

Packaged Foods Data Analysis

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Introduction

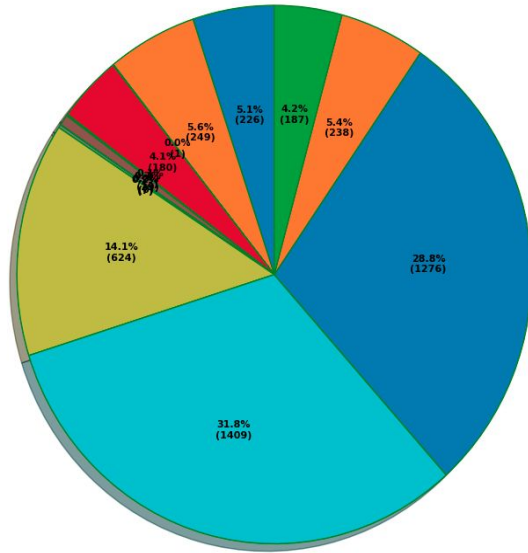
- Datasets contains the ingredient details of all the packaged foods, serving size, brand owner information manufactured in US.
- Datasets were released by US Department of Agriculture for the ultimate goal of enhancement of public health.

Project Objectives

- Perform data analysis to obtain popular ingredients in each food category and for all over packaged food.
- Finding the nutritious rich meal category.

Preliminary Analysis

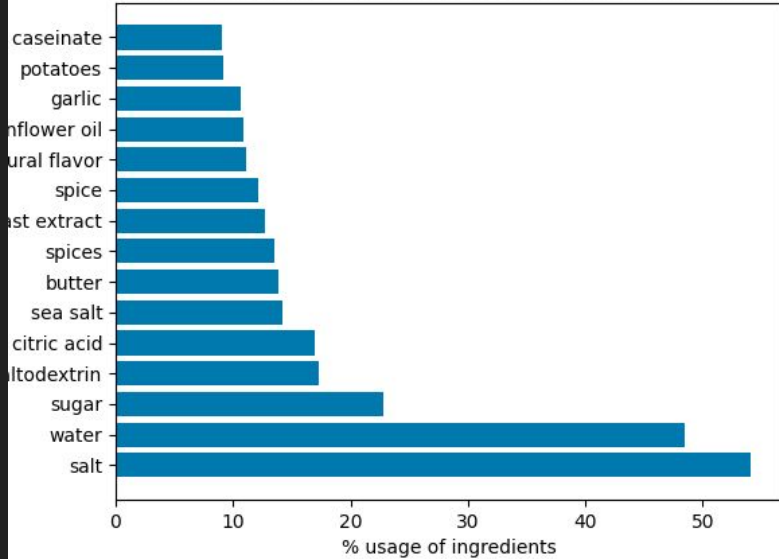
Branded Food Categories Pie Chart



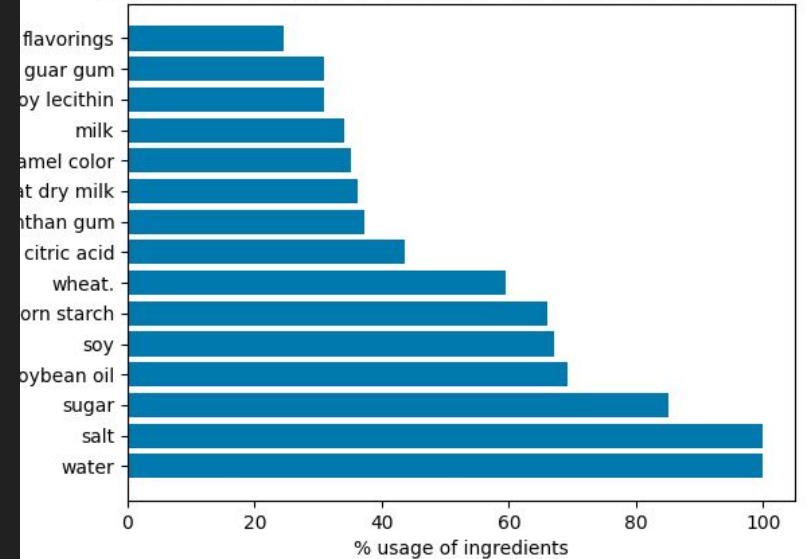
- There are 13 branded food categories.
- Packaged foods market in US has a total of 4437 varieties of food.
- Entrees, Sides & Small Meals and Frozen Breakfast Sandwiches, Biscuits & Meals form 60.6% of the packaged foods.

