Preparation and properties of bioadhesive containg chondroitin sulfate and gelatin with serveral additives

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In this study, the bioadhesive is made of dorsal and vetral skin of yellowfin tuna, Thunnus albacares. It contains gelatin and chondroitin sulfate and it was known of adhesion ability for various fields. Bioadhesive samples are preapared with hot water extract and lyophilized. Physical and mechnical properties of samples were determined to the difference with change in concentration of sample, time to extract in hot water, concentration of samples, adhesive time, concentration of additive. Gluten, Genipin, Zein, Cysteine and Sodium alginate were used as additive to enhance properties of samples. These additives are known to combine with protein and amino acid. Evaluation of physical properties of the bioadesive samples was conducted by using FT-IR, UTM results. And biodegradability was determined by cell viability.