

26 April 2023

Mauricio Prieto Palacios

Data Science Team

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Data Science
Team



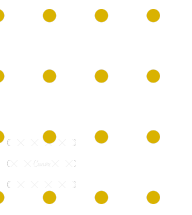
Tasty Bytes

Predicting high-traffic recipes

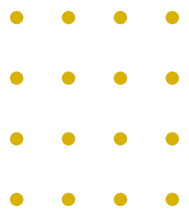
Start Page



Overview



- Which recipes to display on the homepage each day
- Predict the most popular
- More traffic means more subscriptions
- Data from almost 1K recipes
- Calories, carbs, sugar, protein
- Categories and Servings

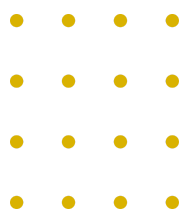


Business Goals

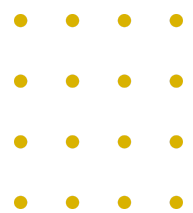
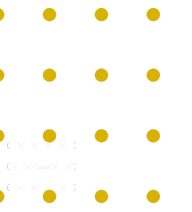
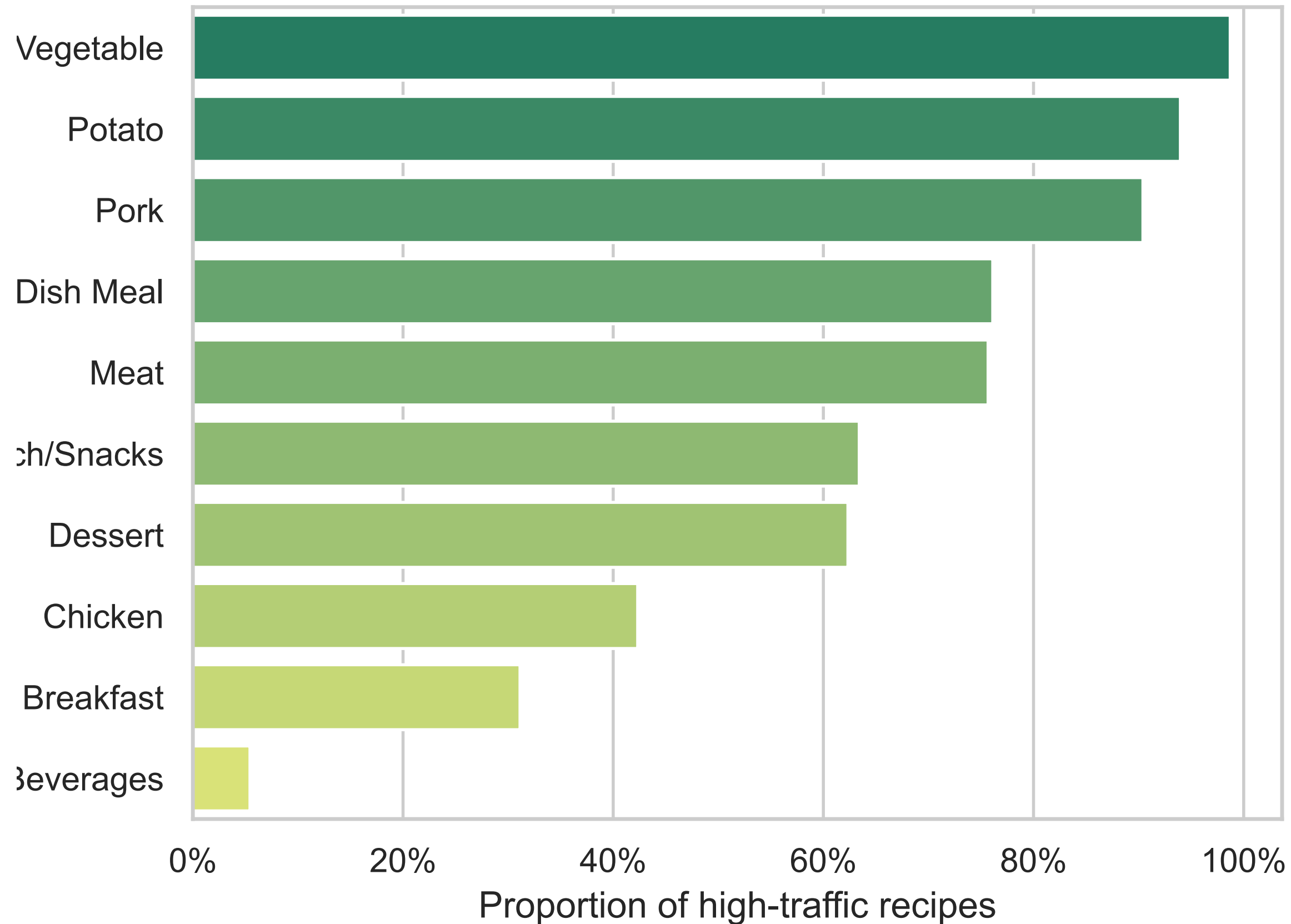
- Correctly predict high-traffic recipes 80% of the time
- Minimize the chance of showing unpopular recipes
- Get to know our customers better

