

# Substitution of Intgredients in Recipes for high-Protein diets (S.I.R. Protein)

Alicja Kasicka, Oskar Szudzik, Radosław Winiński



**Basing on the GISMO article. We want to provide a tool for modifying a given recipe so that it contains more protein (or also other elements if project succeeds).**



## **Major milestones:**

- Find a dataset that can be scraped / used to provide ingredient to protein / nutrients mapping**
- Implement 3rd paper ideas with**
- Reranking**



## **Additional Literature**

- Health-Aware Food Recommendation Based on Knowledge Graph and Multi-Task Learning

(<https://www.mdpi.com/2304-8158/12/10/2079>)

- A Knowledge Graph Construction Method for Food Nutrition

(<https://ieeexplore.ieee.org/document/10102066>)



# Acquisition of the dataset

- existing database - FoodDB (<https://foodb.ca/foods/FOOD00011>)
- recipe1m(subs) from GISMO paper (<https://github.com/facebookresearch/gismo>)

Important since we need complex information about protein in any given ingredient.



# Technology

1. Python
2. Jupyter notebook