The invention relates to the dairy industry, namely to a process for the preparation of bacterial leaven for combined lactic-acid products. The process, according to the invention, includes the preparation of nutrient medium based on hydrolysates of skimmed cow and soy milk, obtained separately by hydrolysis under the influence of a proteolytic ferment with subsequent filtration, dilution with water in the ratio of 1:1, correction of pH up to 7.0...7.2, sterilization at the temperature of 121°C for 10 min and cooling. Then follows the mixing of hydrolysates of cow and soy milk in the ratio of 1:1 with constant stirring, addition of 3...5% of mixture of cultures of lactic-acid bacteria *Lactococcus lactis ssp. lactis, Lactococcus lactis ssp. lactis biovar diacetylactis* in the ratio of 5:3:2, respectively, and cultivation at the pH 6.7...6.8 and the temperature of 30°C for 8...10 hours.

Claims: 3