



Scrapy Analysis of BudgetBytes.com



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May 2019



About BudgetBytes

Price Conscious

As implied by the blog title, the main goal of BudgetBytes.com is to provide inexpensive recipes. Recipes give the per recipe and per serving prices.

Time Efficient

In addition to saving money, BudgetBytes aims to save time and energy while still creating delicious meals. These recipes are made with easy to find ingredients and common cooking supplies.

Multi-Diet Inclusive

The recipes on BudgetBytes.com are broken out into many different categories, which include several that are diet and allergy specific. Paired with a broad cultural repertoire, BudgetBytes reaches a large audience.

The Data

Retrieved using Scrapy

960 unique recipes

32 different categories

6232 total recipes by category

Analysis Questions

Question 1

Does rating increase with recipe price?

- Expectation: Yes

Question 2

Does rating decrease with increasing cook time?

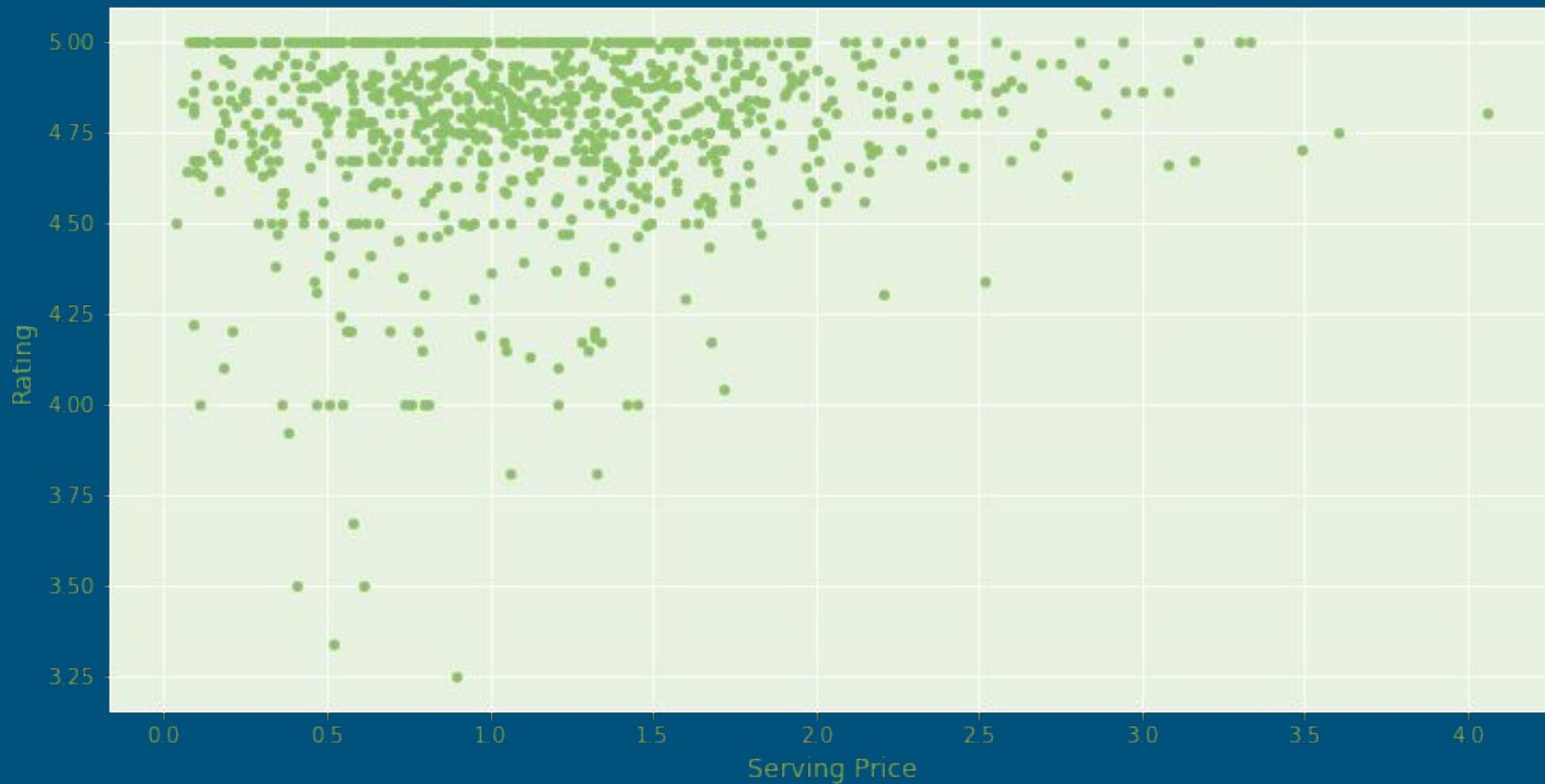
- Expectation: Yes

Question 3

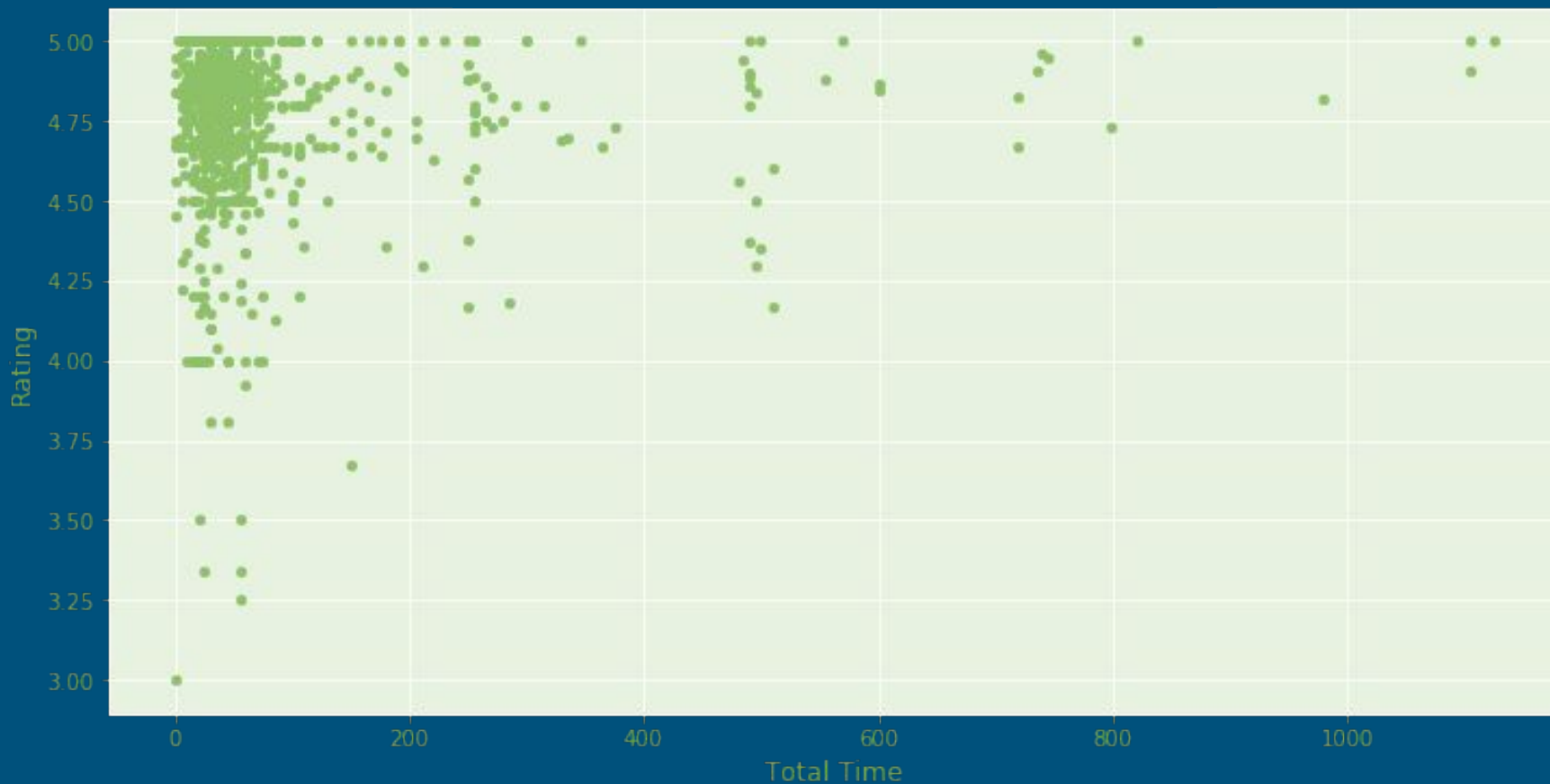
Are vegetarian and allergy-friendly recipes as popular and highly rated as meat-based recipes?

