

Unit 6 Energetics Questions respiration

Define cellular respiration:

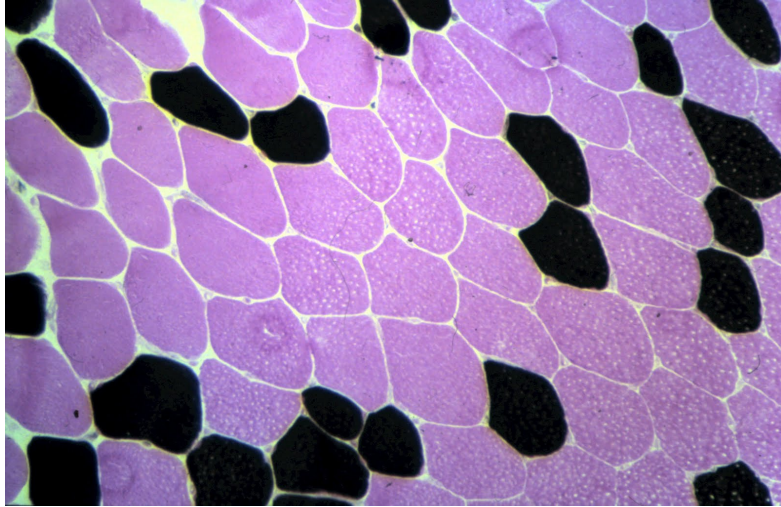
Outline the steps involved with glycolysis using diagram/bullet points

Explain how ATP is used and produced in glycolysis

Under what conditions and in what process does glucose enter cells- what is required?

Discuss why glucose is transported through the whole body via the bloodstream and why ATP production needs to be at the individual cell level.

Write out the equation for the chemical reaction for aerobic respiration in eukaryotes



Muscle cells magnified Image source: NC 1 4.2 By [Henk Kraaijenhof](#) | Published January 23, 2013
 Using what you know about aerobic and anaerobic respiration in eukaryotes and the following Youtube clips, fill out the table below.

London 2014 Olympic Gold

Mo Farrah <https://www.youtube.com/watch?v=C93qwVmBseE>

Jessica Ennis <https://www.youtube.com/watch?v=5ogwLIPAjKk>

	Mo Farrah	Jessica Ennis
running time		
energy source	Step#1	Step #1
Identify the muscle fibres used		

<p>Explain the choice Describe the immediate actions of the athletes at the end of the race- suggest why these two Olympians differed.</p>		
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Suggest with reasons what type of respiration the (a) javelin throwers and (b) high jumpers were likely to be undergoing.

A : bread dough

B.wine casks



Compare and contrast cellular respiration that is occurring in image A to that of image B

Suggest a reason why casks being stored underground in a wine cellar is beneficial

Suggest why the yeast that is used to bread might not be the same as that used to make wine- *hint look at the final products*

Discuss how cellular respiration is regulated at the cellular level based on what you know about enzyme limiting conditions; cell transport and end product inhibition.

Write down any areas of uncertainty that you have- go through the objective statements, notes, readings and handouts.