The survival of the probiotic strains Lactobacillus fermentum (AB5-18 and AK4-120) and Lactobacillus plantarum (AB16-65 and AC18-82), all derived from human faces, was investigated in Turkish Beyaz cheese production. Three batches of Turkish Beyaz cheeses were produced: one with the test probiotic culture mix (P), another with a commercial starter culture mix including Lactococcus lactis subsp. cremoris, Lactococcus lactis subsp. lactis (C), and the third with equal parts of the commercial starter culture mix and test probiotic culture mix (CP). The cheeses were ripened at 4 degrees C for 120 days and the viability of cultures was determined monthly. Cheese samples were analyzed for total solids, fat in solids, titratable acidity, pH, salt in total solids, proteolysis, sensory evaluation, aroma compounds, and biogenic amines. While the initial lactic acid bacterial load in P cheese was $2.7 \times 10^9$ at the beginning, it was $7.42 \times 10^7$ cfu/g at the end of 120 days of ripening. The results showed that the test probiotic culture mix was successfully used in cheese production without adversely affecting the cheese quality during ripening. The chemical composition and sensory quality of P cheeses were also comparable with C cheeses. The present study indicates that probiotic cultures of human origin are feasible for Turkish Beyaz cheese production.