

Introduction

Oranges are mainly consumed as fresh fruit,



Dried fruits are used as versatile foods,



One of the most appreciated proprieties of a snack



this study aims to create a new product by dehydration



processed orange (mostly as juice) are global commodity

as snacks or as an ingredient to enrich other foods

is presenting a crunchy texture

of sweet oranges in an innovative format

Methods

Dehydration (60°C) of the fruit pulp to obtain a multi-purpose product ($\leq 4\%$ of dry matter) as seen in the following figure.

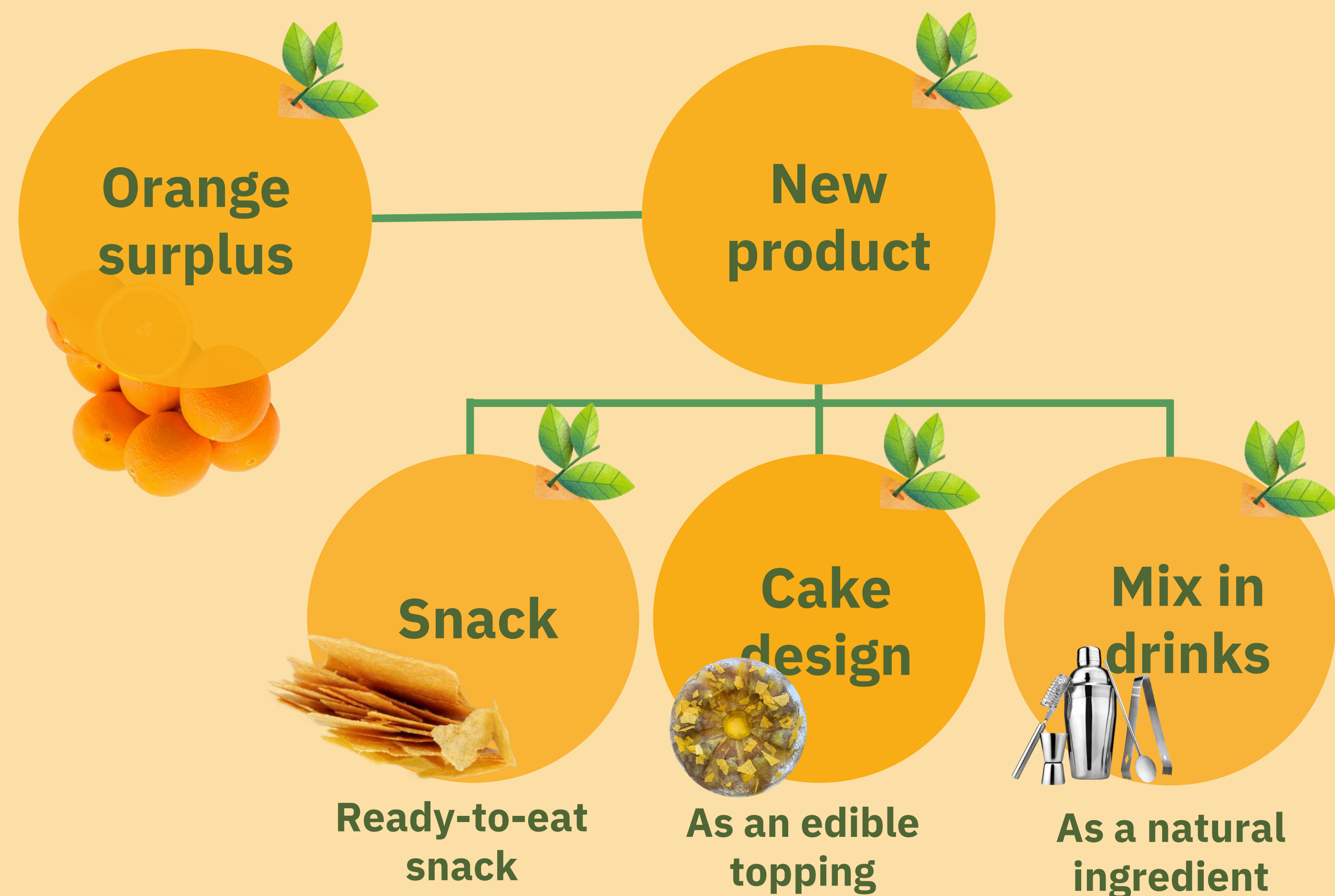


Fig 1 – Problem-solving by creating ready-to-eat multi-purpose snacks.

Results

With a ratio of 64% female – 36% male, an average age of 37 years (n=66), 95.5% of consumers would buy this product if available.

