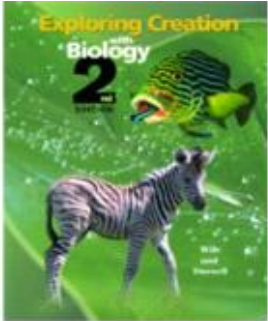


M06 L1 Cell Function

Thursday, March 05, 2009
11:31 AM

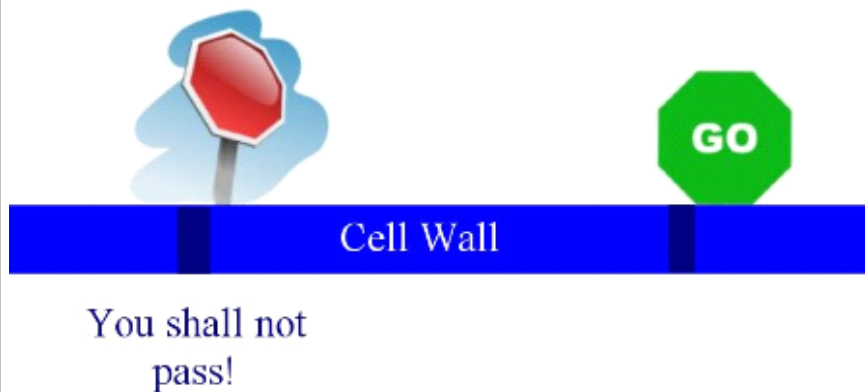
VoiceThread	http://voicethread.com/share/232802/
Cmap	http://cmapspublic2.ihmc.us/rid=1160861839109_759933121_10863/Cell%20Biology.cmap
Link to the music video version	http://aimediaserver4.com/studiodaily/videoplayer/?src=ai4/harvard/harvard.swf&width=640&height=520
Link to the video animator site	http://www.xvivo.net/the-inner-life-of-the-cell/

Another location - <http://www.studiodaily.com/main/searchlist/6850.html>

Slides	Notes
 <p>Module 06: The Cell</p> <p>👉 Lecture 1: Cell Function Lecture 2: Cellular Structure Lecture 3: Cellular Transport System Lecture 4: How Cells Produce Energy Lecture 5: Protein Synthesis Lab Day Interactive Practice</p>	<p>New student - Megan Miller</p> <p>We will have three lectures this week as normal, but in week two we will not have the normal lab, game day, study day flow. Instead we will be working on lecture 4 and 5 on Tuesday and Wednesday with Game Day on Thursday. Labs have an optional recorded link and there is a recorded biomystery as well.</p>

Cell Function

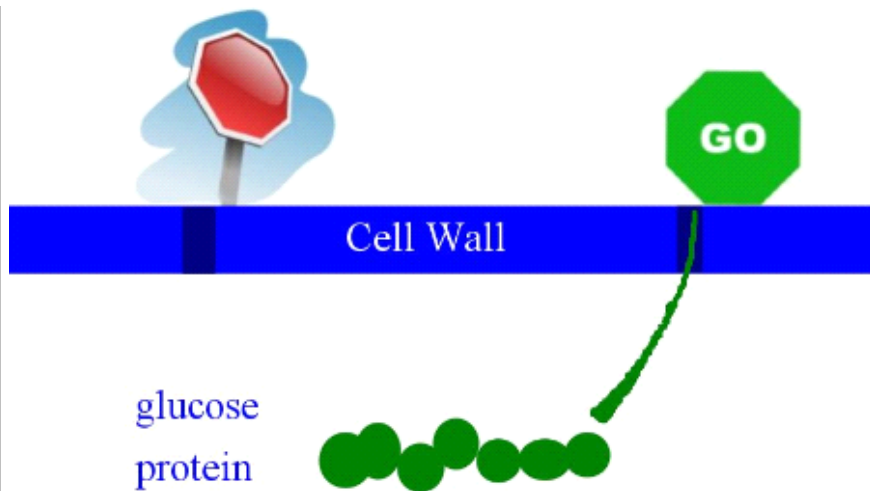
1. Absorption
2. Digestion
3. Respiration
4. Biosynthesis
5. Excretion
6. Egestion
7. Secretion
8. Movement
9. Irritability
10. Homeostasis
11. Reproduction



Some things don't get through and others do.