- Expectation: No

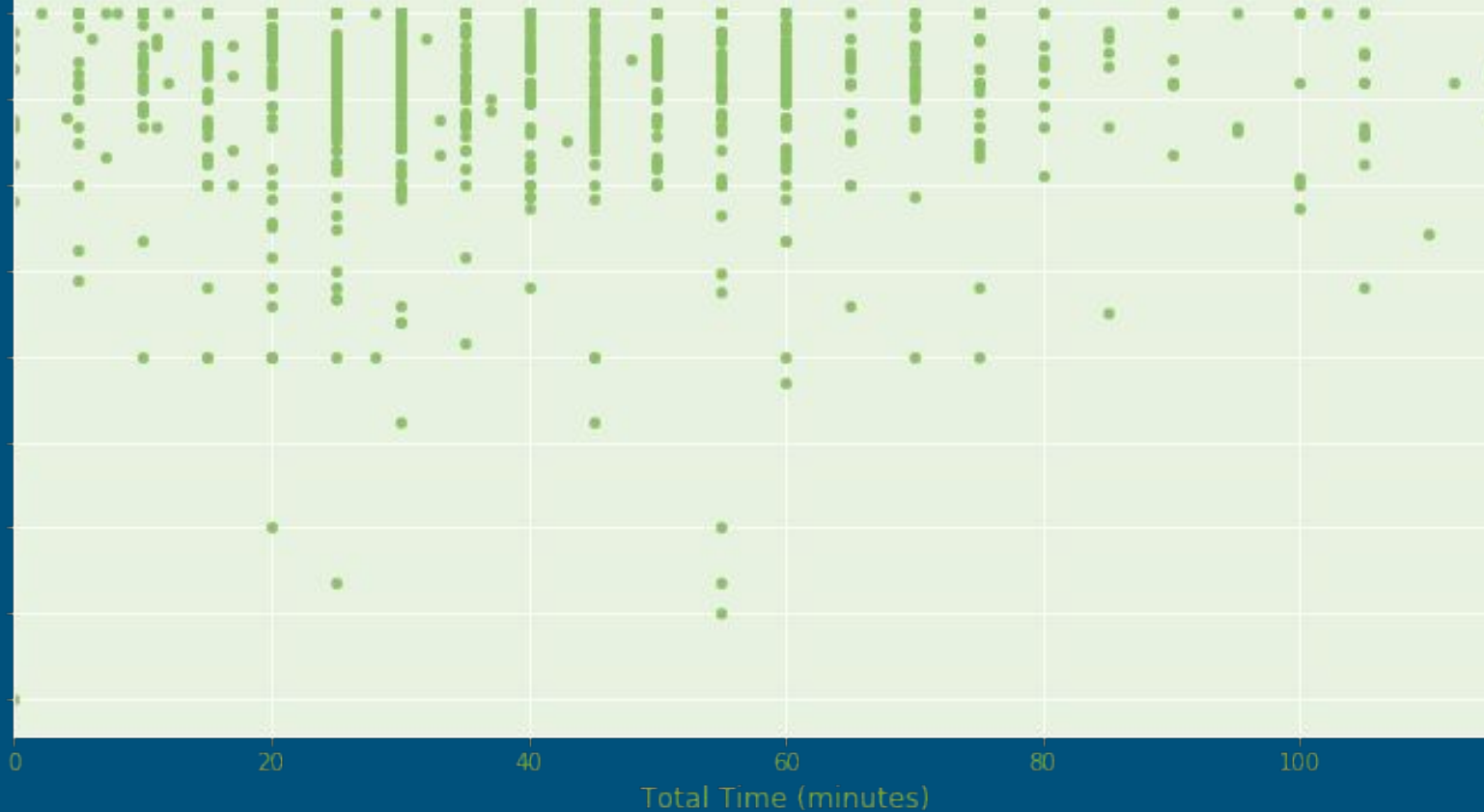
Price per Serving vs. Rating



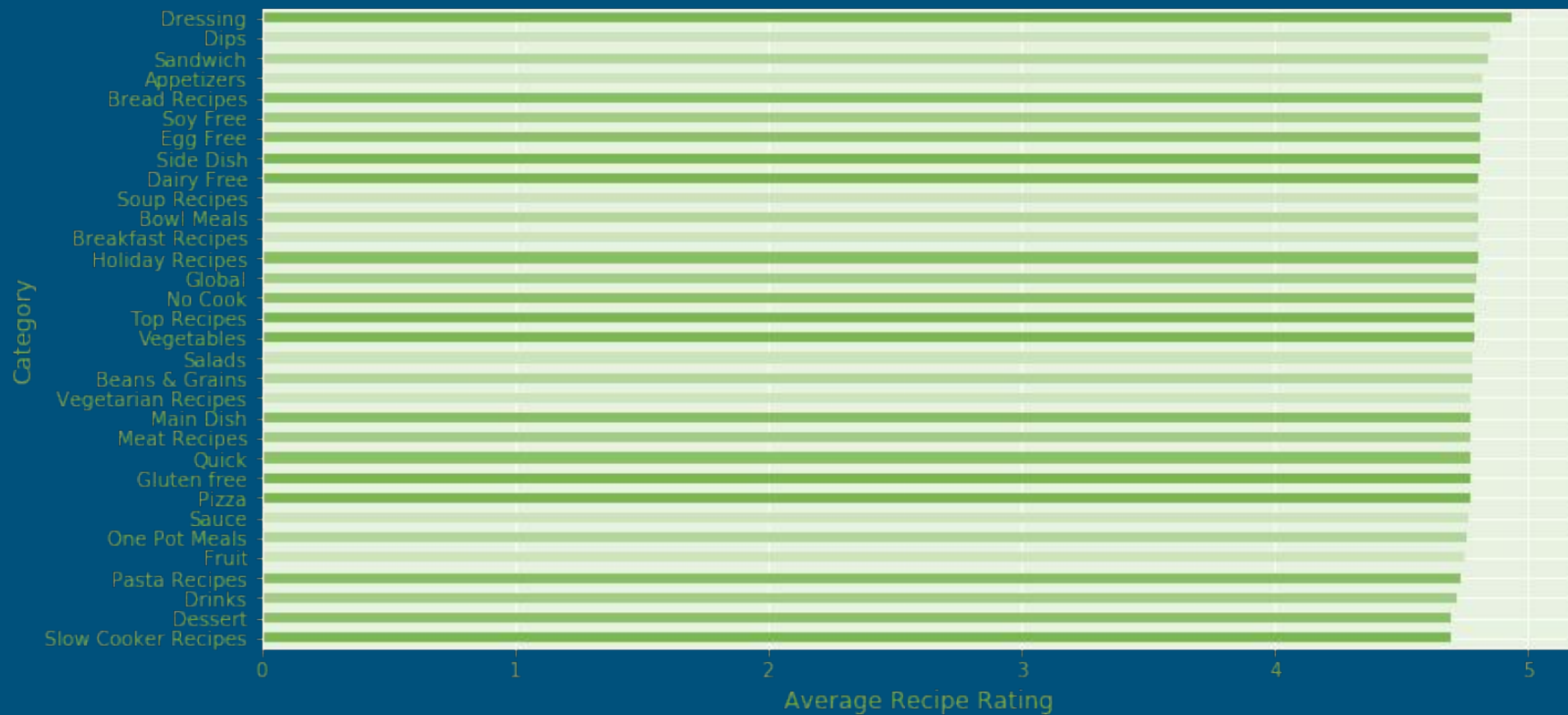
Total Cook Time vs. Rating



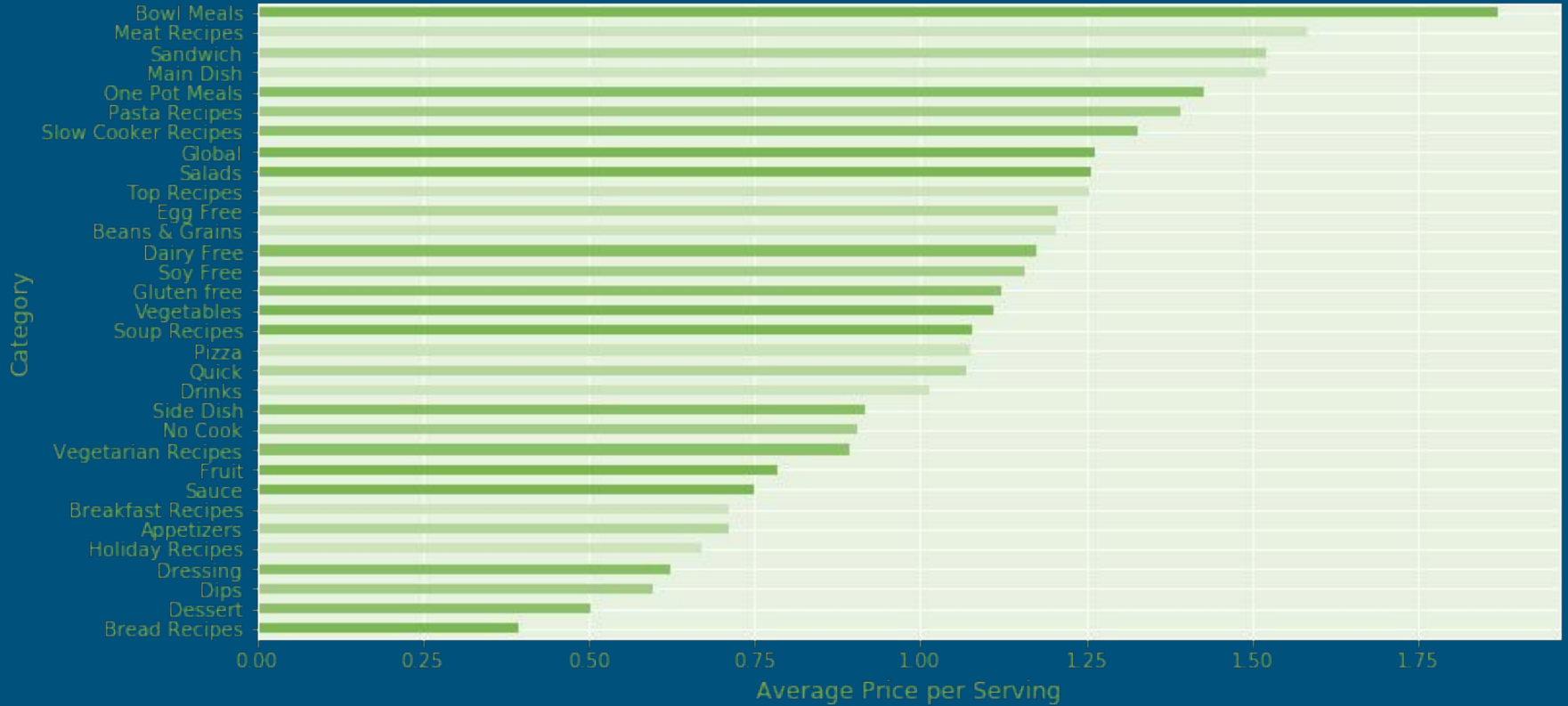
| Country | Year | Population (millions) | GDP (billion USD) | Life expectancy (years) | Healthcare expenditure (billion USD) |
|---------------------|------|-----------------------|-------------------|-------------------------|--------------------------------------|
| USA | 2019 | 328 | 21.5 | 78.1 | 1.1 |
| Germany | 2019 | 83 | 4.0 | 81.0 | 0.4 |
| France | 2019 | 67 | 3.0 | 82.4 | 0.3 |
| Japan | 2019 | 126 | 5.0 | 84.4 | 0.5 |
| UK | 2019 | 67 | 3.0 | 81.1 | 0.3 |
| Canada | 2019 | 38 | 1.8 | 82.7 | 0.2 |
| Australia | 2019 | 25 | 1.3 | 83.7 | 0.2 |
| South Korea | 2019 | 51 | 1.7 | 83.4 | 0.2 |
| Italy | 2019 | 60 | 2.1 | 83.7 | 0.2 |
