figures from 20 to 30. Active tuberculosis gives readings of 3 plus and 4 plus, corresponding to Vernes figures above 30.

This simple method lacks the delicacy of the Vernes technic, but is capable of giving diagnostic information and requires only inexpensive equipment. Owing to its simplicity, too much significance must not be attached to the results in the hands of the inexperienced.

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Relation of Osmotic Pressure to Availability of Synthetic Media for Streptococci.

FRANCES KRASNOW AND MIRIAM REINER.

From the Laboratory of Biological Chemistry of Columbia University at the College of Physicians and Surgeons.

The osmotic pressure of the environment of an organism is believed to be an important factor affecting its metabolism. Dr. Frankel and her coworkers have made the first attempt to apply this consideration to the investigation of synthetic media.[1] These authors kept all their media isotonic with an M/6 NaCl solution. Falk, in his review of the rôle of certain ions in bacterial physiology, expressed the view that "an attempt to keep osmotic pressure constant is undoubtedly a step toward elucidation of the principles underlying the sound use of synthetic media."[2]

The work described in the present paper includes the determination of the osmotic pressures of four series of entirely different media. Media were prepared and their availability for streptococci tested by procedures already described.[3] Osmotic pressures were calculated from the freezing point depressions. The authors were aware, at the outset, of the inaccuracies in this method due to the high molar concentrations of several of the mixtures used. The errors were ignored in order to obtain figures for preliminary comparisons.

The significance of the details obtained may be brought out perhaps most clearly in the following tabulations:

TABLE I.

	Osmotic Pressure in Mm. Hg.		
	12 to 49	53 to 151	666 to 915
Total No. of Media	18	12	16
No. showing growth	16	6	7
Per cent showing growth	89	50	48

TABLE II.

	Osmotic Pressure in Mm. Hg.				
	12-40	40-49	53-151	666-813	817-915
Total No. of Media	10	8	12	8	8
No. showing growth	9	7	6	4	3
Per cent showing growth	90	87.5	50	50	37.5

In all, 46 media were used in this study. When they are divided arbitrarily into three groups on the basis of osmotic pressure, 89% of those with osmotic pressure below 50 mm. Hg. permit viability for shorter or longer periods. Fifty per cent permit viability when pressures are below 151 and above 53 mm. Hg., and 44% of those having osmotic pressures between 666 and 915 mm. Hg. permit viability. (Table I.) Similar gradations appear again when the media are divided into 5 groups. Ninety per cent of the media with pressures below 40 mm. Hg. showed growth, 88% of those having osmotic pressures between 40 and 49 mm. Hg., 50% of those having osmotic pressures above 666 and below 813 mm. Hg. and 38% of the media with osmotic pressures between 817 mm. and 915 mm. Hg. (Table 2.)

Therefore, the number of media which permitted growth increases as the osmotic pressure decreases.

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Comparative Studies on Autoplastic Lymph Node and Thymus Transplants.

J. MARMORSTON-GOTTESMAN AND J. GOTTESMAN.
(Introduced by David Marine.)

From the Division of Laboratories, Montefiore Hospital, N. Y.

Studies by numerous investigators on the histogenesis of the thymus gland have failed to clear up the origin and biological significance of the small thymic cell. In order to secure additional data