

Method for producing sterile collagen gels for therapeutic and hygienic purposes involves mechanical grinding of raw materials, washing of prepared raw materials from associated components with water, acid extraction, filtration, precipitation with sodium chloride, centrifugation and redissolution in acid, and subsequent dialysis. Untanned by-products of leather production are used as raw materials. After washing the ground raw materials with water, washing with a salt solution is carried out, followed by washing with water. Acid extraction is performed using a 0.5 M acetic acid solution in a 1:10 mass/volume ratio in the presence of 5 mM ethylenediaminetetraacetic acid under variable temperature and dynamic conditions. Precipitation is carried out using dry sodium chloride. Additionally, a reprecipitation is performed using dry sodium chloride and dissolution in a minimum amount of 0.1 M acetic acid. Further dialysis is carried out against deionized water to obtain gels of varying strengths, which are then filtered through a 0.22  $\mu\text{m}$  membrane filter for sterilization.