

WELCOME!

Final project presentation:
**DINING FROM A
FOOD FOREST**





Who are we?

What can you expect during this presentation?

Aim: to provide insight in the potential for creating a healthy and attractive diet from a food forest

1. Problem statement, research question and project structure
2. What makes a healthy diet? 
3. What makes an attractive diet? 
4. Practical translation 
5. Conclusion and advice
6. Time for discussion

Questions during the presentation? Ask them in the chat.

Problem statement



“a productive ecosystem designed by humans, modeled on a natural forest, with a high diversity of perennial and/or woody species, parts of which (fruits, seeds, leaves, stems, etc.) serve as food for humans”



Current research on food forests: environmental, ecological, economic



Attention to food

Research question

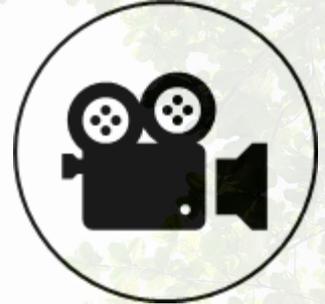
To what extent is it possible to create a healthy, varied and attractive diet from ingredients of a food forest, and how can this be translated to stakeholders in a practical way?



Healthy diets

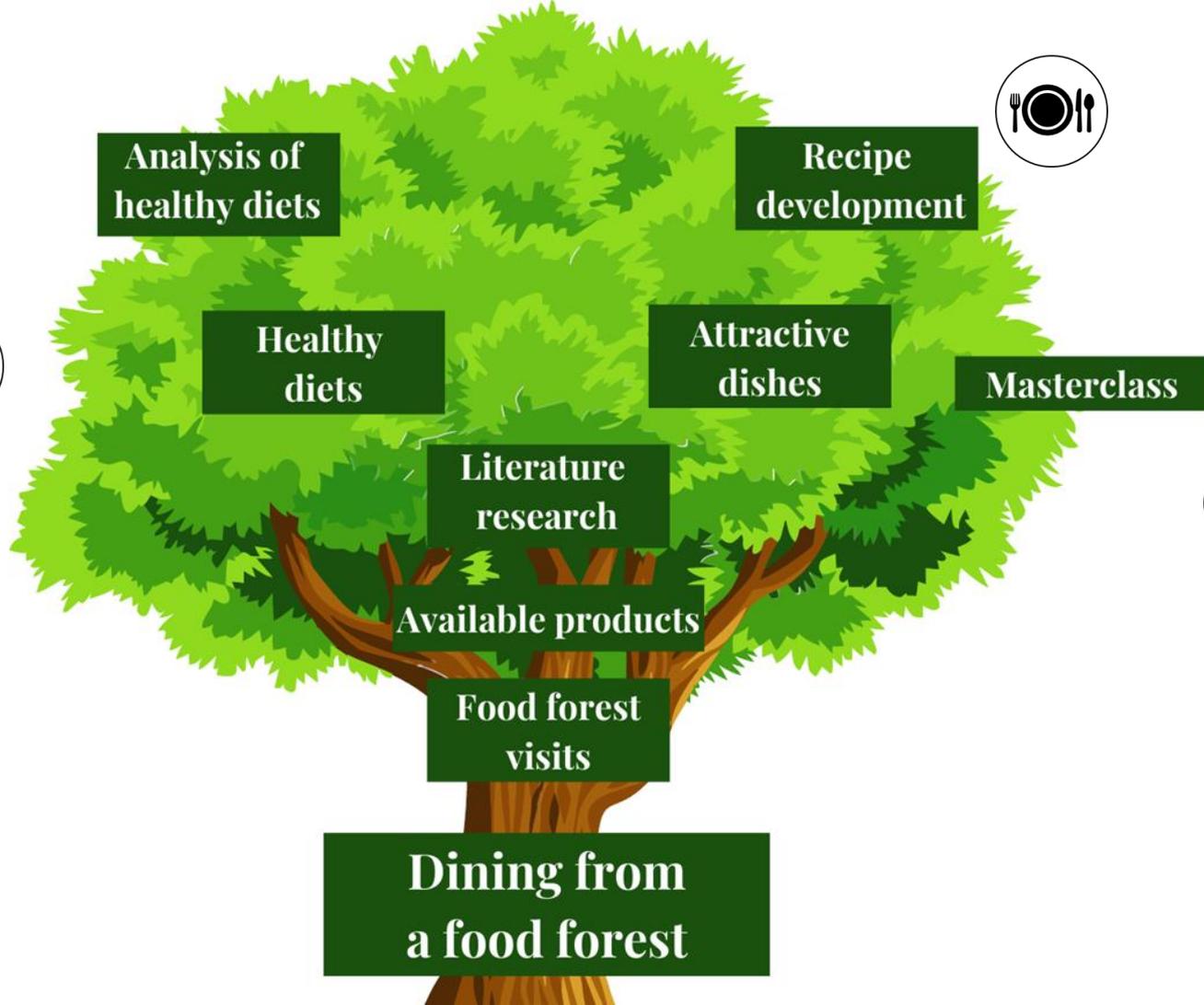


Attractive dishes



Practical translation

Project structure



Health framework - Nutrition requirements for a healthy and varied diet



- Based on:
 - Nutritional guidelines World Health Organisation
 - Dutch Health Council

