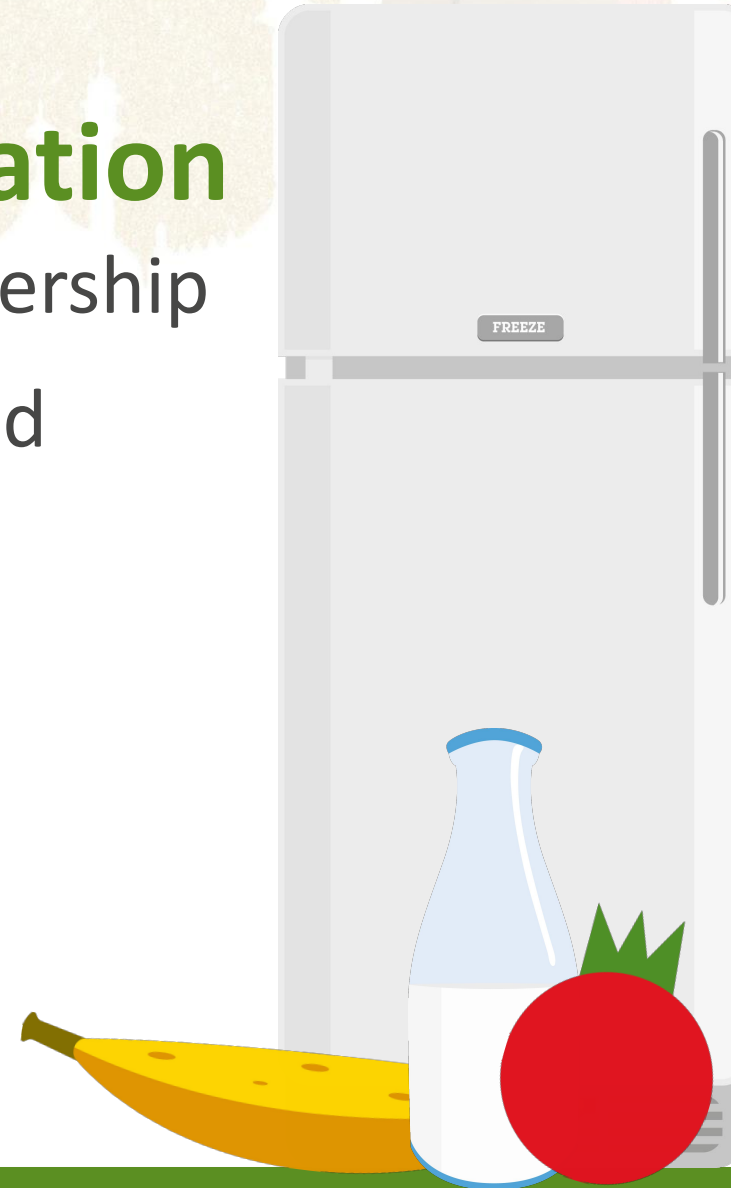


# Micro-processing - dehydration

Vic Borrill, Brighton & Hove Food Partnership

[www.bhfood.org.uk](http://www.bhfood.org.uk) @btnhovefood



# Brighton & Hove Food Partnership

BHFP is an independent, 'not for profit' established in 2003 that helps people learn to cook, to eat a healthy diet, to grow their own food and to waste less food.

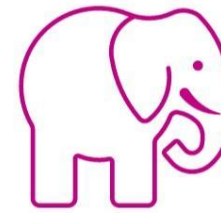
- Work with individuals
- Work with groups
- Work with caterers and food businesses
- Work at a strategy and policy level



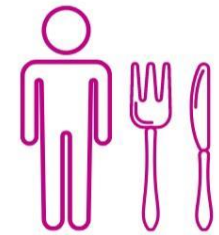
# Surplus food network, product development and food sharing



In 2022 Brighton and Hove's Surplus Food Network saved **1,982** tonnes of food from being wasted



Equivalent to **495** elephants



Feeding over **5,000** people per week



Saving our planet from **7,493** tonnes of CO2 emissions

# Ready Healthy Eat – partnership project led by Real Farming Trust with Edinburgh Cyrenians, Now Group Belfast and Hornbeam Centre (London) How to improve access to nutritious food through the provision of 'meals' whilst also reducing the environmental impact of those meals?

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Brighton & Hove Food Partnership part of this project

- To improve access isn't only about the physical presence of fresh and healthy produce

- If people do not have the facilities or the means of storing and cooking healthy produce – even if they had *access* to it doesn't mean they are able to benefit from it.

- Is there scope with the packs to rethink 'meals' and overcome these barriers for people without storage / who have switched off fridges due to energy price hikes etc

**READY  
HEALTHY  
EAT**





# Fresh surplus products that can flood projects at certain times of year – how could you extend shelf life?

- Main culprits – potatoes, bread, milk, tomatoes, courgettes
- Seasonal gluts – predictable at certain times of the year swede, tomato, courgettes, pumpkins & squashes
- What about high value protein items such as meat & fish?



**What is the best process for extending the shelf life of fresh surplus produce?**

- Make meals
- Freeze – as meals or ingredients
- Vinegar
- Sugar
- Salt
- Fermentation
- Vinegar
- Pasteurise
- Brewing
- Dehydrate

# Problems to solve – in the midst of a pandemic

- Surplus in itself can be problematic – unpredictability, volumes & logistics
- Emergency food provisions increasing at exceptional rates

*Problem of repetitive and unhealthy food amongst food bank users many of whom have **very limited storage for fresh food***

- First iteration of a solution to a problem

*Based on a memory of an Italian dried veg product*

..... could we make a dehydrated veg pack?



