

Fruits for Tomorrow

RED TEAM 3

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Our company



Who we are?

- New and promising company
- Focuss on Active and Intelligent Packaging for fruits
- 5 people
 - Director
 - Marketing and communication
 - Salesman
 - Engineer
 - Chemical technologist



Our company



Located in Madrid (Spain)

Where we are?



- 2^o world fruit consumer (per capita)
- 7th world fruit producer
- 27% of the fruits of Spain exported to EU (n^o 1)

Spain

TABLE 30: Top fruit producers and their productivity

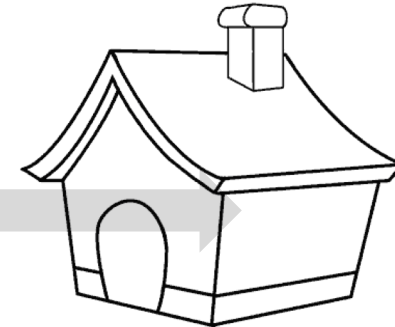
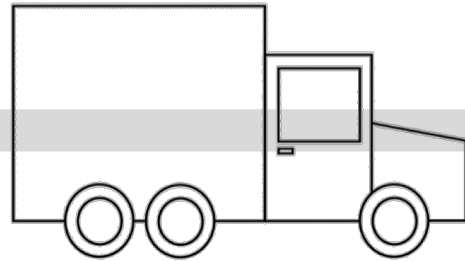
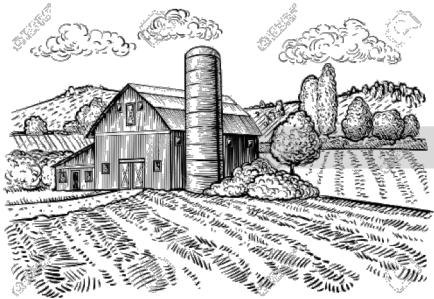
	Fruit (excluding melons)							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	%	thousand hg/ha	%	thousand tonnes	thousand tonnes	%	%
	2010	2000-10	2010	2000-10	2009	2010	1990-99	2000-10
China	11 316	2.2	108	2.7	115 858	122 350	12.6	6.7
India	6 403	5.3	117	0.4	68 975	75 121	5.8	5.7
Brazil	2 383	-0.0	163	0.5	37 155	38 793	2.3	0.5
United States of America	1 145	-1.3	229	-1.0	27 448	26 181	0.4	-2.2
Italy	1 277	-0.7	132	0.1	18 364	16 908	0.1	-0.6
Philippines	1 228	2.7	132	1.4	15 980	16 182	2.2	4.1
Spain	1 601	-1.3	97	0.9	14 497	15 456	1.5	-0.4
Mexico	1 227	1.3	125	0.1	15 890	15 368	3.1	1.5
Indonesia	607	1.9	240	3.6	17 577	14 598	3.8	5.7

Our company



What we do?

Reduce the food waste in storage and distribution stage



**80% of distributors waste more than
6% of food in distribution stage**

FRECA

WE CAN solve this problem!

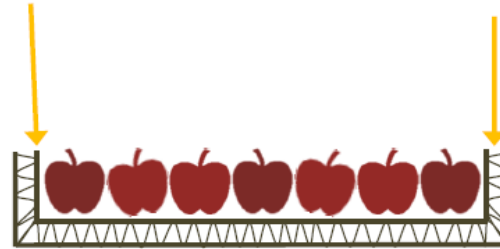
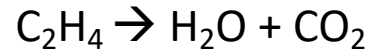
Our product

FRECA

Ethylene scavenging inner layer

Antibacterial / anti mould corrugated layer sandwiched between inner and outer layer

PLA + ZnO NPs



Cardboard coated with Silica

Inhibition of bacteria growth

2 FRECA products

**Big box
(40x30x16)**



**Small box
(25x20x10)**



Suppliers:

Amorphous PLA → Ecrossbio (Spain)

ZnO NPs → Bioquartzo (Portugal)

Cardboard → International Paper Madrid Mill

Our product



Withstand mechanical and thermal stress produced during manufacture transportation and storage

Provide antimicrobial activity against Gram-positive and Gram-negative bacteria as well as fungi and mould (ROS production, ion release, water absorption, catalytic activity)