Cell Function

1. Absorption
2. Digestion
3. Respiration
4. Biosynthesis
5. Excretion
6. Egestion
7. Secretion
8. Movement
9. Irritability
10. Homeostasis
11. Reproduction

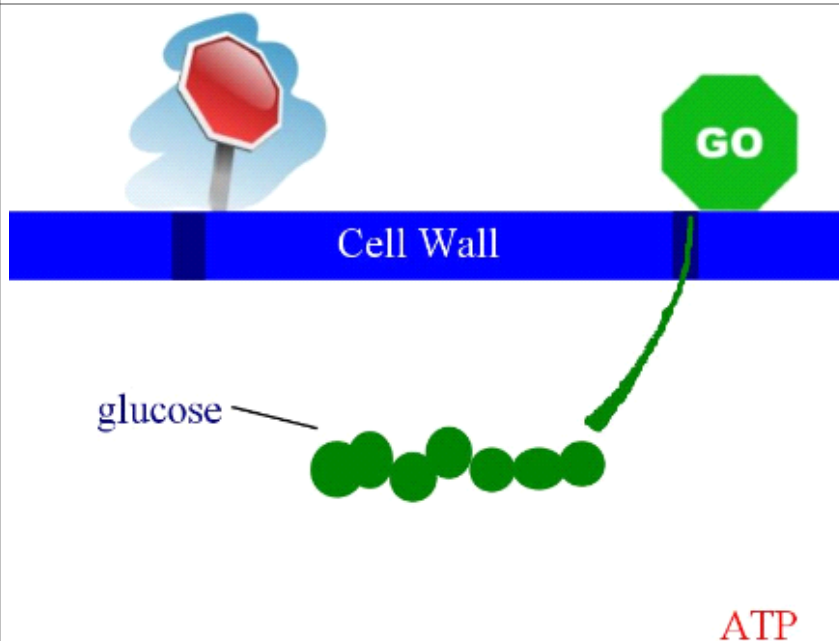


Once amino acids and glucose gets through and digestion is breaking them down.

White blood cell too - phagocytosis

Cell Function

- | | |
|------------------|------------------|
| 1. Absorption | 7. Secretion |
| 2. Digestion | 8. Movement |
| 👉 3. Respiration | 9. Irritability |
| 4. Biosynthesis | 10. Homeostasis |
| 5. Excretion | 11. Reproduction |
| 6. Egestion | |

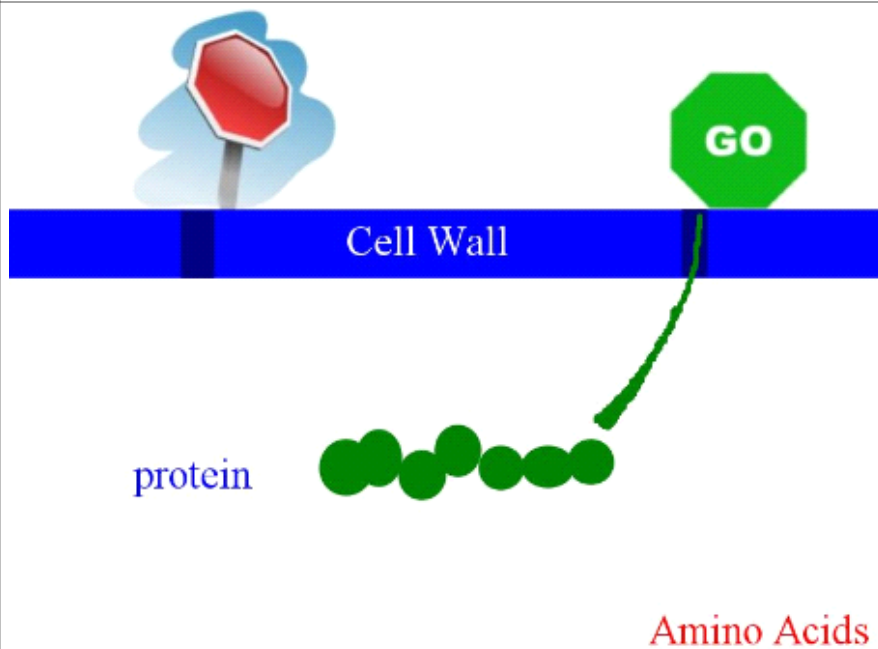


We are used to respiration meaning breathing. While breathing is the way to supply needed oxygen for cellular respiration, it is more the process of turning glucose to ATP.

More on ATP in the energy lecture (lecture 4)

