Ate a chocolate bar! Process 2 glucose to pyruvate

without using an enzyme

Infected by a virus! Bacteria hijacked your protein synthesis pathway. CANNOT synthesize protein for one turn

Ate a steak! Import up to 3 lipids for free. OR Import up to 3 proteins for free.

Ate ice cream! Import up to 3 lipids for free AND Process 3 glucose to pyruvate for free

Ate protein powder!

Place 10 amino acids in your stock.

Pickup 10 ATP and place in your stock













You have upregulated your protein synthesis pathway! Get an extra enzyme this turn You saw a bear!

Increase in epinephrine accelerated your fatty acid breakdown Wait only one turn for Fatty Acid Metabolism

You are exercising vigorously! You used up your glucose stores You cannot use the glycolysis pathway this turn

Acquired a genetic mutation in your enzyme! Enzymes are now nonfunctional Lose one enzyme

Poisoned by Carbon Monoxide!

Oxygen is unavailable to mitochondria CANNOT use mitochondria this turn

You got diabetes!

Low insulin lowers glucose import CANNOT import glucose this turn













₽???**A**₽??**A**₽**h**₽₽**r**?

? A? ??? A? ?? ??? C ???????

2000 2000 W2012 24/002000 0004 0 / e 52 P/ 22 p2













11.127J / CMS.590J / CMS.836J / 11.252J Computer Games and Simulations for Education and Exploration Spring 2015

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.