

Citrus consumption trends in Europe

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European tools to stimulate consumption

A favorable «political» context for the citrus category

- ▶ **Farm to Fork Strategy:** Promoting sustainable food consumption and facilitating the shift to healthy, sustainable diets
- ▶ **EU beating cancer action plan:** Improving health promotion through access to healthy diets and physical activity
- ▶ **European School scheme** and child guarantee: guaranteeing for children in need effective access to sufficient and healthy nutrition, including through the EU school fruit, vegetables and milk scheme



European Commission | #EUCancerPlan

The infographic has a light grey background. At the top, it asks 'What is the Child Guarantee?'. Below, it states 'The Child Guarantee is a European initiative that will help ensure that children in Europe have access to the following key services:'. A circular diagram with five colored segments (orange, yellow, green, blue, teal) contains icons for a heart, a graduation cap, a school building, a house, and a plate. Text labels around the circle are: 'Free Health Care', 'Free Education', 'Decent Housing', 'Adequate Nutrition', and 'Free Child Care'. To the right is a photo of a young boy smiling and holding two oranges in front of his eyes.

A favorable «marketing » context for the citrus category

- ▶ EUR **180 million annually** for promotion of European agri-food inside and outside the EU
- ▶ Fruits & vegetables’ proposals face **strong competition** with wide variety of other sector for promotion budget- but fruit and veg have a dedicated budget of > 19 Mio €
- ▶ EU promotion is being re-directed at « new » topics dedicated to **sustainability in line with F2F objectives** (sustainable production, biodiversity preservation, organics, food waste & loss, etc.)
- ▶ EU co-Financing at **70- 80%**

THE CHALLENGES

- Identify the European and Spanish lemons with the Mediterranean Star
- Maximize the lemons' value for the European consumer
- Going steadily to the welfare of the production model in Europe, such as freshness, certified quality, traceability and sustainability
- Make the European lemons the favorite of consumers compared to other countries
- Reduce raw generation, promoting zero waste

WELCOME TO THE LEMON AGE

LEMON ART, LEEMON SPORT, LEEMON COOK & DRINK, LEEMON RECIPES

ACTIONS MIX

LEMON ART, LEEMON SPORT, LEEMON COOK & DRINK, LEEMON RECIPES

CAMPAIGN PIECES

CAMPAIGN VIDEOS

Through a vibrant, fun, and memorable video to an online search engine, we have been able to reach the origin of its properties. It is from here and continue. Download them all on our YouTube channel!

VIDEO RECIPES

For all with a taste of lemon you have something good to say something even better? Discover and for this we have created 18 video recipes, prepared by chefs and ambassadors from Spain, France and Germany, with the lemons as the protagonist. Discover them all on our website!

EVENTS

LEMON ART

A European artists were inspired by our lemons to create the most beautiful exhibition of Europe. A series of masterpieces, that we have exhibited in different cities of Spain.

LEMON SPORT

A campaign with the lemon as the protagonist is needed to complete without apple... and without chocolate! Therefore, we have counted on our 3 sports ambassadors.

SOCIAL RESPONSIBILITY

ACTION AGAINST BREAST CANCER

On World Day Against Breast Cancer, we only carry out a CSR action to show you our support to all women who have been through it. We created a t-shirt that we wanted to make available to all people, to show the following to "Empower their lemons!"

EUROPE PROMOTES A HEALTHY FUTURE

WELCOME TO THE LEMON AGE

WITH LEMONS FROM SPAIN

LEMON FROM SPAIN

ENJOY IT'S FROM EUROPE

A (un)favorable(?) «health & nutrition» context for the citrus category

- ▶ **Strict (European) regulation on authorized claims for consumer protection**
- ▶ **No specific claims authorized for citrus**
- ▶ Nutrition claim can be used through a general health claim referring to a specific nutrient/mineral.

World Citrus Organisation

Nutritional Composition Clementine

Nutrient	Per 100g
Water	85.77 g
Energy	53 kcal
Protein	0.81 g
Total fat	0.31 g
Carbohydrate	13.34 g
Fibre	3.9 g
Sugars	10.58 g
Calcium	27 mg
Iron	0.15 mg
Magnesium	12 mg
Phosphorus	20 mg
Potassium	366 mg
Sodium	2 mg
Zinc	0.07 mg
Copper	0.042 mg
Selenium	0.1 µg
Vitamin C	26.7 mg
Thiamin	0.035 mg
Riboflavin	0.036 mg
Niacin	0.376 mg
Vitamin B6	0.076 mg
Folate	16 µg
Choline	10.2 mg
Vitamin B12	0 µg
Vitamin A	34 µg
Carotene (beta)	159 µg
Carotene (alpha)	107 µg
Cryptoxanthin (beta)	107 µg
Lutein & zeaxanthin	158 µg
Vitamin E	10.2 mg
Fatty acids, total saturated	0.039 g
Fatty acids, total monounsaturated	0.06 g
Fatty acids, total polyunsaturated (cholesterol)	0.065 g
Cholesterol	0 mg

Source: USDA - 'Clementine, raw'

