

FAT AND OIL IN BAKERY PRODUCTS

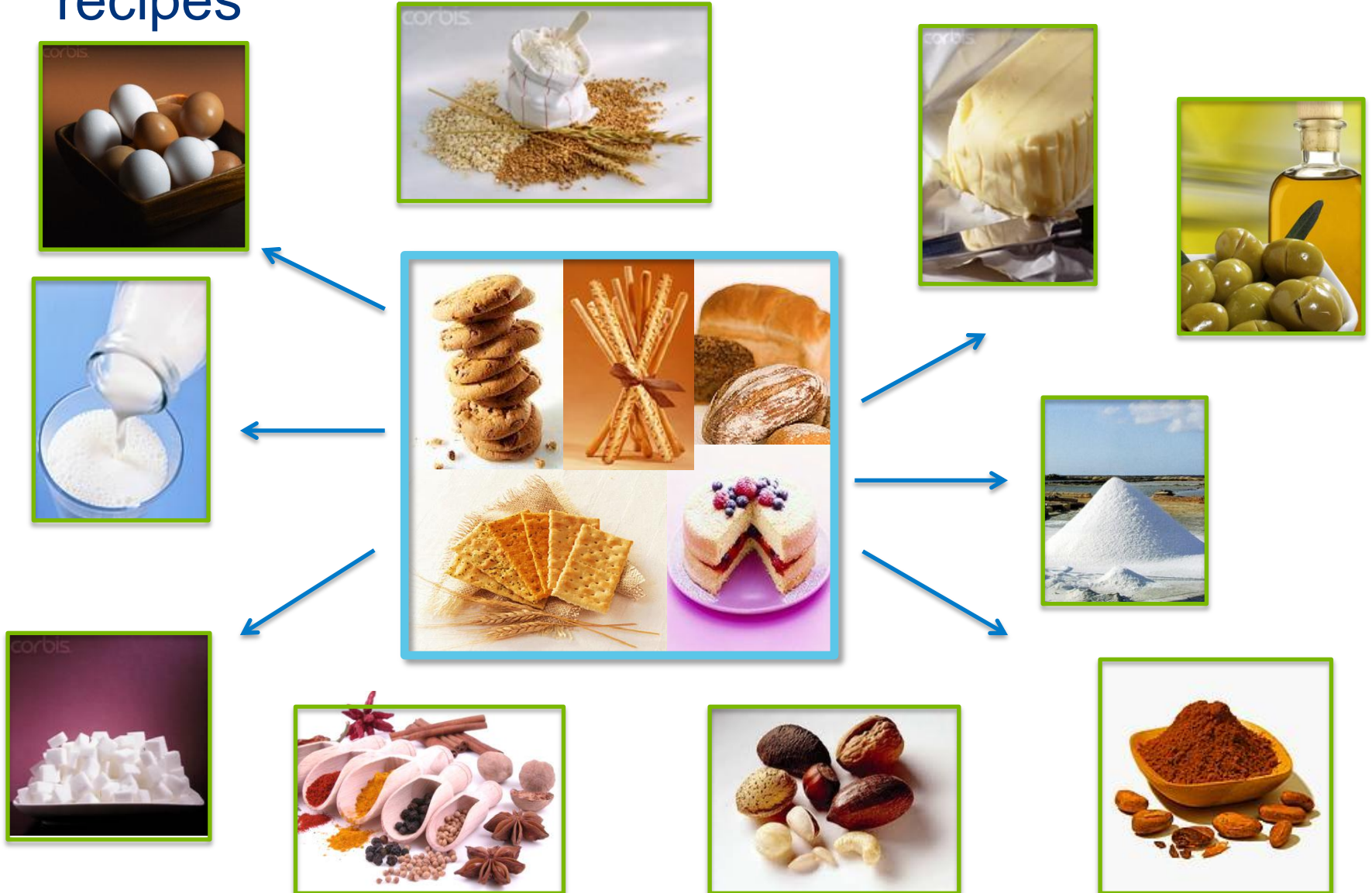


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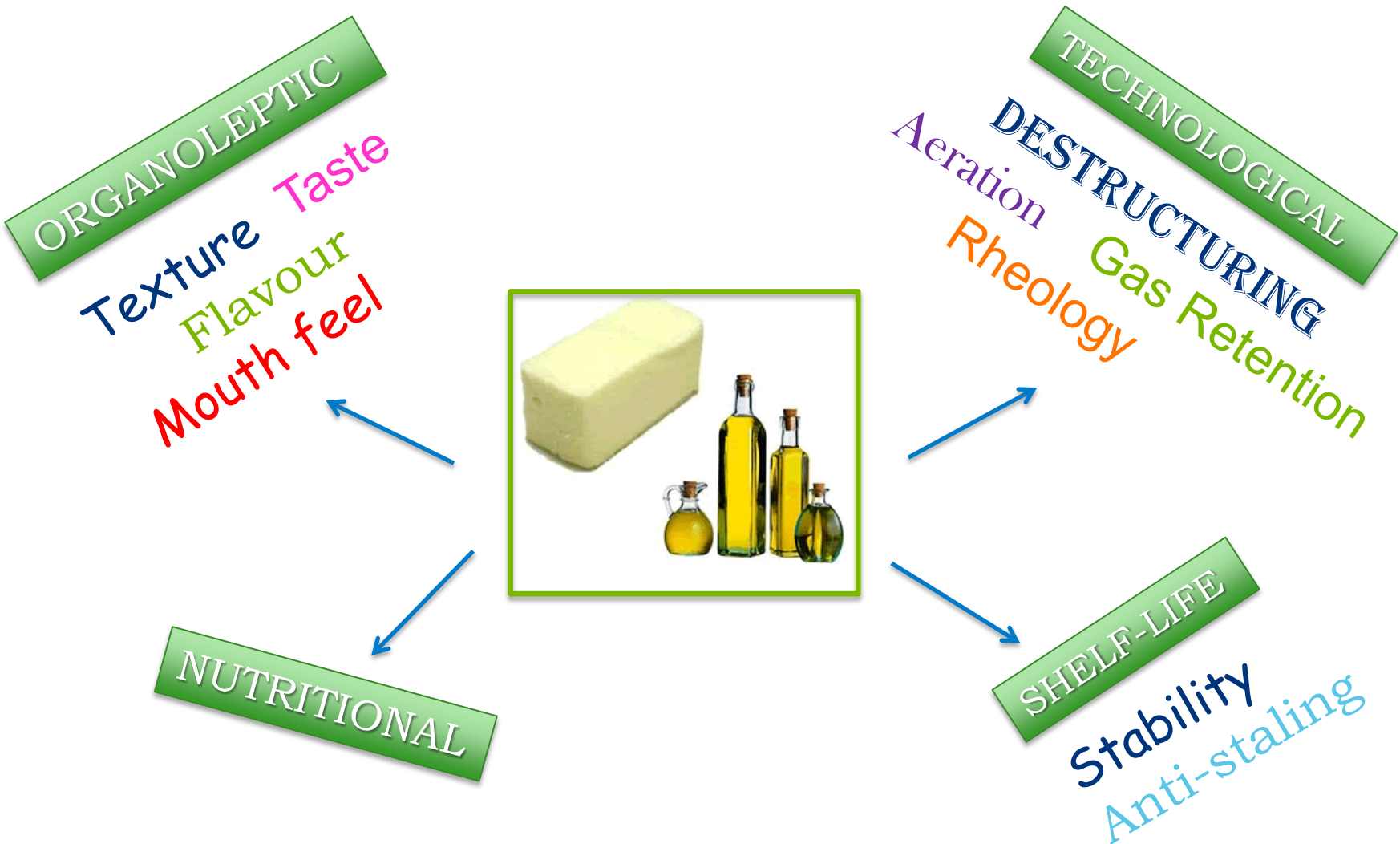
Presentation Content

1	Fat and Oil Role in Bakery Products
2	Type of Fat and Oil in Bakery Products
3	Olive and Extra Virgin Olive Oil
4	Sunflower and Rapeseed Oil
5	Palm fat
6	Butter
7	Nutritional improvement

