In the well-known Engeland[1] process for the separation of the bases of muscle extract, precipitation with mercuric chloride and sodium acetate is used. After several days the precipitate is collected and heated with dilute hydrochloric acid, then decomposed with hydrogen sulphide. Under these conditions the possibility of creatine oxidation, hydrolysis of the resulting compound and liberation of methylguanidine, must be considered.

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Concerning carnosine and its synthesis.

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The chemical configuration of the muscle extractive, carnosine, has been determined in two ways: (1) By deamination with nitrous acid, hydrolysis of the resulting deaminocarnosine and isolation of one of the cleavage products. (2) By its synthesis.

The hydrolysis of deaminocarnosine gave a 70 per cent. yield of histidine.

The synthesis was effected by the interaction of beta iodopropionyl chloride and histidine, followed by amination of the resulting product. The analyses, optical rotation, melting point and crystal form of the synthetic and natural products were identical. A mixture of both substances gave the same melting point as either component.

It is evident that beta alanyl-histidine correctly expresses the constitution of carnosine.

Carnosine is not hydrolyzed by muscle or liver extract.

[1] Engeland, R., *Z. Unters. Nahr. Genussmittel*, 1908, XVI, 658.