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The Amount of Organic Phosphates (Like DPG) Existing in Blood is Determining Factor of Mammal's Bulk

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Abstract : Throughout Necessary oxygen should be supplied for all cells of a mammal at any moment through blood to make it possible remain alive all cells the mammal's body. In case a mammal's bulk is large, there is a farther distance between cells in different tissues and mammals' heart. Therefore red blood cells in bulky mammal's body should be capable of conveying oxygen to farther distances. To make it practical, oxygen should be glued red blood cells tenaciously. In other words, cohesion strength of oxygen to red blood cell of bulky mammal's blood should be much more than the same of small mammal's blood. In mammal's bodies, the controlling factor of amount of cohesion of oxygen to red blood cell, are organic phosphates (like DPG). The less DPG in red blood cells of a mammal, the more cohesion of oxygen to red blood cell (at the same rate). As much as oxygen is glued more tenacious to red blood cells, oxygen could been carried to farther distance and as much as oxygen could be conveyed to farther points of heart, bulk of mammal could be larger at the same rate.

Keywords: mammals size, animals size, organic phosphates, DPG, red blood cell, metabolism

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