The fats and oils are a key part of bakery product's recipes



Oil and fat play a key role in bakery products



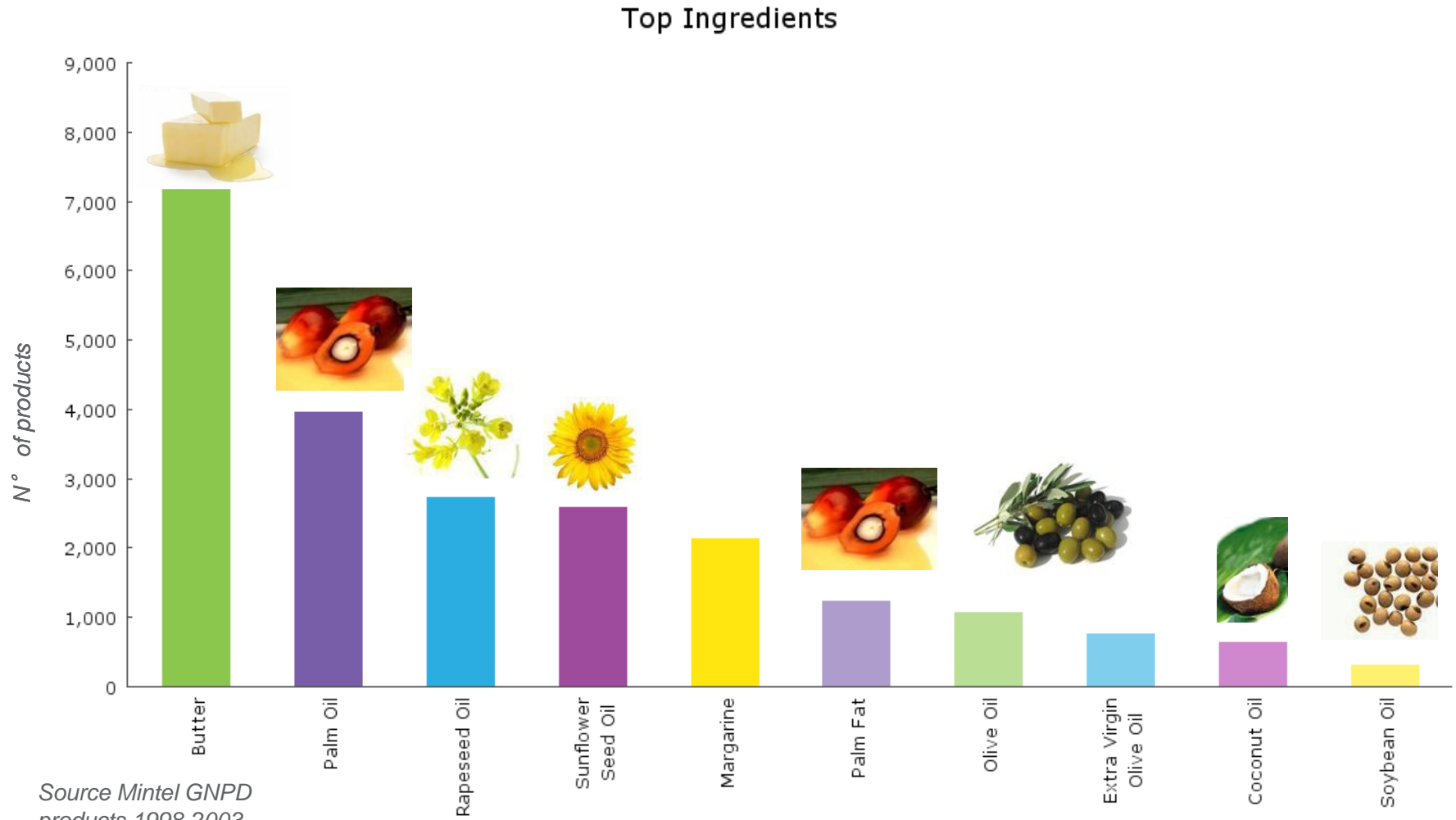
The average quantity of oils and fats in bakery products

Product	Added Fat
Yeast Leavened	10-15%
Batter	12-18%
Sponge	3%
Biscuit	15-20%
Bread	2-5%
Rusk	3-5%
Bread stick	5-10%