Cell Function

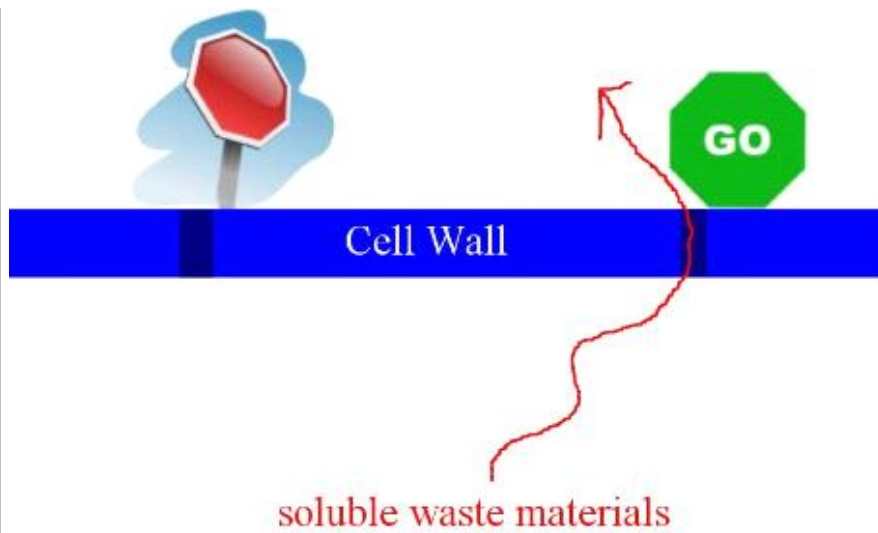
1. Absorption
2. Digestion
3. Respiration
- 👉 4. Biosynthesis
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7. Secretion
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Making proteins from amino acids.

Cell Function

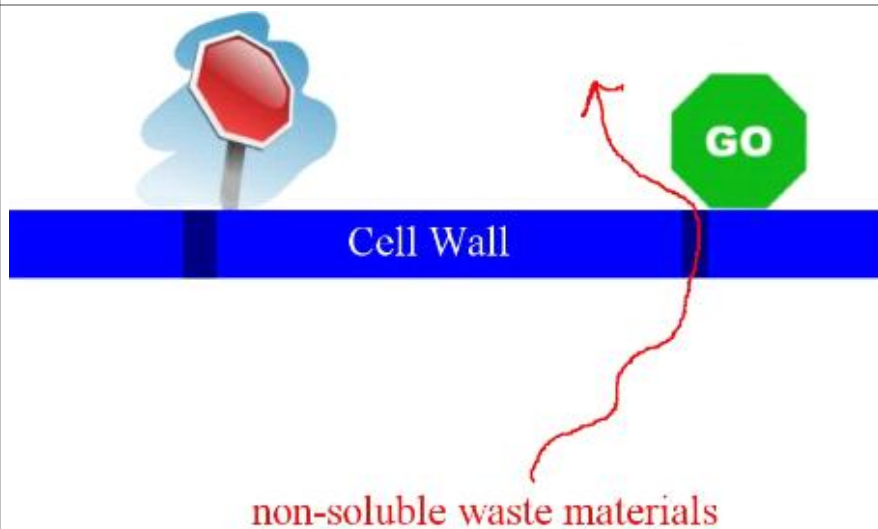
1. Absorption
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Soluble is a key word!

Cell Function

- | | |
|-----------------|------------------|
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| 3. Respiration | 9. Irritability |
| 4. Biosynthesis | 10. Homeostasis |
| 5. Excretion | 11. Reproduction |
| 👉 6. Egestion | |

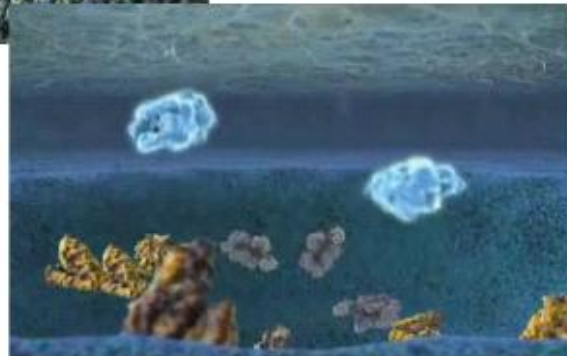
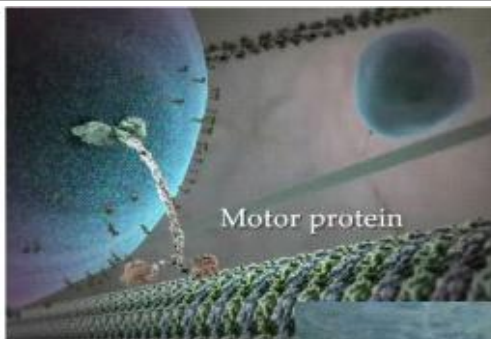


Non-soluble is the key word!

Cell Function

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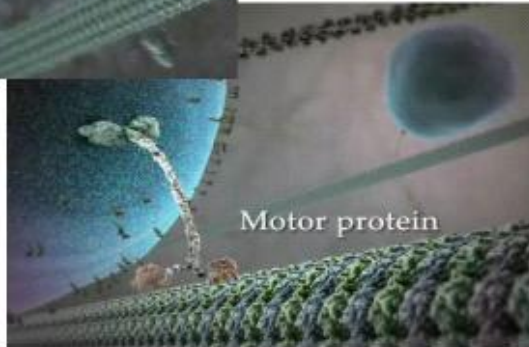
Good place to pause to see if the first column is mastered.



