



Typical Intracellular and Extracellular Ion Concentrations		
Ion	Cell (mM)	Blood (mM)
SQUID AXON (INVERTEBRATE)*		
K ⁺	400	20
Na ⁺	50	440
Cl ⁻	40–150	560
Ca ²⁺	0.0003	10
X ^{-†}	300–400	5–10
MAMMALIAN CELL (VERTEBRATE)		
K ⁺	139	4
Na ⁺	12	145
Cl ⁻	4	116
HCO ₃ ⁻	12	29
X ⁻	138	9
Mg ²⁺	0.8	1.5
Ca ²⁺	<0.0002	1.8

*The large nerve axon of the squid has been widely used in studies of the mechanism of conduction of electric impulses.
†X⁻ represents proteins, which have a net negative charge at the neutral pH of blood and cells.