

FINAL DEGREE
PROJECT:
PROBIOTICS IN
COCOA PRODUCTS

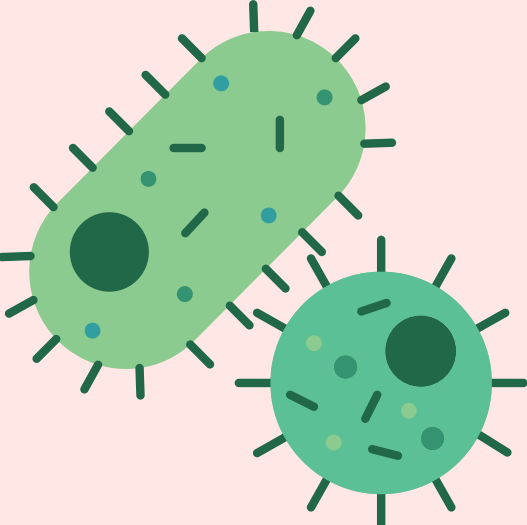
UAB

Universitat Autònoma
de Barcelona


- 1.OBJECTIVES
- To check the knowledge of the population about probiotics and chocolate, and verify its acceptance in the market.
 - To study methods for addition probiotics to the matrix
 - To market analysis both physically and on-line

2. INTRODUCTION

PROBIOTICS:




Lactobacillus spp.

EFSA
EUROPEAN FOOD SAFETY AUTHORITY

Bifidobacterium spp

CHOCOLATE:



↑
Saturated and monounsaturated
fats

↑
Polyphenols (flavonoids)

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3. CONSUMPTION AND
KNOWLEDGE SURVEY

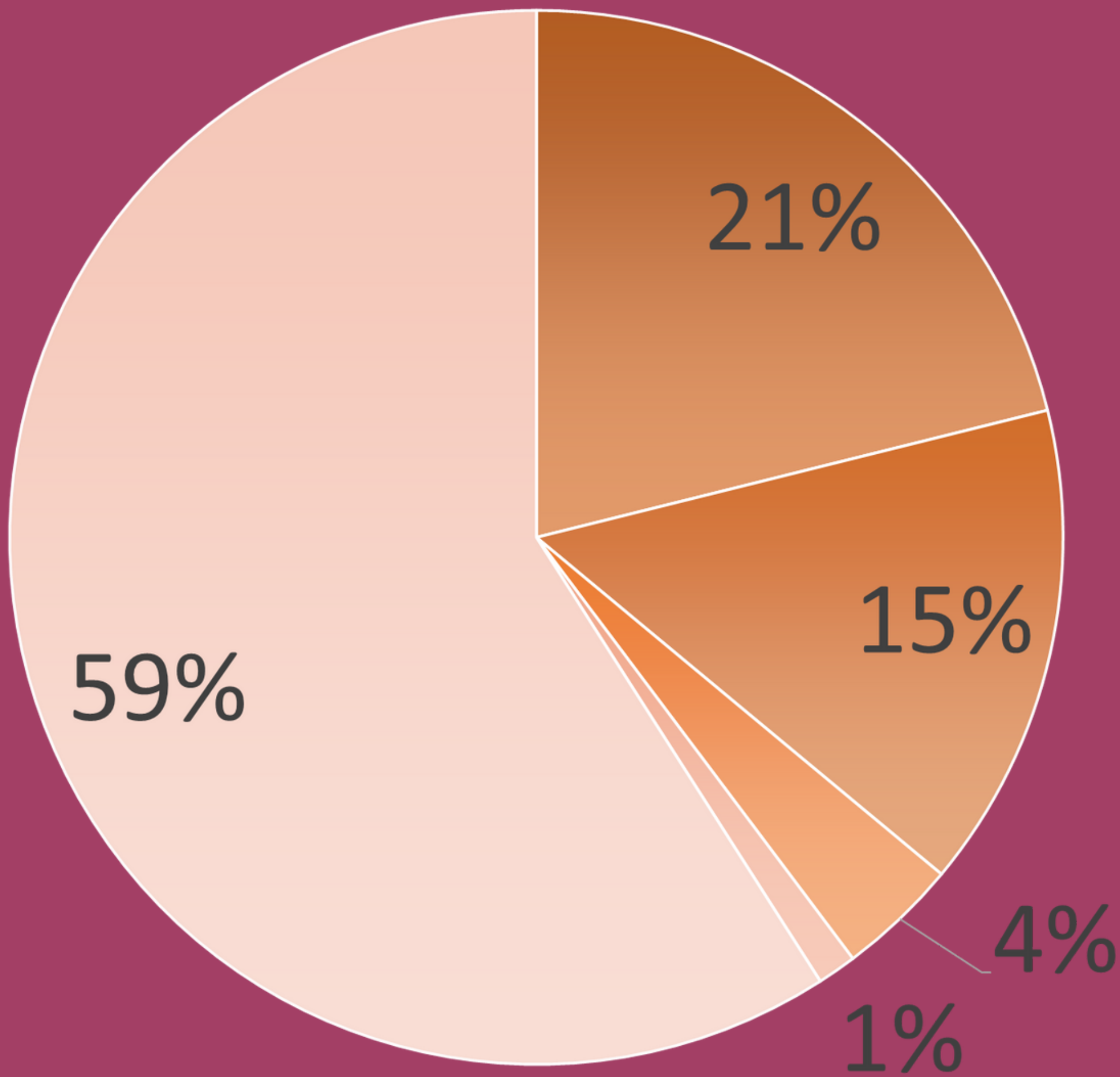


Figure 1: Graph to the question. Would you increase your chocolate consumption if it contained probiotics?

21,10% Yes, regardless of price
14,9% Yes, even if the price increases by 5%
3,7% Yes, even if the price increases by 10%
1,2% Yes, even if the price increases by 15%
59% No, I would not consume more chocolate even if the product contained probiotics.

4. METHODS FOR
ADDING PROBITOCS

MICROENCAPSULATION



LYOPHILIZATION

5. MARKET REVIEW

Chocolate bar	"New You"	Price	Probiotics
		29\$/ 10 units	<i>Bacillus Subtilis</i> DE111

Cocoa cream	Brand	Price	Probiotics
	"Gryph&Ivy rose"	34\$/unit	<i>L. acidophilus</i> , <i>B. bifidum</i> , <i>B. lactis</i> , <i>B. longum</i> .
	"Procoa"	299\$/unit	<i>Lactobacillus Rhamnosus</i> GG

Mini sticks/can dies	Brand	Price	Probiotics
	"YumVs"	15\$/unit	<i>Lactobacillus Acidophilus</i> , <i>Bifidobacteriu m Lactis</i>
	"Biorela"	9,80€/10 units	<i>Bifidobacteri um lactis</i> HN019

6. CONCLUSIONS

- The survey did not reveal a great interest of the population in consumption.
- The two methods of addition show factors for and against their use
- There are not too many competitively priced probiotic chocolate manufacturers on the market.