

Concentration of mineral salt ions in various living things

Substance	Sodium ions	Potassium ions	Calcium ions
Sea water	100	3.6	3.9
Tissue of a jellyfish	100	5.2	4.1
Serum of a lobster	100	3.7	4.9
Blood serum of a dog	100	6.9	2.5

(percentage concentration of sodium set at 100 in each substance for comparison sake)

P.H. Mitchell, "A Textbook of General Physiology" (5th edition - Kogakusha Co. Ltd, Tokyo), McGraw-Hill Book Co: New York, 1956 p:312

The Concentration of Mineral Salts in the Human Body and Sea Water

	Sodium	Potassium	Calcium	Magnesium	Chlorine
Sea Water	100	3.6	3.9	12.1	179.7
Human Body	100	133.3	1333.3	33.3	100.0

“The New Encyclopedia Britannica” (15th edition), Vol. 25, Encyclopedia Britannica Inc: Chicago, 1989 p:50 & 126

The Concentration of Mineral Salts in Human Body Fluid and Sea Water

	Sodium	Potassium	Calcium	Magnesium	Chlorine
Sea Water	100	3.6	3.9	12.1	179.7
Human Body	100	3.5	1.7	0.8	71.0

“The New Encyclopedia Britannica” (15th edition), Vol. 25, Encyclopedia Britannica Inc: Chicago, 1989 p:126
 W.T. Keeton, “Biological Science”, W.W. Norton & Co: New York, 1967 p:272

The Concentration of Mineral Salts in Human Blood Plasma & Sea Water

	Sodium	Potassium	Calcium	Magnesium	Chlorine
Sea Water	100	3.6	3.9	12.1	179.7
Human Body	100	6.2	3.2	0.7	115.5

“The New Encyclopedia Britannica” (15th edition), Vol. 25, Encyclopedia Britannica Inc: Chicago, 1989 p:126

“The New Encyclopedia Britannica” (15th edition), Vol. 19, Encyclopedia Britannica Inc: Chicago, 1989 p:13

Percentage Concentration of Mineral Salts in Various Aquatic Animals

Item	Sodium	Potassium	Calcium	Magnesium	Chlorine
<i>Sea Water</i>	100	3.6	3.9	12.1	179.7
Jellyfish body fluid	100	2.3	2.1	11.2	122.0
Lobster body fluid	100	2.1	3.3	1.4	99.6
Sea urchin body fluid	100	2.2	2.2	11.3	117.6
Annelid worm body	100	2.6	2.2	11.3	118.0
Crab body fluid	100	2.6	3.7	5.0	112.0
Clam body fluid	100	2.1	79.1	2.1	86.3
Crayfish body fluid	100	2.7	5.5	2.9	95.2

(percentage concentration of sodium set at 100 in each fluid for comparison sake)

W.T. Keeton, "Biological Science", W.W. Norton & Co: New York, 1967 p:272

Percentage Concentration of Mineral Salts in Various Land Animals

Item	Sodium	Potassium	Calcium	Magnesium	Chlorine
<i>Sea Water</i>	<i>100</i>	<i>3.6</i>	<i>3.9</i>	<i>12.1</i>	<i>179.7</i>
Cockroach body fluid	100	4.9	2.5	3.5	89.4
Bee body fluid	100	281.8	163.6	191.0	-
Beetle body fluid	100	50.0	80.0	195.0	95.0
Chicken body fluid	100	3.8	3.6	1.5	79.2
Dog body fluid	100	2.9	3.5	1.2	70.7
Human body fluid	100	3.5	1.7	0.8	71.0

(percentage concentration of sodium set at 100 in each fluid for comparison sake)

W.T. Keeton, "Biological Science", W.W. Norton & Co: New York, 1967 p:272