80%

Precision

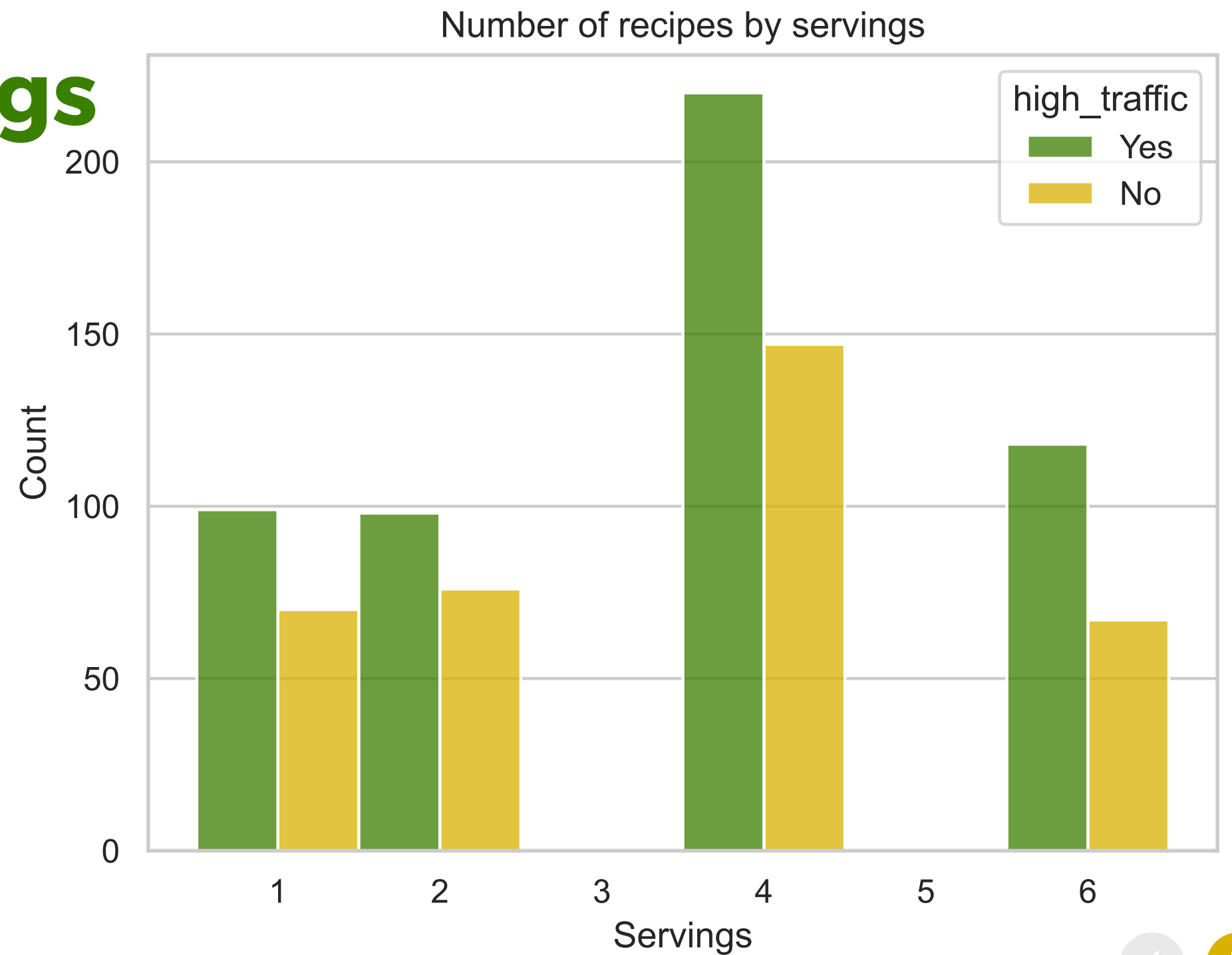


Popular categories

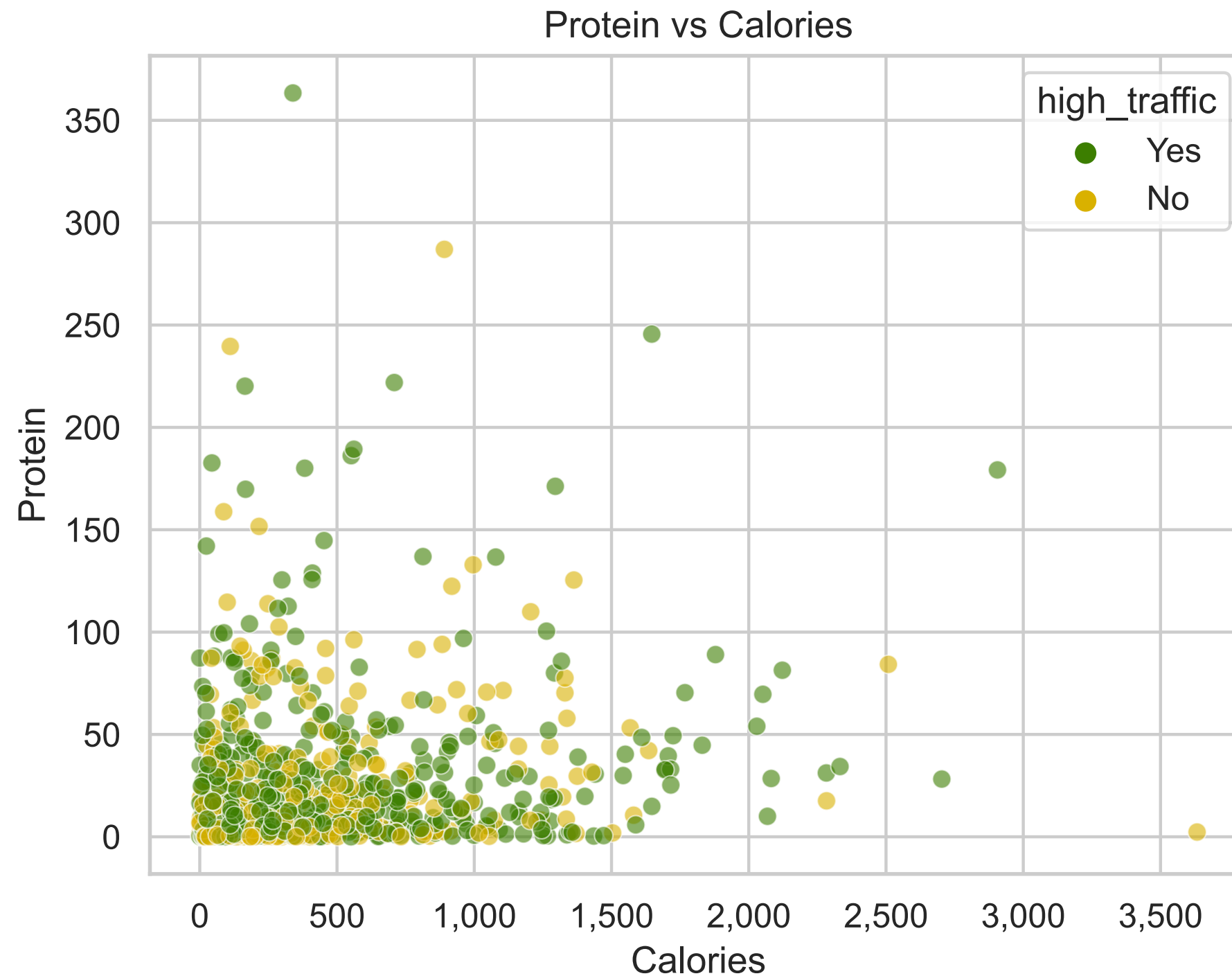


Most chosen servings

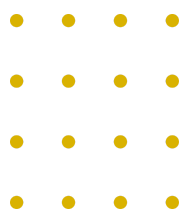
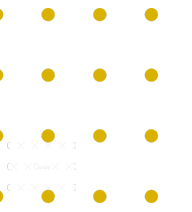
- Recipes with 4 servings are the most popular
- The main customers are families
- Why not offer recipes with 3 or 5 servings?



