Prep.	Material	Extract, 4% trichloroacetic acid *p*H	% N	Biuret reaction	Glucuronic acid	Viscosity*	Depolymerization*
A7	dried	4·0	3·4	neg.	pos.	186	10 min.
A8	fresh	4·0	3·6	neg. faintly	pos.	246	12 min.
A14	fresh	4·0	4·1	pos.	pos.	145	11·5 min.
A15	dried	1·0	3·7	neg.	pos.	150	10 min.

* Viscosity and depolymerization measurements were performed according to the method described by Pantlitschko and Kaiser (ref. 4) (McIlvaine buffer *p*H 7·0 + 0·35 per cent sodium chloride; substrate concentration 0·1 per cent). Depolymerization is indicated by the time in minutes to reach half the initial viscosity. Viscosities given are relative viscosities × 100 against the same solution without substrate. We are indebted for a hyaluronidase preparation to the Vister Corp. Casatenovo (Como, Italy).

ion or other bases. The extraction is performed at room temperature with constant stirring (some hours) or at low temperatures (ice box, one to three days) and precipitation with ethyl alcohol. Whether dialysis of the extract is necessary or not depends on the character of the tissue extracted and on the desired purity of the substance to be obtained.

If desired, it is possible to fractionate the substances by different concentrations of alcohol from buffered solutions in water. Comparatively pure preparations of nucleic acid may also be obtained by this method.

Typical preparations from human umbilical cords of hyaluronic acid obtained without any further purification have the properties shown in the accompanying table.

The exact characterization and analytical figures (electrophoresis, content of sulphurated polysaccharides, amino-acids, etc.) of the preparations will be published elsewhere *in extenso*.

As the method described is a comparatively simple one and can be applied not only to the preparation of hyaluronic acid but also to other similar non-protein tissue constituents (such as heparine), the present preliminary report seems to be justified.

W. E. Jancsik
E. Kaiser

Institut für medizinische Chemie
der Universität Wien,
Wien IX, Währingerstrasse 10.
July 6.

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Attempt to prepare Anti-Tyrosine Decarboxylase

In the course of studies on various anti-enzymes, an attempt was made to prepare an anti-tyrosine decarboxylase. The enzyme was an extract from acetone-dried cells of *Streptococcus fæcalis*, prepared and tested by the method of Epps[1]. This extract was injected intravenously into a rabbit at three- to four-day intervals, and antiserum removed seven days (approximately) after the third and subsequent injections. On incubation with the crude enzyme preparation, the antiserum regularly gave a precipitate; but, on removal of this precipitate, enzymic activity was retained or slightly increased. The enzyme had, therefore, neither been precipitated nor inactivated in the supernatant. Precipitates were not obtained when the antiserum was replaced by a non-specific rabbit serum.

Attention should be directed to the fact that the most reliable results were obtained at *p*H 5·5, the optimal *p*H for the enzyme. This is a region in which non-specific precipitation of γ-globulins, and therefore probably of antibodies, might occur, though it is doubtful whether an anti-enzyme if present would be completely precipitated in this way without having any influence on the enzyme.

Frank C. Happold
R. Ryden

Department of Biochemistry,
School of Medicine,
University of Leeds.
July 25.

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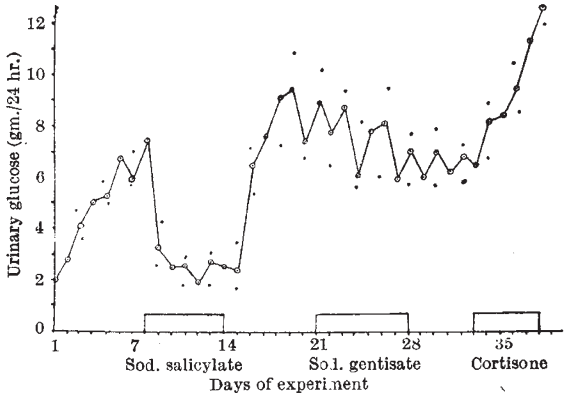
Salicylates and Carbohydrate Metabolism

A number of workers[1] have reported that the administration of salicylates prevents diabetic glycosuria in man, and Ingle[2] has shown that aspirin reduces the glycosuria of rats made mildly diabetic by reason of partial pancreatectomy. We have confirmed this latter effect using rats made severely diabetic with alloxan and found that the closely related gentisic acid (2 : 5-dihydroxybenzoic acid) caused no alteration of the glycosuria, whereas cortisone exacerbated it (see diagram).



Mean 24-hr. urinary glucose and range for a group of 8 alloxan-diabetic rats.
Sodium salicylate: 100 mgm. in 1 ml. arachis oil daily; sodium gentisate: 100 mgm. in 1 ml. arachis oil daily; cortisone: 10 mgm. as saline suspension of cortone acetate (Merck) daily

The effect of salicylates on the blood glucose of fasting alloxan-diabetic rats was then investigated in two groups of animals. Blood glucose was measured by the method of Nelson[3] in each animal at 0, 4, 7 and 24 hr., one group of rats having been given salicylates at 0 hr. The results are shown in Table 1.

These results show that there was no significant difference between the two groups at the start of the experiment, but that a significant fall in blood glucose occurred in alloxan-diabetic animals treated with salicylate, and this fall was significantly different