| Spain | 2019 | 46 | 1.5 | 83.7 | 0.2 |
| Sweden | 2019 | 10 | 0.5 | 84.1 | 0.1 |
| Netherlands | 2019 | 17 | 0.9 | 84.1 | 0.1 |
| Belgium | 2019 | 11 | 0.5 | 84.1 | 0.1 |
| Portugal | 2019 | 11 | 0.5 | 84.1 | 0.1 |
| Greece | 2019 | 11 | 0.5 | 84.1 | 0.1 |
| Poland | 2019 | 38 | 0.8 | 84.1 | 0.1 |
| Czech Republic | 2019 | 11 | 0.5 | 84.1 | 0.1 |
| Slovakia | 2019 | 5 | 0.2 | 84.1 | 0.1 |
| Hungary | 2019 | 10 | 0.5 | 84.1 | 0.1 |
| Slovenia | 2019 | 2 | 0.1 | 84.1 | 0.1 |
| Croatia | 2019 | 4 | 0.2 | 84.1 | 0.1 |
| Bulgaria | 2019 | 7 | 0.3 | 84.1 | 0.1 |
| Romania | 2019 | 21 | 0.4 | 84.1 | 0.1 |
| Lithuania | 2019 | 3 | 0.1 | 84.1 | 0.1 |
| Latvia | 2019 | 2 | 0.1 | 84.1 | 0.1 |
| Estonia | 2019 | 1 | 0.1 | 84.1 | 0.1 |
| Finland | 2019 | 5 | 0.2 | 84.1 | 0.1 |
| Ireland | 2019 | 4 | 0.2 | 84.1 | 0.1 |
