Glucose Phosphorylation

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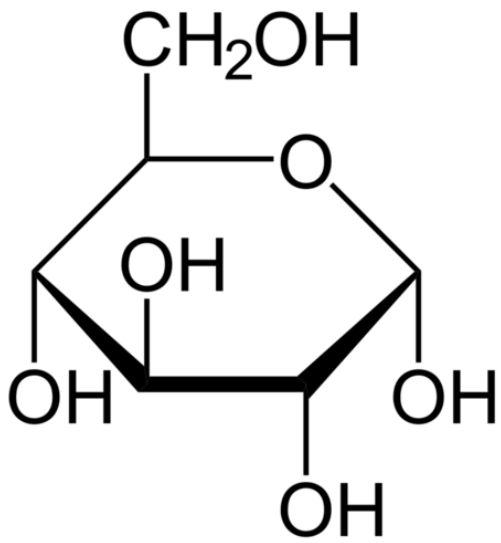

Figure: Chemical structure of a D-glucose molecule.

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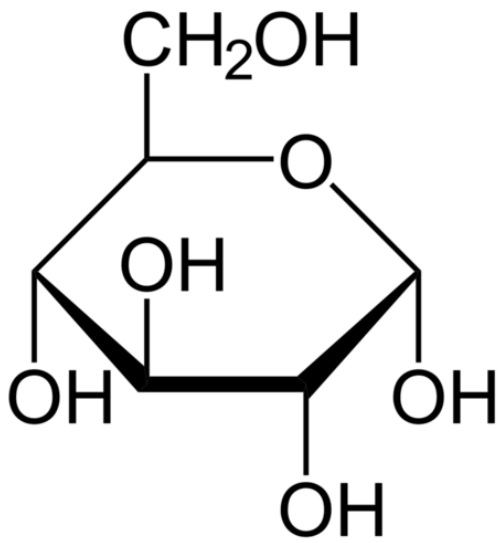

Figure: Chemical structure of a D-glucose molecule.

- An essential food for life.
- Is delivered through our blood to each of our cells.

Hexokinase

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- Hexokinase 1/A
- Hexokinase 2/B
- Hexokinase 3/C
- Hexokinase 4/D (Glucokinase)

