

Note by Note Cooking

Dirac & Cocktail

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Module TFCS9025: Advance Molecular Gastronomy

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1. Background information about Molecular gastronomy and Note by Note and the topic for this year's assignment (Diracs and cocktails).

According with Collins Dictionary (2018), Molecular Gastronomy can be defined as “an approach to cooking in which a chef's knowledge of physics, chemistry, and biology allows him or her to experiment with unusual flavour combinations and cooking techniques”.

One of the disciplines derived from Molecular Gastronomy is Note by Note Cooking, term defined in 1999 by cofounder Herve This, but first propose in 1994 in the in the magazine Scientific American (Paris, 2018). It opened the creation of completely new food by using chemical compounds of ingredients instead of animal or plant tissues by the application of scientific knowledge (Hervé, 2018). The positive outcome from this speciality are beyond recreational and scientific applications as it is considered as a potential solution of how to feed the growing world's population as ingredients have longer and more stable shelf life, easier to transport and can be combined to specific nutritional requirements (Chandran, 2018).

The Note by Note Cooking competition takes place every year in Paris in order to promote its development and drive innovation, focusing this year in the creation of Diracts and cocktails giving priority to dishes made of pure compounds with no animal or vegetable tissues (Paris, 2018).

This brief is a great representation of what Note by Note cooking really is, as the mix of the exciting, originality and scientific, creating completely new dishes and cocktails that at the same time have the clear objective of helping to overcome the challenge of how to feed the world's population by 2050 by developing Diracs that are dishes of similar nutritional value to meat or fish (Hervé, 2018; Paris, 2018).

There is an additional factory to be taken into consideration when creating new food with compounds instead of traditional ingredients that is the tolerance levels per day and toxicity of this compounds as it could be the case as the define levels of additives as it is the REGULATION (EC) No 1333/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on food additives.

2. The Aim.

To experiment with compounds to develop a new dish with high protein content characterised as a sweet and savoury Dirac accompanied by a cocktail.

3. Final Materials and Methods.

Scone

- 140g inulin
- 15g coconut fat

Cook on pan whisk low heat

Mix in robot coupe for 2 minutes with:

- 400ml water
- 100g pure whey protein
- 20g glycerine
- 8 g salt
- 10ml popcorn

Bake at 180C for 15 minutes in a Convotherm oven with fan setting on.

Chocolate Syrup

- 2 scoop chocolate peanut 80g
- 30 g cacao powder
- Rhubarb Flavouring 2ml
- 30g coconut fat
- 300g water
- 2 g lecithin

Mix with robot coupe for 3 minutes and chill in a domestic freezer -18°C for 30 min.

Make chocolate shapes with solid parts and us chill syrup to accompany the scone.

Cocktail

Phase Test (Density)

- 500g water
- 2g xanthan gum
- Orange colour (Sucrose, glucose syrup, water, E422, E406, E330, E202): 5 g
- Cocktail 1ml each (Orange Juice, Cola, red wine cabernet Flavourings) and 2ml of Rum flavouring


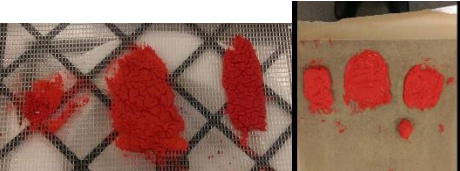



Mix with robot coupe for 2 minutes.

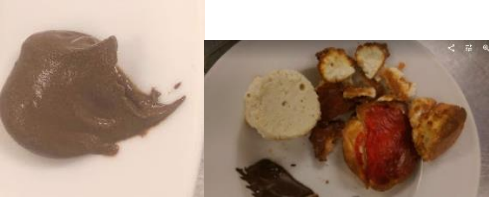

After serving cocktail use remaining adding 5g xanthan gum and use it on the final dish as the gum preparation. Mix in robot coupe for 2 minutes.

Place scone on a deep dish, pour chocolate syrup around it, place chocolate decoration and a dollop of the jelly preparation.

