

Transforming curricula into an impetus for the development of innovative products

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Applying EntreComp to attract young people to the 1st European manufacturing sector: the agrifood industry

EntreComp Food



Co-funded by the COSME programme of the European Union

Sensory analysis course

Study programmes: MSc Food science; MSc Nutrition (1st year)

Course structure: Lectures, Seminars, Lab exercise (4 ECTS)

Duration: 7 weeks

Student activity: Seminars (adapted curricula)

Student task: Conceptual design of an innovative food product relying on SDGs

EntreComp competences promoted: creativity, vision, ethical & sustainable thinking, motivation & presurance, working with others

Final outcome: Written report, pitch with ppt presentation

Seminars: conceptual design of an innovative food product that relies on SDGs

- 10 groups of 4-5 students
- 1 idea of an innovative product / group

Content:

- Target consumer group
- Contribution to sustainable development goals
- Study the effect of ingredients on sensory properties and nutritional value
- Propose sensory methods for quality monitoring and consumer product acceptance
- Product description: ingredients, technology, sales channel(s)

Jamboard online session

Project presentation

- Main information shared with peers

Brainstorming

- 45 min
- Research
- Justification, explanation
- Written on Jamboard

Comments/questions

- Peer review
- Group comments / questions shared on Jamboard

Final discussion

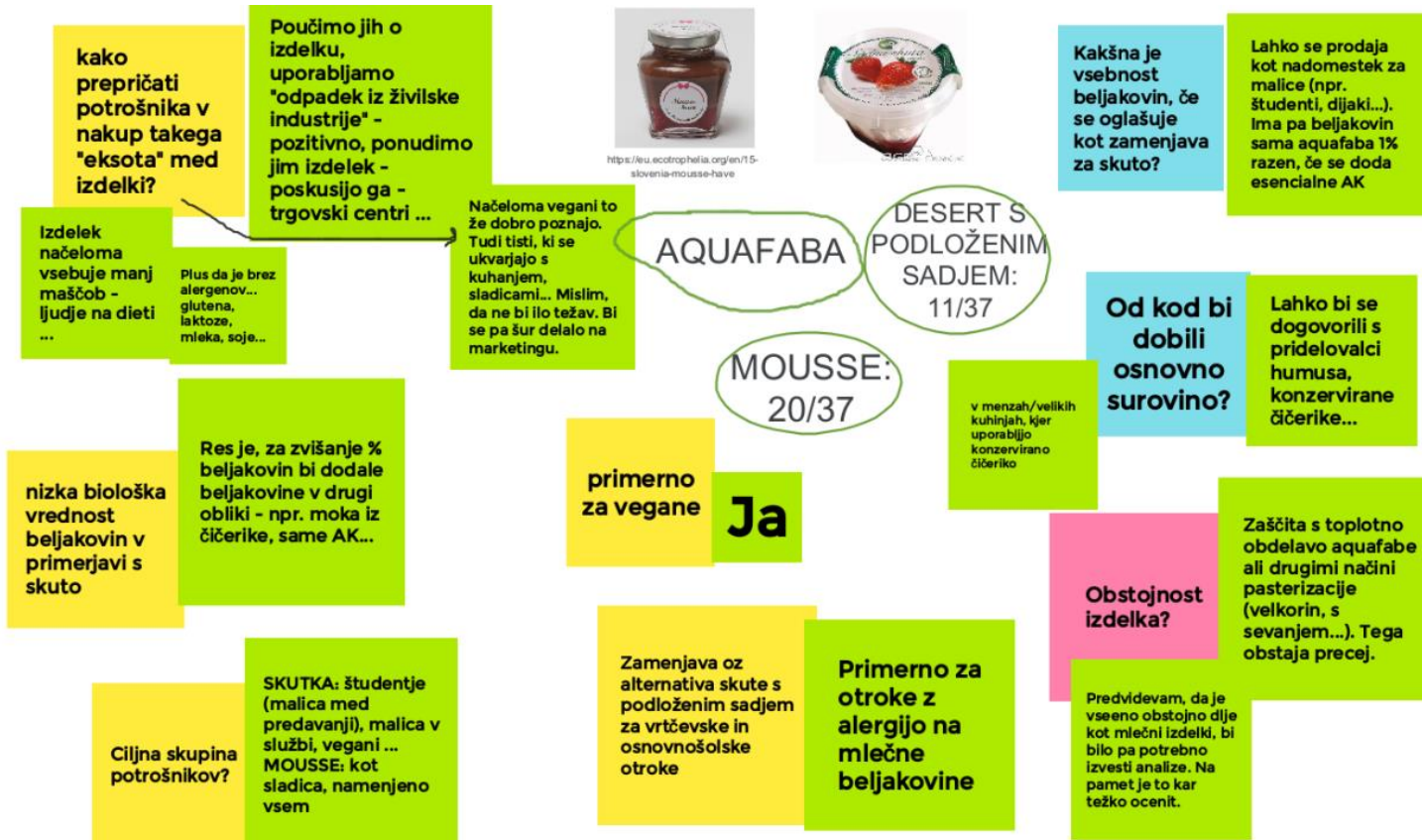
- Answers to peer review
- Possible upgrades