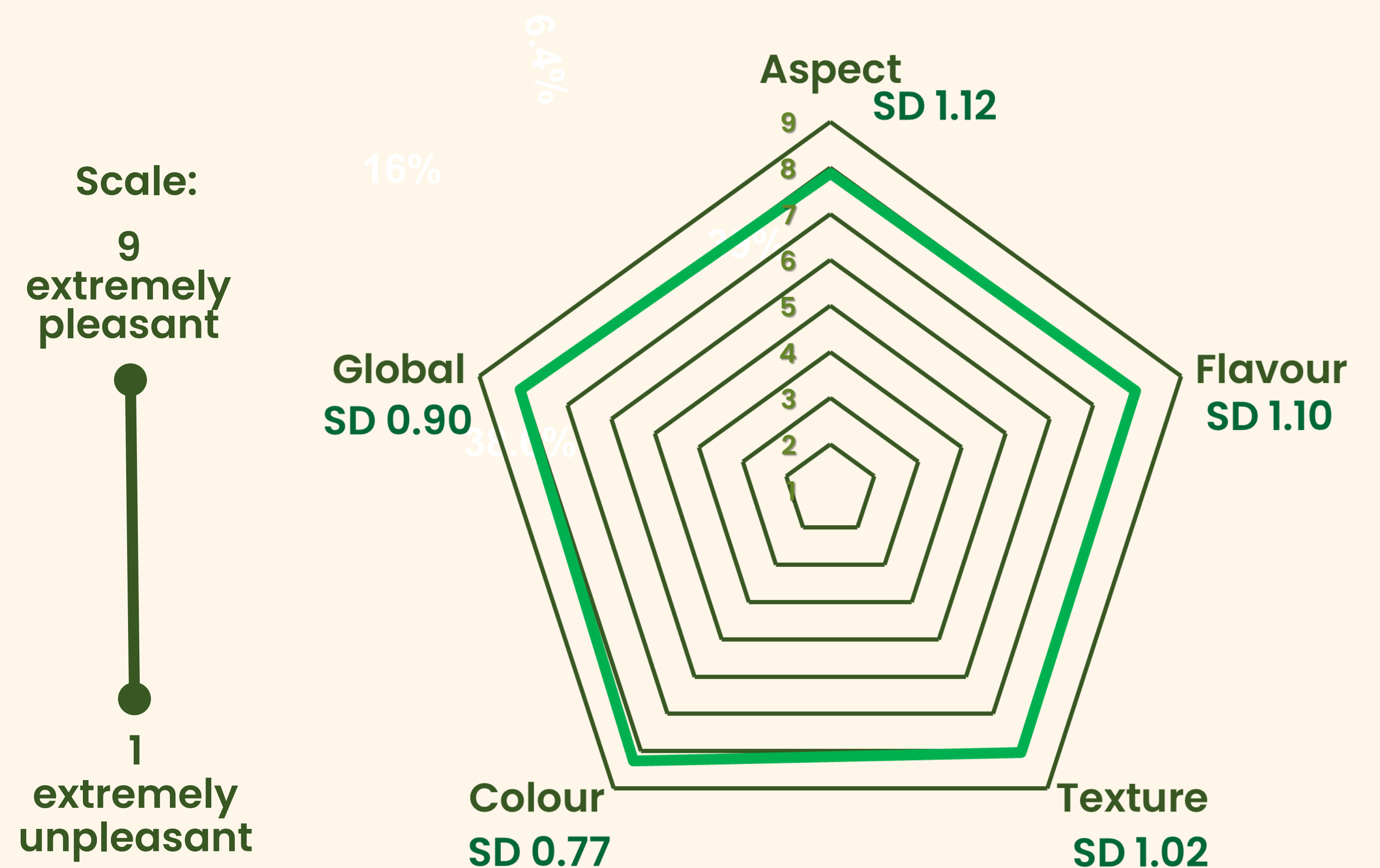


Fig2. Sensory evaluation of the orange snack.

Nutritional value

Although fibre is normally lost in the juice production process, in this snack the value actually increases (78.5%) from 0.44g/100g to 2.55g/100g.

Tab1. Presence of vectors in chestnuts.

	100 g	RDA*
Energy (kJ)	1582.23±1.40	19%
Energy (kcal)	372.98±0.34	19%
Total Carbohydrates (g)	85.08±0.01	34%
of wich sugars (g)	79.47±0.09	88%
Protein (g)	5.71±0.05	11%
Fat (g)	0.53±0.02	1%
of which saturated (g)	0.22±0.01	1%
Fibre (g)	2.55±0.01	10%
Salt (g)	0.02±0.00	0%
Humidity (%)	3.35±0.04	-
Ashes (g)	2.79±0.01	-

The low content of aw (free water available) limits enzymatic and chemical degradation reactions, as well as microbial development.



Fig3. Benefits of the product (aw 0.238).

Final considerations

- Multi-purpose food allows new market opportunities;
- Viable option for clean label market;
- Free of gluten and preservatives;
- Only naturally occurring sugars from fruit;
- Low fat and low saturated fat;
- Vegan.