Refer to Annex I: Ingredients and Annex II equipment, for further information.

4. Results.

Week	Pictures	Sensory Analysis
1	<p>Pea Protein preparation</p> 	<p>Not Suitable for setting a tasting.</p>
2	<p>Pea Protein Dehydrator Pea Protein oven</p>  <p>Milk Protein Oven</p>  <p>Gum Preparation Fresh</p>  <p>Gum Preparation Oven</p> 	<p>Not Suitable for setting a tasting.</p> <p>However, as part of development notes, milk protein was noticed to have better flavour and that raw preparations convey better flavour compounds.</p>

3	<p>Chocolate Scone</p> 	<p>First organoleptic tasting:</p> <ul style="list-style-type: none"> - Scone with natural baked colour was preferred - Scone flavour: requires more salt and other flavours. - Chocolate flavour was acceptable, but texture was found grainy. <p>See Annex III: Sensory Analysis</p>
Week	Pictures	Sensory Analysis
4	n/a	n/a
5		<ul style="list-style-type: none"> - Scone: Good savoury popcorn flavour. - Chocolate: Texture was not as expected mousse like, but the syrup worked well with the savoury baked product. Chocolate peanut flavour with rhubarb notes. - Jelly: sweet and slightly alcoholic hint. - Cocktail: mild coke and orange taste with rum and a hint of cabernet.

5. Discussion of Results.

Scone:

This was the element in which the project invested more time for its development, been accounted for a total of 47% of the total time (Ref. Log book- working plan). The main objective was to develop innovation on the main protein presentation, hence 50% of the time was invested in blue sky research working with pea protein, various flavours and cooking methods. Due unsatisfactory results from the organoleptic point of view and the limiting factor that time represented, pea protein was discarded and replaced by milk protein that performed better in organoleptic profile (Ref. Log book- Day 2).

The initial problems with the texture were solved by adding Inulin (Shoaib et al., 2016) and achieve a bakery like appearance.

Flavour and colour were refined as per tastings results in which was concluded that not only natural baked colour was found more attractive to the tasters but also that the popcorn flavour, added with the intention of minimise salt addition, dispersed during the cooking process as barely noticeable after baking. This was compensated by adding more flavours and salt.

Chocolate:

Time allocated of the project 10% (Ref. Log book- working plan).

Colour and flavour were satisfactory, but the texture results were quite poor due the inconvenience of time missed during the project. Texture ended like a syrup but it worked well with the finished product after plating in a deep dish.

Added flavours were more noticeable in the raw protein preparation than in the cooked (scone).

Jelly:

Time allocated of the project < 10% (Ref. Log book- working plan).

Blue sky innovation was tried to be applied to jellies and gums by trying to fully dehydrate a laminate, however dehydrator could not be used at desire setting as used by multiple projects and oven did not deliver result that was looked for.

Due the lack of time after Day 4 was missed, recipe was simplified and derived from the cocktail recipe by adding more gum.

Cocktail:

Recipe was simplified due the challenge on time finally invested on the project (0.5h instead of the planned 1.5h). Nevertheless, results were deemed to be satisfactory.

Flavours again conveyed a lot better in raw preparations and a significant texture difference could be noticed from the preparation with no gum to the one with gum added, in addition to the extreme case of the jelly in which larger concentration was used contributing to a variation on the mouthfeel and flavour, as the more gums added less flavour was detected.

6. Conclusion.

Note by Note cooking offers a very large variety of ingredients, preparation and cooking methods opening a new path for the culinary experience and a potential alternative to the food security crisis. The learning contribution of this project was significant, not only on the relevance of time management, requiring to schedule in time for unforeseeable events in the project, but more important the knowledge on the performance of simple compound flavours that was found to be better in raw preparations than in cook products, finding interesting that further research is required to be developed in this area to improve applications.

7. References.

Chandran, N. (2018). The future of food may be cooking with chemical compounds. [online] CNBC. Available at: <https://www.cnbc.com/2018/06/29/note-by-note-cuisine-can-boost-food-security-herve-this.html> [Accessed 26 Dec. 2018].

