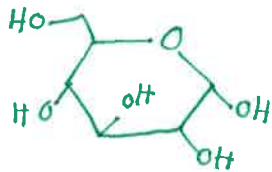


Name: Key

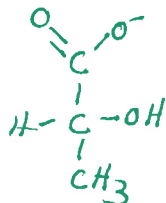
Quiz 13

Fed State (Adipocyte)	Increasing	Decreasing	N/A
Blood [glucose]	X		
Blood [Insulin]	X		
Insulin Receptor Signal	X		
Blood [Glucagon]		X	
Glucagon Receptor Signal		X	
[cAMP]		X	
Flux through GLUT2			X
Flux through GLUT4	X		
PFK-2/F-2,6-BPase Phosphorylation		X	
PFK-1 activity	X		
PFK-2 activity	X		
F-2,6-BPase activity		X	
[F-2,6-BP]	X		
Pyruvate kinase phosphorylation			X
Pyruvate kinase activity	X		
Flux through glycolysis	X		
[lactate]			X

1. Draw α -D-glucose.



2. Draw lactate.



3. How many total (all together) C-C and C-H bonds are present in glucose? 12

4. How many total (all together) C-C and C-H bonds are present in two lactate? 12

5. What is the numerical difference between your answers for #3 and #4? 0

6. How many total redox reactions occur in the pathway of glucose becoming two lactate?

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