Analysis of Ingredients

Popular Ingredients in Entrees, Sides & Small Meals category

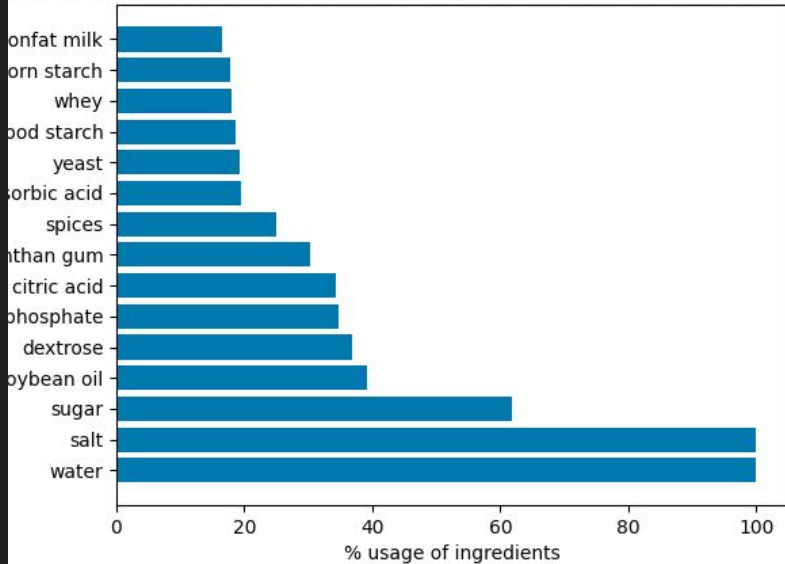


Popular Ingredients in Ready-Made Combination Meals category

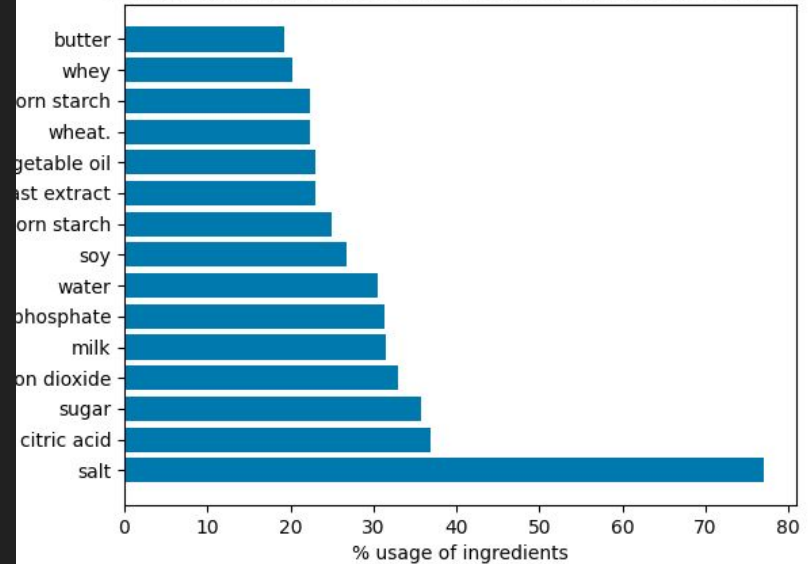


Analysis of Ingredients

