

UNITE

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Italimentis

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FERRETTI
specialisti del dessert

Italimentis



Challenge

How to innovate and to improve healthy properties of the classical Italian “croissant”.



Product



Butter for Lamination

ORIGINAL RECIPE

Wheat flour

Eggs

Milk

Sugar

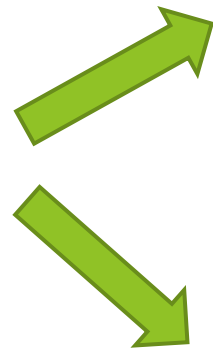
Yeast

Butter 82% (DOUGH)

Natural aromas

Butter lamination

Brainstorming



Insects



Chia seeds



Avocado



Avocado oil



Apple skin powder



Health benefits



Good level of MUFA and PUFA, other biological active compounds: tocopherols, phytosterol etc..

- Improve ratio between PUFA and SFA in product
- Improve level of total cholesterol
- improve inflammatory parameters



- Rich source of dietary fiber (41%) and phenolic compounds
- Has threefold to sixfold more flavonoids than flesh of fruit
- Maintain good cholesterol levels



- Prebiotic compound
- It has great benefits in the intestinal tract

H.P. VASANTHA RUPASINGHE et al 2008

Muhammad Shoaib et al, 2016

Marcos Flores et al. 2019

Project development



Avocado oil 40%



Water 40%



Inulin 20%



Homogenizer



Hydrogel

Project development



Apple skin powder (ASP)



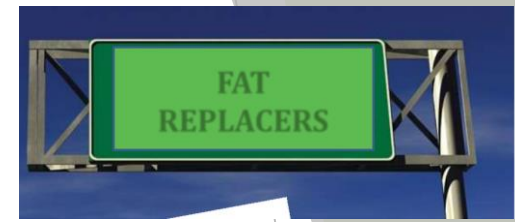
Emulsion filled gel (EFG)

ASP 10%
substitution
of flour

Hydrogel 22%
substitution
of butter



Market trends: fat replacers



COMMON BAKERY FATS

Margarine, vegetable oil, butter blends, shortening ...

Use in pastries, ... CROISSANT;
(Imarc, visited 18/06)

FAT REPLACERS

Fat Replacers Market - Revenue Share (%), By Type, Europe, 2019



- Carbohydrate-based
- Protein-based
- Lipid-based

MAJORITY: starchy foods (corn, cereals, and grains), gums and oat fiber.
(Mordor intelligence, visited 18/06)

FOOD APPLICATIONS

- dairy products, desserts;
- processed meat;
- baked foods;
- salads, sauces.

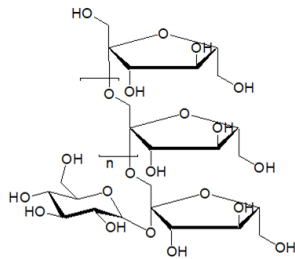
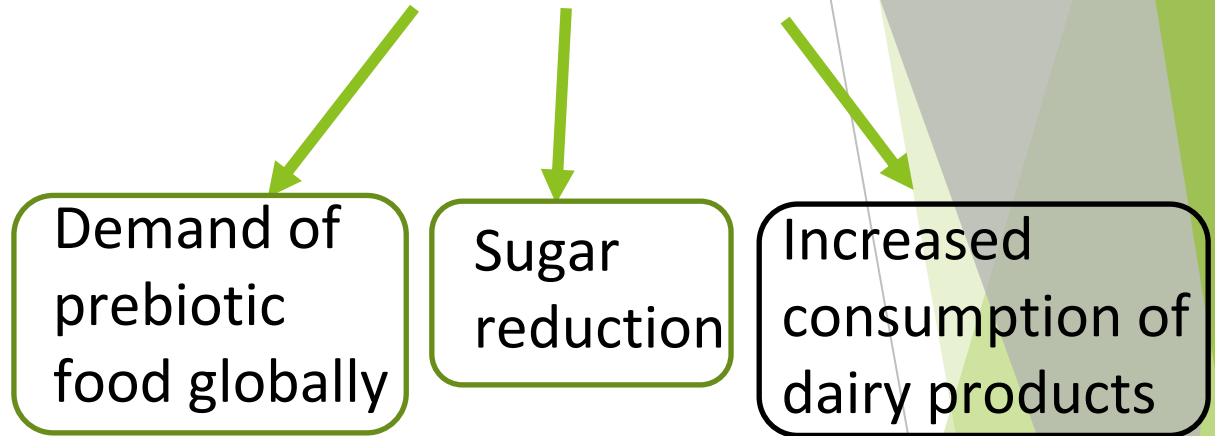


