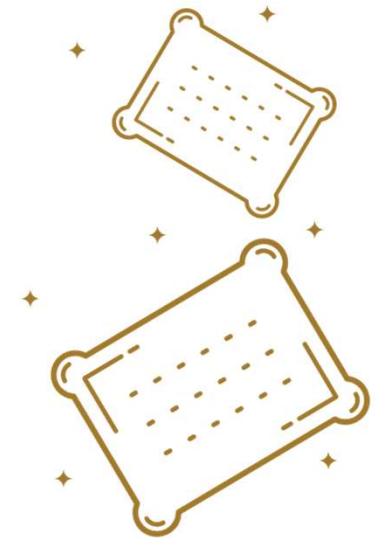




Exploring the potential use of turnip root vegetable surplus as a food ingredient in crackers :

physical, colour and texture characteristics and sensory attributes



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## Food Waste and Vegetable Surplus

Food surplus is an inevitable part of food processing and production!

89 million tonnes are generated in Europe alone

### Vegetable Surplus Learnings:

- ✓ Bioactive compounds
- ✓ Dietary fibre
- ✓ Have many other uses in nutrition, food and nutraceutical industries



## Vegetable Surplus and Value Added Food Products

Vegetable surplus has been successfully added to food products!

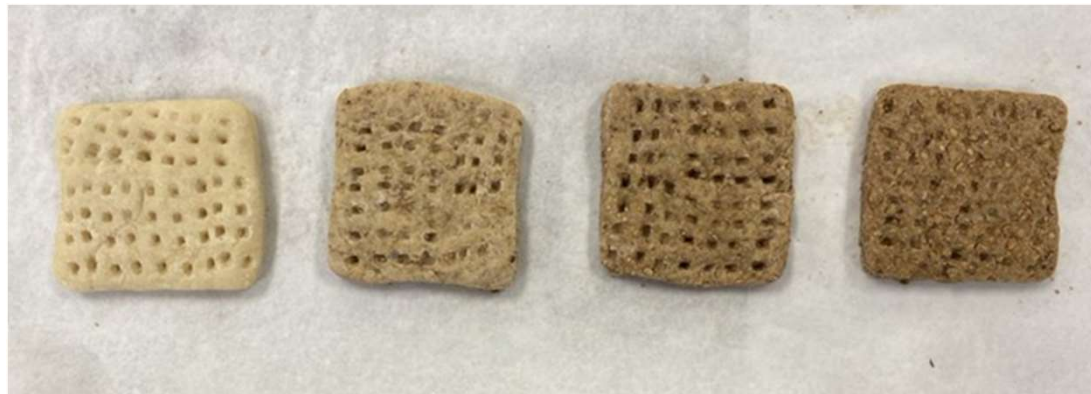
- ✓ Red Onion Skin Crackers
- ✓ Dried Cauliflower Leaf Pancakes