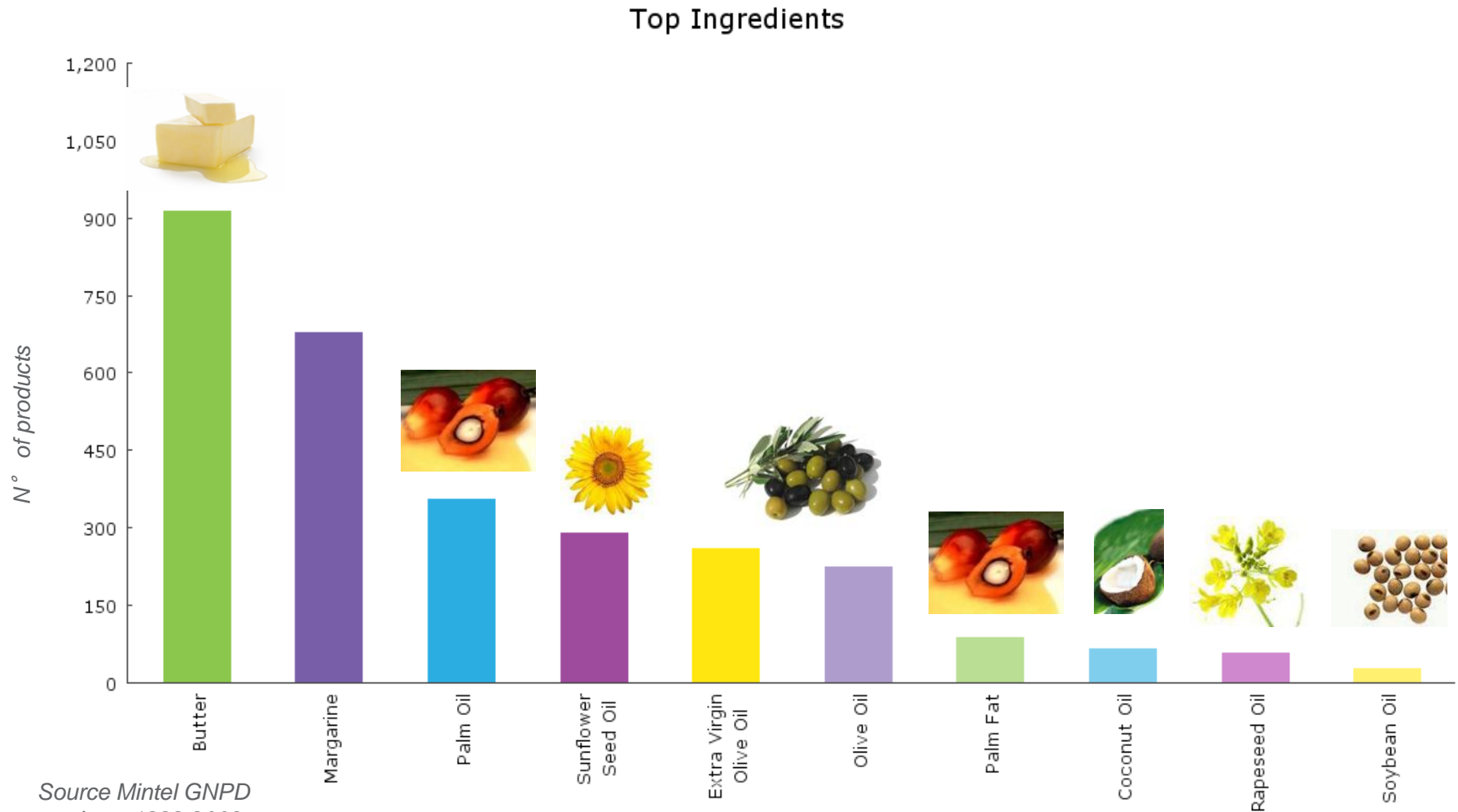
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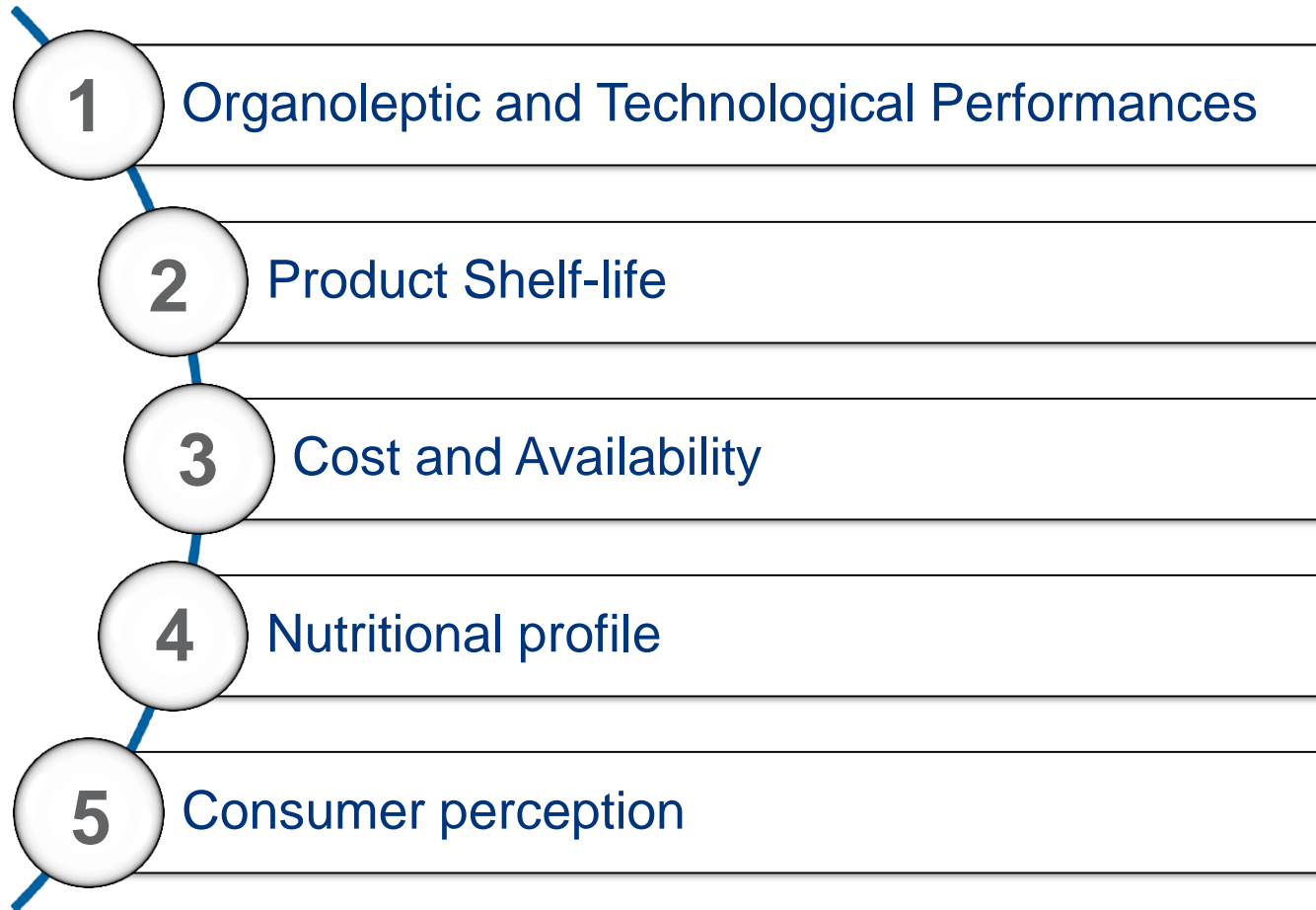
Butter and palm oil are the main fats used in bakery products in Europe



