

Fortified Whey Kefir- A Healthy Alternative to Carbonated Beverage

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With the changing lifestyle, nutrition along with health benefits has been a major criterion for food choices among the consumers. Fermented foods, owing to their health benefits and palatability are now having a niche market. Whey is a by-product of the cheese/ paneer making industry which presents about 85-95% of the milk volume. Whey usage for the production of fermented beverage results in reduction of pollution potential, apart from producing a value-added product. Utilization of whey in the preparation of kefir will potentially enhance the functionality of the product. Kefir is a lactic fermented, viscous, self-carbonated beverage with a slight alcohol content produced by the symbiotic fermentation of bacteria and yeast present in the kefir grains. The peptides, bactericides, organic acids and exopolysaccharides produced during fermentation have demonstrated a wide array of health benefits like improved gastro intestinal health, increased mineral adsorption, cholesterol metabolism, anti-carcinogenic, immune stimulating, skin care and anti-ageing properties. Whey kefir drink with the addition of 4% inulin, 1% whey protein concentrate fortified with 30 ppm Zinc sulphate and 20 ppm iron using US kefir grains resulted in good nutritive kefir which improves its health value. Inulin acts as both, soluble dietary fiber and prebiotic activity in the colon. Iron has an important role in the transport of oxygen and increases hemoglobin level thereby alleviating anemia. Zinc is a powerful antioxidant, anti ageing agent and maintains the ideal hormone levels. The exotic, refreshing flavor, thirst quenching and prickly sensation of fortified whey kefir can be ascribed to its ethanol and carbon dioxide contents which also improves its shelf life. Fortified whey kefir has resulted in an enhanced overall nutritive value of the product and thus can serve as an alternative to commercial carbonated soft drinks.