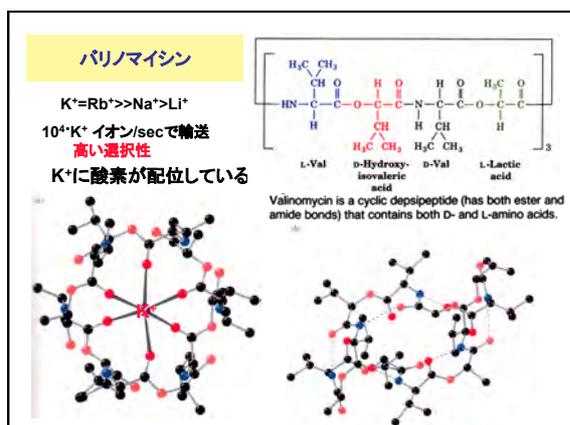
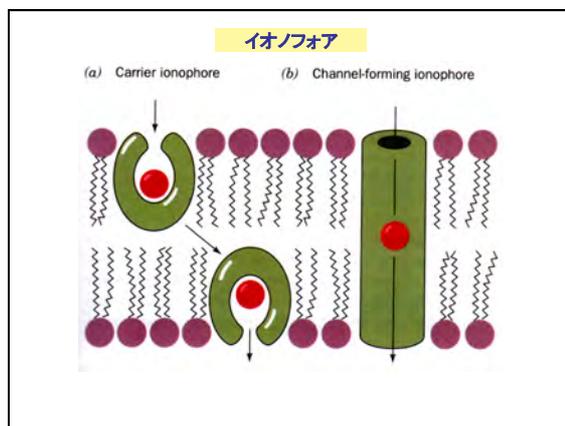
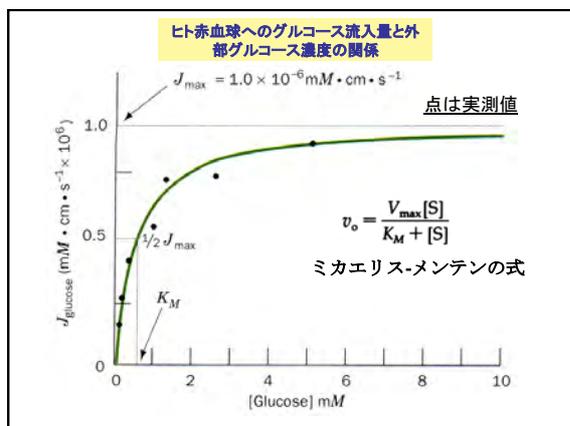


### 生体膜と合成膜での糖の透過係数

**Permeability Coefficients of Natural and Synthetic Membranes to D-Glucose and D-Mannitol at 25° C**

Membrane Preparation	Permeability Coefficients ( $\text{cm} \cdot \text{s}^{-1}$ )	
	D-Glucose	D-Mannitol
Synthetic lipid bilayer	$2.4 \times 10^{-10}$	$4.4 \times 10^{-11}$
Calculated nonmediated diffusion	$4 \times 10^{-9}$	$3 \times 10^{-9}$
Intact human erythrocyte	$2.0 \times 10^{-4}$	$5 \times 10^{-9}$

Source: Jung, C. Y., in Surgenor, D. (Ed.), *The Red Blood Cell*, Vol. 2, p. 709, Academic Press (1975).



**水素とアルカリ金属**

	H	Li	Na	K
第一イオン化エネルギー (kcal/mol)	313	124	118	100
原子半径 (Å)	1.0	1.55	1.90	2.35
イオン半径 (Å)		0.64	0.95	1.33
標準水素エンタルピー (kJ/mol)	1090	520	405	321
水素イオンの溶解熱 (x10 <sup>-5</sup> cal <sup>2</sup> /V <sup>2</sup> · g)	362	40	51	76

**TABLE 13.2 Properties of alkali cations**

Ion	Ionic radius (Å)	Hydration free energy in kcal mol <sup>-1</sup> (kJ mol <sup>-1</sup> )
Li <sup>+</sup>	0.60	-98 (-410)
Na <sup>+</sup>	0.95	-72 (-301)
K <sup>+</sup>	1.33	-55 (-230)
Rb <sup>+</sup>	1.48	-51 (-213)
Cs <sup>+</sup>	1.69	-47 (-197)

Li<sup>+</sup> · H<sub>2</sub>O    Na<sup>+</sup> · H<sub>2</sub>O    H<sub>2</sub>N-OH (Hydroxylamine)    H<sub>2</sub>N-NH<sub>2</sub> (Hydrazine)    K<sup>+</sup> · H<sub>2</sub>O