| Denmark | 2019 | 5 | 0.2 | 84.1 | 0.1 |
| Norway | 2019 | 5 | 0.2 | 84.1 | 0.1 |
| Switzerland | 2019 | 8 | 0.4 | 84.1 | 0.1 |
| Austria | 2019 | 9 | 0.4 | 84.1 | 0.1 |
| Belarus | 2019 | 9 | 0.4 | 84.1 | 0.1 |
| Ukraine | 2019 | 45 | 0.7 | 84.1 | 0.1 |
| Russia | 2019 | 146 | 1.5 | 84.1 | 0.1 |
| China | 2019 | 1400 | 14.0 | 77.1 | 0.1 |
| India | 2019 | 1380 | 2.8 | 74.6 | 0.1 |
| Brazil | 2019 | 215 | 1.8 | 75.3 | 0.1 |
| Mexico | 2019 | 133 | 1.3 | 75.3 | 0.1 |
| Argentina | 2019 | 45 | 0.4 | 75.3 | 0.1 |
| Colombia | 2019 | 50 | 0.4 | 75.3 | 0.1 |
| Venezuela | 2019 | 28 | 0.2 | 75.3 | 0.1 |
| Peru | 2019 | 33 | 0.3 | 75.3 | 0.1 |
| Ecuador | 2019 | 17 | 0.2 | 75.3 | 0.1 |
| Bolivia | 2019 | 11 | 0.2 | 75.3 | 0.1 |
| Paraguay | 2019 | 7 | 0.2 | 75.3 | 0.1 |
| Uruguay | 2019 | 3 | 0.1 | 75.3 | 0.1 |
| Chile | 2019 | 19 | 0.3 | 75.3 | 0.1 |