Creation of chemicals needed elsewhere.
Storage vesicle.

Cell Function

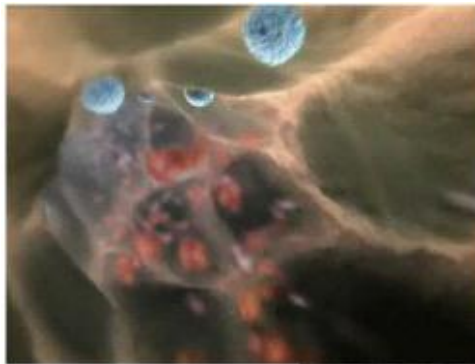
1. Absorption
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Next lecture will have cytoplasmic streaming.

Chaperone proteins

Motor proteins

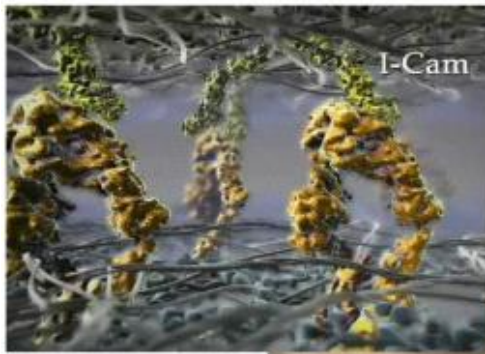


On the outer surface of leukocytes, they have a velcro-like way of hanging on to the sides of the blood vessels. The push of blood flow rolls them along.

Leukocytes are white blood cells.

Cell Function

- | | |
|-----------------|-------------------|
| 1. Absorption | 7. Secretion |
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| 3. Respiration | 👉 9. Irritability |
| 4. Biosynthesis | 10. Homeostasis |
| 5. Excretion | 11. Reproduction |
| 6. Egestion | |



Sensing and responding to changes in the environment.



Cell Function

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9. Irritability
- 👉 10. Homeostasis
11. Reproduction

Just the right amounts of ...

resources

concentrations

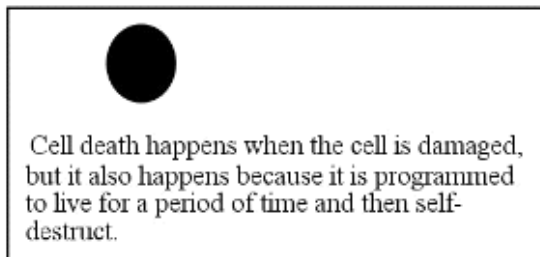
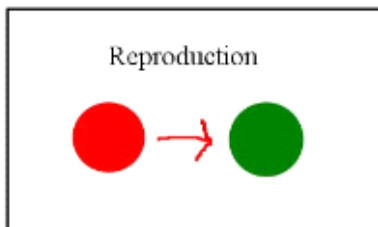
pH

temperature

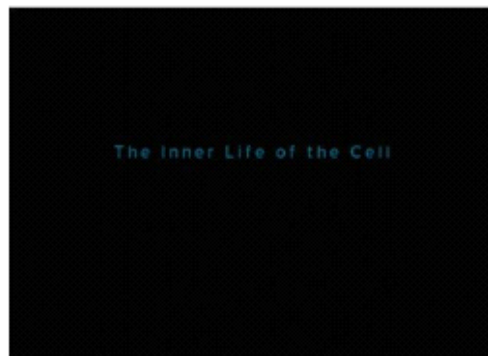
Literally means - Same status

Cell Function

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9. Irritability
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- 👉 11. Reproduction



We will get in to much more detail in a later module.



Select at least one:

Low-Bandwidth music video:

http://aimediaserver.com/studiodaily/video/player/?src=harvard/harvard_low.swf&width=640&height=520

High Bandwidth music video:

<http://aimediaserver4.com/studiodaily/video/player/?src=ai4/harvard/harvard.swf&width=640&height=520>

Narrator explanation/no music:

http://multimedia.mcb.harvard.edu/anim_innerlife_li.html

<http://aimediaserver4.com/studiodaily/video/player/?src=ai4/harvard/harvard.swf&width=640&height=520> prompts for Flash version 8 and the current Flash version is all that is at the linked location. I have the most recent and it still stays stuck in the cycle.

Low bandwidth is a tint window, but it works. It is at

http://multimedia.mcb.harvard.edu/anim_innertime_music.html

8am: <http://www.virtualhomeschoolgroup.com/mod/quiz/view.php?id=828>

9am: <http://www.virtualhomeschoolgroup.com/course/view.php?id=150>

2:30 : <http://www.virtualhomeschoolgroup.com/mod/quiz/view.php?id=13906>

2010/11: <http://www.virtualhomeschoolgroup.com/mod/quiz/view.php?id=18285>