



## ATTACHMENT XI

# Examples of 'Natural <X> Flavouring'

- **According to Article 16(4) of Flavouring Regulation (EC) No 1334/2008 and Recital (26)**
- **Application of the "95/5-rule"**

- Article 16(2) stipulates that the term 'natural' for the description of a flavouring may only be used if the **flavouring component** comprises only flavouring preparations and/or natural flavouring substances.
- Article 16(4) further qualifies that the term 'natural' may only be used in combination with a reference to a food, food category or a vegetable or animal flavouring source if the flavouring component has been obtained exclusively or by at least 95 % by w/w from the source material referred to.
- The wording of the Regulation indicates that when considering a "flavouring preparation" – as part of the "flavouring component" of a given "natural <X> flavouring" – in the quantitative determination pursuant to Art. 16(4), the entire "flavouring preparation" has to be taken into account.
- Additional information: According to Article 3(4), flavourings may contain food additives as permitted by Regulation (EC) No 1333/2008 and/or other food ingredients incorporated for technological purposes.
- The Commission Services consider that when assessing the "95/5-ratio" of a "flavouring component", it is necessary to take into account the amount of "flavouring preparations" and "natural flavouring substances" from the labelled source compared to the total amount of flavouring component. According to the Commission Services, the entire flavouring preparation from the labelled source should be included for the purpose of this measurement.
- This interpretation has been confirmed by the competent EU Commission Services and the broad majority of the Members of the Standing Committee on the Food Chain and Animal Health (SCoFCAH). [Standing Committee on Food Chain and Animal Health, section Toxicology, 11 January 2013]
- Hence in the following examples (natural strawberry flavouring and natural lemon flavouring) – when assessing the 95/5-ratio of the flavouring component, it is necessary to take into account the entire flavouring preparation derived from the source materials (strawberry or lemon in our examples). This includes:
  - Constituents that are naturally present in a flavouring preparation due to their presence in the source material (e.g. water, intrinsically present in strawberries 90%)
  - Remaining amounts of 'foods or food ingredients' that were used as extraction solvents within the scope of Directive 2009/32 during the manufacturing process.

# Composition of a strawberry

	Value g/100 g
Water	90
Fat	0,40
of which saturated	0,04
Carbohydrates	5,51
of which sugars	4,40
Polyols	0,06
Fibers	1,63
Protein	0,82



Other constituents	Value g/100 g
Acids, minerals and flavouring materials	1,58

Source: Souci, Fachmann & Kraut (2016), *Die Zusammensetzung der Lebensmittel Nährwert-Tabellen*, 8<sup>th</sup> Auflage

