.5ml whey water. The developed health drink was organoleptically evaluated by a panel of judges and students by using nine-point hedonic scale. Both the panels gave the highest overall acceptability scores to the S<sub>1</sub> level. The most acceptable level was chemically analyzed for proximate composition, available carbohydrates, vitamins and minerals and anti nutritional factors by using standard methods. Hundred milligram of developed drink was analyzed for proximate composition showed that it had 61.43g of moisture, 2.9g of crude protein, 0.4g of crude fat, 1.2g of crude fibre, 2.2g of ash, 31.87g of carbohydrates and provided 142.68 Kcal of energy. Developed health drink had 21.7g total soluble sugars, 7.9g of reducing sugars, 13.8g of non-reducing sugars and 9.8g of starch. The concentration of minerals iron and calcium in the drink was 2.96 mg and 167 mg, respectively. The concentration of vitamins, ascorbic acid and β-carotene was 5.6 mg and 1568 μg, respectively. The amount of total phenols, oxalates and phytin phosphorus in the drink was 18.2 mg, 22.5 mg and 32.68 mg, respectively.

**Key Words :** Adolescent girls, Banana, Broccoli leaves, Health drink, Jaggery, Pearl millet, Whey water

**How to cite this article :** Kapoor, Neha, Kochhar, Anita, Madhu and Kochhar, Vandana (2013). Sensory and nutritional evaluation of health drink for adolescent girls using underutilized foods. *Food Sci. Res. J.*, 4(1): 7-11.

---

MEMBERS OF RESEARCH FORUM

**Author for correspondence :**

NEHA KAPOOR, Department of Food and Nutrition, College of Home Science, Punjab Agricultural University, LUDHIANA (PUNJAB) INDIA

Email: [neha\\_kapoor729@yahoo.co.in](mailto:neha_kapoor729@yahoo.co.in)

**Associate Authors' :**

ANITA KOCHHAR AND MADHU, Department of Food and Nutrition, College of Home Science, Punjab Agricultural University, LUDHIANA (PUNJAB) INDIA

VANDANA KOCHHAR, Department of Processing and Food Engineering, College of Home Science, Punjab Agricultural University, LUDHIANA (PUNJAB) INDIA

Email: [dranitakochhar@yahoo.com](mailto:dranitakochhar@yahoo.com)

---