What's in a Graph? (Daily Warm-up)

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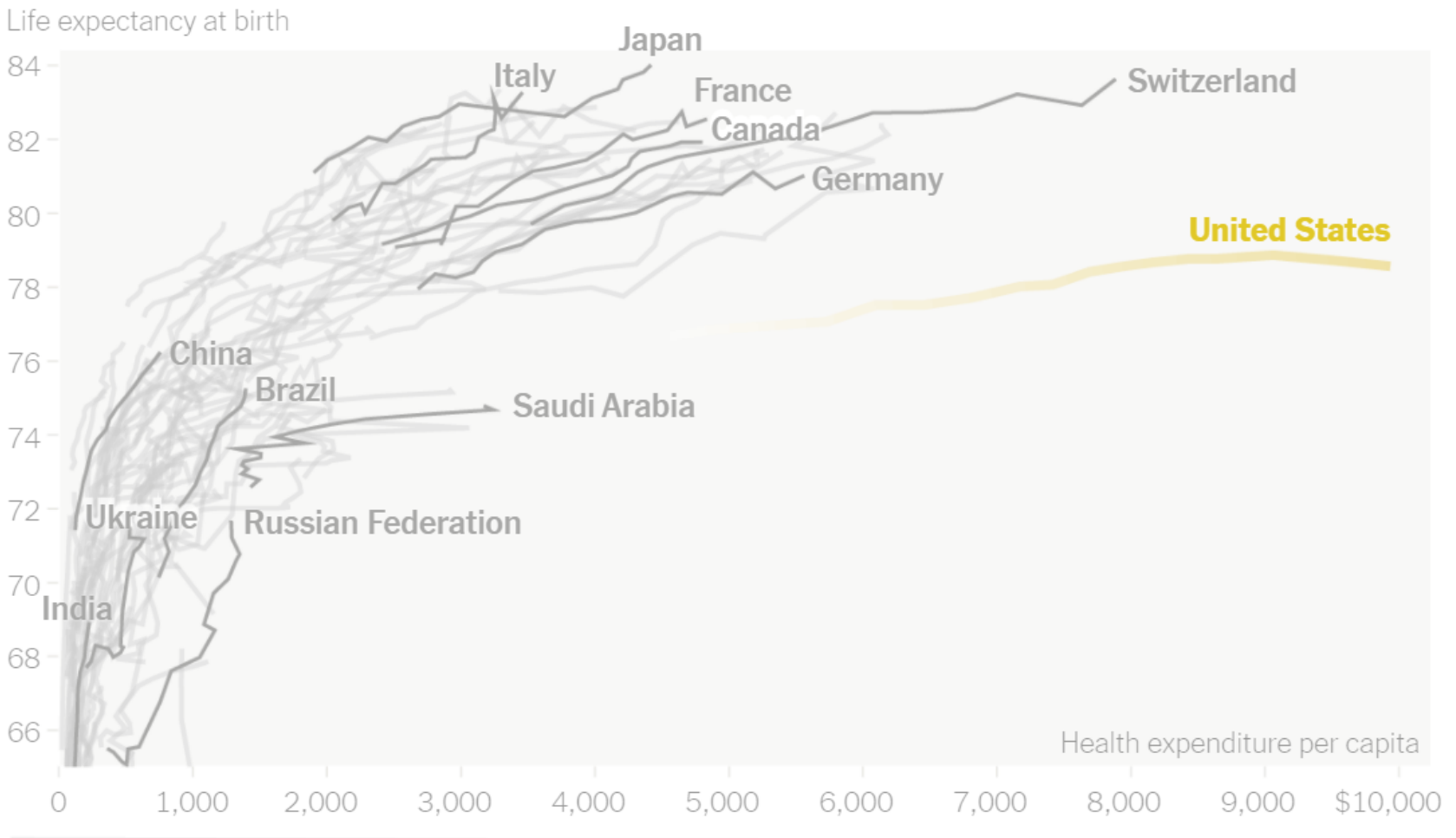
Introduction

Two important goals of Math-146:

1) Develop your ability to identify and interpret patterns via data visualization
2) Develop your ability to clearly communicate these findings using the proper statistical terms

We will begin class on most days with brief warm-up that addresses these goals by analyzing and discussing a different data visualization. I encourage you to keep track of our discussions, each exam will include at-least 1 multivariate graph.