## An illustrative example of a commercial « Natural strawberry flavouring » according to Art. 16 (4) (95/5-ratio)

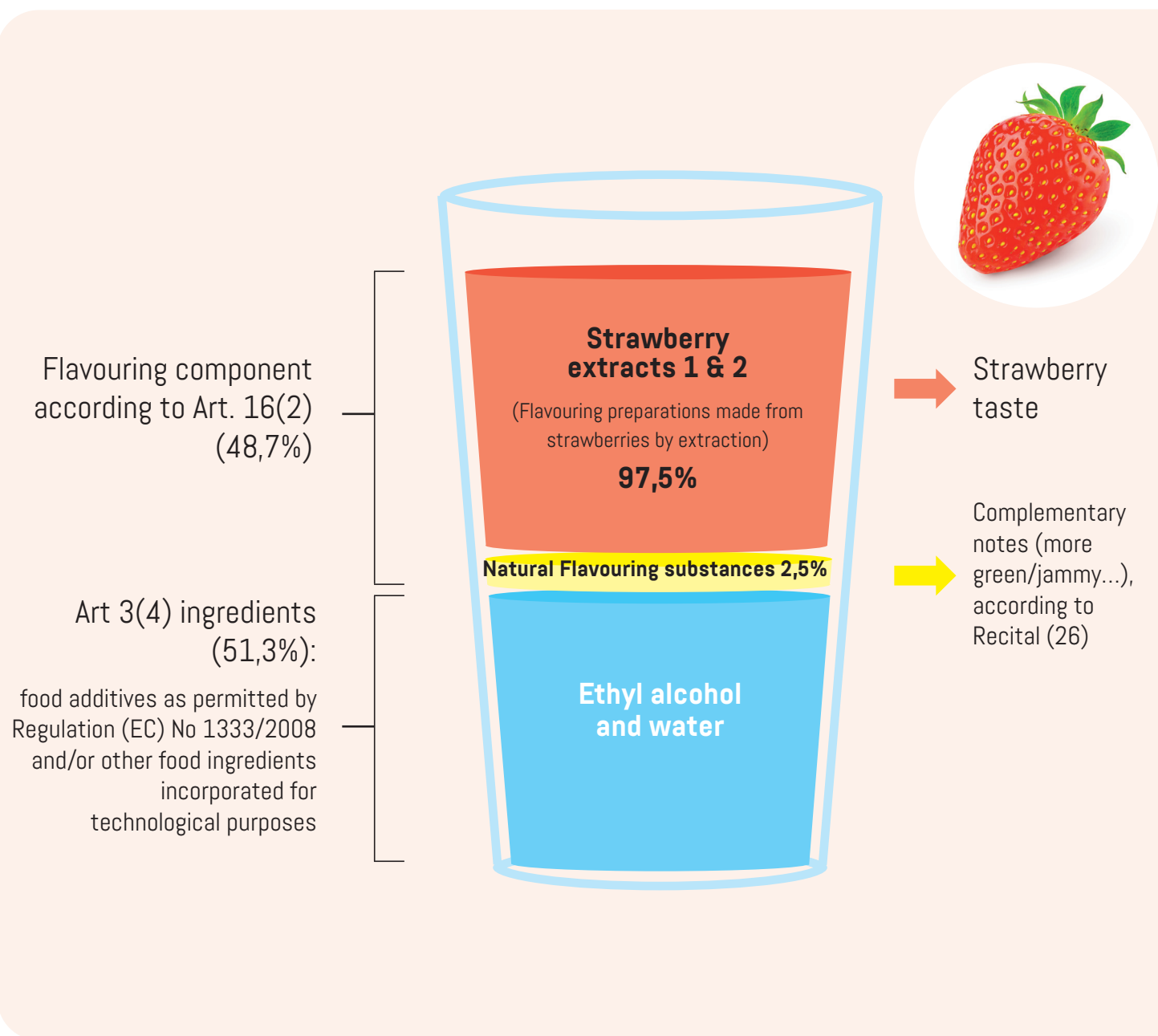
Part of the flavouring	Ingredients (Flavouring component and other ingredients)		Quantity / 100g flavouring	Quantity % of the flavouring component	
Flavouring component according to Art. 16(2)	Flavouring preparation	Strawberry extract n°1*	32,8g	67,3%	97,5% w/w of the flavouring component issued from the named source (strawberry)
	Flavouring preparation	Strawberry extract n°2*	14,7g	30,2%	
	Natural flavouring substances	ethyl butyrate furanol <i>cis</i> -3-hexenol	1,2g	2,5%	2,5% w/w of the flavouring component from substances not issued from the named source (strawberry)
Art. 3(4) ingredients	Solvents and/or carriers	Water/Ethanol	51,3g		

Total = 100g

Dosage of natural strawberry flavouring in the final food (depending on the matrix): 0,2-0,3%

\* "extracts" = Flavouring preparations made from strawberries by extraction

## Example of a Natural strawberry flavouring



# An illustrative example of a commercial « Natural lemon flavouring » according to Art. 16(4) (95/5-ratio)

Part of the flavouring	Ingredients (Flavouring component and other ingredients)		Quantity / 100g flavouring	Quantity % of the flavouring component	
Flavouring component according to Art. 16(2)	Flavouring preparation	Lemon extract n°1*	40,0g	40,0%	97,6% w/w of the flavouring component issued from the named source (lemon)
	Flavouring preparation	Lemon extract n°2*	24,0g	24,0%	
	Flavouring preparation	Lemon extract n°3*	20,0g	20,0%	
	Flavouring preparation	Lemon extract n°4*	8,0g	8,0%	
	Flavouring preparation	Lemon extract n°5*	5,6g	5,6%	
	Flavouring preparation	Orange oil	0,1g	0,1%	2,4% w/w of the flavouring component from other preparations and substances not issued from the named source (lemon)
	Natural flavouring substances	Linalool Geranyl acetate Geraniol	2,3g	2,3%	
Art. 3(4) ingredients	Solvents and/or carriers	None	0g		