| Costa Rica | 2019 | 5 | 0.1 | 75.3 | 0.1 |
| Panama | 2019 | 4 | 0.1 | 75.3 | 0.1 |
| Dominican Republic | 2019 | 7 | 0.1 | 75.3 | 0.1 |
| Honduras | 2019 | 9 | 0.1 | 75.3 | 0.1 |
| Guatemala | 2019 | 17 | 0.1 | 75.3 | 0.1 |
| El Salvador | 2019 | 6 | 0.1 | 75.3 | 0.1 |
| Nicaragua | 2019 | 6 | 0.1 | 75.3 | 0.1 |
| Haiti | 2019 | 11 | 0.1 | 75.3 | 0.1 |
| Jamaica | 2019 | 3 | 0.1 | 75.3 | 0.1 |
| Trinidad and Tobago | 2019 | 1 | 0.1 | 75.3 | 0.1 |
| Guyana | 2019 | 0.7 | 0.1 | 75.3 | 0.1 |
| Suriname | 2019 | 0.6 | 0.1 | 75.3 | 0.1 |
| Belize | 2019 | 0.4 | 0.1 | 75.3 | 0.1 |
| Paraguay | 2019 | 7 | 0.2 | 75.3 | 0.1 |
| Uruguay | 2019 | 3 | 0.1 | 75.3 | 0.1 |
| Chile | 2019 | 19 | 0.3 | 75.3 | 0.1 |
| Costa Rica | 2019 | 5 | 0.1 | 75.3 | 0.1 |
| Panama | 2019 | 4 | 0.1 | 75.3 | 0.1 |
| Dominican Republic | 20 | | | | |



