

FUTURE STUDY

1. Investigation of the more appropriate dose for vulcanization and grafting process in the natural latex.

In this study, the total dose of gamma ray used was 15 kGy which gave the tensile strength of 12 MPa in the graft copolymer. For the clinical practice of soft ling denture base material, it may be not necessary to have the high tensile strength as 12 MPa. Therefore, the least irradiation dose that will not alter other properties of graft copolymer must be investigated. Reduction of the irradiation dose means reduction of the hazard, cost and working time.

2. Improvement of the bonding ability of the graft copolymer to the denture base material.

The graft copolymer showed incomplete bonding to the denture base material in this study. This pitfall probably came from high water content in the graft copolymer. To solve this problem, the other form of copolymer with less water content should be developed in the future study.

3. Improve the tolerance of the graft copolymer to the dye staining.

Since the graft copolymer developed in this study was easily stained by capsaicin in oil and the discoloration of the soft lining material can discourage patients from wearing dentures, therefore prevention of the graft copolymer from dye staining should be performed.