The forgotten importance of phosphate

Haemoglobin is important and necessary for the absorption of oxygen in the lungs. 2,3 DPG (diphosphoglycerate) is necessary for releasing oxygen at capillary level. The precursor to 2,3 DPG is 1,3 DPG. A certain minimum amount of phosphate is necessary to enable the body to make 1,3 DPG (1). 1,3 DPG is also the precursor of ATP (1). A supply of glucose to the body is important, but when a large amount of energy is needed, substantial quantities of glucose bind phosphate in order to make the glucose fat-soluble. The release of large quantities of glucose from the liver can have the same effect as intake of glucose per os. A typical example of the undesirable effect glucose may have was seen in 1945 when American soldiers discovered concentration camps (2).

These facts permit an explanation of my personal experiences and those of many others. A person who is totally exhausted and takes phosphate and glucose will be quite rested and able to start again after 3–4 minutes. The result of taking phosphate and glucose after completing hard work or exercise will be that the following day there is no stiffness, even if the muscles have not been stretched afterwards.

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References

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