### **Turnip Peel Powder Crackers**

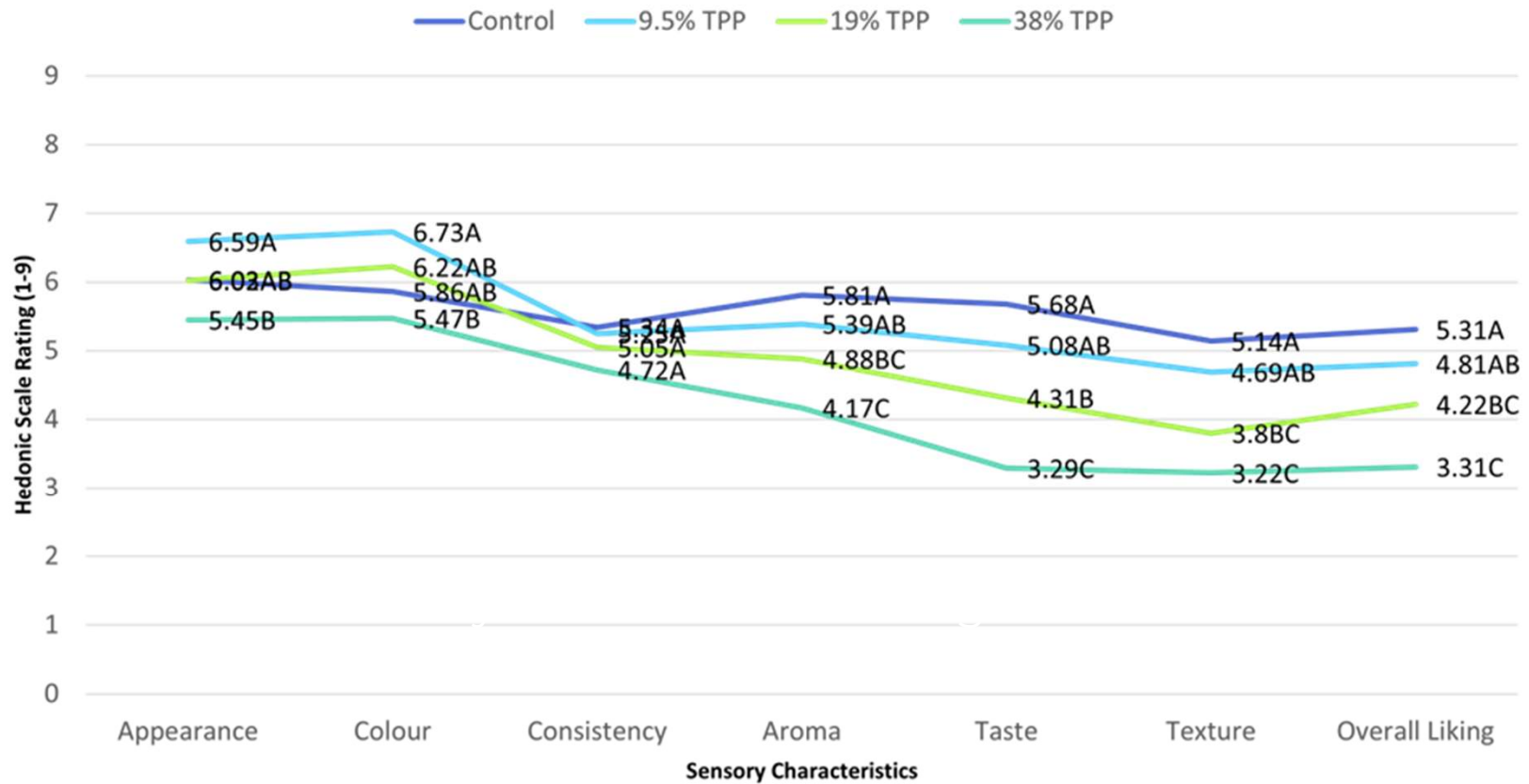
- ✓ Crackers - common snack food
- ✓ Irish population does not meet the RDA for fibre
- ✓ Antimicrobial, antibacterial, antidiabetic and anticancer effect potentials

## Turnip Peel Powder Crackers... How to?

- ➔ Disinfected raw peel with NaClO
- ➔ Dehydrated in dehydrator for 24hrs @70C
- ➔ Ground into a fine powder
- ➔ Trials to determine level of substitution with preliminary team

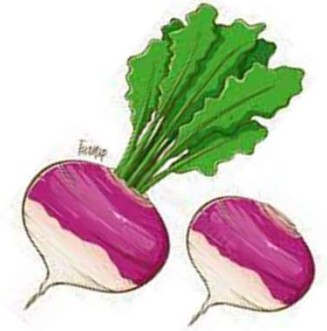


## Comparison of Hedonic Rating Scores for Control and TPP Substitution Crackers



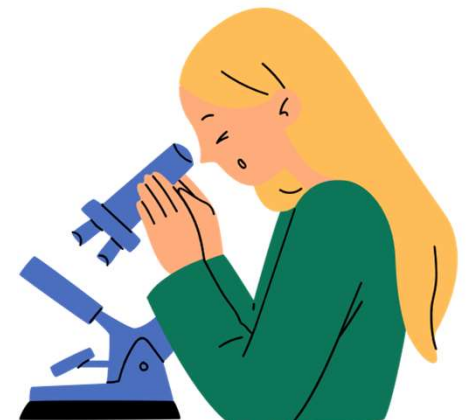
## Conclusion

- ➔ Offers a potential solution to global food waste concerns
- ➔ Contributes to existing literature regarding vegetable surplus utilisation and value added food products
- ➔ Warrants further investigation into the nutritional, environmental and economic potentials of the utilisation of turnip peel surplus



## How to Complete an Awesome Final Year Project

- ➔ Be open to learning something new!
- ➔ Don't compare yourself to others! Focus on your own learning, research and work!
- ➔ If times get tough, persevere! Keep going with it!



Thank you for listening!

Any questions are welcome!