Jamboard example: banana spread



Jamboard example: aquafaba mousse

Peer review:
questions and
comments



Group:
answers and
justification

Pitch presentation

In person

5 minutes

Convince us that your product is the best to buy / invest in!

External “evaluator”: dr. Urška Pivk Kupirovič (CCIS-CAFE)

Students also had to submit a written report which was evaluated by the professor.



CARROT PESTO: TARGET GROUP

- **VEGAN PRODUCT** → wide consumer group
- **VERSATILE** → as a sauce, bread spread or as a complement to salad dressings

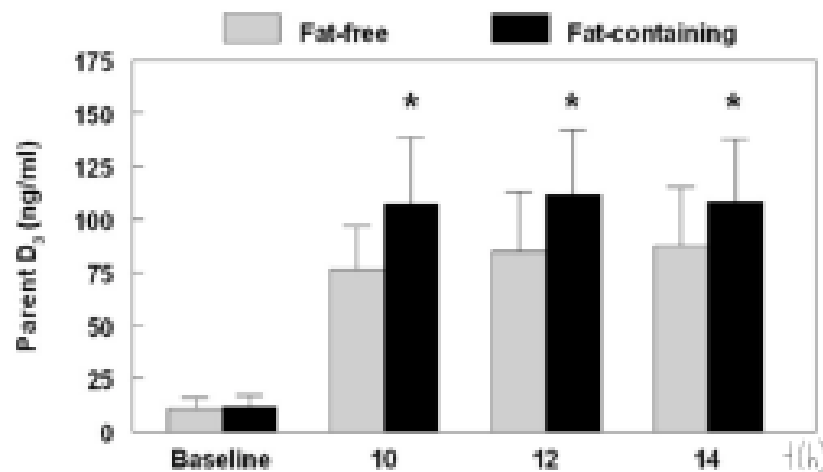


Arnšek, Kragelnik, Keber, Javorik, Plevnik

Plan D – vit. D3 enriched tea: literature study

Absorpcija

Absorpcija D3 je boljša, kadar je zaužit v bližini obroka, ki vsebuje maščobe. Kljub temu pa ni zanemarljiva, če mastnega obroka ni, saj se absorbira 66-90 % toliko D3, kot z obrokom, je potrdila klinična študija (Dawson-Hughes in sod., 2015).



Ena izmed potencialnih opcij pri marketingu izdelka je ponujanje v kompletu z mastnim piškotom.

NAME

OLIVE OIL SPREAD

CATEGORY

Spread, vegan friendly

NETO

160 g / 8 x 20 g

BEST BEFORE

3 months from packaging

STORAGE

Store below 8 ° C, protected from direct sunlight. Once opened, store in the refrigerator and use within 3 days.

INGREDIENTS AND
THEIR SOURCE

Olive oil - Slovenia
Soy sauce - China
Garlic - Slovenia
Onions - Slovenia
Mustard - Slovenia
Lemon - Slovenia
Salt - Slovenia
Chives- Slovenia



Dodič, Robič, Trček, Vagaja, Zagorc

Collabeer: production stages

ZAKAJ DODATEK KOLAGENA?

Prekomerno uživanje alkohola lahko onemogoči sintezo kolagena
Dodajanje kolagena dokazano zmanjša vidne znake staranja na koži



Potek izdelave piva

⋮

1 DROZGANJE

3 različni sladi + voda

2 VRETJE

do 100°C, dodajanje
hmelja

3 HLAJENJE, FERMENTACIJA

20 °C , 10 dni

4 DODAJANJE KOLAGENA, STEKLENIČENJE

Brkopec, Kiroška, Korat, Martinović, Ščap, Zupančič

ADVANTAGES: BANANA PUREE WITH RUM

- Discarded bananas: ↓ **food waste problem.**
- **Source:** vitamin B6, K, vitamin C, Mn, Mg, B complex vitamins, dietary fiber.
- Table sugar substitute.



Buda, Hren, Ivanc, Sakal Dumič, Škufca, Šturm

ENVIRONMENTAL IMPACT FABALOUSSE (aquafaba chocolate mousse)

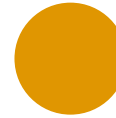


„Waste“ in food industry



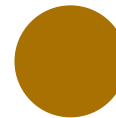
**AQUAFABA,
WINE STONE**

Animal wellcare.