Graph #1 (Monday 8/16)



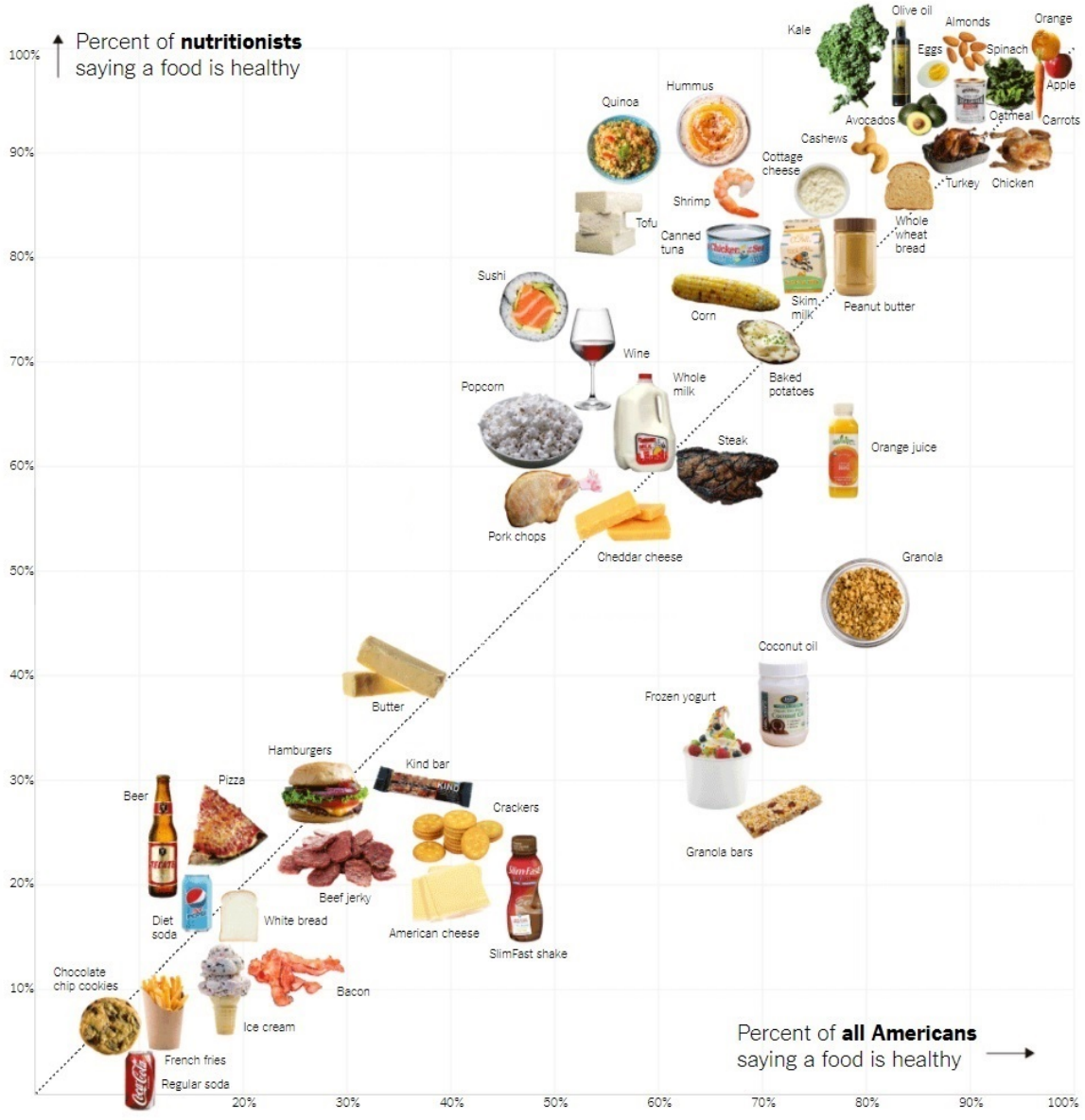
Note: Current health expenditure per capita, purchasing power parity, reflects current international dollars. Both measures span 2000-2017. Source: World Bank

Source/full-size link

Graph #1 (Discussion Questions)

1. What are the variables depicted on this graph?
2. Based upon the graph, what is the *strongest* predictor of greater improvements in a country's life expectancy (at birth)?
3. What do you think was the message that graph's creator wanted convey? Do you have any criticisms or concerns regarding the evidence this graph provides?

