WATER

other substances combined, and it is no less the chief excretion. It is the vehicle of the principal foods and excretory products, for most of these are dissolved as they enter or leave the body.¹ Indeed, as clearer ideas of the physico-chemical organization of protoplasm have developed it has become evident that the organism itself is essentially an aqueous solution in which are spread out colloidal substances of vast complexity.² As a result of these conditions there is hardly a physiological process in which water is not of fundamental importance.

All of these circumstances, which completely justify the interest in water which Thales and Aristotle, and nearly all later students of nature have manifested, depend in great part upon the quantity of water which is present outside the earth's crust, and upon its often unique physical and chemical properties.

¹ Properly speaking, the entrance of the foods into the body is across the wall of the intestine; at this point the foods have all undergone digestion and are almost exclusively in solution. In like manner excretion takes place across the renal epithelium, or the epithelium of the lungs, or across that of the sweat glands; these too are traversed only by substances in solution.

² "Der Organismus, Pflanze wie Tier, ist ein Gefäss voll wässeriger Lösung, in dem sich als disperse Phase verschiedenartige Kolloide befinden." — ВЕСННОLD, "Die Kolloide in Biologie und Medizin." Dresden, 1912.