Butter and palm oil are also the main fats used in bakery products in Italy



There are 5 main drivers to select oils and fats for bakery products



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Olive oil and Extra Virgin Olive Oil (EVOO)



Organoleptic and Technological Performances

- Suitable for soft bread, dry bread and savoury snacks due to typical taste and flavour.
- Impact on dough rheology during mixing and forming

Product shelf-life

- Critical for long-shelf-life bakery products due to oxidation process
- Oil release on product surface

Cost and Availability

- Medium price volatility
- Global availability is affected by Spain olives crop

Nutritional profile

- Very good due to the amount of unsaturated fatty acids(~ 70% of MUFA and 10% of PUFA)

Consumer perception

- The oil of Italian and Mediterranean food tradition
- People know it very well and use it for cooking
- Healthy image

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Seed oils: Sunflower and Rapeseed



Organoleptic and Technological Performances

- Suitable for all bakery products
- Impact on dough rheology during mixing and forming
- Impact on product texture

Product shelf-life

- High oleic oils are more stable than conventional ones thanks to fatty acid composition (75-80% MUFA)
- Oil release on product surface

Cost and Availability

- Low price volatility
- Good market availability from different geographical origin

Nutritional profile

- Very good due to the high amount of unsaturated fatty acids (~ 80-90) and low amount of saturated fatty acids

Consumer perception

- Sunflower oil is well known and appreciated while rapeseed oil is not perceived as food oil in Italy
- Rapeseed oil is well-known in France and in the Nordics

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Palm fat



Organoleptic and Technological Performances

- Neutral taste and flavour
- High technological versatility due to its physical characteristics

Product shelf-life

- High resistance to oxidation

Cost and Availability

- The cheapest one
- Wide availability

Nutritional profile

- High amount of saturated fatty acid (50%)
- It can be blended with unsaturated oils to balance the fatty acid profile of foods

Consumer perception

- It isn't well known by people in Italy
- In some countries, like France and Norway, there is a lot of media pressure against palm fat.

