Ghee is one of the most important milk product manufactured and marketed in India and its subcontinent. Its origin dates back to prehistoric Indian civilisation as far as 1500 BC (HaeSoo et al, 2013). In some Middle Eastern countries similar kinds of products are usually made from goat, sheep or camel milk and are commonly known as samna in Egypt (Abou-Donia and El-Agamy, 1993), meshho in ancient Assyrian empire (2400 BC to 612 BC) (Abdalla, 1994), samin in Sudan (Hamid, 1993), maslee or samnin in Middle East, rogan in Iran (Urbach and Gordon, 1994) and samuli in Uganda (Serunjogi et al, 1998). Ghee is also gaining popularity in Australia, Arabian countries, the United States, the United Kingdom (UK), Belgium, New Zealand, Netherlands and many other African and Asian countries (Illingworth et al, 2009). According to Codex standard for milkfat products, ghee is a product exclusively obtained from milk, cream or butter, by means of processes which result in almost total removal of water and non-fat solids, with an especially developed flavour and physical structure (FAO and WHO, 2011).

Camel milk products are gaining popularity among the peoples and in future these products may be in a big demand (Mal and Pathak, 2010). It has been reported that camel milk is only suitable for drinking (Yagil et al, 1984). However, various products produced from dromedary camel milk include soft cheese, fermented milk, yoghurt, ice cream and butter (Al Haj and Al Kanhal, 2010).

The information on some compositional attributes, physical properties and chemical characteristics of ghee prepared from camel milk is very scarce. Hence, the present study was planned to compare ghee prepared from camel, cow and buffalo milk.

Materials and Methods

Collection of milk samples

The pooled milk samples (n=8, each species) of camel milk from Anand and Kheda district, cow milk and buffalo milk were collected from the local herd maintained in village nearby Anand. Samples were transported to the laboratory and stored at 4°C before its analysis. All milk samples used in preparation of ghee were analysed for fat contents of camel, cow and buffalo milk as per the method described in BIS Handbook (SP 18: part XI, 1981).

Determination of fat content in milk

The milk fat content in all the milk samples were estimated by following the Gerber method as described in BIS Handbook (SP 18: Part XI, 1981).

Preparation of ghee

Direct creamery method as reported by De (2004) was used for the preparation of ghee. Cream was separated from milk using cream separator. The cream so obtained was heated in a stainless steel vessel (pan) with continuous stirring till final

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