Graph #2 (Wednesday 8/18)



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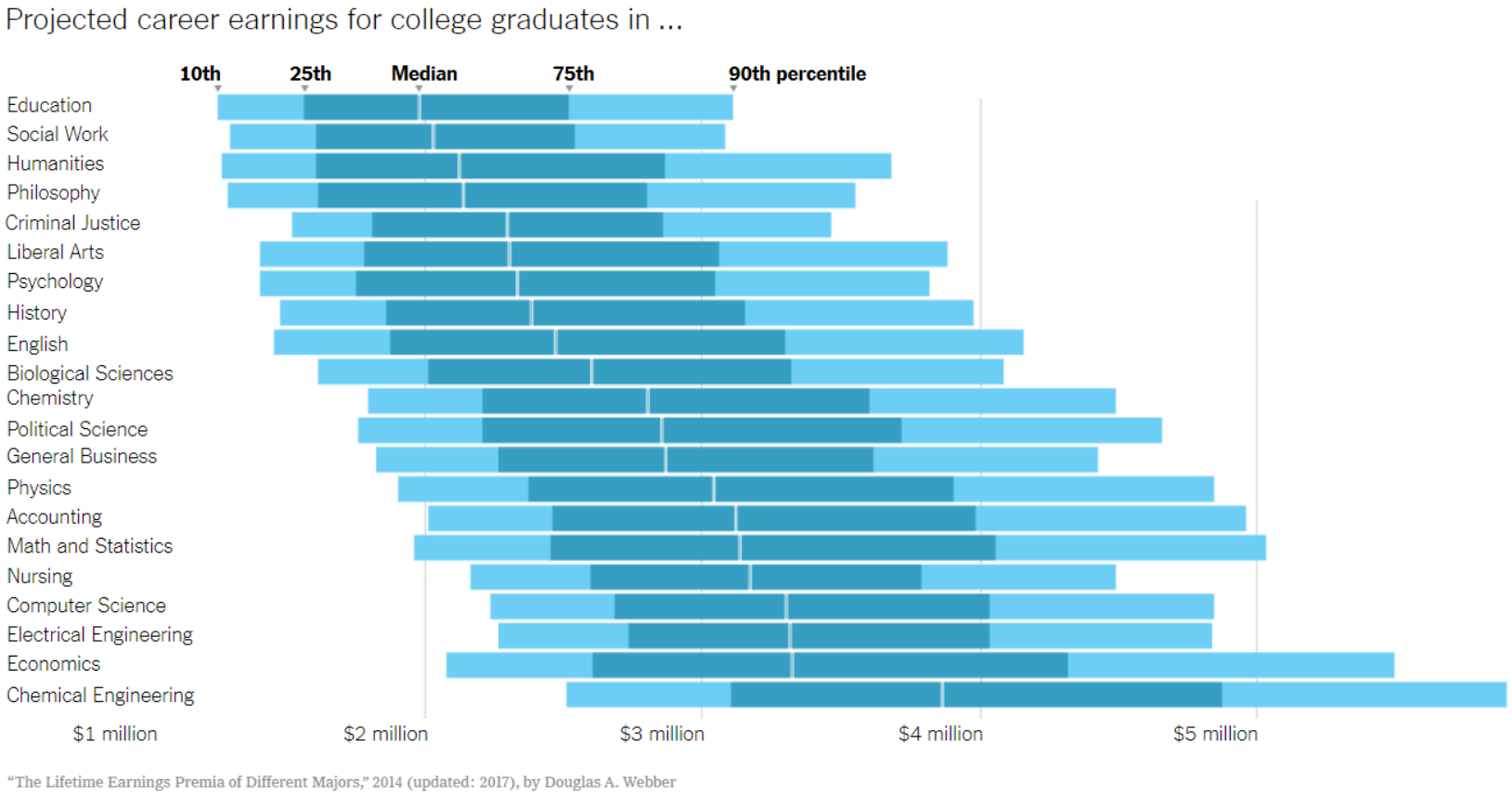
Graph #2 (Discussion Questions)

1. What variables are depicted on this graph?
2. What value/use is the 45-degree line that is drawn on the graph?
3. Which foods do you think received the most attention in this graph's accompanying article?

Graph #3 (Monday 8/23)



Source/full-size link

Graph #3 (Discussion Questions)

1. What do you think the cases were in the data used to create this graph? What do you think the variables were?
2. What type of a graph are we more familiar with that shows many of the same summary measures as this one?
3. What do you think received the most attention in the article that accompanied this graph?