



# Effect of Different Processing Methods on Physicochemical Properties and Protein Quality of Small Shrimp (*Acetes indicus*) Flour

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### Effect of Different Processing Methods on Physicochemical Properties and Protein Quality of Small Shrimp (*Acetes indicus*) Flour

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**Keywords:** *Acetes indicus* · Amino acid · Protein quality · Shrimp flour

**Background/Aims:** Shrimp contains high protein that is needed for human growth. This study aimed to determine the effect of different processing methods on physicochemical properties and protein quality of small shrimp (*Acetes indicus*) flour (SSF). **Methods:** Two different processing methods were used to produce SSF: blending process before (SSF-A) and after (SSF-B) oven drying. Selection of the optimal processing method was determined by moisture content, protein content, and protein quality (chemical score, amino acid score, essential amino acid index, predicted protein efficiency, and biological value) of the samples. Amino acid composition was analyzed using Ultra Performance Liquid Chromatography (UPLC). **Results:** Physicochemical properties and protein quality of SSF were significantly different ( $p < 0.05$ ) between the two samples. The moisture content of SSF-B was significantly lower than SSF-A ( $p < 0.05$ ). Moreover, protein content and protein quality of SSF-B were better than SSF-A ( $p < 0.05$ ). **Conclusions:** Different processing methods influenced physicochemical properties and protein quality of SSF.

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