- Includes guidelines for:
 - Carbohydrates
 - Fats
 - Protein
 - Various micronutrients

Practical translation of health framework

- A 35-year-old healthy Dutch woman
- A body weight of 70 kilos
- A length of 1.70 meters
- A normal BMI of 24 kg/m²
- Moderately active
- Vegetarian

Daily recommended energy and macronutrient intake

- 2200 kcal
- 70-85 grams of protein
- 400 grams of fruits and vegetables
- 20-40% of energy from fats
- 40-70% of energy from carbohydrates



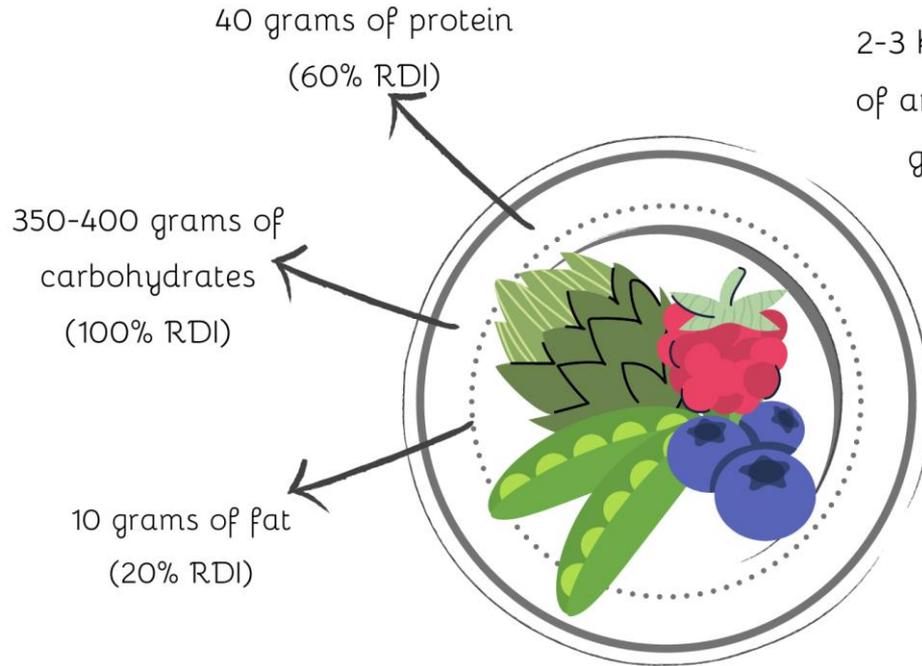
**Let's meet
Barbara!**





Spring

- Energy density: low
- Protein and fat: low
- Variety: challenge



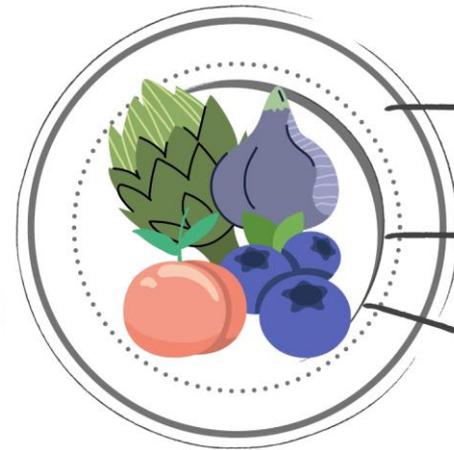
2-3 kg of berries, 1 kg of artichoke and 500 grams of peas.