Popular Ingredients in Frozen Breakfast Sandwiches, Biscuits & Meals category

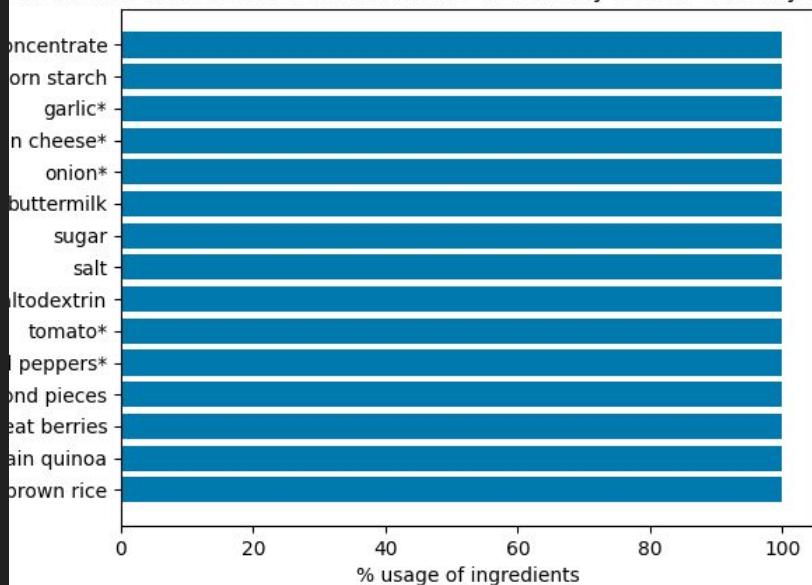


Popular Ingredients in Dough Based Products / Meals category

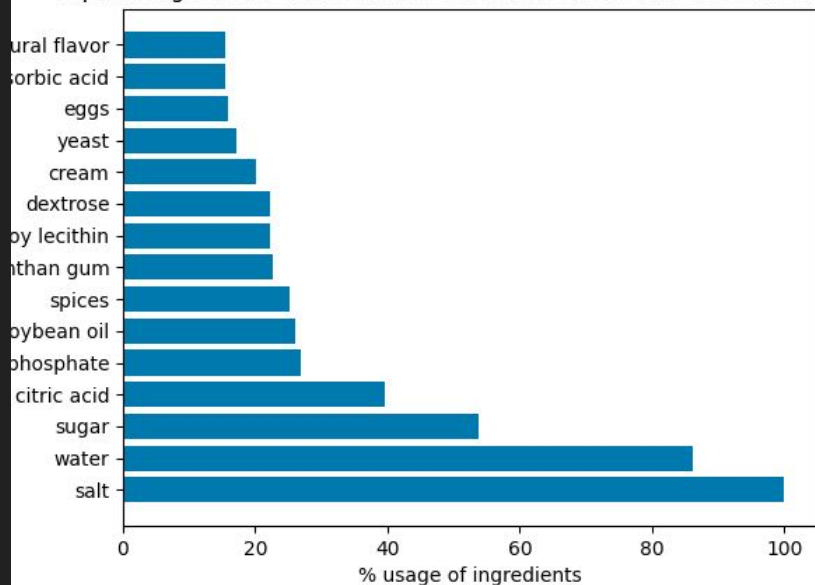


Analysis of Ingredients

Ingredients in Grain Based Products / Meals - Not Ready to Eat - Savoury (Shelf St