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Organoleptic and Technological Performances

- Suitable for sweet bakery products due to the typical taste and flavour

Product shelf-life

- Butter from fresh milk cream guarantees better product shelf-life than one from whey or reprocessed butter in term of taste and flavour

Cost and Availability

- High price volatility (range 2-6 euro/kg)
- Sometimes lack of availability

Nutritional profile

- High amount of saturated fatty acid (70%) and cholesterol

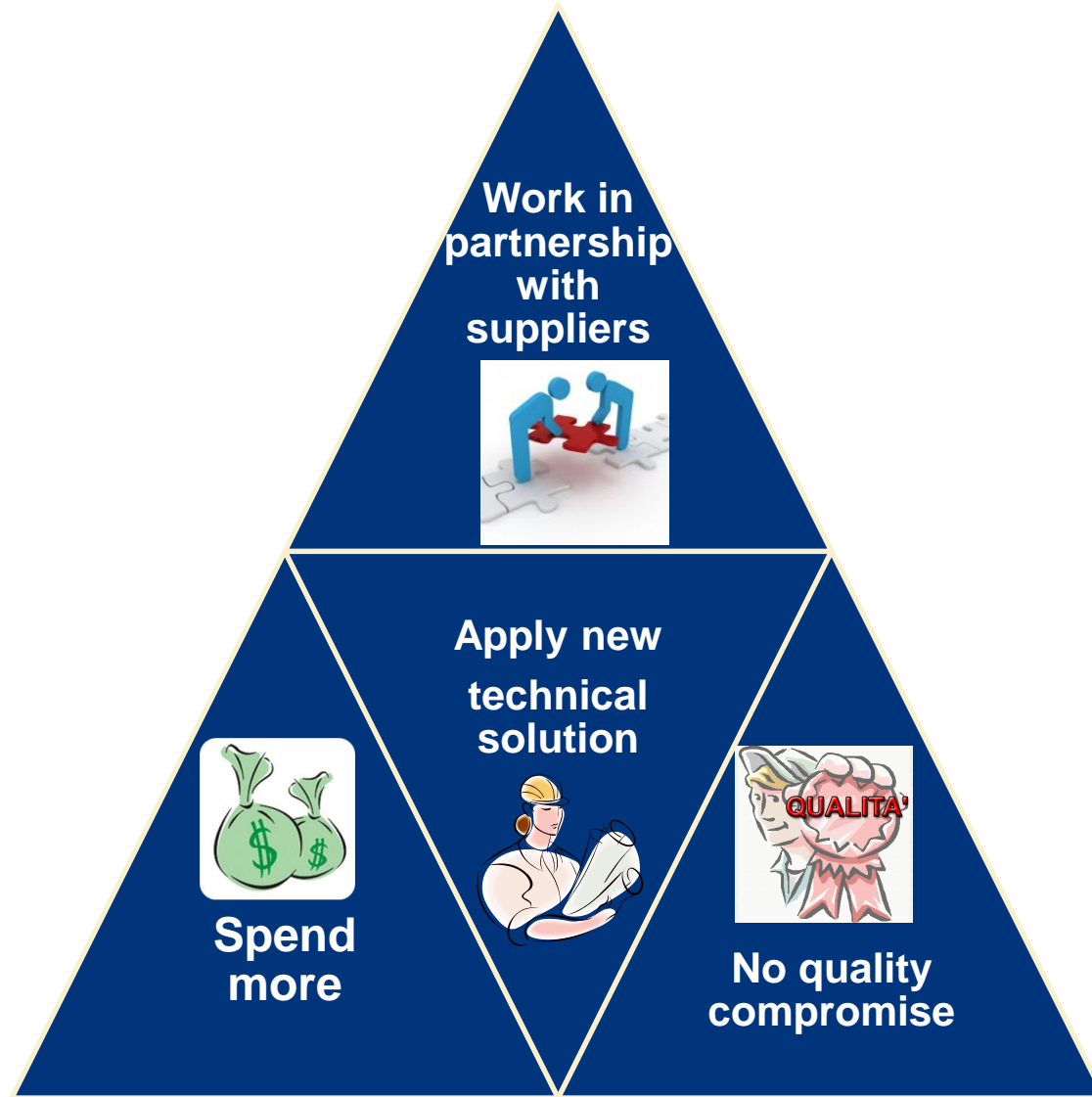
Consumer perception

- It is well know, people commonly use at home
- It is part of food tradition in many European countries

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The key 4 rules to obtain good results in fat substitution



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