Collins Dictionary (2018). Molecular gastronomy definition and meaning | Collins English Dictionary. [online] Available at: <https://www.collinsdictionary.com/dictionary/english/molecular-gastronomy> [Accessed 26 Dec. 2018].

Hervé, T. (2018). The Future of Food is Note by Note Cooking. [online] MAD Feed. Available at: <https://www.madfeed.co/2015/mad-dispatches-the-future-of-food-is-note-by-note-cooking/> [Accessed 26 Dec. 2018].

Paris, G. (2018). International Contest for Note by Note Cooking N°7 - AgroParisTech. [online] Www2.agroparistech.fr. Available at: <http://www2.agroparistech.fr/International-Contest-for-Note-by-Note-Cooking-No7.html> [Accessed 26 Dec. 2018].

REGULATION (EC) No 1333/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on food additives.

Shoib, M., Shehzad, A., Omar, M., Rakha, A., Raza, H., Sharif, H., Shakeel, A., Ansari, A. and Niazi, S. (2016). Inulin: Properties, health benefits and food applications. Carbohydrate Polymers, [online] 147, pp.450-452. Available at: <https://www.researchgate.net/publication/301248402> [Accessed 10 Nov. 2018].

8. Logbook for Molecular Gastronomy: Dirac & Cocktail

Working Plan

14/11/18	21/11/18	28/11/18	05/12/18	12/12/18
Ingredients Prep 0.5h	Ingredients Prep 0.5h	Ingredients Prep 0.5h	Ingredients Prep 0.5h	Ingredients Prep 0.5h
Work on protein 2h	Work on protein 1.5h	Work on protein 1.5h	Work on cocktail 1h	Protein 1h
Cleaning 0.5 h	Work on Jelly	Work on	Work on Jelly	Chocolate 0.5h
Pictures	0.5h	Chocolate	0.5h	Jelly and cocktail 0.5h
Sensory analysis	Cleaning 0.5 h	0.5h	Work on	Cleaning 0.5 h
	Pictures	Cleaning 0.5 h	Chocolate	Presentation 0.5
	Sensory analysis	Pictures	0.5h	Organoleptic tasting
		Tasting	Cleaning 0.5 h	
			Pictures	
			Sensory analysis	Ensure you have all equipment and product pictures

Initial working plan had to be adjusting in function of results and time limitations.

Please refer to Annex II for pictures of ingredients and equipment.

1. Plan Day 1 (14th November 2018)

Aim: To experiment with compounds to develop a new dish with high protein content characterised as a sweet and savoury Dirac accompanied by a cocktail.

Objectives:

To:

- Innovate on main protein presentation: experiment with Pea protein and other compounds to develop a sweet and savoury dirac dish.
- Test in savoury flavours can contribute to salt elimination or reduction.
- Work on the cocktail different density to develop a phase “Tinctail”.
- Complete a sensory analysis if possible.

1.1 Preparation

1.1.1 Ingredients

Dirac

Flavours

Smokey Bacon Flavour msk

Horseradish

Caramelised onion

Cheese

Colour

Beetroot

Spices

Pepper/ paprika extract, cumin, garlic

Protein

Pea protein

Hydrolysed collagen peptide

Egg white

Gums/Starch's/Emulsifiers/Texture

Pectine

Dextrose

Xanthan gum

Fat

Sunflower oil

coconut oil

Cocktail

Flavours

Vi negre en pols/red wine powder

Spiced apple?

Orange

Lemon flavour

Dark chocolate (shapes or another phase)

1.1.2 Procedure:

MEAT-4 cases, with and without collagen peptide and horseradish

45% Pea protein in recipe

- 90g pea protein
- 130g water
- 5g corn starch
- 10g sunflower oil
- Pepper 0.3g
- Paprika extract smoked 2g
- Cumin 1g
- Garlic 0.6g
- Beetroot for colour as visual effect.