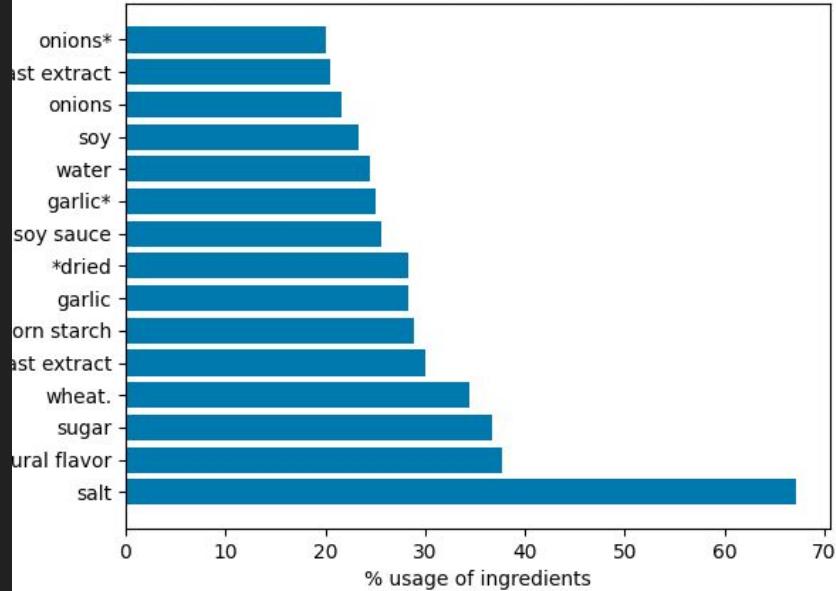


Popular Ingredients in Breakfast Sandwiches, Biscuits & Meals category

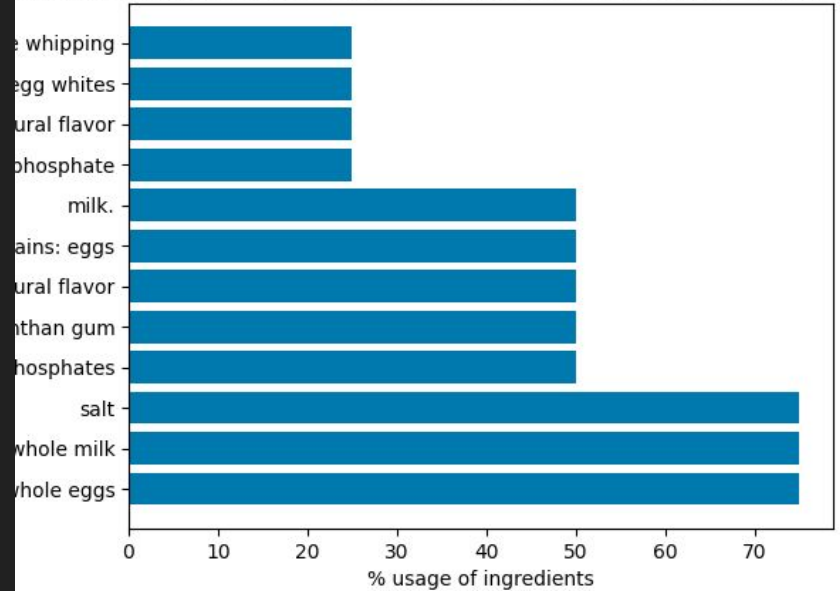


Analysis of Ingredients

Popular Ingredients in Grain Based Products / Meals category

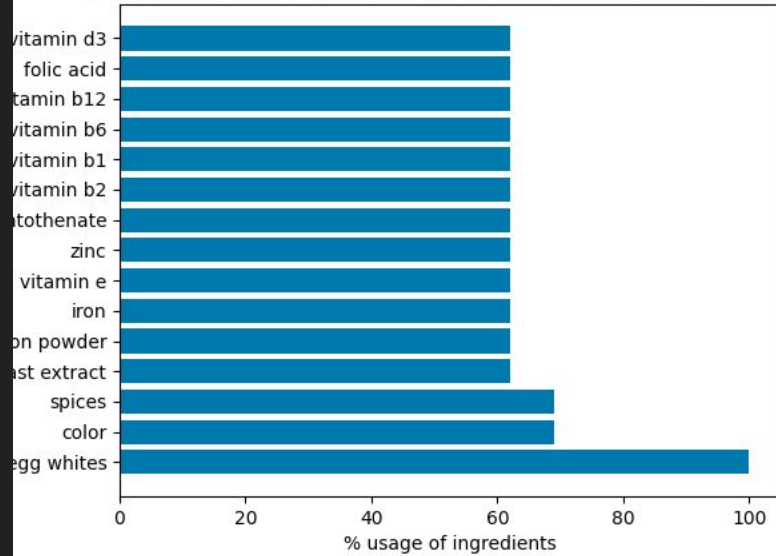


Popular Ingredients in Egg Based Products / Meals - Not Ready to Eat (Frozen) category

