

to that of the other proteins investigated. On the other hand the CO₂- or "insoluble" globulin of serum, when isolated and dissolved in sea water, is no less potent than other proteins in inhibiting membrane-formation. A 0.3 per cent. solution of the "insoluble" serum globulin very noticeably inhibits membrane-formation, and yet a 3.7 per cent. solution of the mixed proteins of serum, containing 0.33 per cent. of the CO₂-globulin, under the conditions enumerated above only inhibits membrane-formation to a barely perceptible extent. These facts would appear to lend confirmation to the view advanced by Hardy¹ and myself² that the various proteins in sera are not present therein in the free condition, but bound together in a molecular complex.

44 (653)

Preliminary note. — The action of various agents upon the secretion of milk.

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In these experiments we used the lactating goat, obtaining the milk by aspiration with a water bottle. We found, as Mackenzie has noted, an increased secretion from venous injections of extracts of the mammary gland. The boiled gland was also active. The pineal body, corpus luteum, and infundibulin were active after a previous dose of atropin. Atropin and antipyrin greatly decreased the secretion. Pilocarpin and digitalin augmented the secretion. Pilocarpin in large doses was active after a preliminary dose of atropin. Albumoses, peptones, and glucose increased the secretion. Sodium, potassium and calcium chloride increased the secretion. Eserine, muscarine, and nicotine did not augment the secretion. 1/1000 of a drop of infundibulin increased the flow of milk, and 1/100 of a drop caused a marked increase. Infundibulin is a 20 per cent. extract of the infundibular part of the pituitary body.

¹ W. B. Hardy, *Journ. of Physiol.*, 33, 251, 1905 (Appendix).

² T. Brailsford Robertson, *Univ. of Calif. Publ. Physiol.*, 4, 25, 1911; "Die physikalische Chemie der Proteine," Dresden, 1912, pp. 126-133.