Split in 4

- Add horse radish to one
- Salamander

- Add collagen peptide to the other (read label but approx. 2-5g)- Mix collagen peptide with suitable matrix oil/water.
- Reference

Shape and pan fried

Laminate dehydrated

- Cheese flavour with chillies or apple and caramelised onion
- Texture gum or pectin mix make a layer and dehydrator
- Look at egg white compounds maybe mix a little

Cocktail

Phase Test (Density)

- 50g water/ 0.5g pectin
- 50g water/ 0.5 xanthan gum

Add more water depending on texture. Add Lemon/chocolate and see how it mixed across red wine phase.

Red wine mix with water

Lemon phase sit on top

Dark chocolate phase mixed across red wine

* Think of straw solid how to make and flavour

1.2 Practical Development in the Kitchen

The working plan had to be amended as the practical experience was developed based on results and time limitations.

1.2.1 Recipe

Changes due consistency of protein

Pea protein bulk powders.com was the starting point for the development of the recipe.

Initially 30g were weight to assess product as per pack indication (300ml of water per 30g of pea protein), however it looked like it was going to be very liquid so eventually went for a mix of 60g pea protein and 200g water to achieve good consistency to facilitate shape formation.

Increased other components like maize starch (10g) and sunflower oil (15g).

Replaced spices mix for pure compounds that were dispersed in oil or water depending on their solubility.

- Smoked bacon flavour: 10 drops (water soluble)
- Camembert N7: 3 drops (Oil Soluble).
- Horse radish: 2 drops (Oil Soluble).

For colour and flavour purpose 4 g of Beetroot powder were added.

Separate 50g (Case2) and put aside remaining (Case 1) added 5g collagen peptide that changed texture to softer and smoother. It required some more starch in order to be able to create a shape so added 10g more of maize starch.

Case 1: flavour and smell were quite sour from the pea protein. It was then questioned if instructions for use should have been followed for the protein mix as it could be a different case an original recipe not applicable for this brand. Therefore, further water was progressively added to assess performance (150g). Starch (20g) and xanthan gum (1g) were added to compensate texture. However, this was still a very liquid phase so mix was heat up on the hob and mix with a whisk to activate starch.

Case 1 and Case 2 were result not to be suitable for the original application, so these were eventually oven cooked for 15 minutes at 180°C (no fan).

Both cases were not acceptable for organoleptic analysis purpose specially Case 1:

Unacceptable- Texture like a very starchy pancake.

Colour was very deteriorated by thermic treatment.

None of the added flavours could be noticed in any of the preparations, only the starch and protein favour remained.

On the positive side, texture of Case 2 was significantly improved after oven cook getting a crispy feeling.

*Case 1 (left) and Case 2 (Right) before cooking
before cooking*



Case 1 (down) and Case 2 (up)



There was not enough time to work on the cocktail on this session.

1.3 Conclusions.

- Heat resistant colours are required if thermic treatment.
- Try also milk or soya protein in combination with collagen peptide being careful with moisture and starch.
- Increase flavour as barely noticeable after cooking.
- Cook in the oven: This time aim to provide shape. As the mix was initially too fluid, first cook for 7 minutes, check texture and shape in a role.
- Test dehydrator (Protein mix and only gel).
- Make a gel recipe with Xanthan gum.

2. Plan Day 2 (21st November 2018).

Aim: To experiment with compounds to develop a new dish with high protein content characterised as a sweet and savoury Dirac accompanied by a cocktail.

Objectives:

To:

- Artificial colours if thermic treatment.
- Innovate on main protein presentation: Try also milk or soya protein in combination with collagen peptide being careful with moisture and starch.
- Test in savoury flavours can contribute to salt elimination or reduction. Increase flavour as barely noticeable after cooking.
- Innovate on main protein presentation: Cook in the oven, this time aim to provide shape. As the mix was initially too fluid, first cook for 7 minutes, check texture and shape in a role.
- Innovate on main protein presentation: test dehydrator (Protein mix and only gel).
- Make a gel recipe with Xanthan gum.

