

glucose to diffuse into the epithelial cell from the lumen. Na^+ also enters the epithelial cell to keep the concentration gradient balanced. Glucose is then able to diffuse out the epithelial cell and into the blood down the concentration gradient provided by Na^+ . If the glucose level of a person's blood got too low, they could experience hypoglycaemia in which they may faint. ✓ Relevance.

H^+ is an ion that creates a concentration gradient in order for the ~~body~~ ^{cells} to receive enough ATP. * As NADH_2 arrives at the matrix, the H_2 splits into H^+ and e^- . The H^+ move into the matrix and the e^- travel down the ETC releasing energy. The energy released pulls H^+ into the intermembrane space creating a H^+ concentration gradient so more H^+ flow in. As more H^+ flow in, they travel back out through a H^+ channel protein and turn ATP synthase which ~~smashes~~ ^{joins} ADP + P_i together. ~~Without~~ forming ATP. Without H^+ concentration gradient, the cell cannot form ATP which would result in cell death and eventually overall organism death due to ATP starvation. ✓ Relevance.

* It is used in aerobic respiration and is the oxidative phosphorylation stage.

B-✓✓
R-✓✓
GNC-✓✓

Topics.
Resp-✓✓
Dq-✓✓
NS-✓✓ BB
M-✓ B.

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Great!