

CONSUMER KNOWLEDGE AND ATTITUDES TOWARDS MICROALGAE AS FOOD: THE CASE OF SPAIN



microalgae?

No (N=618)

NA (N=43)

Have you ever eaten

Yes, I eat microsigae once a week (N=83)

Yes, I tried them once but never again (N=746)

Yes, I eat microalgae daily (N=3)

Yes, I eat them occasionally (N=301)

2.2%

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INTRODUCTION

Currently we do not know the perception of microalgae in the Spanish population. This information can be very useful and would allow us to establish market strategies to be able to include microalgae in different foods.

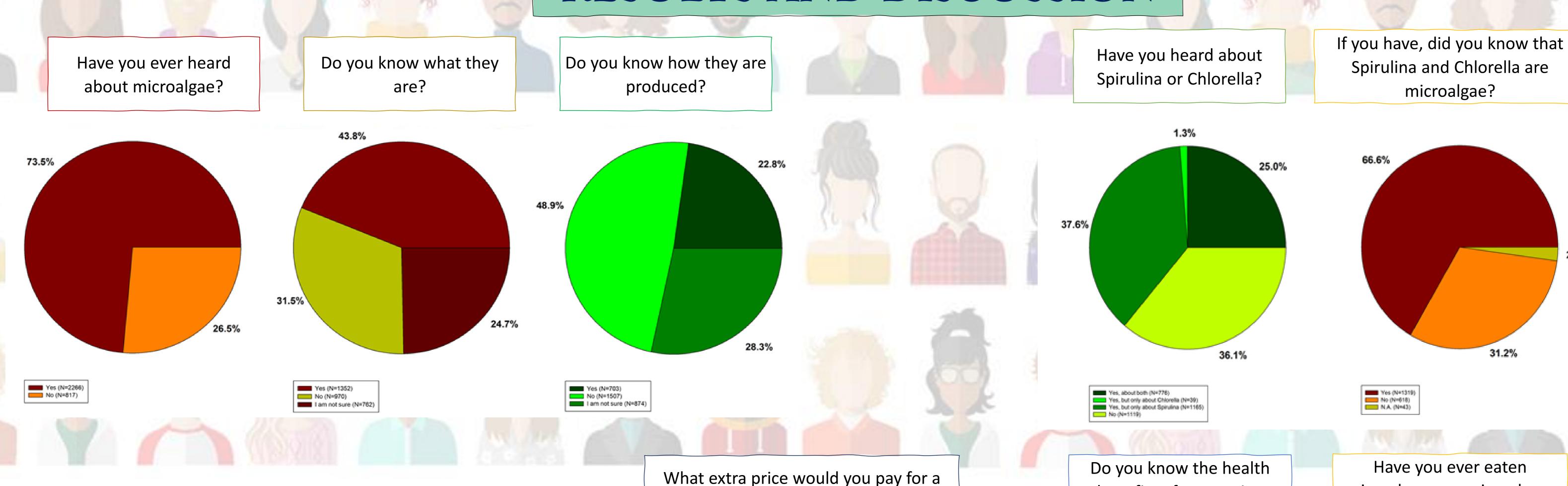
MATERIALS AND METHODS

Spanish consumers' knowledge and attitudes towards microalgae as food were assessed using a specific questionnaire a total of 3,084 Spanish consumers over 18 years old were considered in the current study.

The questionnaire, composed by 36 close-ended questions, revealed that there is a huge lack of knowledge on basic aspects of microalgae, especially within the youngest respondents (18-24 years old) and for those aged over 65 years old (p<0.001).