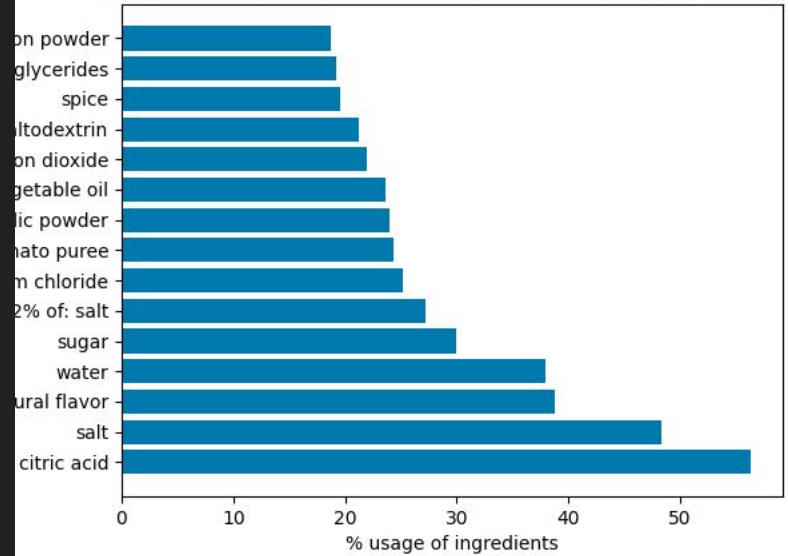


Analysis of Ingredients

Popular Ingredients in Dairy/Egg Based Products / Meals category

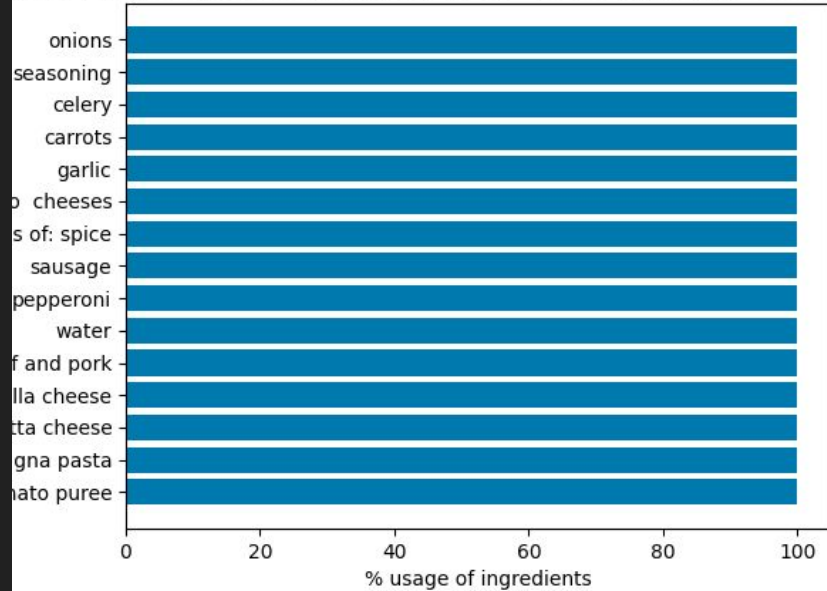


Popular Ingredients in Vegetable Based Products / Meals category

