INTRODUCTION

Camel milk has an important role in human nutrition in the hot regions and arid countries. Unlike other milk-producing animals, camels can thrive under extremely hostile conditions of temperature, drought, and lack of pasture, and still produce milk with health effects that are of interest due to their therapeutic properties such as anti-bacterial, anti-viral, and anti-inflammatory.

MATERIALS AND METHODS

This experiment was undertaken from the July to the middle of October, 2013. Camel milk samples from 30 camels of at various stages of lactation were collected at random from camel-rearing areas around Khur and Biabanak, Isfahan province, Iran. Camels were on a normal diet. All milk samples (500 ml each) were collected in clear and sterilized sample bottles and stored at 4°C during transportation to the laboratory. Titrable acidity, total solids, ash, were determined according to the method of Association of Official Analytical Chemists (AOAC, 1990, a, b, c, d, e, f). pH values were determined using pH meter (model pH lab Metrohm, Swiss made). Fat content of milk was analyzed by Gerber method as described by James (1995). Protein content was estimated according AOAC (991/23) and density and specific gravity were determined using DMA 38 Density Meter and freezing point were determined using CryoStar I.

RESULTS AND DISCUSSION

A total of 30 samples of individual one humped raw milks (500 ml) were collected at random from camel-rearing areas around Khur and Biabanak, Isfahan province, Iran. A wide variation was observed in the quality of raw camel milk. Proximate analyses indicated (11.13%±0.24) total solids, 13.1% acidity, (0.79±0.065%) ash, (88.86±0.24%) water, (1.0171±0.0007) density, (1.0162±0.0007) specific gravity, (2.16±0.1%) protein, (2.5±0.6%) fat, (6.52±0.18) pH. Although slightly different from some of the data reported worldwide, these values are very similar to those found in Dromedary camel and western Asia. This study clearly demonstrates that Iranian camel milk could provide a valuable energy source in the diet of the urban consumer as it has been for decades for the Bedouin population.

Keywords: Camel Milk; Quality; Iranian

REFERENCES