2.1 Preparation

2.1.1 Ingredients and Procedure.

Dirac

CASE A: PEA PROTEIN

- 60g Pea Protein + 150g Water
- Glucose: 9g
- Salt: 2.75g
- Sunflower oil 10g

- Bacon flavour 20 drops
- Colour Red - 5g
- collagen peptide 5g and put into oven
- Corn flour 5g and put into oven

Each one split in two for oven other for dehydrator.

CASE B: MILK PROTEIN

- Whey Protein 120g + 150g Water
- Glucose: 10g
- Salt: 2g
- Colour (Orange-red)
- 5 drops blue
- Bacon flavour 20 drops
- Collagen peptide 5g and put into oven
- Corn flour 5g and put into oven

Each one split in two -for oven other for dehydrator.

Gel Mix

- Xanthan Gum 6g
- Maltodextrin tapioca 1g
- 300ml Water
- Hydrolysed milk protein- 15g
- Orange 4g
- 15 Camembert
- 1g salt

Each one split in two and prepare in oven and dehydrator.

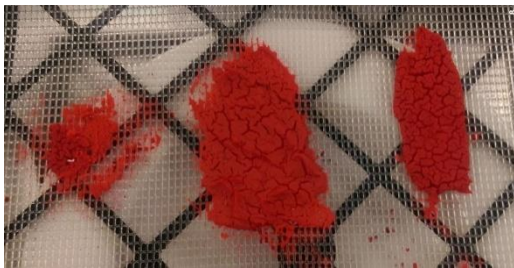
2.2 Practical Development in the Kitchen

Dehydrator was set at 63°C as it was been share with other projects which items could get damaged if higher temperatures were used. Therefore, is was considered not suitable to complete the experiment with the gum mixed.

Mixtures were prepared in the robot coupe.

Pea Protein was cooked as followed:

- 15:40 dehydrator 63C till 17:02



- 15:45 oven 180C with fan out 16:10



Milk Protein and Gum

Oven- 180C 16:45-17:10

Milk protein



Milk protein mix was not put into the dehydrator due unsatisfactory performance of the pea protein.

Gum Mix



None of the products were suitable for organoleptic tasting.

2.3 Conclusions.

- Dehydrator did not deliver better appearance or texture product was still unacceptable, so oven will be the preferred choice as cooking method. However, texture requires to be improved into a more solid one, similar to a scone.
- Milk protein had a more pleasant taste than pea protein but still none of the mixes was suitable for consumption as a palatable dish. Therefore, further milk preparations will continue to be prepared.
- Another flavour to be tested as bacon flavour is barely noticeable after cooking.
- Gum, milk and maltodextrin is kind of aerated mix that does not work well in the oven. Hence, other experimental gum preparations will be completed in further sessions avoiding being cooked in the oven.
- Raw protein preparations conveyed better the flavour of the compounds, therefore this will be used in combination with cook ones.
- Colour was found rather unpleasant, so further preparations will aim for a more natural appearance.

3. Plan Day 3 (28th November 2018).

Aim: To experiment with compounds to develop a new dish with high protein content characterised as a sweet and savoury Dirac accompanied by a cocktail.

Objectives

- Continue working with milk protein improving product texture to achieve a savoury scone by using oven like cooking method.
- Use popcorn flavour for the cook protein to test if it can be used to reduce or eliminate salt.
- Develop a protein based raw preparation to convey more flavour.
- Work in a different gum preparation.
- Develop more natural colours. It will be considered for the gum preparation to develop a better contrast in the dish.
- Prepare the base for the Tinctail with Vi Negre en Pols.

3.1 Preparation

3.1.1 Ingredients and Procedure.

Scone

- 70g inulin
- 50g pure whey protein
- 110ml water
- 10 g coconut fat
- 10 g glycerine
- 1 ml popcorn flavour N7

Prepare in the pan at low heat (Coconut fat and inulin).

Prepare whey protein in separate bowl and put syrup on top and quickly mix to combine and for a dough.

Add water and whisk.

Finish blend by using robot coupe for 2 minutes.

