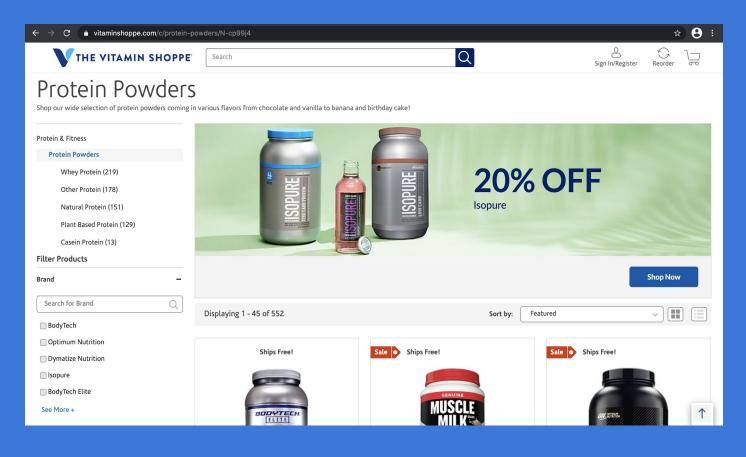
# Scraping Vitamin Shoppe

Analysis of Vitamin Shoppe's Protein Powder



#### Ships Free! Optimum Nutrition Gold Standard 100% Whey Protein - Double Rich Chocolate (5 Lbs. / 74 Servings) ★★★★☆ (252) 21 Flavors | More Sizes \$59.99

(\$0.81/Serving)

### Types of Protein Powder Offered

- Whey: milk product easily digestible
- Casein: milk product more slowly digested
- Natural: organic, natural ingredients, non GMO
- Plant-Based: made from various plant proteins such as beans, rice, pea, hemp
- Other: blends of proteins



	number_reviews	
	mean	median
type		
Casein	31.375000	21.5
Natural	59.463415	16.0
Other	14.782609	8.0
Plant Based	38.684211	19.5
Whey	32.000000	13.0

### Correlations by listed price

```
type
Casein
            rating
                                 0.431303
                                 0.424508
Natural
           price per serving
Plant Based price per serving
                                 0.400105
Whey
            rating
                                 0.344002
                                 0.253460
Plant Based
            recommended yes
            rating
                                 0.245005
Natural
            rating
                                 0.209026
Plant Based number reviews
                                 0.204129
Other
            rating
                                 0.181919
            price per serving 0.170981
Name: listed price, dtype: float64
```

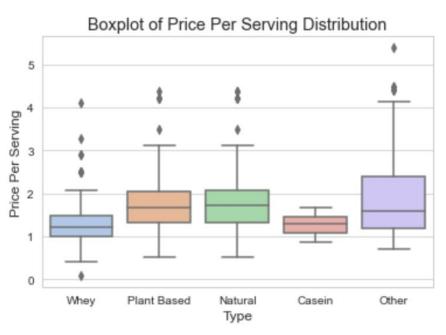
# Rating vs. Listed Price





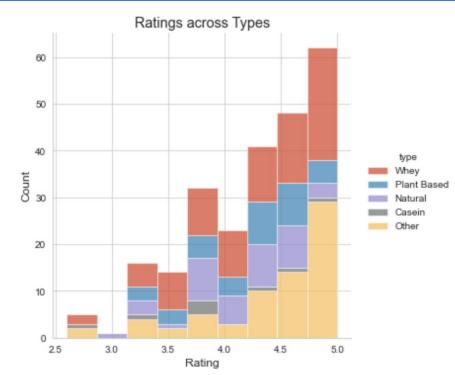
### Price Distributions across Types



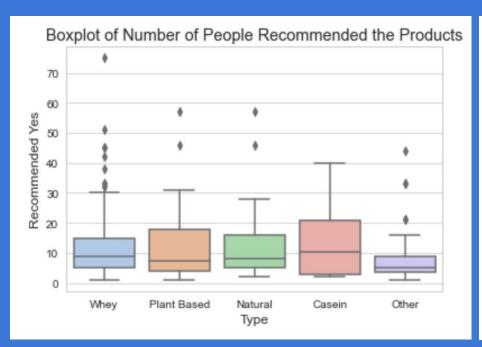


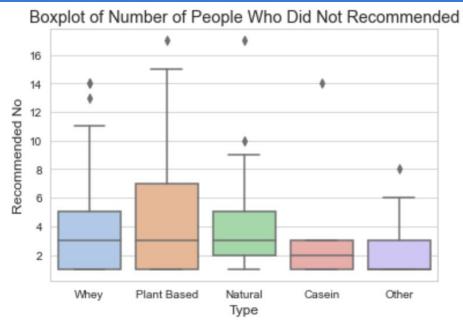
# Ratings

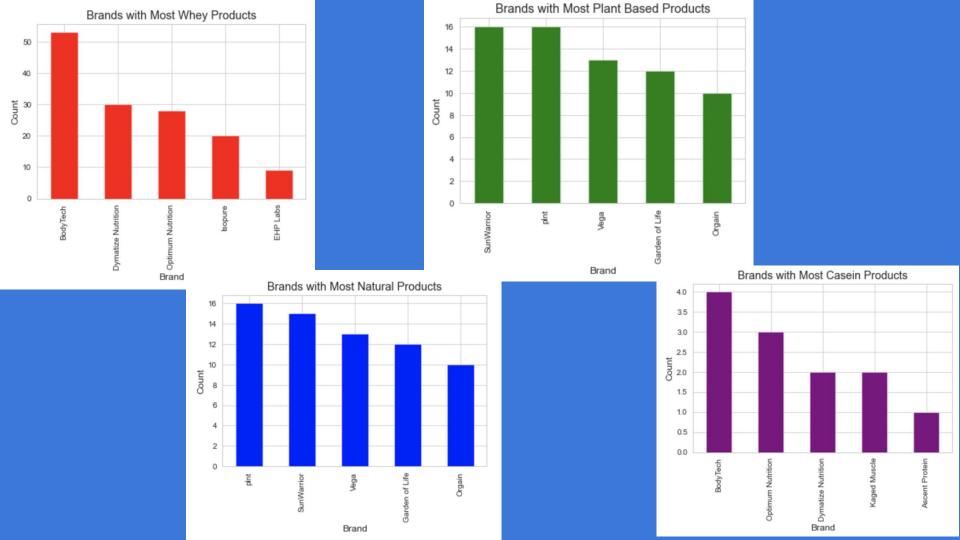




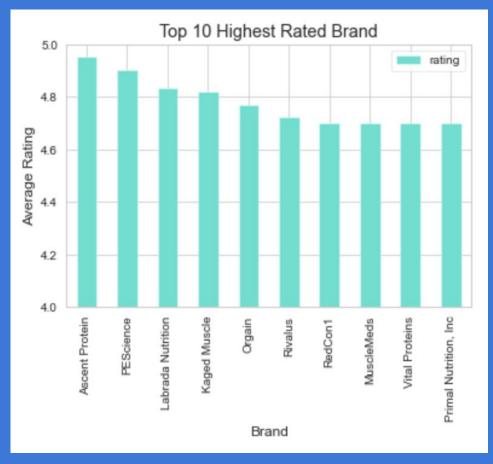
#### Recommendation of Products







## Top Brands by Ratings



#### Future work

- Ingredient analysis of various protein products
- Look at review data
- Look at consumer data on other sites that offer these protein powder to normalize the rating data and be able to find the best products within these type categories