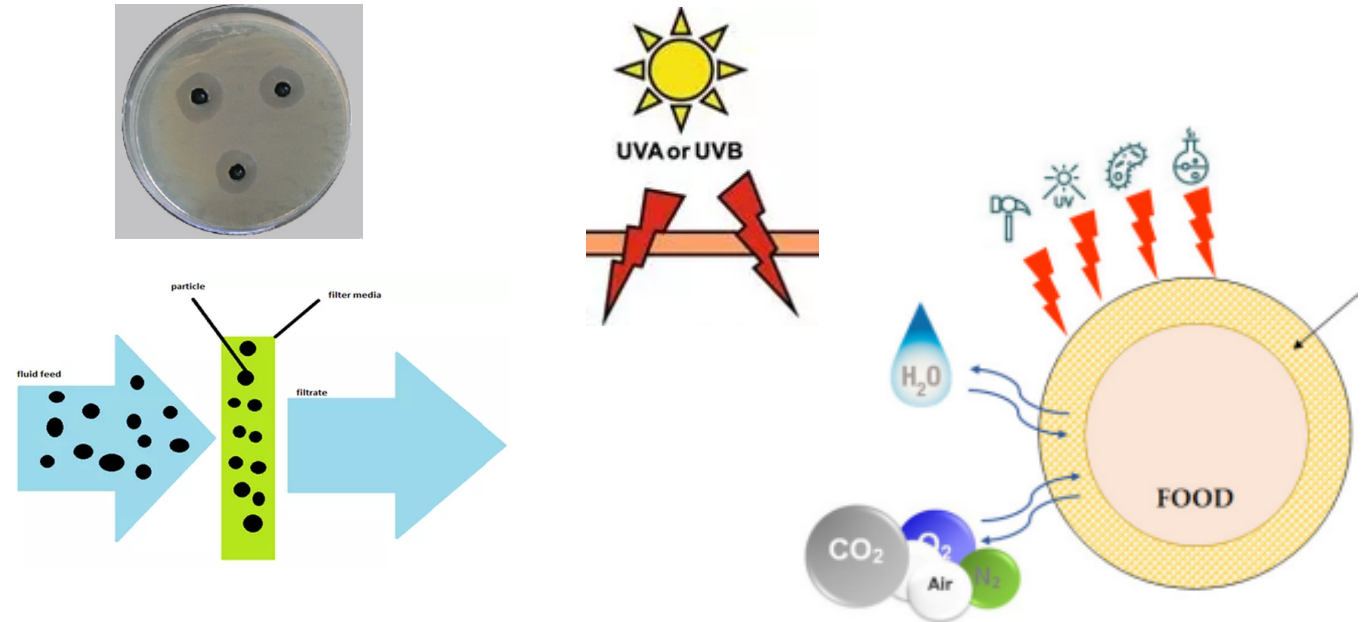
Recognized as safe materials by the FDA (21CFR182.8991)

Concentrations far below the legal limits



Scientific Committee on Consumer Safety

SCCS



Migration Zn values via contact of packaging with food

In paper, paperboard and corrugated packaging, Zn migration values ranged from n.d. to 67.15 mg.kg⁻¹, n.d. to 307.10 mg.kg⁻¹, and n.d. to 82.62 mg.kg⁻¹, respectively (Table 7). It was observed that values from all packages demonstrated a homogeneous distribution ranging between n.d. and 307.1 mg.kg⁻¹ (Table 7). According to Pearson correlation analysis, the concentration of Zn migration had a very strong positive linear correlated with

Mertoğlu-Elmas & Çınar (2018). "Metals in packages," *BioResources* 13(4), 7560-7580. 7573

Our market

Ecological market

- Small markets to satisfy demand
- More environmental awareness
- Spain in Top 10 of ecological product consumers (2000M€ bussiness)
- Raise of 14% ecological market vs 2% conventional ones



Our analysis (SWOT)

Strengths

Weaknesses

Internal analysis

- Great team
- Clear path (business plan)
- Great knowledge
- Innovator
- Multidisciplinary team

- Small Company
- Our own equipment must be acquired
- Lack of experience

Opportunities

Threats

External analysis

- Lots of food waste in distribution stage
- Possibility to expand
- New channels of markets
- Good location

- Small market
- Lot of competitors (yellow team)
- No assured trust

Our numbers



	Year 1	Year 2	Year 3	Year 5
Number of customers	15	120	450	1500
Price (€) /sold units	2.5/50k	2.5/500k	2.5/2.3m	2.5/5m
Total revenues (€)	125k	1.25m	5.75m	12.5m
Variable cost (€)	40k	400k	1.38m	3m
Customer acquisition cost (€)	21k	21k	21k	21k
Fixed costs (€)	54k	72k	216k	372k
Total costs (€)	115k	493k	1.62m	3.39m
Earnings before interest and tax (€)	10k	757k	4.13m	9.11m

Thank You for Your attention!



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