



43. Functional *dahi* fortified with pomegranate peel and seed powder

Type: Fermented Dairy Product (Functional *dahi*)
Date:
Patent: NA

Name of Inventor
Mohammad Ashraf Paul and Heena
Jalal

Description of Technology

Dahi is a fermented milk product obtained after fermentation of milk by employing a suitable starter culture. *Dahi* has nutrients in easily digestible form and exerts therapeutic benefits, hence is widely popular among all age groups worldwide. *Dahi* has a great potential for it to be used as a carrier for functional ingredients. During last few years, the interest in functional foods has increased significantly. Of late, the utilization of pomegranate peel and seed powder in dairy products as functional ingredients has emerged as an area of immense interest because of nutritional significance and health awareness among consumers and utilization of agro-industrial by products. The nutritive value of dairy products particularly *dahi* can be improved by fortification with pomegranate peel and seed powder as they are rich sources of polyphenols. In order to increase its consumption in day to day life, these can be incorporated as usual ingredients during the preparation of dairy products. Fortification of *dahi* with pomegranate peel or seed powder can serve as a good source of antioxidants provided the antioxidant capacity of these food preparations are not depleted through oxidation reduction reactions upon mixing and storage of these products. In light of the above facts, the current study was envisaged to assess the feasibility of using pomegranate peel and seed powder as nutraceuticals in fermented milk products such as *dahi*. Based on the results 0.5% pomegranate peel powder and pomegranate seed powder were found optimum for fortification in *dahi* as evidenced by an increased antioxidant activity of *dahi* while maintaining the sensory, colour and textural attributes of the product. Functional *dahi* fortified with 0.5% pomegranate peel powder or 0.5% pomegranate seed powder could be stored for 28 days at $4 \pm 1^\circ\text{C}$ without any appreciable loss of quality and acceptability.



Impact

- Improved functionality of the product.

Commercial Applicability

- Utilization of fruit industry waste
- Potential functional food ingredients (pomegranate peel powder/ seed powder) incorporation
- *Dahi* with added antioxidants from natural sources appears to be a convenient food format to satisfy consumer interest in original *dahi* nutrients, beneficial effects of starter cultures, and health benefits of added antioxidants