

# QUALITY TABLE OLIVES



olivesir

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## Today's Discussion

- Different perspective
- How do we juggle quality, food safety and customer demands?
- Industry Standards are well-known
- Lets be aware of fads which may compromise the integrity of the industry
- While being flexible

# Definition of Table Olives

‘....the sound fruit of **specific varieties** of the cultivated olive tree (*Olea europaea sativa*), harvested at the **proper stage of ripeness** and whose quality is such that, when they are **suitably processed** as specified in this standard, produce an edible product and ensure its **good preservation** as marketable goods. Such processing may include the addition of various products or spices of good table quality’.

## Raw Material

The olive is known as a drupe – defined as a fleshy stone-fruit and consists of:

- epicarp
- mesocarp
- endocarp

But differs from other fruit in that:

- has a low sugar content 2.5 – 6%
- has a high lipid content 17 - 30%
- contains oleuropein

## Reducing sugar content – naturally black olives

<b>Cultivar</b>	<b>Sugar content</b> (glucose/100g wet flesh)
• Hojiblanca (Spanish)	2.08
• Lechin (Spanish)	3.00
• Verdial (Spanish)	1.60
• Gemlik (Turkish)	4.45
• Edencik (Turkish)	5.94
• Konservolea (Greece)	2.92

# Ask the Right Questions

- Does the market want?
- What does the market know?
- What is the grower producing?
- What is the objective of the processor?
- How long will the product be on the shelf?
- What will the product look like in 12 months?
- What will the product taste like in 12 months?



## Taste matters

- Flavour and taste are pre-eminent food qualities – and more important than convenience or cost
- Consumers are looking for bold and authentic natural flavours
- Globalisation is encouraging culinary discovery
- Today - natural, local and contribution to healthy lifestyle are becoming paramount



# What constitutes Food Quality?

- food safety
- nutritional quality
- appearance
- organoleptic quality
  - olfactory (smell)
  - gustatory (taste)
  - tactile (mouthfeel)

Total quality management

- Appearance







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# Appearance

- **COLOUR** – uniformity and glossiness
  - 20-40% of total score
  - immediately apparent
  - conveys lots of info – degree of ripeness, processing method





# Appearance

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  - immediately apparent
  - conveys lots of info – degree of ripeness, processing method
- shape
- texture
  - shrivelling, fissures etc



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- Aroma





## Aroma



Fig. 6.3 – The two means of aroma perception. (a) The nostrils are the anterior nares. (b) the openings at the back of the throat are the posterior nares or choana  
(Source: Pfenninger et al. 1975)

# Olfactory sensations

- smell is a chemical reaction of volatile compounds
- volatiles caused by:
  - enzyme reactions / metabolites
  - method of processing
  - fermentation type – this is the major cause of malodorous notes
- Need more research into mechanisms of aroma formation and of deterioration