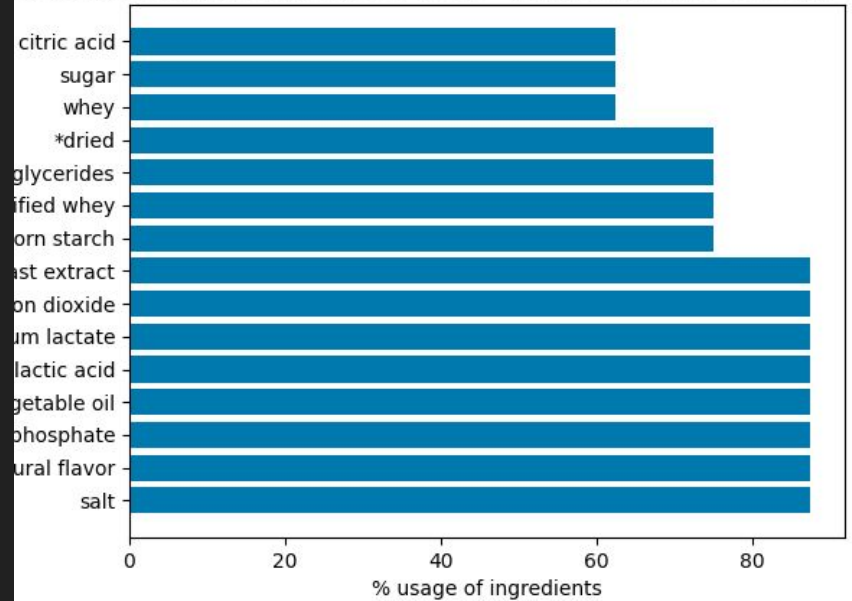


Analysis of Ingredients

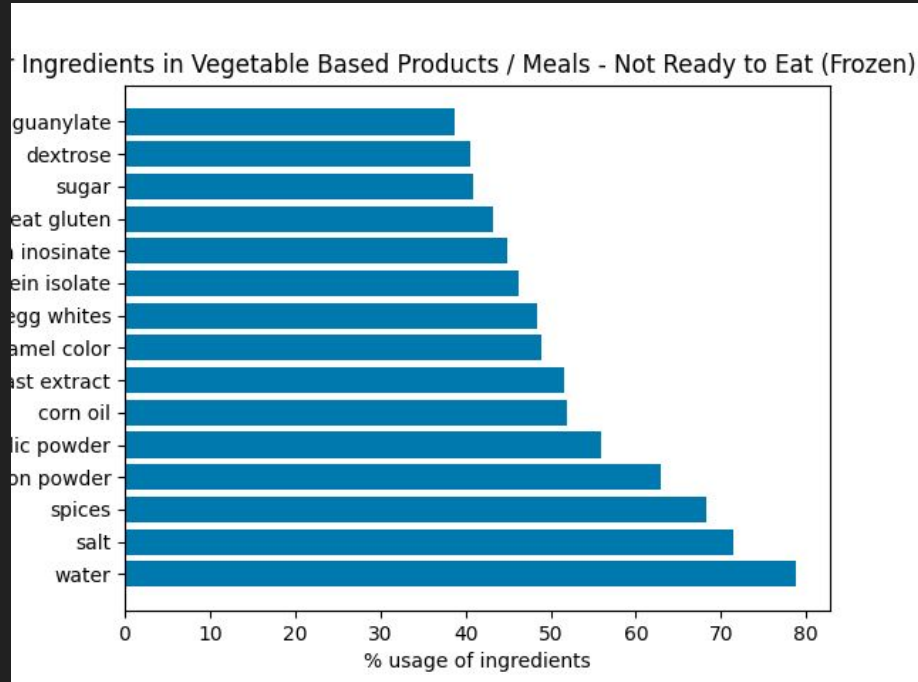
Ingredients in Dough Based Products / Meals - Not Ready to Eat - Savoury (Frozen)