Summer

- Energy density: low
- Protein and fat: low
(but higher than spring)
- Variety: challenge, harvest is mostly fruits



1 kg of berries, 1 kg of artichokes, 500 grams of figs, 500 grams of apricots

300-350 grams of carbohydrates
(100% RDI)

21 grams of fat
(45% RDI)

55 grams of protein
(75% RDI)

Autumn

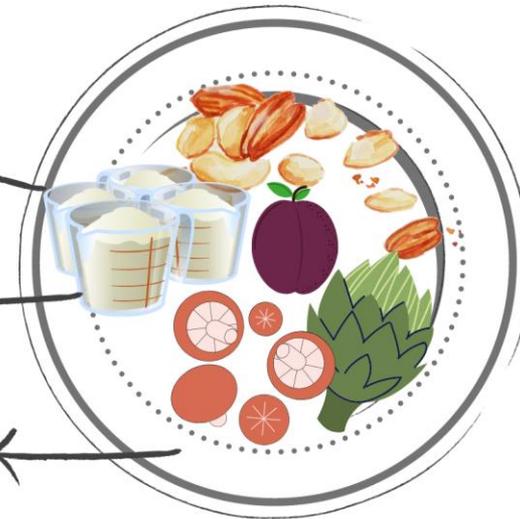
- Energy density: higher
- Protein and fat: higher
- Variety: higher
- Potential to maintain a healthy diet

315 grams of
carbohydrates
(100% RDI)

63 grams of
protein
(90% RDI)

81.8 grams of fat
(100% RDI)

300 grams chestnut flour, 100 grams pine nuts,
25 grams pecans, 200 grams shiitake, 400 grams
European plum, 500 grams artichoke



Winter

- Energy density: higher
- Protein and fat: higher
- Variety: low
- Harvest from winter is limited

200 grams of pine nuts, 300 grams of oyster mushroom, 300 grams of shiitake mushroom, 200 grams of ramson, 400 grams of crab apple, 500 grams of European wild pear

254 grams of carbohydrates
(100% RDI)

71 grams of protein
(100% RDI)

106 grams of fat
(100% RDI)





Micronutrients during all seasons



Sufficient

Sodium, magnesium,
iron, vitamin A, vitamin
B1, vitamin C, vitamin E
and vitamin K.



Non-sufficient

Vit B12, B2, B6, D, folate,
iodine and calcium
selenium and zinc



What makes an attractive dish?



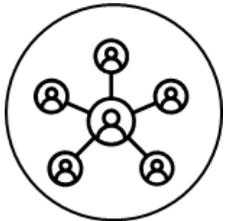
Evidence from sensory science

- Base notes, middle notes and top notes



Taste is personal

- Preference for familiar vs. unfamiliar products



Taste is socially constructed

- The role of one's social environment

Creation of recipes

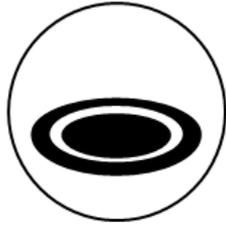
Recipe booklet

Seasonal recipes

Use of food forest ingredients only?



Unfamiliar ingredients



Lack of substance



Use a basic pantry



FOOD FOREST RECIPES

A bundle of seasonal recipes with ingredients from a food forest.
Happy cooking!



Framework applied to the recipes



SUMMER ARTICHOKE & APRICOT TAGINE

Warming, tangy, sweet and ultimate comfort food. Take a chestnut naan to dip into this food forest tagine.

The creamy and soft notes from the artichoke compliment really well with the sweet and acidity from the apricots.

90 MIN SERVES 4

MAIN COURSE



Ingredients

- 3 Szechuan pepper corns (crushed)
- 2 Ramson leaves, thinly sliced
- 5 Chinese toon leaves, thinly sliced
- 6 artichokes
- 10 apricots
- 140 grams of almonds
- 140 grams of hazelnut
- Handful of mint

Pantry ingredients

- 1 tablespoon of olive oil
- 1 tablespoon of cumin, ginger, coriander & cinnamon
- 1 bouillon cube (this can also be made fresh with toon stems and leaves)
- Salt

Base note: ramson leaves

Middle note: artichoke

Top note: apricot and mint

But: a lack of variety

Cooking with unfamiliar ingredients

Communicating the potential of dining from a food forest



Masterclass
“Cooking from a food forest”



Cooking
food forest recipes



Information
on food forest ingredients

MASTERCLASS SNEAKPEAK



CONCLUSION: HEALTHY AND ATTRACTIVE DIETS OUT OF A FOOD FOREST?

ATTRACTIVE DISHES?



- Challenging, but possible
- Potential of top notes
- Lack of base notes and middle notes
 - Not enough variety
- Add other ingredients
- To cope with unfamiliar ingredients:
incorporate them in familiar dishes

HEALTHY DIETS?



- Differs per season
- Difficult with only produce per season
- Shortages in micronutrients
- Variety

Further research recommendations

1. Nutritional composition of food forest products
2. Importance of bioactive compounds
3. Amino acid composition of proteins
4. Effect of different preservation and fermentation techniques
5. Further experimentation with cooking food forest produce
6. Sensory consumer research on attractiveness and acceptance



**Questions,
suggestions,
or points for discussion?**

