



INTISARI

Telah dilakukan suatu penelitian mengenai pengkayaan tepung tahu dan konsentrat protein kedelai (*soypro*) dalam produksi mie instan. Tujuan dari studi ini adalah (1) untuk mengkaji tingkat pengkayaan yang akan menghasilkan mie instan dengan sifat fisik dan kimia yang disukai oleh panelis; (2) untuk menghitung kenaikan biaya bahan baku. Banyaknya penambahan tepung tahu dan *soypro* adalah 10%, 12%, 14%, dan 16%.

Pengkayaan tepung tahu dan *soypro* sebanyak 16% dari berat tepung terigu menurunkan kadar karbohidrat masing-masing sebesar 10,61% dan 10,12%, tetapi kadar protein naik masing-masing sebesar 8,91% dan 10,34%, sedangkan kadar lemak naik sebesar 1,6% (tepung tahu) dan turun sebesar 0,61% (*soypro*). Daya cerna protein turun sebesar 11,89% (tepung tahu) dan naik sebesar 10,60% (*soypro*).

Pengkayaan ini menurunkan ekstensibilitas, deformasi, elastisitas, dan kapasitas rehidrasi masing-masing sebesar 7,34% dan 7,34%; 4,67 N dan 6,47 N; 36,17% dan 31,67%; 6,41% dan 4,06%; tetapi tingkat pengembangan dan *cooking loss* naik masing-masing sebesar 24,51% dan 20,19%; 1,29% dan 1,83%.

Pengkayaan tepung tahu sebesar 12% dan 14% lebih disukai panelis dibandingkan pengkayaan 16%.

Pengkayaan tepung tahu dan *soypro* sebanyak 16% dari berat tepung terigu menaikkan biaya bahan baku pembuatan mie instan masing-masing sebesar Rp 106,00 dan Rp 112,00.

Kata kunci: fortifikasi, tepung tahu, konsentrat protein kedelai (*soypro*), mie instan, protein, biaya bahan baku



ABSTRACT

A research on the fortification of tofu flour and soybean protein concentrate (soypro) in the production of instant noodle has been conducted. The objective of this study are (1) to determine the level of fortification that (which) produce instant noodle with physical and chemical properties accepted by panelist; (2) to calculate the increasing of raw material cost. The addition of tofu flour and soypro were at the levels of 10%, 12%, 14%, and 16%.

Fortification of tofu flour and soypro at the level of 16% wheat flour by weight decreased the carbohydrate contents, i.e. 10,61% and 10,12%, but the protein contents increased, i.e. 8,91% and 10,34% respectively, whereas the fat contents increased 1,6% (tofu flour) and decreased 0,61% (soypro). The protein digestibility decreased 11,89% (tofu flour) and increased 10,60% (soypro).

This fortification decreased the extensibility, deformation, elasticity, and rehydration capacity, i.e. 7,34% and 7,34%; 4,67 N and 6,47 N; 36,17% and 31,67%; 6,41% and 4,06% respectively; but the level of unfolding and cooking loss increased, i.e. 24,51% and 20,19%; 1,29% and 1,83% respectively.

Fortification of 12% and 14% tofu flour more preferable by panelist than that of 16%.

Fortification of tofu flour and soypro at levels 16% wheat flour by weight increased the raw material cost of instant noodle, i.e. Rp 106,00 and Rp 112,00.

Keywords: *fortification, tofu flour, soybean protein concentrate (soypro), instant noodle, protein, raw material cost*

