



# Vitamin D gummy supplements and their shelf life

Kaja Gertin Grétarsdóttir

Supervisor: Kristberg Kristbergsson





# Aim

- Developing vitamin D gummy supplement
  - With 2 types of gums: Gelatin, agar-agar
  - With 2 types of juices: Strawberry, carrot
  - In total 4 gummy types
- Shelf life was measured
- This project is not part of another study





# Method

- Development of the gummies
  - Experimental designs were used to invent the recipe (gelatin used)
  - Other gums were tested on the recipe and adjusted
- Shelf life measurements
  - Time period: 14 weeks
  - Vitamin D activity, color, texture and consumers test





# Results

- Color changed significantly in all the gummies (varied between types)
- Consumers test:
  - Color in Strawberry Agar gummies changed significantly
- Vitamin D decreased in all the gummies over the time period
- I'm working on the results at the moment so unfortunately I can't give you more information right now





# Discussions

- It is not on the agenda to put these vitamin D gummies on the market in Iceland
  - But maybe it will happen one day 😊
- People who live in Iceland need to take vitamin D as a supplement due to lack of sunlight
  - Gummy vitamins might be more appealing than conventional tablets
  - Could solve „pill-swallowing“ problems that some adults and kids experience





**Thank you for listening**



UNIVERSITY OF ICELAND  
FACULTY OF FOOD SCIENCE AND NUTRITION