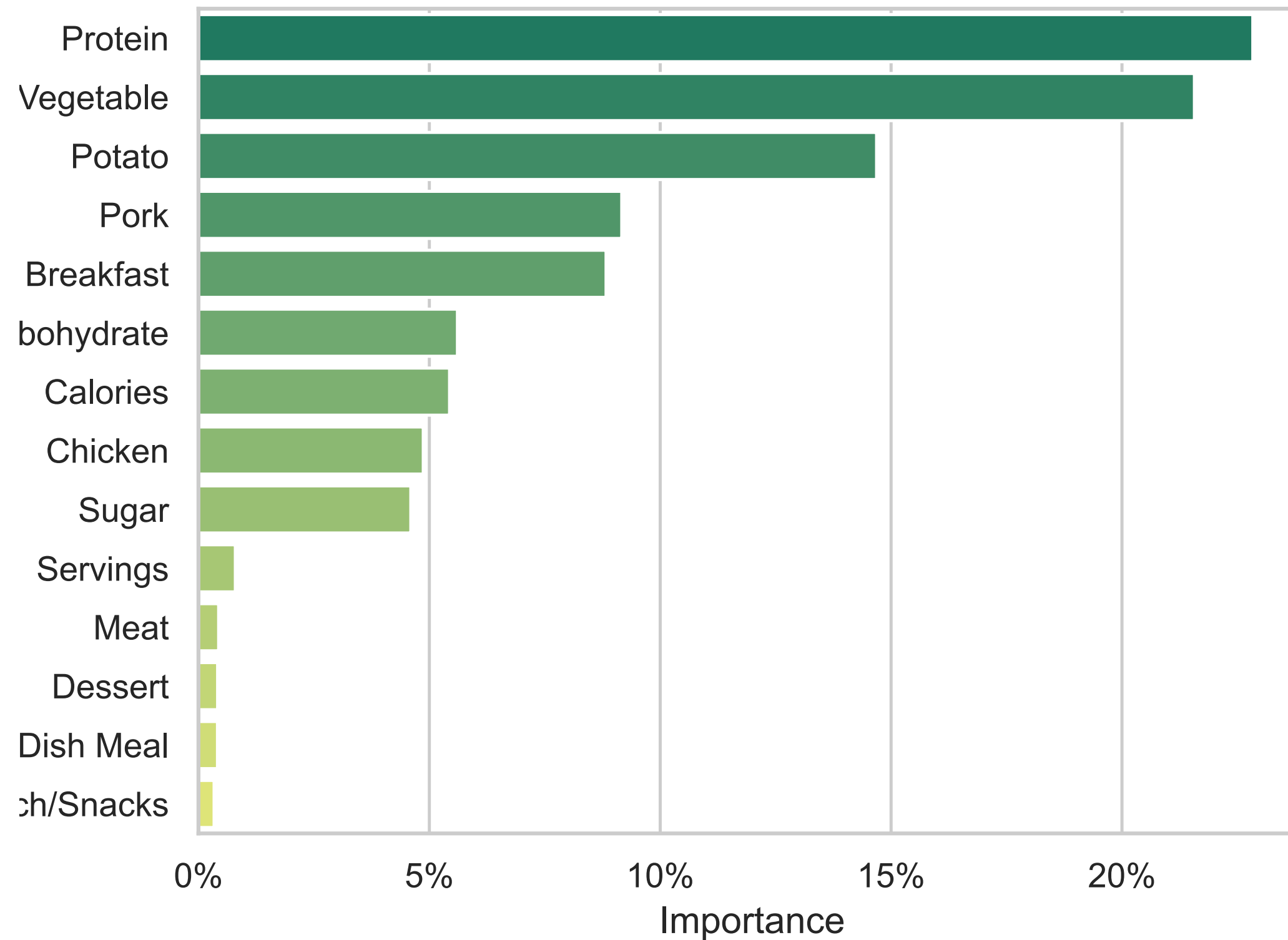
Calories are not defining



- Nutritional variables are not as useful as one might think.
- This information is not displayed on the main page
- Some recipes are very caloric but usually the opposite is true
- Explore new features?