VEGAN

Reduction of transport and
greenhouse gasses.



**LOCAL
INGREDIENTS**

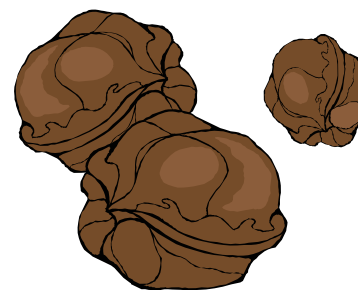
Sensory properties: sustainable bar with spirulina

Spirulina powder - a strong smell and taste of fish or "sea" - can be masked with other ingredients:

- Carob flour - adds to the sweetness, taste and aroma similar to cocoa
- Walnuts add a fuller - richer taste
- Apples - apple cider sweet and sour
- Cinnamon - a pleasant smell, "rounds off" the taste



Bizjak, Bonča, Jeram, Karara



Sensory methods
proposed:
Chogrape spread

SENZORIČNE METODE

- hedonska lestvica
- metoda JAR
- metoda CATA

„Bi bil
dober?“

Ime: _____ Starost: _____ Spol: _____

Pred seboj imate kodiran vzorec. Poskusite ga in označite "X" na katerikoli točki na spodnji lestvici (vključno med narisanimi pikami), ki najbolje predstavlja vašo oceno všečnosti vzorca.

Vzorec:



Vzorec _____	aroma po čokoladi	močno premalo	nekoliko premalo	ravno prav	nekoliko preveč	močno preveč
	aroma po lešnikih	močno premalo	nekoliko premalo	ravno prav	nekoliko preveč	močno preveč
	sladek okus	močno premalo	nekoliko premalo	ravno prav	nekoliko preveč	močno preveč
	grenak okus	močno premalo	nekoliko premalo	ravno prav	nekoliko preveč	močno preveč

sladko		dolg pookus	
slano		srednje dolg pookus	
grenko		kratek pookus	
kislo		topla aroma	
aroma po praženem		plehka, prazna aroma	
aroma po po lešnikih		intenzivna aroma	
aroma po po kakavu		topljivost	
aroma po po čokoladi		kremna tekstura	
aroma po po mlečnem		gladka tekstura	
aroma po po zemlji po suhem sadju		zrna tekstura	
aroma po po lesu		lepljivost	
aroma po po zažganem		kompaktnost	
aroma po po vanilji		oblaga usta	
prijeten okus		groba tekstura	
neprijeten okus		lesketajoč videz	
vonj po žarkem		mazljivo	
topel vonj		prijeten vonj	
		neprijeten vonj	

Bregar Piškur, Horvat, Krampelj, Pečarič, Rahne, Simonič

Bučnflakes: sales channels

NAŠ IZDELEK NA TRGU

- Lokalne trgovine brez embalaže, zadruga
- Projekt Štartaj Slovenija (Spar)

Surovina	Masa (g)	Cena (€/kg)	Cena (€/enoto)
Koruzni zdrob	260	0,8037	0,209
Bučna moka (prga)	60	0,80-1,00	0,048-0,06
Cvetlični med	40	5,315	0,2126
Mleti cimet	10	10,9285	0,1092
Voda	400	Vodovod	
Skupaj kosmiči	370*	1,5805	0,5848
Embalaža	1x		0,36
Skupaj pakiranje		2,5632 *	0,9484*



SPRING WATER WITH WINE ESSENCE: DeVino



Brilej, Omladič, Pekolj, Pogorevc



Self-evaluation

Google form questionnaire

Which statements best describes you? Based on EntreComp competences and APT q.