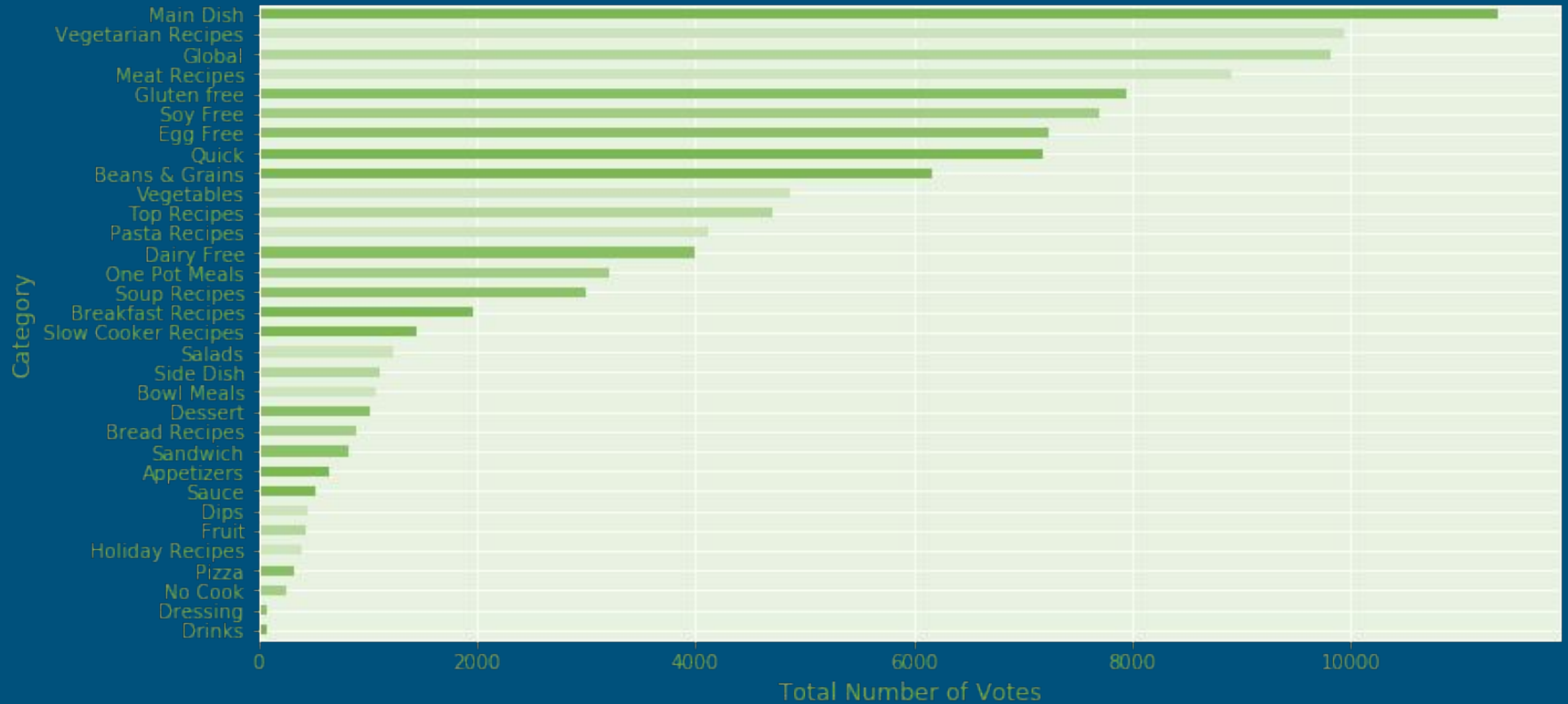
Average Recipe Rating per Category



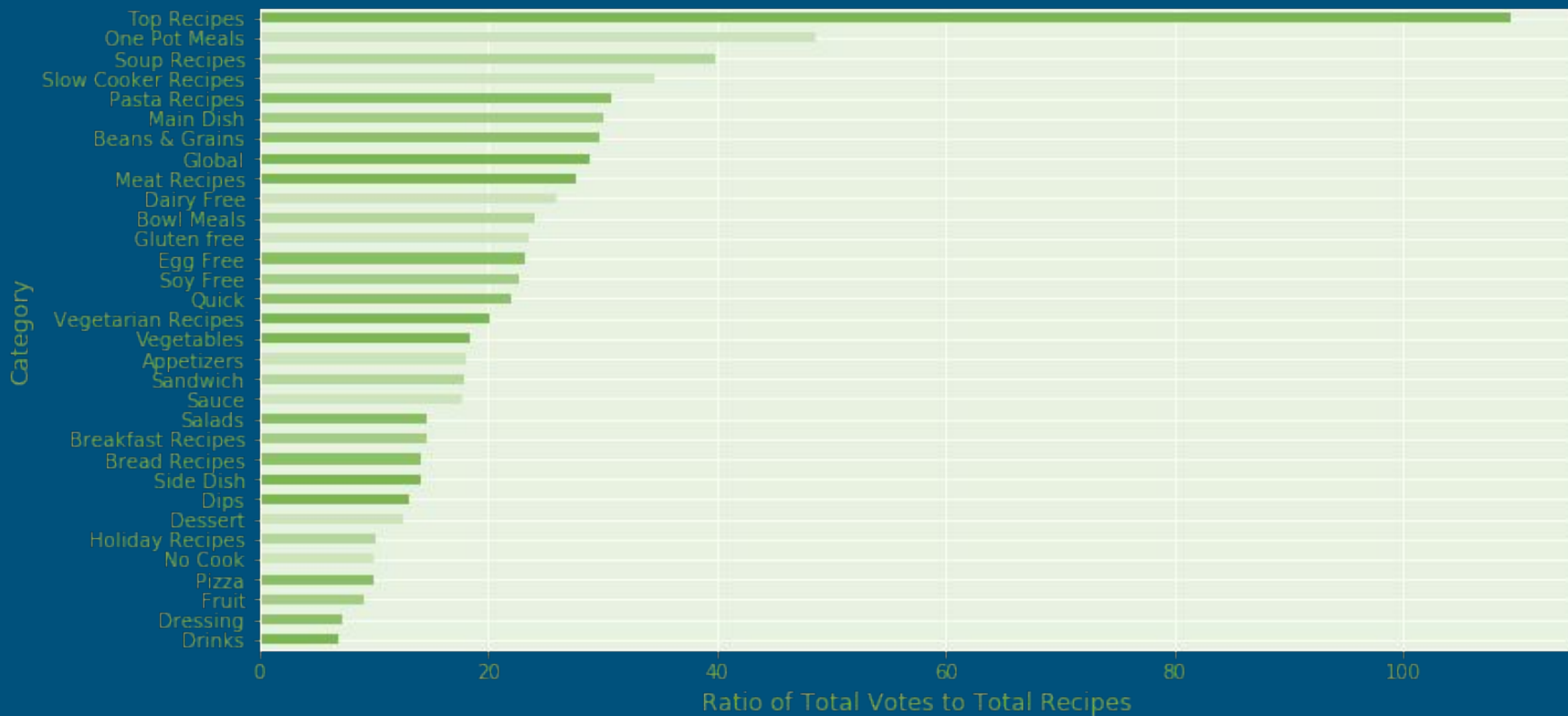
Average Price per Serving by Category



Total Votes per Category



Ratio of Total Votes to Total Recipes per Category



Question Results

Question 1

Does rating increase with recipe price?

- Expectation: Yes
- Result: No!

Question 2

Does rating decrease with increasing cook time?

- Expectation: Yes
- Result: No!

Question 3

Are vegetarian and allergy-friendly recipes as popular and highly rated as meat-based recipes?

- Expectation: No
- Result: Yes, and usually more!

Overall Characteristics

BudgetBytes
vs
Blue Apron & Hello Fresh

BudgetBytes:

| | |
|---------------------------|-----------|
| Average Rating | 4.777889 |
| Average Total Time | 72.087500 |
| Median Total Time | 40.000000 |
| Average Price per Serving | 1.128525 |

Blue Apron:

- regular: \$7.49/\$8.99 per serving, 4 servings, 4/2 times a week, free shipping
- vegetarian: \$9.99 per serving, 2 servings, 3/2 times a week, free shipping/\$7.99 shipping

Hello Fresh:

- regular: \$7.49/\$9.99 per serving, 4/2 servings, 3/2 times a week, \$6.99/\$7.99 shipping
 - vegetarian: \$6.99/\$8.99 per serving, 4/2 servings, 3 times a week, \$6.99 shipping
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Future Work

- Shiny App to explore data
- Possibly sentiment analysis (not many comments)

Thank you!