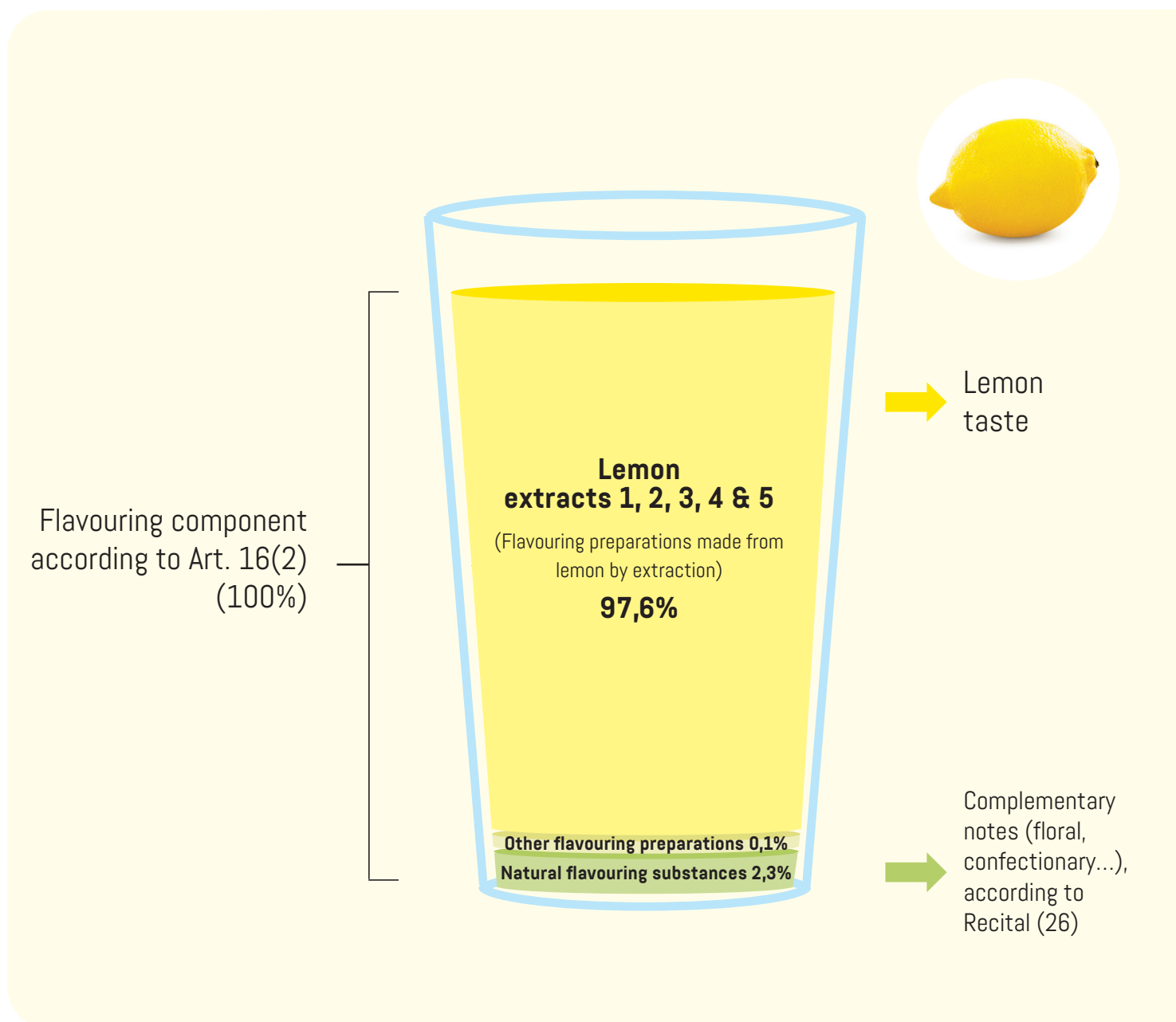
Total = 100g

Dosage of natural lemon flavouring in the final food (depending on the matrix): 0,03 - 0,3%

\* "extracts" = Flavouring preparations made from lemon by extraction



## Example of a Natural lemon flavouring



# An illustrative example of a commercial « Natural lemon flavouring » according to Art. 16(4) (95/5-ratio)

Part of the flavouring	Ingredients (Flavouring component and other ingredients)		Quantity / 100g flavouring	Quantity % of the flavouring component	
Flavouring component according to Art. 16(2)	Flavouring preparation	Lemon extract n°1*	10,5g	95,5%	96,4% w/w of the flavouring component issued from the named source (lemon)
	Flavouring preparation	Lemon extract n°2*	0,1g	0,9%	
	Flavouring preparation	Lime extract	0,1g	0,9%	3,6% w/w of the flavouring component from other preparations and substances not issued from the named source (lemon)
	Flavouring preparation	Peppermint extract	0,1g	0,9%	
	Natural flavouring substance	Beta-pinene	0,2g	1,8%	
Art. 3(4) ingredients	Solvents and/or carriers	Ethanol, Propylene glycol	89g		
<b>Total = 100g</b>					

Dosage of natural lemon flavouring in the final food (depending on the matrix): 0,1 - 0,6%

\* "extracts" = Flavouring preparations made from lemon by extraction



## Example of a Natural lemon flavouring

