

NAME: _____

Quiz 11

Assume that metabolism and its regulation are similar between humans and rats. Imagine that you had two rats, both of which had been fasting for 24 hours. To rat "A" you give 5 grams of ^{13}C -labelled glucose. To rat "B" you give 5 grams of ^{13}C -labelled fructose. Twelve hours later, you collect some of rat "A's" and rat "B's" hepatocytes and analyze the lipids from within the cells for ^{13}C . Which rat will contain lipids with more ^{13}C ? Justify your answer metabolically.