

NOTES FROM THE U. S. BUREAU OF CHEMISTRY.*

STUDIES ON THE DIGESTIBILITY OF PROTEINS IN VITRO.

I. THE EFFECT OF COOKING ON THE DIGESTIBILITY OF PHASEOLIN.¹

By Henry C. Waterman and Carl O. Johns.

[ABSTRACT.]

EXPERIMENTS to explain the findings of Johns and Finks² that phaseolin gave better results in feeding experiments after cooking than did the raw protein indicate that phaseolin is rendered more readily digestible by boiling with distilled water. Cooking for 5 minutes gave a delectable increase in digestibility, while cooking for $\frac{3}{4}$ hour was apparently sufficient to produce the maximum effect. It would seem therefore that the better results obtained after cooking may be considered to be due to an increase in digestibility.

STUDIES IN NURITION. V. THE NUTRITIVE VALUE OF SOY BEAN FLOUR AS A SUPPLEMENT TO WHEAT FLOUR.³

By Carl O. Johns and A. J. Finks.

[ABSTRACT.]

BREAD made with a mixture of 25 parts of soy bean flour and 75 parts of wheat flour contained a protein mixture and water soluble vitamins adequate for normal growth. A similar bread containing 15 parts of soy bean flour and 85 parts of wheat flour likewise furnished adequate proteins and water-soluble vitamins for normal growth.

These mixtures of the soy bean and wheat proteins were found two or three times more efficient than the proteins from wheat alone.

* Communicated by the Chief of the Bureau.

¹ Published in *J. Biol. Chem.*, 1921, 46: 9.

² Published in *J. Biol. Chem.*, 1920, 41: 379.

³ Published in *Am. J. Physiol.*, 1921, 55: 455.