

TABLE I

PERMEABILITIES OF GHOSTS TO VARIOUS SUGARS AND A RELATED POLYOL

Each figure represents the mean \pm S.E. An isotopic exchange flux was measured at complete chemical equilibrium, except in the case of D-mannitol, for which the net flux was measured. Chemical concentration of the permeants in each case was 0.25 mM. The temperature was 24°. The surface area of the ghosts was assumed to be identical to that of intact cells, and a reported value of $1.55 \cdot 10^{-6}$ cm² was used¹³. The volume of water space of ghosts, V_1 , was obtained from the difference of tritiated water and [¹⁴C]inulin space of the ghost pellets.

<i>Permeants</i>	<i>Permeabilities (cm/sec)</i>	<i>Number of experiments</i>
D-Glucose	$2.0 \cdot 10^{-5} \pm 0.77 \cdot 10^{-5}$	8
2-Deoxy-D-glucose	$2.9 \cdot 10^{-5} \pm 0.91 \cdot 10^{-5}$	3
D-Mannose	$6.9 \cdot 10^{-6} \pm 2.1 \cdot 10^{-6}$	4
D-Ribose	$3.9 \cdot 10^{-7} \pm 1.8 \cdot 10^{-7}$	3
D-Mannitol	$5.2 \cdot 10^{-8} \pm 3.6 \cdot 10^{-8}$	5