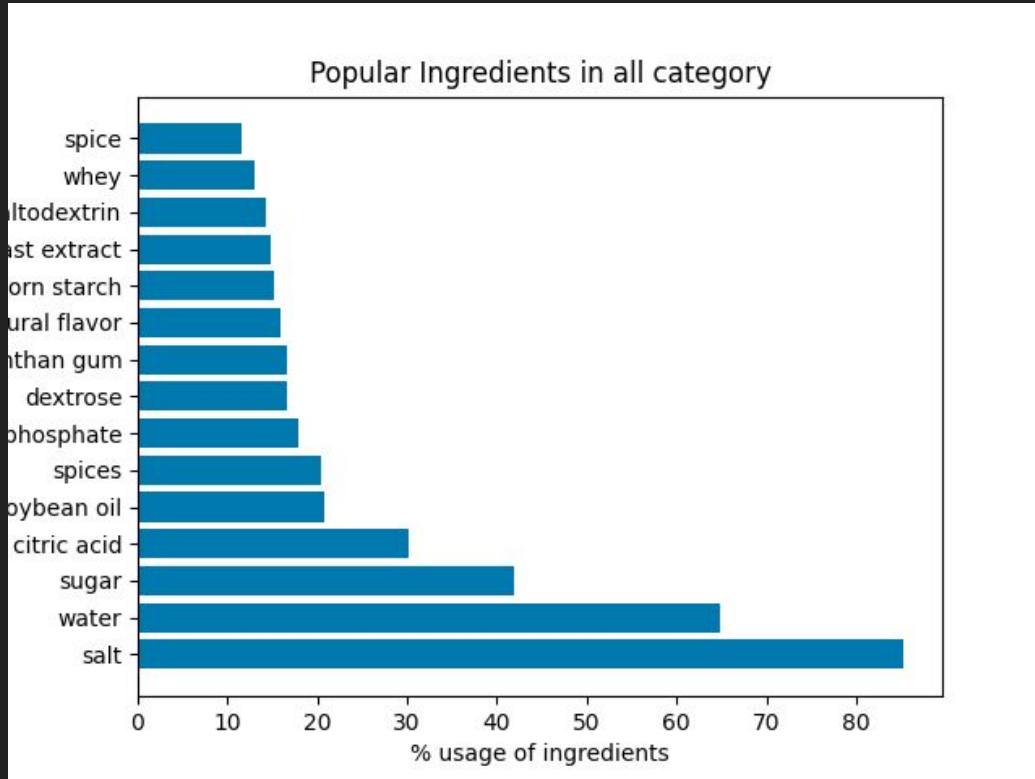
Ingredients in Dough Based Products / Meals - Not Ready to Eat - Savoury (Shelf S



