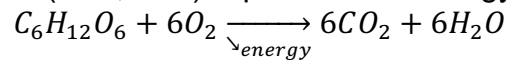


About the metabolism of yeast

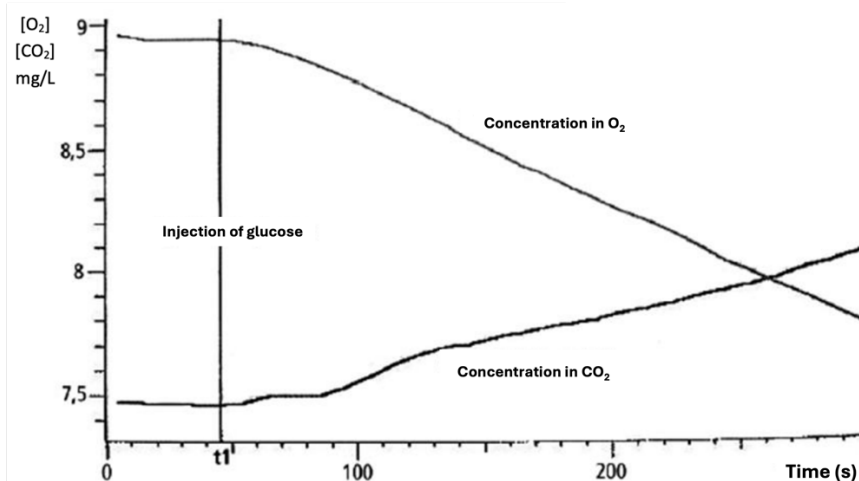
We all know cellular respiration!!! It is the degradation of organic matter (mainly in the form of glucose) into mineral matter (H_2O , CO_2) to produce the energy needed for the metabolism:



However, this is only the basics... Let's go more in depth.

Bakers' yeast is suspended in distilled water for 3 days, in the presence of a bubbler assuring a constant supply of oxygen gas. The bubbler is turned off at time $t = 0$.

The results can be seen on the graph below:

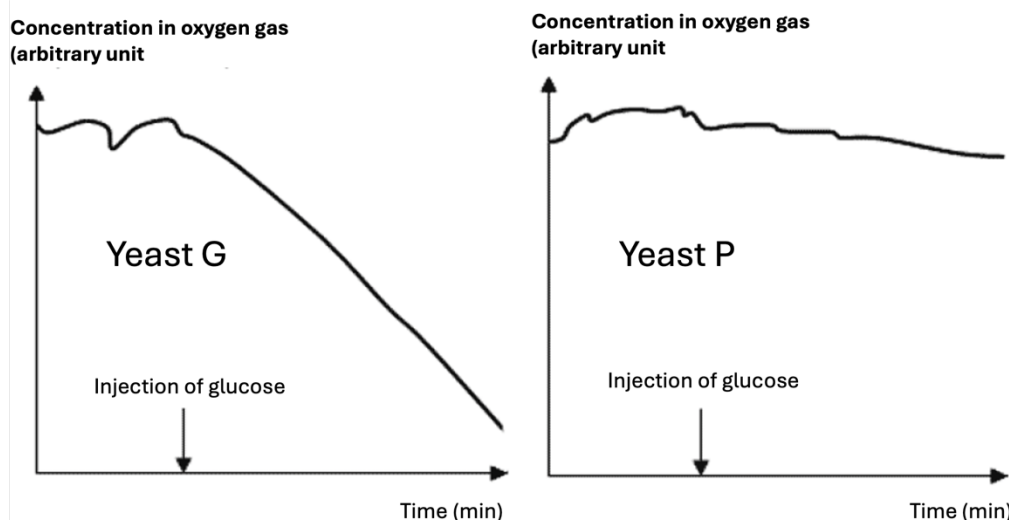


1. What is/are the independent variable(s)?
2. What is/are the dependent variable(s)?
3. What conclusions can be drawn from this graph? Explain your answer.

2 other yeast strains have been cultivated: Yeast G cells are rich in mitochondria, while yeast P cells contain only small numbers of mitochondria.

Both strains are following the same method than the baker's yeast.

The results can be seen on the graphs below:



4. What is/are the independent variable(s)?
5. What is/are the dependent variable(s)?
6. What conclusions can be drawn from these graphs? Explain your answer.