- Taste  
and  
texture





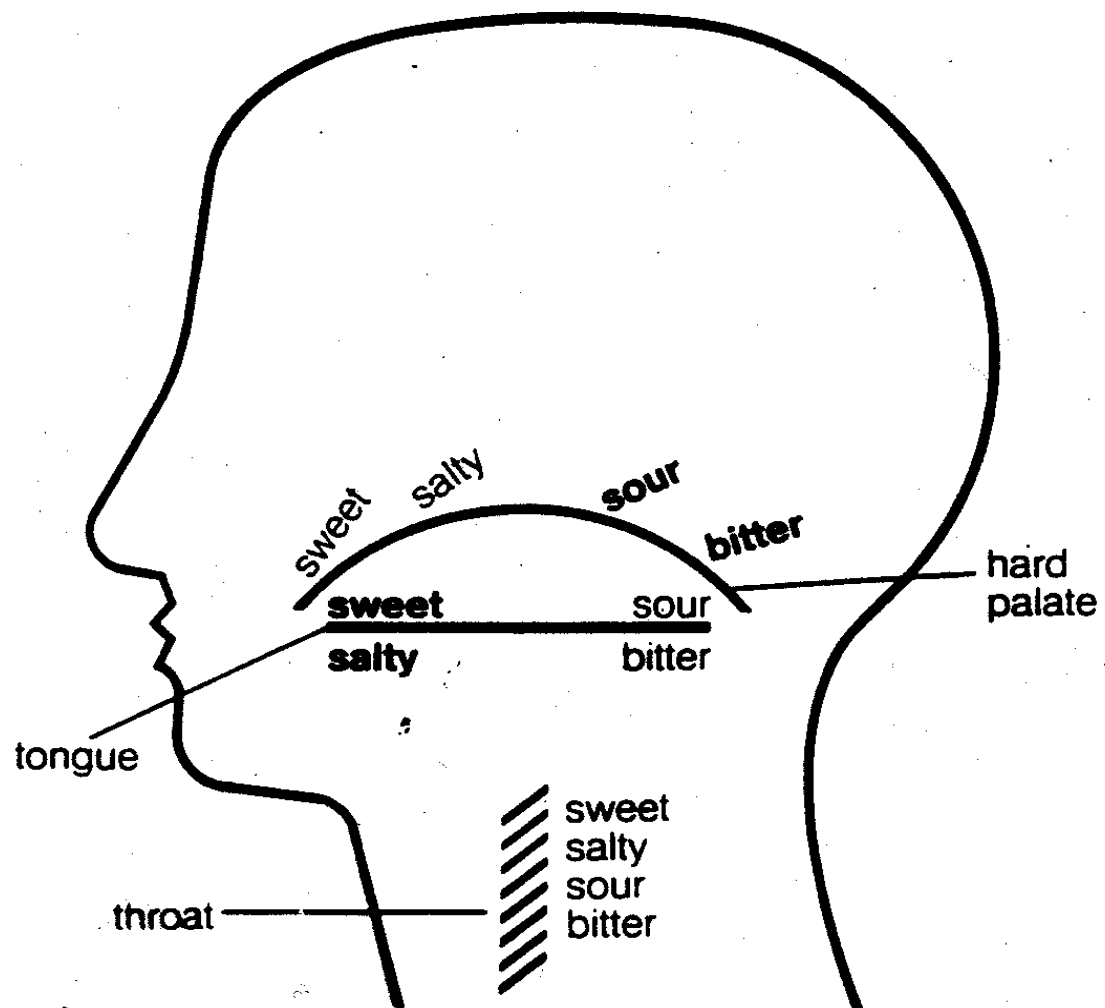


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# Taste and Texture

- Taste buds – 5 tastes  
sweet, acid, salty, bitter and umami

## Taste



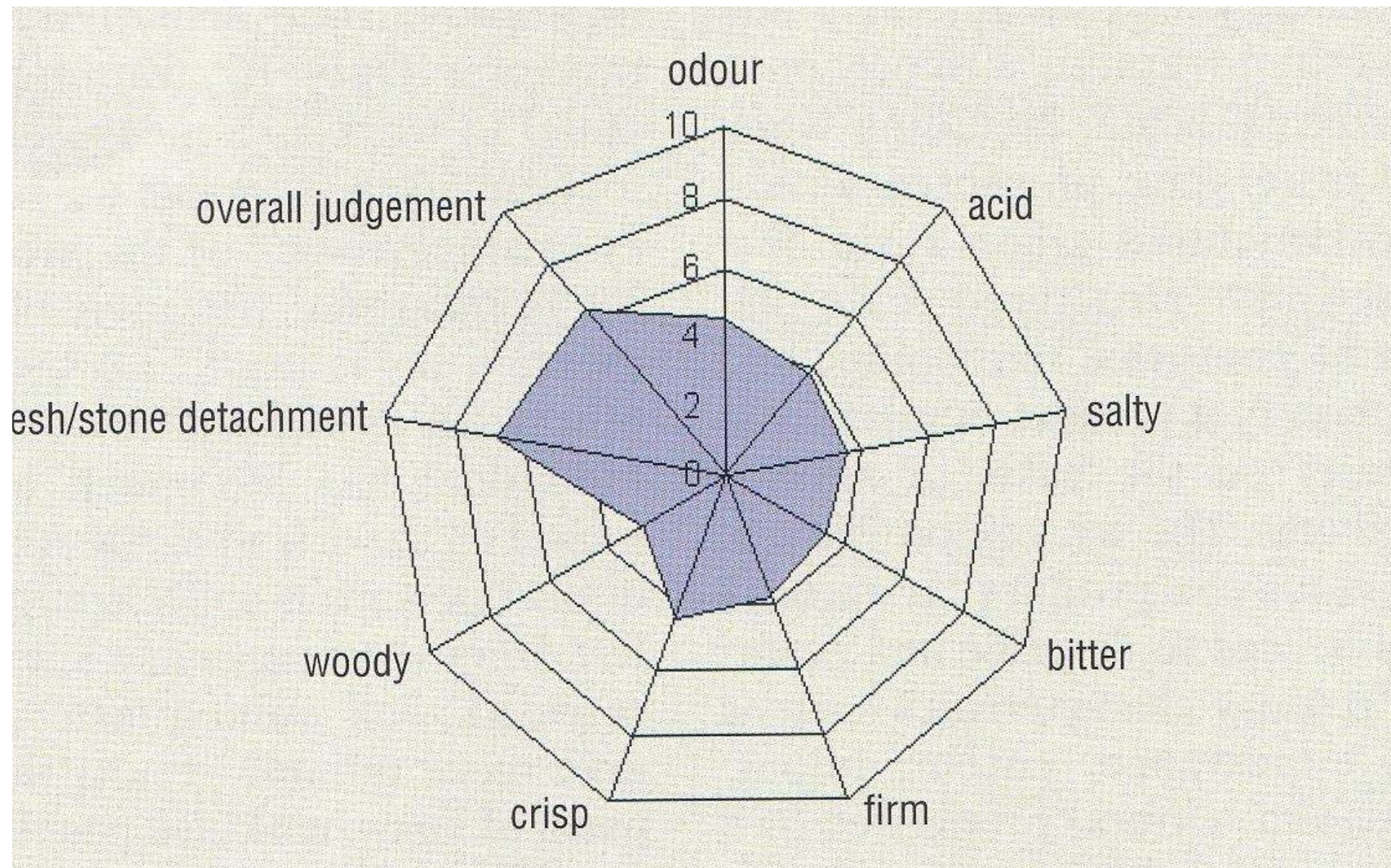
# Taste and Texture

- Taste buds – 5 tastes  
sweet, acid, salty, bitter and umami
- Tactile – mouthfeel
  - depends on the physical structure
  - consistency can be easily measured
  - factors which affect consistency
  - rough or smooth kernel/pit