RESULTS AND DISCUSSION

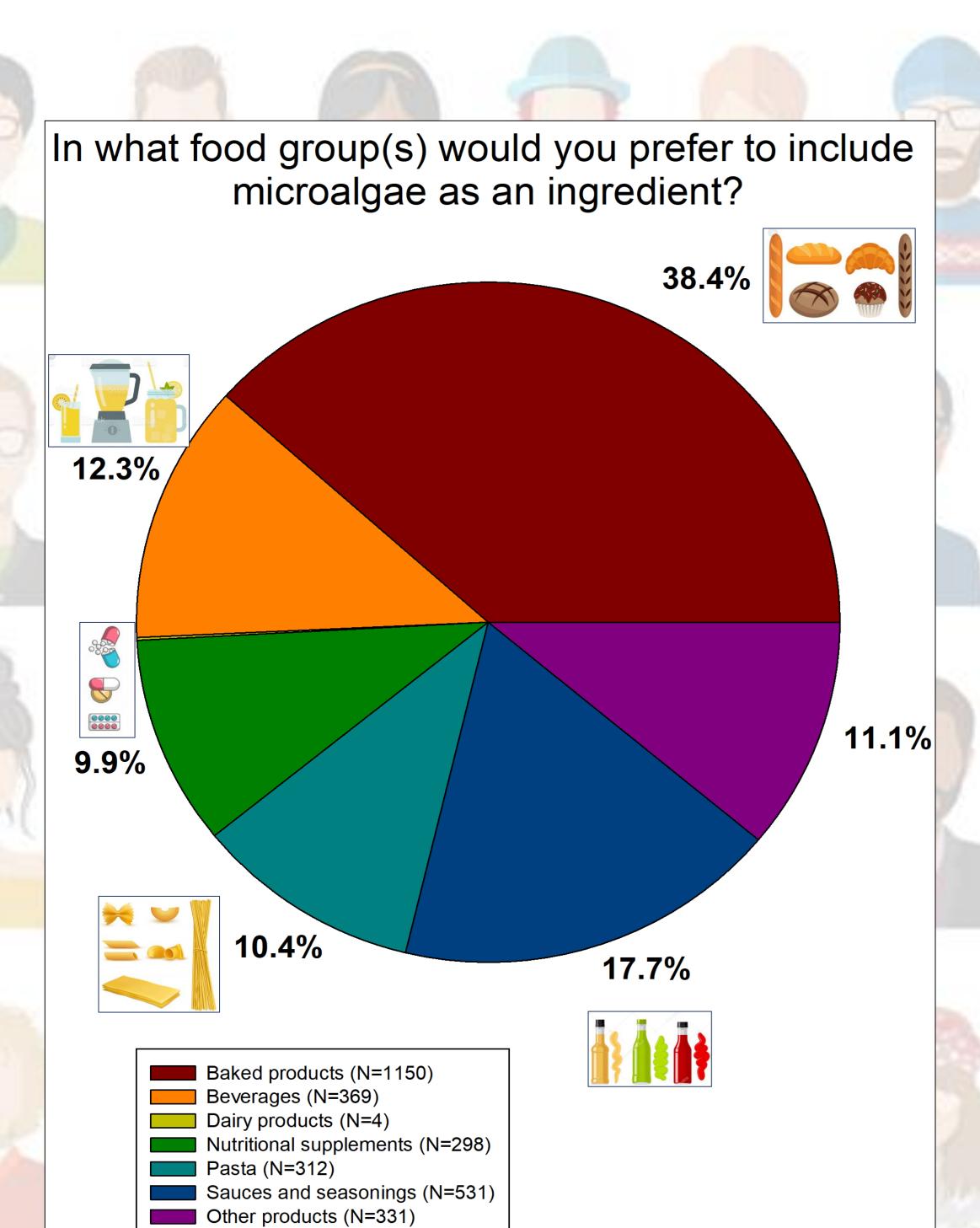


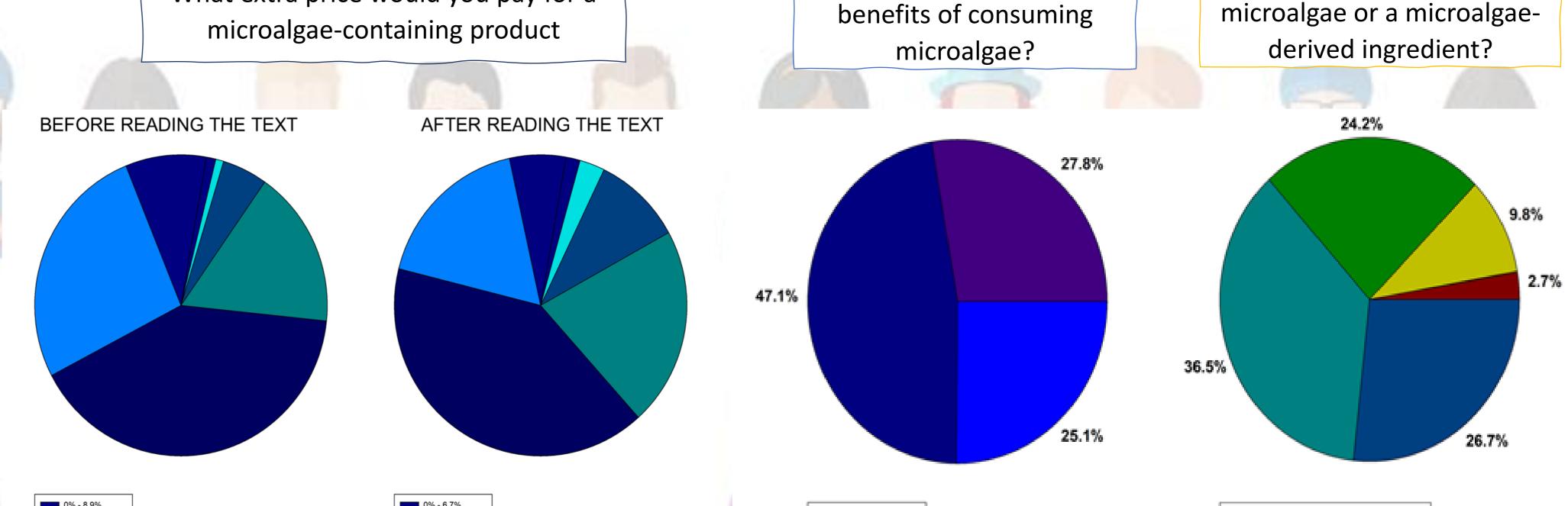
1-5% - 26.6% 6-10% - 40.6%

11-20% - 16.9%

21-30% - 5.0%

31-50% - 0.9%





CONCLUSIONS

- Approximately 85% of all respondents scored the statement "There is a big lack of information about microalgae" with either 4 or 5 (using a 5-point hedonic scale), demonstrating that microalgae and their potential applications are unknown to the majority of the Spanish population
- Spanish consumers consider microalgae as: (i) sustainable and environmentally friendly, (ii) nutritious and healthy, and (iii) safe, which is of key importance for acceptance of microalgae-based products.
- Results revealed that consumers from all the different age groups and educational levels preferred microalgae as an ingredient in baked goods, such as bread or biscuits, except for those aged over 65 years old, who would prefer microalgae to be introduced into soups or sauces, and those with no regulated studies, who preferred microalgae as an ingredient in pasta products (p<0.01).

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