

## عنوان مقاله:

(Isolation of Probiotic Lactobacilli Bacteria from Traditional Naein Dairy Product (Koome

## محل انتشار:

فصلنامه میکروب شناسی پزشکی ایران, دوره 15, شماره 1 (سال: 1399)

تعداد صفحات اصل مقاله: 22

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## خلاصه مقاله:

Background and Aim: Koome as one of the traditional fermented dairy products of ovine milk has long been produced in rural areas around Naein, Iran in sheepskin bags. The present study aimed to isolate Lactobacillus bacteria from the traditional dairy products of Naein and to evaluate the functional characteristics and health of these bacteria as probiotics. Materials and Methods: For the initial isolation of bacteria, de Man, Rogosa, and Sharpe (MRS) agar was used. A total of 15 bacilliform, gram-positive, and catalase-negative colonies were isolated from the culture, and resistance to acid, bile, gastric juice, and intestinal juice was assessed to investigate probiotic characteristics. Bacterial isolates with favorable probiotic characteristics were tested for antimicrobial activity and antibiotic resistance to assess the effect of probiotics on health. Afterwards, seven bacterial isolates were selected and their ability for reducing cholesterol and hydrolyzing bile salts was evaluated. Moreover, the selected isolates were sequenced to identify the strain. Results: Our findings demonstrated that six of 15 bacterial isolates had a suitable resistance in pH=2.5. In addition, 60% of the isolates were sensitive to bile salts. The identified Lactobacillus isolates had a high antibiotic resistance and were shown to have a favorable antimicrobial activity against pathogenic bacteria. Furthermore, the selected bacterial isolate could reduce 70% of environmental cholesterol. Conclusion: According to the results of the present study, koome is highly potential for isolating probiotic isolates and the nutritional consumption of Lactobacillus isolates s microbial supplement might have positive effects on health

## کلمات کلیدی:

Diary products, Koome, Lactobacillus, Probiotic, پروبیوتیک, کومه, لاکتوباسیل, محصول لبنی

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