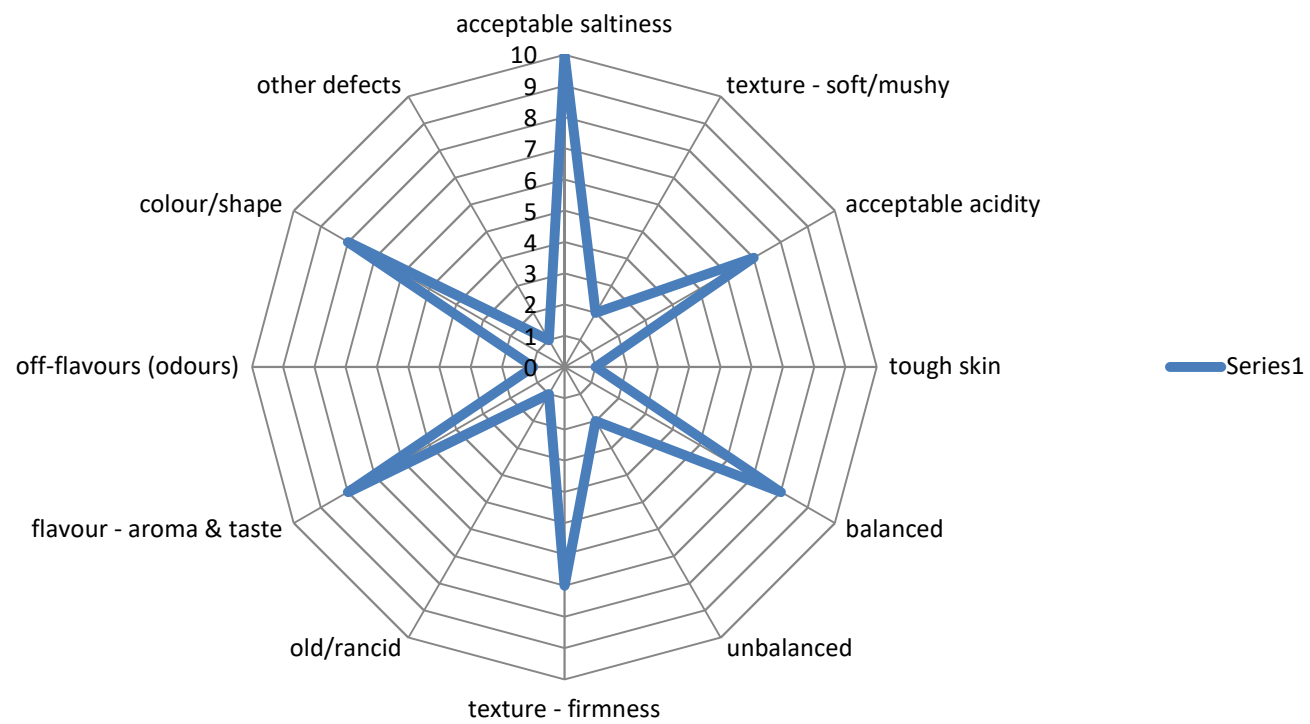
# Evaluation

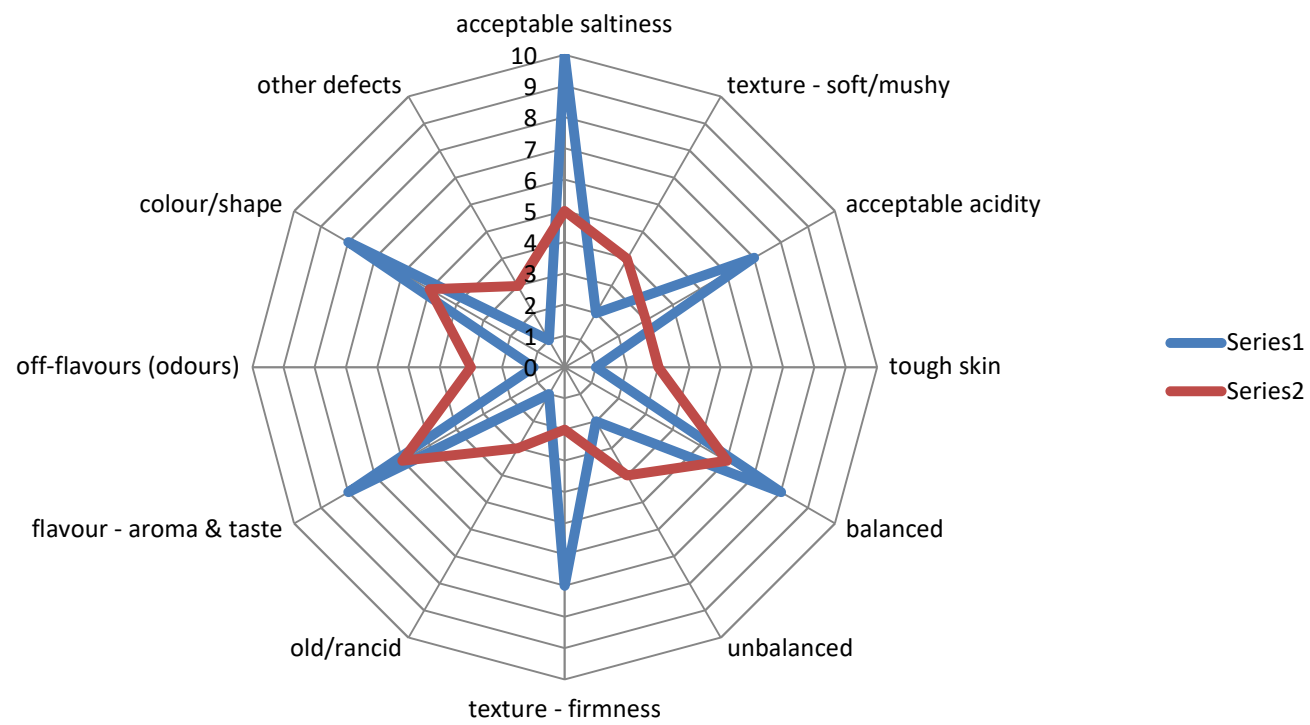
- Minefield
- Subjective
- Difficult to manage











## Methods Galore

- Many traditional methods
- Concept of 'Ready to Eat' – what does this mean?
  - Not bitter?
  - Grave implications - debittered unfermented olives
  - Pose huge health risks
- Customers love them
- Treated, oxidised black olives – high acrylamide levels
- Best procedures - fully fermented olives, where sufficient sugars are present to form sufficient lactic acid to lower pH to 4

## Conclusion

- Let's approach table olive processing from a solid principled base
- Listening to the market
- Let's make quality Table Olives fun and sexy
- And provide the glass slipper for our Cinderella!

Thank you very much.