Analysis of Ingredients

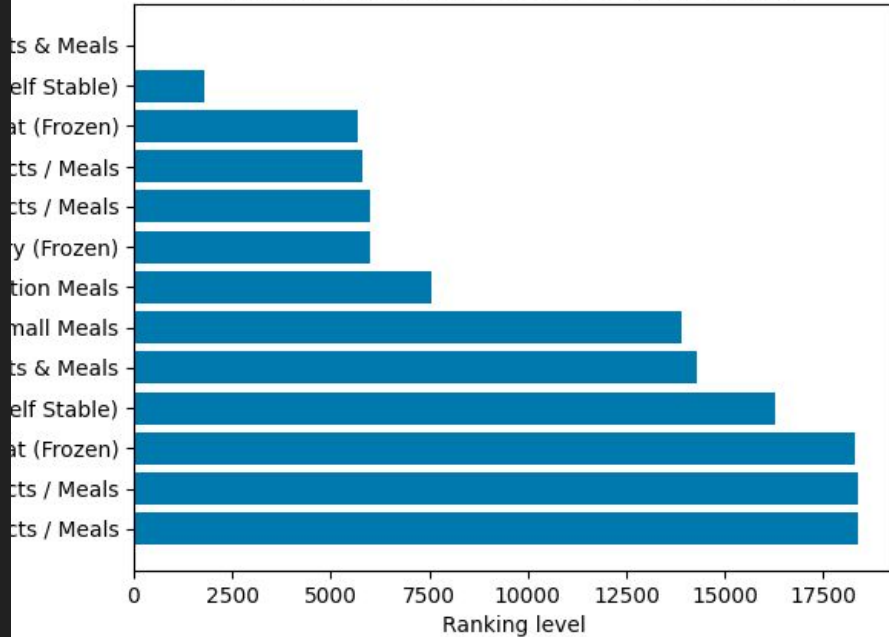


Overall analysis of Ingredients



Nutrients Analysis

High quality nutritious food category ranking

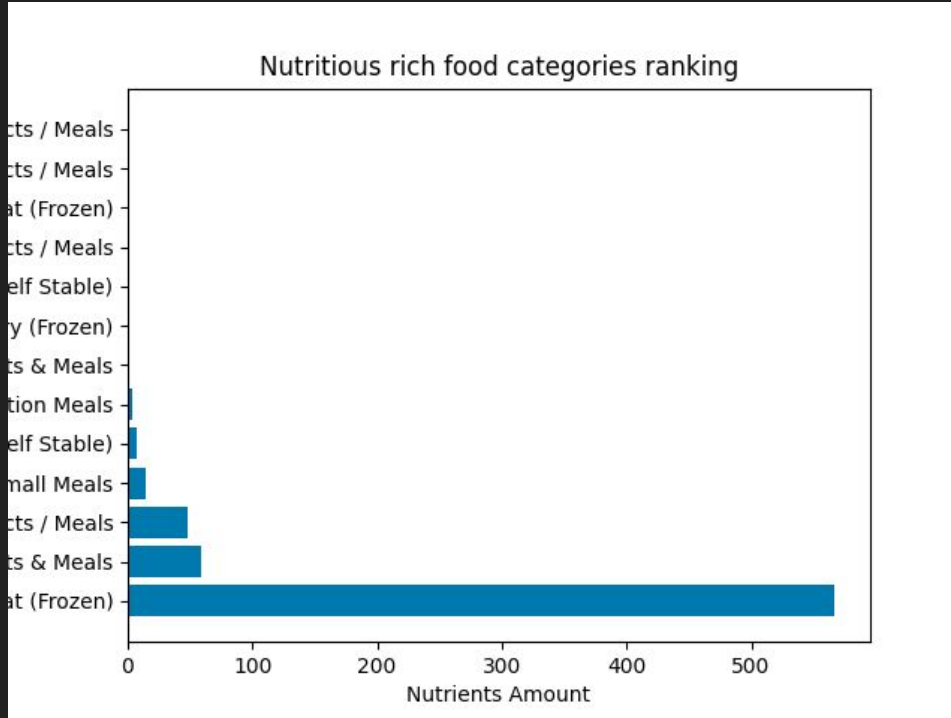


In terms of providing high quality nutrients,

1. Vegetable Based Products / Meals - 250
2. Dairy/Egg Based Products / Meals - 29
3. Egg Based Products / Meals - Not Ready to Eat (Frozen) - 4

categories ranks highest which forms only 6.3% of the total packages foods.

Nutrients Analysis



In terms of quantity of nutrients,

1. Vegetable Based Products / Meals - Not Ready to Eat (Frozen)
2. Frozen Breakfast Sandwiches, Biscuits & Meals
3. Grain Based Products / Meals

provides rich nutritious food.

Implications on Manufacturing side

- Manufacturers can use to the popular ingredients information to manufacture new variant of popular packages foods.
- Manufacture can add ingredients from nutritious rich and high quality nutrients food categories to low nutritious food categories.
- Manufacturers can prioritize manufacturing process based on popular ingredients and nutrients.

Implications on Health Side

- Although nutritious, Egg Based Products / Meals - Not Ready to Eat (Frozen), Frozen Breakfast Sandwiches, Biscuits & Meals and Dough based Products/ Meals contain more than 40% of sodium phosphate.
- Elevated intake of sodium can raise blood pressure leading to stroke and heart attacks.
- Packaged foods is the main source of sodium for american people.

Recommendations

- Vegetable Based Products / Meals - Not Ready to Eat (Frozen) category is the best choice in terms of quality of nutrients.
- Vegetable Based Products / Meals category is the best choice in terms of amount of ingredients.
- Low sodium food is advisable.

Thank you