

Prominence of goat milk consumption and determinants of attitudes towards the milk in five agro-ecological zones of Zimbabwe

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Abstract

This study determined the prominence and determinants of attitudes towards goat milk consumption in agro-ecological zones I to V of Zimbabwe. Data were collected from 545 households and analyzed using SPSS. Generally, milk was consumed at least twice a week (71.8%) especially in regions III and V. Goat (61.7%) and cow (100%) milk consumption was high though cow milk was preferred (57.3%). Higher percentage (67.4%) of respondents above 36 years and those possessing 1-5 cattle and 1-5 goats were associated with likelihood of consuming goat milk. Major causes of negativity were lack of habit (41%), flavor attributes (27%) and non-availability of goat milk (23%).

Key words: Consumption, cows, goat, milk, preference, Zimbabwe

Résumé

Cette étude visait à déterminer l'importance et les déterminants des attitudes envers la consommation de lait de chèvre dans les zones agro-écologiques I à V au Zimbabwe. Les données ont été recueillies auprès de 545 foyers et analysées en utilisant le logiciel SPSS. En général, le lait était consommé au moins deux fois par semaine (71,8%) spécialement dans les régions III et V. La consommation de lait de chèvre (61,7%) et de vache (100%) a été élevée bien que le lait de vache a été préféré (57,3%). Le pourcentage plus élevé (67,4%) des répondants de plus de 36 ans et ceux qui possèdent 1 à 5 bétails et 1 à 5 chèvres ont été associés à une probabilité de consommer du lait de chèvre. Les principales causes de la négativité sont le manque d'habitude (41%), attributs de la saveur (27%) et la non-disponibilité du lait de chèvre (23%).

Mots clés: Consommation, vaches, chèvre, lait, préférence, Zimbabwe

Background

Livelihoods of rural people in Zimbabwe are based largely on crops and livestock particularly small ruminants as sources of food. Protein and energy supply particularly in rural communities has remained insufficient. Nevertheless, the contribution of goat milk appears to be limited, although it has higher nutritional value than cow milk (Haenlein, 2000). The study explored how different rural communities valued goat milk and how it contributed to their health and livelihoods. The association of attitudes and status of goat milk consumption was also studied. The hypothesis tested was that the prominence of consumption of goat milk and peoples' attitudes towards it compared well to cow milk in the five agro-ecological regions of Zimbabwe.

Literature Summary

In the five agro-ecological regions of Zimbabwe, the different crop and livestock production practices vary according to temperature, vegetation and rainfall patterns and determine communities eating habits of crops, food animals and their products. Environmental factors that have meaning to cultural beliefs also determine certain attitudes and food acceptance (Steenkamp, 1996). In parts of Malawi, there were beliefs that goats were associated with witchcraft hence consuming milk became taboo (Banda, 1990). Properties of food which include its physiological effects and the consumer's sensorial perception of it greatly influence attitudes (Steenkamp, 1996). For example, the strong flavor of goat milk was implicated to prevent its consumption in Malawi (Banda, 1990) and Tanzania (Goromela, 1996). Furthermore, availability, as the case with production of more cow milk, particularly in Southern Africa, influences attitude towards the milk. Non-food factors that affect attitude may relate to the psychology and self realization of the person engaged in food consumption as well as socio-demographic factors such as age and household income (Pilgrim, 1956; Steenkamp, 1996). Health consciousness, HIV/AIDS, heart disease and allergies requiring diet change and these have altered negative attitudes towards goat milk.

Study Description

Cross-sectional face to face interviews were carried out randomly in Zimunya, Seke, Somabhula, St. Peters and Matobo rural communities representing agro-ecological regions 1, 2, 3, 4 and 5, respectively, during the period December 2009 and January 2010. A total of 545 respondents were interviewed. The questionnaires used were administered to persons above 18 years of age regardless of their gender. The data were analyzed using SPSS version 16 of 2007.

Research Application	Regardless of source, milk consumption was high, 71.8% consuming it at least twice a week. Over 60% of respondents from agro-ecological regions III and V consumed milk on a daily basis compared to 40% in regions I, II and IV. Goat (61.65%) and cow (100%) milk consumption was high but cow milk was more preferred (57.3%). A higher percentage (67.4%) of respondents above 36 years consumed goat milk compared to those below 36 years (53.5%). Respondents who owned 1-5 cattle ($X^2 = 24.2$, $P < 0.001$) and 1-5 goats ($X^2 = 33.2$, $P < 0.001$) were associated with likelihood of consuming goat milk. Also, 38.35% of respondents with negative attitude towards goat milk cited lack of custom of consuming it ($P < 0.001$) as the major reason (41%), unpleasant smell (27%), non-availability of the milk (23%) causing consumers to be unfamiliar with it and milk causing allergic reactions (9%).
Recommendation	Where there are no taboos against it, rural people who are known to possess the largest population of goats should be encouraged to consume goat milk the same way as cow milk and value it as an important contributor to food security.
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