Bake at 180C for 10 minutes. Part was put apart and the other was cooked for further 10 minutes.

Chocolate Mousse

- 40g chocolate peanut.
- 17g cacao powder
- 10g coconut fat
- 130g water
- 2g lecithin

Mix all ingredients in robot coupe and chill in the fridge.

Cocktail

Phase Test (Density)

- 500g water/ 1 xanthan gum: 5g vinegre en pols

3.2 Practical Development in the Kitchen

No amendments took place for the recipes during the development.

The only variation was that some burnt chocolate was added on top of part of scone preparation to amylase potential alternatives on natural colours.

Chocolate Mousse



Scone



Cocktail

Result unsatisfactory, very over powdery unpleasant taste (Picture not available).

Gum preparation

It was not possible to dedicate time to this section.

See Annex III: Sensory Analysis.

3.3 Conclusion

- Chocolate Mousse: Result satisfactory but taster's advice that texture is grainy. Flavours added were noticed to remain better than in cooked preparation.
- Scone: Result satisfactory but after organoleptic tasting the natural bake colour was the favourite one. Improve flavour by adding more salt, therefore popcorn flavour does not have a significant contribution to replace salt.
- Tinctail: Result unsatisfactory, very over powdery unpleasant taste.
- Work on gum preparation.

4. Plan Day 4 (5th December 2018)

Attendance was not possible due illness (communication via email to Roisin Burke). Therefore, objectives planned for this slot will be completed on the final class. However, objectives had to be simplified as this is the final class in which both projects are to be presented. For instance, cocktail consist on just one phase.

5. Plan Day 5 (12th December 2018)

Aim: To experiment with compounds to develop a new dish with high protein content characterised as a sweet and savoury Dirac accompanied by a cocktail.

Objectives:

- Scone: improve flavour by adding more salt and more popcorn flavouring keeping natural baked colour.
- Chocolate mousse: exture requires to be improved by adding more water/ fat.
- Cocktail: Work on alternative with liquid pure compounds and colours. Add Xanthan gum for texture.

5.1 Preparation

5.1.1 Ingredients and Procedure.

Scone

- 140g inulin
- 15g coconut fat

Cook on pan whisk low heat

Mix in robot coupe for 2 minutes with:

- 400ml water
- 100g pure whey protein
- 20g glycerine
- 8 g salt
- 10ml popcorn

Bake at 180C for 15 minutes.

Chocolate Syrup

- 2 scoop chocolate peanut 80g
- 30 g cacao powder
- Rhubarb Flavouring 2ml
- 30g coconut fat
- 300g water
- 2 g lecithin

Mix with robot coupe for 3 minutes and chill in the freezer for 30 min. Make chocolate shapes with solid parts and us chill syrup to accompany the scone.

Cocktail

Phase Test (Density)

- 500g water
- 2g xanthan gum
- Orange colour 5 g
- Cocktail 1ml each (Orange Juice, Cola, red wine cabernet Flavourings) and 2ml of Rum flavouring
- 2g xanthan gum

Mix with robot coupe for 2 minutes.

After serving cocktail use remaining adding 5g xanthan gum and use it on the final dish as the gum preparation. Mix in robot coupe for 2 minutes.

Place scone on a deep dish, pour chocolate syrup around it, place chocolate decoration and a dollop of the jelly preparation.

5.2 Practical Development in the Kitchen





Recipes were adhered to during the practice. However, Chocolate mousse turned out to be very liquid this time. For that reason, it was partially freezer and made some chocolate shape as decoration and use the chill chocolate syrup on the final dish.



Refer Annex III: Sensory Analysis.

Annex I: Ingredients

1. Ingredients

<p>Super Pea Protein Isolate (Bulk Powders.com)</p>		
<p>MSK Smokey Bacon (Water Soluble)</p>		
<p>Camembert N7 (Oil soluble)</p>		
<p>MSK Horse Radish (Oil Soluble)</p>		
<p>Beetroot powder</p>		

Hydrolysed Collagen Peptide
(MYPROTEIN)



Corn Starch, Salt and Sunflower

Conventional ingredients in food stores.