# Testing and refining

Things that were established during this phase

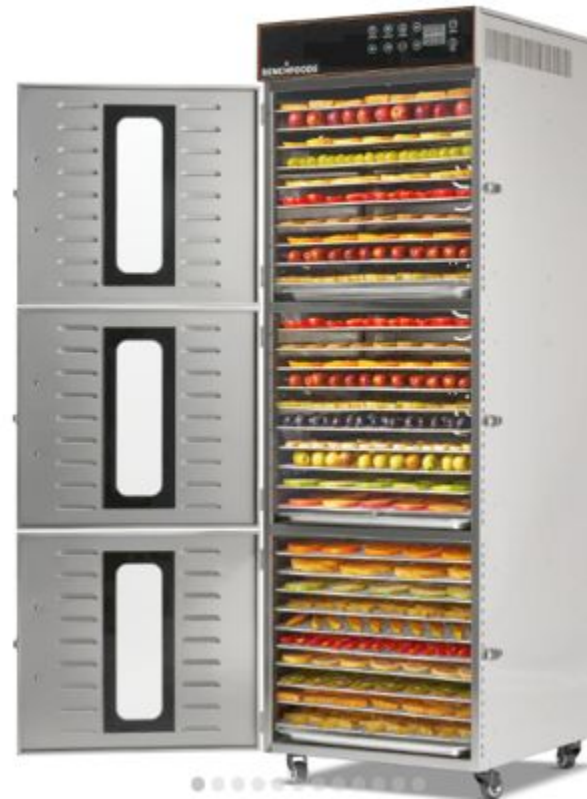
- Cuts
  - Dehydration time and kit
  - Re-hydration method and medium – challenge
  - What does and doesn't dehydrate well
  - Food safety and product check
  - HACCP
  - Insurance
  - Work with nutritionist to ensure that we knew that nutritional value was maintained
- 
- The combination seemed to be infinite – stews, risottos, pasta sauces, soups – inspiration from all around the world





# Kit

- We have three-chamber dehydrator which takes around 11kg raw food
- Processing 11kg takes 10-14 hrs = 1.1kg dehydrated produce
- Water Activity Meter – approx. £250 ours is **Landtek WA-60A**
- Vacuum sealer (get one with a manual vacuum option)
- Tray Liners
- Chopping boards, knives etc
- Storage



4.7 ★★★★★  
13 Reviews

PREMIUM COMMERCIAL DEHYDRATORS  
**3 Zone / 30 Tray / 4.8m<sup>2</sup> Tray Area**

NOW **£ 2,295.00** WAS ~~£ 2,995.00~~ SAVE **£700**

**WHAT YOU GET:**  
1 x Commercial Dehydrator  
30 x Stainless steel mesh trays  
3 x Stainless steel pan drip trays

[REVIEW SPECS](#)

This 100% stainless steel dehydrator is designed for ongoing commercial use with our high-efficiency forced air convection

[READ MORE](#)

**FREE SHIPPING** **5 - 10 BUSINESS DAYS**

**WOULD YOU LIKE NON-STICK MATS? ⓘ**

No Thanks  Add a Set of 30 Mesh Mats (€129)  Add a Set of 30 Solid Mats (€89)

1 **ADD TO CART**

**SATISFACTION GUARANTEE - 120 DAY RETURN POLICY**

**FINANCE OPTIONS AVAILABLE. SAME DAY APPROVAL**

## Labour intensive process - Chop and Chats

- Volunteer sessions to help make the packs – chopping, loading the dehydrator, filling packs and sticking labels
- Provided a friendly / social space working together
- A follow on option for Ready Healthy Eat Trainees





# Tastings & trials

With the help of Community Researchers at Affordable Food Projects evaluation and feedback

- Phase 1 - Tasters and Visual
- Phase 2 – Tasters and Trials to take home both stand alone and as part of In The Bag meal kits
  
- Contents became simpler following feedback
  - Size of packs – wanted bigger packs for larger families
  - Low energy cooking instructions eg slow cooker and microwave
  - Continue to refine pack combos and instructions
  - Single item for meal projects eg not made into packs



# Contents of the packs

- Each of our 65 gram packs contain on average **1.2kg** of fresh vegetables
- **1 Flavour pack – total cost approx. 50p without labour - (20p energy, 25p packaging\*, 5p labels)**
- Packaging challenges
- Instructions
- Allergen labelling
- Batch codes
- Challenge of ‘flavour’





# Things to consider

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Budget

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Packaging and labelling

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Space and logistics infrastructure – both to get surplus to processing space and product to customers

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Person power – labour – how intricate and how many steps to processes

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Equipment

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Source of the surplus – ideally you want to be as near as possible

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Consumers – what do they want / like

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Food safety processes – support of EHO team

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Selling the product?

# Other sources of inspiration

- **De Verspillingsfabriek (The Waste Factory)**  
<https://eu-refresh.org/de-verspillingsfabriek-waste-factory.html>
- **Panier de La Mer, Bologne sur Mer**  
<https://www.panierdelamer.fr/> Fish soup, frozen fish burgers
- **Sussex Surplus**  
<https://www.sussexsurplus.org/>  
heat treated (autoclave sterilisation)



# Top tips in dehydration guide

If you would like to be sent a copy please contact

[Libby@bhfood.org.uk](mailto:Libby@bhfood.org.uk)

Will be ready early Feb 24

[www.bhfood.org.uk](http://www.bhfood.org.uk)