




HIGHLIGHTING OSMOSIS RESULTS



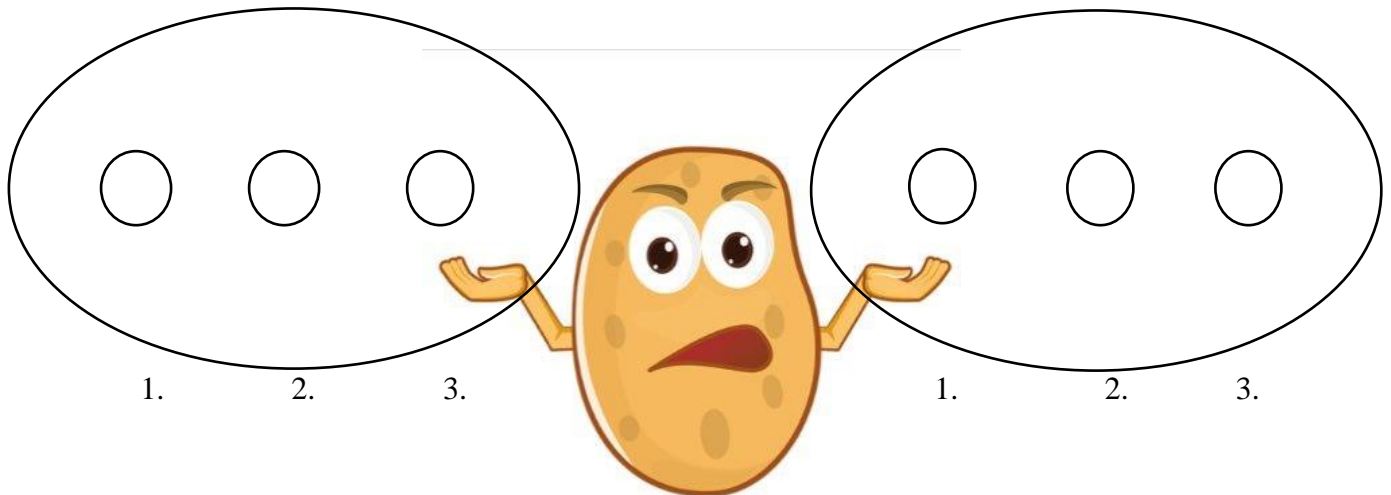
Experiment 1 : Osmosis highlighted in potatoes

Experiment 1.1 : Initial length = mm

	Pure water	NaCl solution at 9 g.L ⁻¹	NaCl solution at 40 g.L ⁻¹
Final length compared to the initial length			
Analysis			
Interpretation			

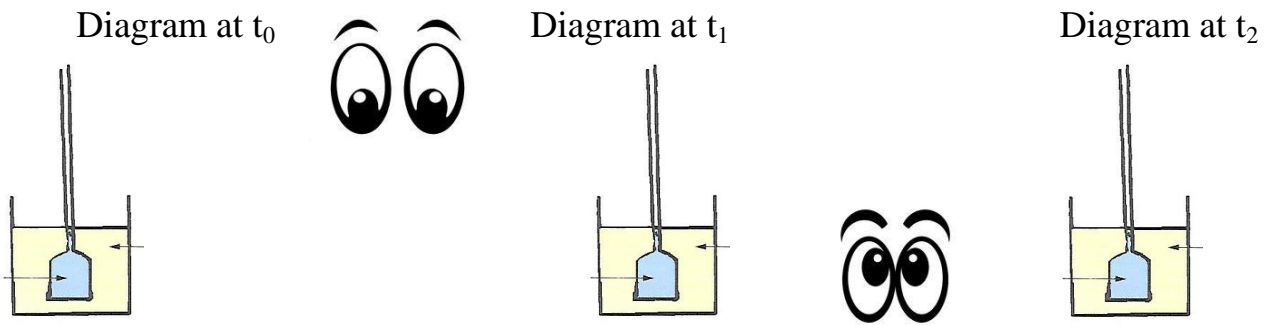
Experiment 1.2 : Diagram at t₀

Diagram at t₁



1. Pure water 2. NaCl solution at 9 g.L^{-1} 3. Grains of salt

Experiment 2 : The Dutrochet osmometer



1. Materialize the level of the liquid in the osmometer; then the direction of diffusion of water by an arrow .
2. To deduce from these experiments, a general law which governs the exchanges of water between 2 compartments separated by a biological membrane.

Use the terms hypertonic / hypotonic.

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3. Under physiological conditions, the chyme is hypotonic with respect to internal environment. Explain how water absorption occurs in the small intestine.

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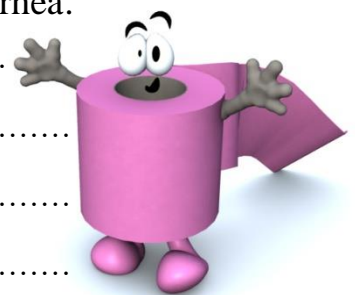
4. From these observations, explain how a lactase deficiency causes diarrhea.

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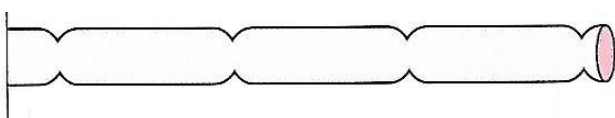
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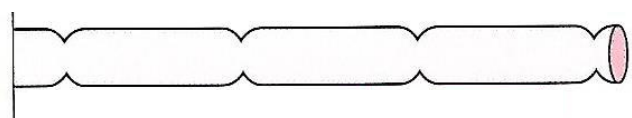
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Small intestine :



Normal running



Diarrhea