Xanthan Gum



Colour Red



Glucose Syrup



Orange Colour



Milk Protein- unflavoured (Bulk Powders.com)



Maltodextrin from Tapioca



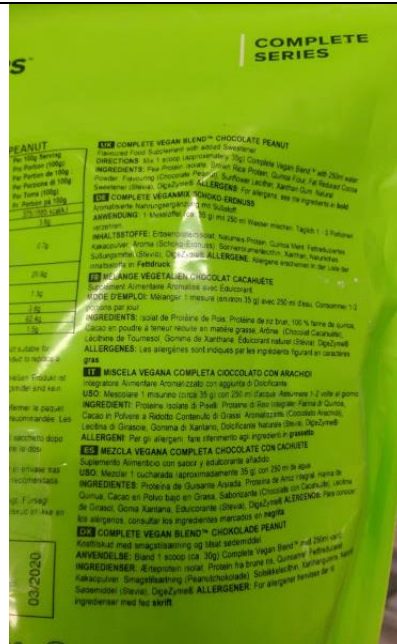
Blue Colour



Inulin



Vegan Chocolate peanut (Bulk Powders.com)



Cacao Powder



Coconut Oil



N7 Popcorn Flavour



Glycerine (Rosa)



Vi Negre en Pols (Rosa)



Burnt Chocolate



Lecithin






Orange juice flavour (Rosa)



Red Wine Type Cabernet Flavour (Rosa)	
Cola Flavouring (Rosa)	
Rom Flavouring (Rosa)	
Rhubarb Flavouring (Rosa)	

Annex II: Equipment

Oven (Convotherm)	
Robot coupe	
Food Dehydrator	
Cooking centre gas	

Annex III: Sensory Analysis

Scales are 1 to 5 (1 is the worst score and 5 is the best).

Week 3: 18th November 2018.

Tasters	Sponge Brown				Sponge White				Sponge Burnt Caramel Colour				Chocolate			
	Flavour	Texture	Colour	comments	Flavour	Texture	Colour	comments	Flavour	Texture	Colour	comments	Flavour	Texture	Colour	comments
Taster 1	2	3	4	more salt	2	3	1	more salt	2	3	2	more salt	3	2	4	grainy texture
Taster 2	2	3	4		2	3	1		2	3	2		3	2	4	grainy texture
Taster 3	2	3	1	more salt	2	3	4	more salt	2	3	1	more salt	3	3	3	
Taster 4	2	3	4		2	3	1		2	3	2		3	4	3	
Taster 5	2	2	3		2	2	2		2	2	1		3	2	4	grainy texture
Taster 6	2	3	4	more salt	2	3	1	more salt	2	3	2	more salt	3	3	3	
Taster 7	2	3	4		2	3	2		2	3	2		3	3	3	

Results

- Scone with natural baked colour was preferred
- Scone flavour: requires more salt and other flavours.
- Chocolate flavour was acceptable, but texture was found grainy.

Week 5: 12th December 2018.

Tasters	Sponge			Chocolate			Jelly			Cocktail		
	Flavour	Texture	Colour	Flavour	Texture	Colour	Flavour	Texture	Colour	Flavour	Texture	Colour
Taster 1	2	3	4	3	2	3	2	1	3	3	3	4
Taster 2	3	4	4	3	2	4	3	2	3	4	4	3
Taster 3	4	3	4	4	1	4	2	2	3	3	4	3
Taster 4	3	3	4	3	2	4	2	2	4	4	4	3
Taster 5	3	4	4	4	1	3	2	1	3	3	3	4

Results:

- Scone: Good savoury popcorn flavour.
- Chocolate: Texture was not as expected mousse like, but the syrup worked well with the savoury baked product. Chocolate peanut flavour with rhubarb notes.
- Jelly: sweet and slightly alcoholic hint.
- Cocktail: mild coke and orange taste with rum and a hint of cabernet.