Glucose metabolism

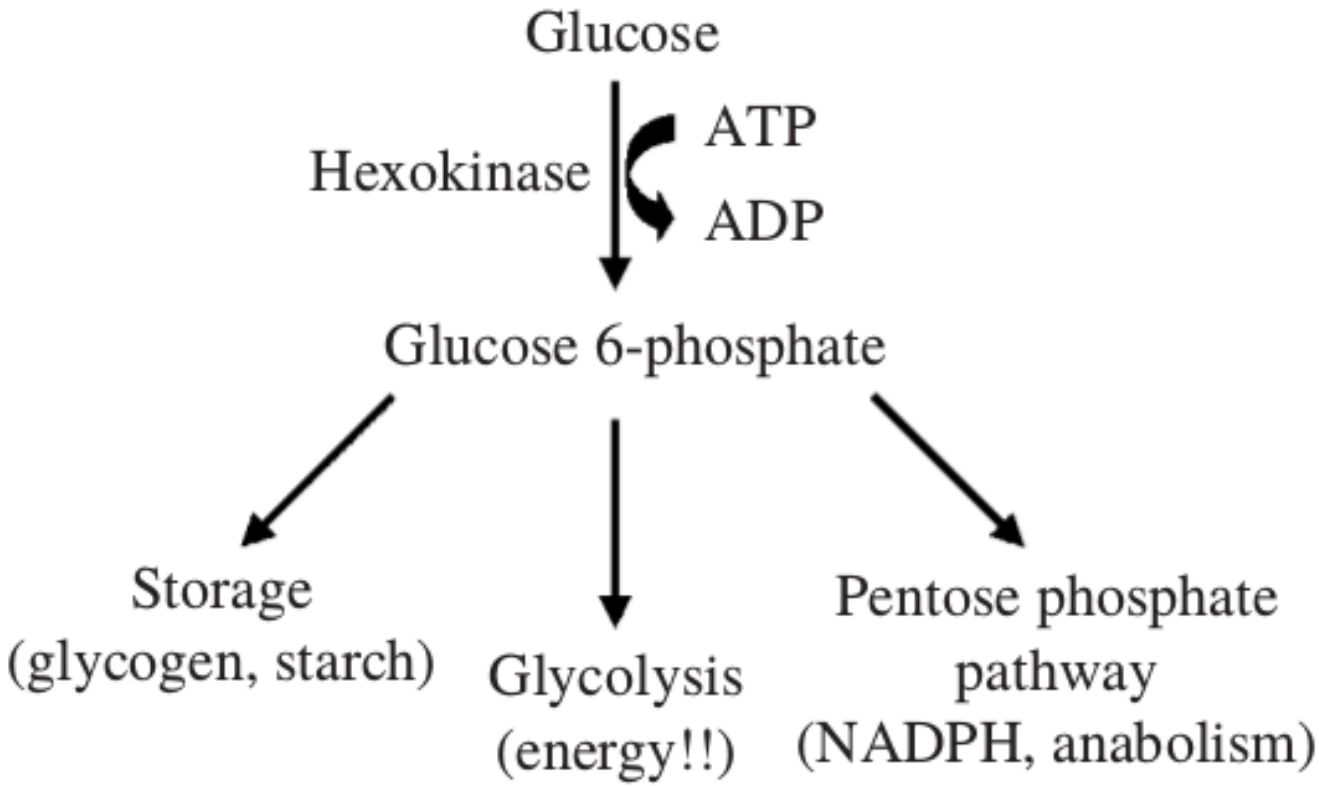

Figure: Phosphorylation, catalysed by hexokinase, is the initial step in common pathways of glucose metabolism.

Hyaluronan synthesis

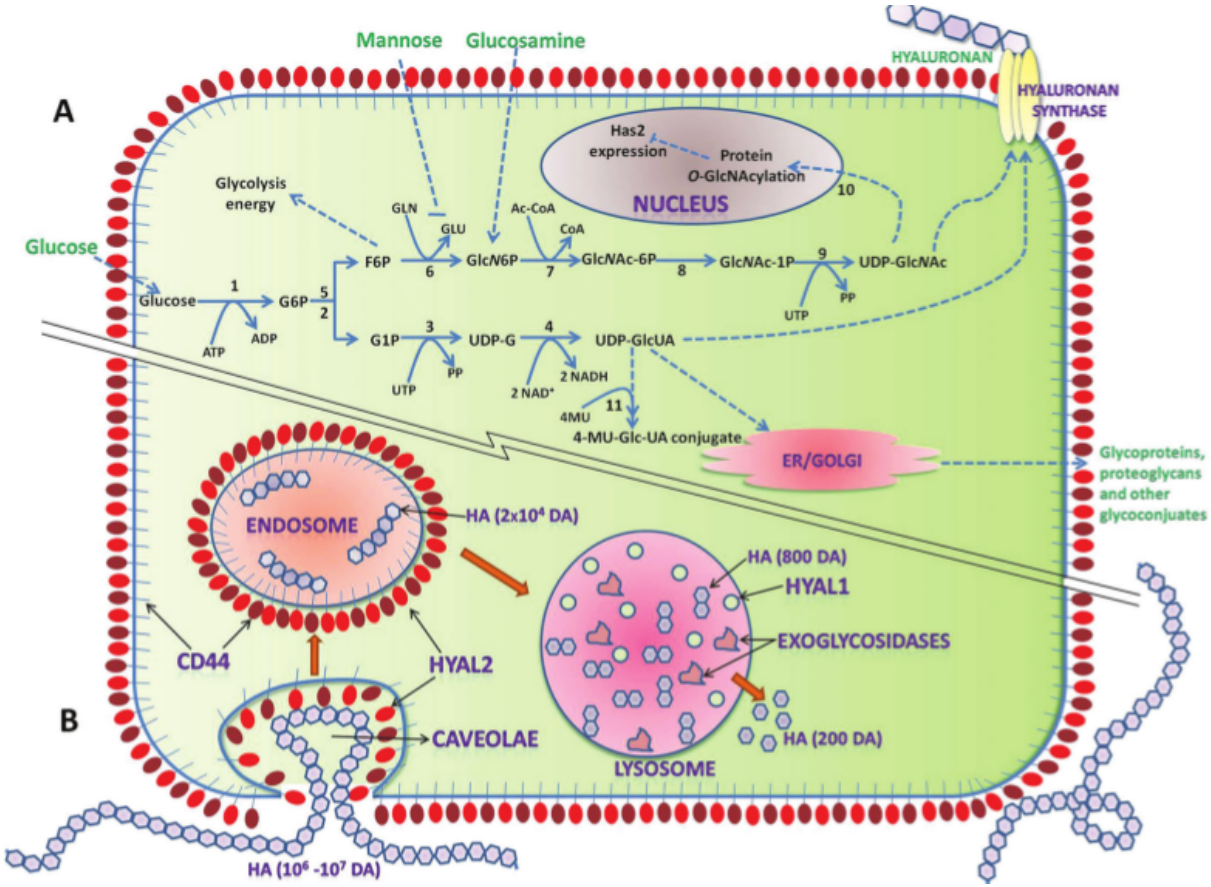

Figure: Synthesis and degradation of hyaluronan.

THANK YOU FOR YOUR ATTENTION!

Questions or Comments?!?! ;)

List of figures

References

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[2] John E. Wilson. *Isozymes of mammalian hexokinase: structure, subcellular localization and metabolic function*. The Journal of Experimental Biology 206, 2049-2057.
[3] Reenu Anne Joy, Narendranath Vikkath and Prasanth S. Ariyannur. *Metabolism and mechanisms of action of hyaluronan in human biology*, Drug Metabol Pers Ther 2018.