lowered which is important as this would mean lower rate of cholesterol synthesis.

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In vivo biocompatibility and biodegradability evaluation of chitosan based composite polymeric films

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Being a natural biopolymer having excellent biocompatibility and biodegradability, chitosan and its derivatives are extensively used for biomedical, agricultural and other healthcare applications. Chemical modifications made to chitosan can make it more or less toxic and can modulate biodegradation rate. In this study, composite polymeric films of chitosan were made by conventional solvent casting method followed by vacuum drying. *In vivo* biocompatibility and biodegradation were evaluated by subcutaneous implantation of the developed polymeric films in experimental rats. Briefly, the animals were divided into five groups of two animals each, namely, chitosan (C), chitosan/chondroitin sulfate (CC), CZC chitosan/ zinc acetate/chondroitin sulfate, chitosan/zinc acetate (CZ) and polypropylene (PP) control. Subcutaneous incision of 1 cm^2 was made on the dorsal side of rats and the developed films were inserted in respective groups under sterile conditions after giving proper anesthesia. The wounds were sutured and animals were carefully monitored for any adverse pathological changes. No visible signs of tissue damage or inflammation were observed during the evaluation period. Body weight was monitored on weekly basis, and the animals were sacrificed after two months. The implanted material along with the surrounding tissue was excised and evaluated. Gross observation and histopathological evaluation of the excised tissue along with the implanted film showed absence of inflammatory cells and non- toxic nature of the biomaterial in all experimental groups except in polypropylene (PP) control. Masson's trichrome staining exhibited collagen deposition around the implanted material which indicates favorable tissue response and biocompatibility. Better tissue biocompatibility was observed for composite polymeric films compared to bare chitosan film. It was interesting to note that the architecture of implanted chitosan-zinc acetate-Chondroitin sulphate film showed enhanced biodegradation during the course of tissue regeneration.

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Antihypertensive and antioxidant activities of tungtap

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Tungtap is a major fermented fish product consumed widely in the state of Meghalaya prepared from *Puntius sophore*. It is widely accepted that fermented food products have numerous beneficial health effects owing to the bioactivity of the peptides formed during the fermentation process but very few scientific studies have been conducted with regard to fermented fish products. In case of fish peptides,