Market trends: inulin



GROWTH RATE: 6.7%
 Inulin is one of the most popular. The inulin market is expected to reach **USD 1.86 billion by 2028**(Fiormarkets 2021)

Key drivers



Europe represented **38.6%** of the market in 2020

Major sectors



Dairy products



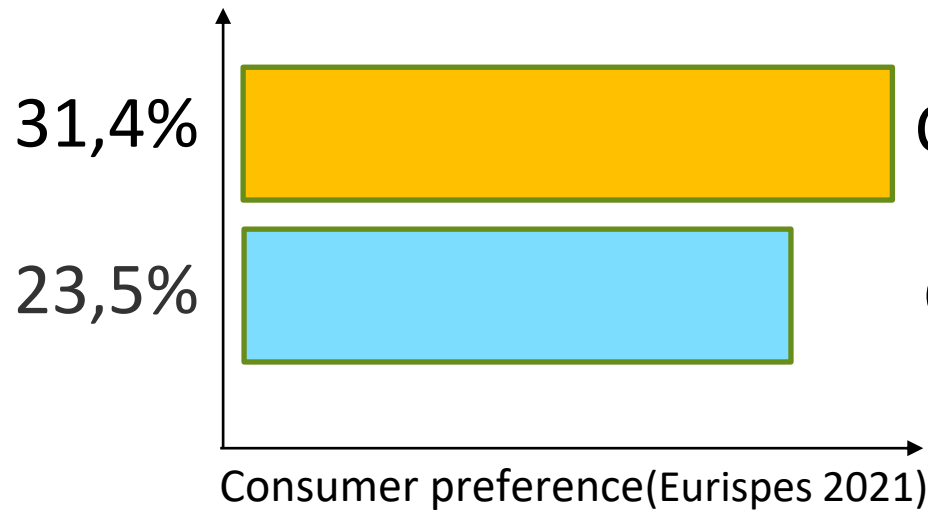
Bakery



Dietary supplements



Market trends: fiber in foods



CLAIM: 'Without' e.g. sugars, added fats

CLAIM: 'Rich in' e.g. vitamins, minerals



(Ossevatorio immagino 2021, vided 25/06)

Fiber rich product represented 3,7% of the sales

In 2020 had a growth of 4,3% on the sales

I NUMERI DEL MONDO RICH-IN: LA SEGMENTAZIONE DELLE CARATTER

	% PRODOTTI	% VENDITE IN VALORE	TREND % VENDITE IN VALORE 2020 VS 2019
Fibro	4,6	3,7%	4,3%
Proteine	3,0	3,4	9,4
Vitamine	2,7	3,0	1,0
Integrale	2,5	2,6	3,1



Market Trends: **Extra Virgin Avocado Oil**



GROWTH: from US\$ 120.30 million in 2018 to US\$ 257.05 million by 2027; CAGR of **8.9%**
(Business Market Insights 2021)

'HASS' VARIETY



Highest share
✓ > health benefits
✓ > popularity



Key drivers

Consumer's awareness about benefits of EVAO

Lighter flavour compared to EVOO

(Persistence market research, visited 24/06)

SWOT ANALYSIS: Croissant

STRENGTHS

(+)

- Healthier Ingredients;
- No use of additives (E number);
- Valorization of apple peel.

WEAKNESSES (-)

- Competition of low sugar low-fat products;
- Modification of the product

OPPORTUNITIES

(+)

- Novelty on the market: there are no croissants that use avocado oil

THREATS(-)

- Avocado oil adulteration and safety;
- Market volatility;
- Percieved low-sustainability of Avocado production

Conclusions

- ✓ Fruity is an innovative croissant with extra virgin avocado oil and inulin;
- ✓ Fruity croissant, given the higher nutritional content; it is optimal for healthy conscious consumers and also for people that practices sports;

Future perspectives

- Optimization of the formulation in a laboratory-scale;
- Perform a sensory evaluation of the croissant;
- Production scale-up of the croissant



THANK YOU FOR YOUR ATTENTION!

