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Traditionally fermented milk products

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INTRODUCTION

Fermented milk is one of the foods that are highly respected and form a part of the daily intake in Namibia. There are many types of fermented milk in Namibia, which have different preparation methods. Milk fermentation assists in preserving the milk by generating organic acids (e.g., lactic and acetic acids) and antimicrobial compounds (e.g., bacteriocins), as well as flavour compounds (e.g., acetaldehyde) and other metabolites (e.g., exopolysaccharides) that contribute to the product's organoleptic properties. Fermented milk provides special therapeutic and prophylactic properties against many diseases, symptoms and health problems.

This chapter outlines the types of traditionally fermented milks produced in Namibia – *omashikwa*, *mashini ghakushika* and *mabisi* – their modes of fermentation and physicochemical properties, and the dominant microflora in them. The health and social benefits of these fermented milk products are also discussed.

Traditional, African fermented milk

Traditionally fermented milk has a long history in Africa and its production relies on the indigenous knowledge of the population. The history of fermented milks is often described in terms of a sequence of two generations of products (Steinkraus, 2002). In the first generation of producing fermented milk products (800 bc to ad 1900), the microflora were not defined and differed from village to village. This first generation was followed from about 1910 by a second generation of fermented milks in which the microflora was defined and the fermentation process was controlled (Chandan, & Shah, 2013). Generally, fermentation processes are believed to have been developed by women over the years, in order to preserve food for times of