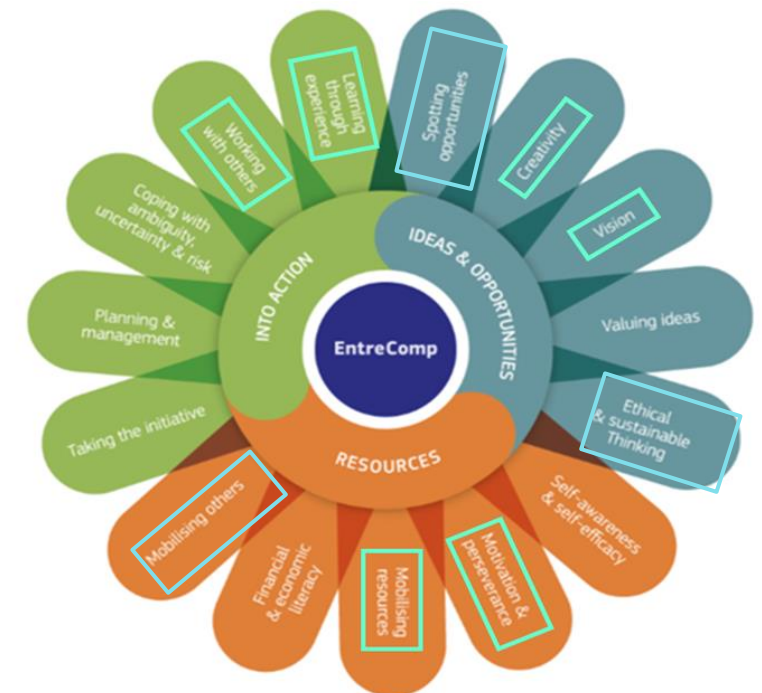
Razdelek 2 od 12

Pokažite kreativnost

Opis (neobvezno)

Izberite najustreznejšo trditev *

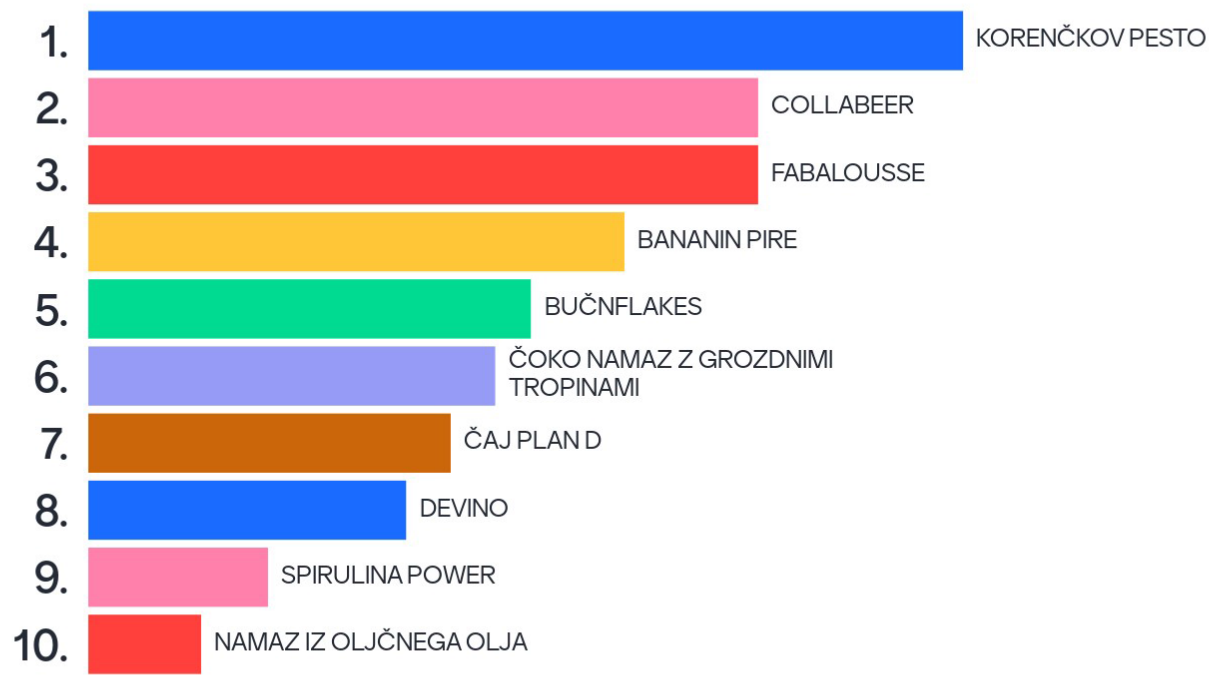
- 1. Vem kako razviti nove ideje kot odgovor na potrebe.
- 2. Znam uporabiti različne tehnike za ustvarjanje idej, ki ustvarjajo vrednost.
- 3. Znam vključiti akterje v raziskovanje in preizkušanje idej, ki ustvarjajo vrednost.
- 4. Znam oblikovati in izvajati proces generiranja in potrjevanja idej, ki ustvarjajo vrednost.



Selection of the best 3 ideas

Izberite najboljše 3 ideje

Mentimeter



Subject evaluation

- Well accepted by students
- Motivated for work: division of tasks, schedule creation, a real-life challenge, peer reviewing
- The importance of university-industry collaboration (inclusion of CCIS-CAFE representative in pitch presentations)

Students decided to develop their ideas further and applied to Ecotrophelia Slovenia 2022



**EntreComp
Food**

Thank you!

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