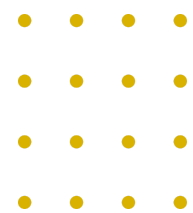


Feature importance

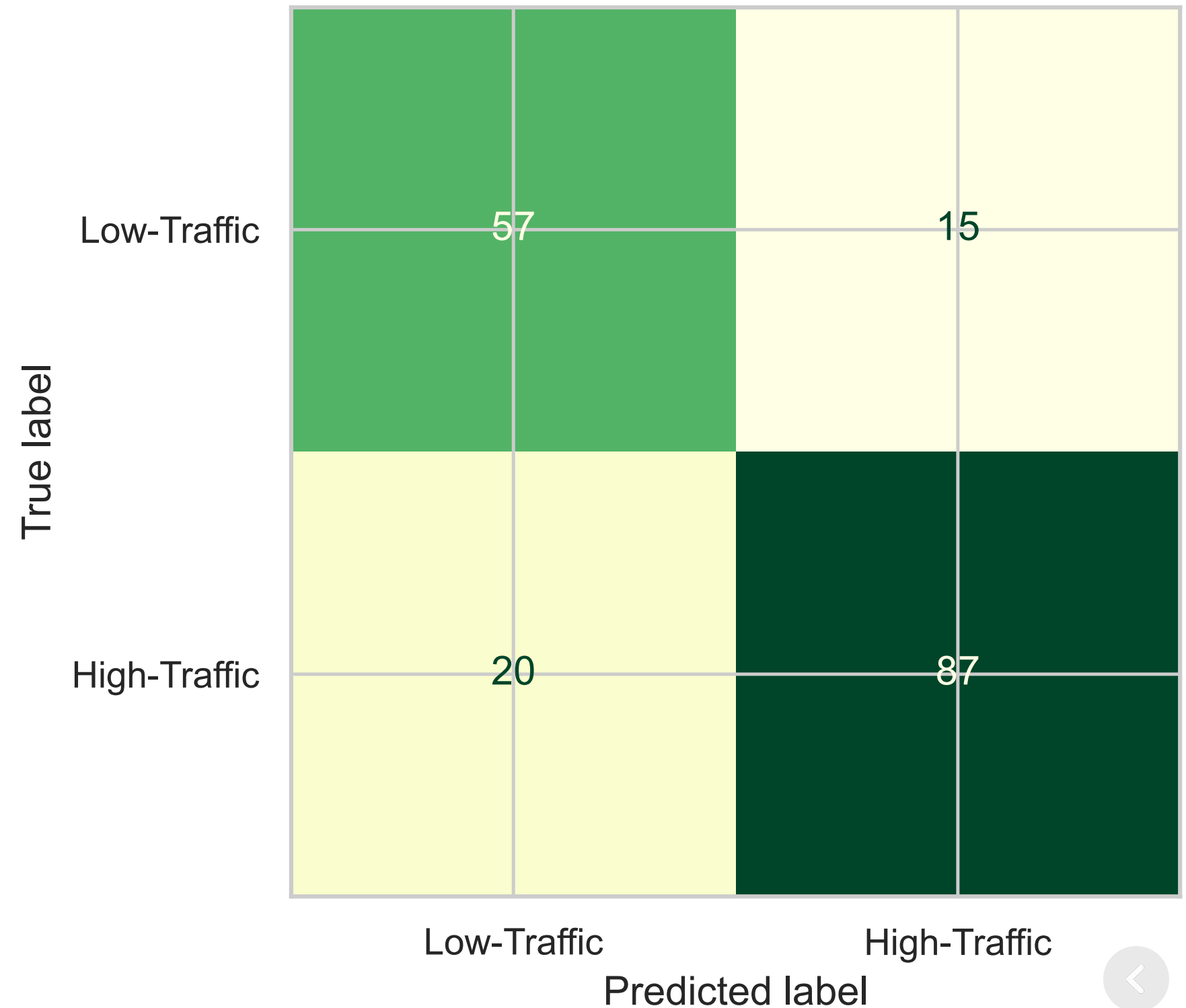


Results

- Metric to monitor: Precision
- 85% of recipes predicted to be popular actually are popular
- 8 out of 10 low-traffic recipes are detected
- Healthy food is the most popular
- Families are the main customers



85%
Precision



Next Steps

- AB test
- Separate current customers into two groups:
 - First group: the current website.
 - Second group: the website with the most healthy recipes for the family.
- Click-through rate (CTR)
- Bayesian analysis
 - Fully fledged business: a lot of previous information and expert opinion
 - Advantage: it is not only measured which is better, but how better!
- Collect new features: there is an opportunity for improvement!