World Citrus Organisation

Nutritional Composition Orange

Nutrient	Per 100g
Water	86.75 g
Energy	47 kcal
Protein	0.94 g
Total fat	0.12 g
Carbohydrate	11.75 g
Fibre	2.4 g
Sugars	9.35 g
Calcium	40 mg
Iron	0.1 mg
Magnesium	11 mg
Phosphorus	14 mg
Potassium	391 mg
Sodium	0 mg
Zinc	0.07 mg
Copper	0.045 mg
Selenium	0.2 µg
Vitamin C	53.2 mg
Thiamin	0.097 mg
Riboflavin	0.04 mg
Niacin	0.282 mg
Vitamin B6	0.06 mg
Folate	30 µg
Choline	8.4 µg
Vitamin B12	0 g
Vitamin A	11 µg
Carotene (beta)	71 µg
Carotene (alpha)	11 µg
Cryptoxanthin (beta)	116 µg
Lutein & zeaxanthin	129 µg
Vitamin E	0.18 mg
Fatty acids, total saturated	0.015 g
Fatty acids, total monounsaturated	0.021 g
Fatty acids, total polyunsaturated	0.025 g
Cholesterol	0 g

Source: USDA - 'Orange, raw'

World Citrus Organisation

Nutritional Composition Lemon

Nutrient	Per 100g
Water	88.98 g
Energy	29 kcal
Protein	1.1 g
Total fat	0.3 g
Carbohydrate	9.32 g
Fibre	2.5 g
Sugars	2.5 g
Calcium	26 mg
Iron	0.5 mg
Magnesium	8 mg
Phosphorus	16 mg
Potassium	188 mg
Sodium	2 mg
Zinc	0.08 mg
Copper	2 mg
Selenium	0.4 µg
Vitamin C	53 mg
Thiamin	0.04 mg
Riboflavin	0.02 mg
Niacin	0.1 mg
Vitamin B6	0.028 mg
Folate	11 µg
Choline	51 µg
Vitamin B12	0 g
Vitamin A	1 µg
Carotene (beta)	3 µg
Carotene (alpha)	1 µg
Cryptoxanthin (beta)	202 µg
Lutein & zeaxanthin	11 µg
Vitamin E	0.15 mg
Fatty acids, total saturated	0.039 g
Fatty acids, total monounsaturated	0.031 g
Fatty acids, total polyunsaturated (cholesterol)	0.069 g
Cholesterol	0 g

Source: USDA - 'Lemon, raw'



'EU Nutritional Claims Cheat Sheet': How to use nutrition & health claims for citrus fruit in EU market?

1. Nutritional information on citrus: where to find referential values?

The composition of fruits and vegetables differs substantially. Even within the same fruit it can vary according to many factors, such as the type of cultivar, the plant growing conditions (e.g. soil composition, climate, fertilizer use), post-harvest handling, distribution and storage conditions as well as the ripeness of the final produce.

It is therefore difficult to find a reference figure for the nutritional composition of fresh citrus fruit varieties, as well as citrus juice. Different varieties and origins may have different values. However, there exist some official sources which may be used as a quick reliable source of health and nutrition information for citrus:

- [USDA Database](#) (in English)
- [COQUAL Database](#) (in English and French)
- [EFSA database](#) (EU countries data compilation for multiple F&V, in English)
- [Norway national database](#)
- [Dutch national database](#)

2. Definitions: nutrition claim & health claim

Identifying correctly nutrition and health claims is essential to the creation of health-related communication content in line with EU legislation:

Nutrition claim	Any claim which states, suggests or implies that a food has particular beneficial nutritional properties due to: (a) the energy (calorific value) it (i) provides; (ii) provides at a reduced or increased rate; or (iii) does not provide; and/or (b) the nutrients or other substances it (i) contains, (ii) contains in reduced or increased proportions; or (iii) does not contain.
Health claim	Any claim that states, suggests or implies that a relationship exists between a food category, a food or one of its constituents and health. There are 3 main types of health claims. 1) Function health claims: Relate to growth, development, functions of

WCO work in Health & Nutrition to boost positioning of the sector

A favorable «health & nutrition »context » for the citrus category

 World Citrus Organisation

Nutrition Facts

Oranges are high in **Vitamin C**.
Vitamin C contributes to normal collagen formation for the normal function of cartilage which keep our articulations running.

Learn about citrus nutrition & health with WCO.



 World Citrus Organisation

Nutrition Facts

Lemons are high in **Vitamin C**.
Vitamin C contributes to normal collagen formation for the normal function of bones.

Learn about citrus nutrition & health with WCO.



 World Citrus Organisation

Nutrition Facts

Limes are high in **Vitamin C**.
Vitamin C contributes to normal collagen formation for the normal function of blood vessels.

Learn about citrus nutrition & health with WCO.



 World Citrus Organisation

Nutrition Facts

Citrus are high in **Vitamin C**.
Vitamin C contributes to the normal function of the immune system during and after intense physical exercise.

Learn about citrus nutrition & health with WCO.



 World Citrus Organisation

Nutrition Facts

Soft citrus are high in **Vitamin C**.
Vitamin C increases iron absorption, which is essential for our cells to transport oxygen.

Learn about citrus nutrition & health with WCO.



 World Citrus Organisation

Nutrition Facts

Grapefruits are high in **Vitamin C**.
Vitamin C contributes to normal collagen formation for the normal function of teeth.

Learn about citrus nutrition & health with WCO.



WCO work in Health & Nutrition to boost positioning of the sector

Consumption trends in the major EU markets

Results of promotion efforts: EU trends in citrus consumption

▶ **Methodology:**

- ▶ Consumption estimations calculated on basis of net supply (production-export+import/population)

▶ **Sources:** Eurostat (trade intra-EU and international), COMTRADE (for non-EU Member States), WCO data (production)

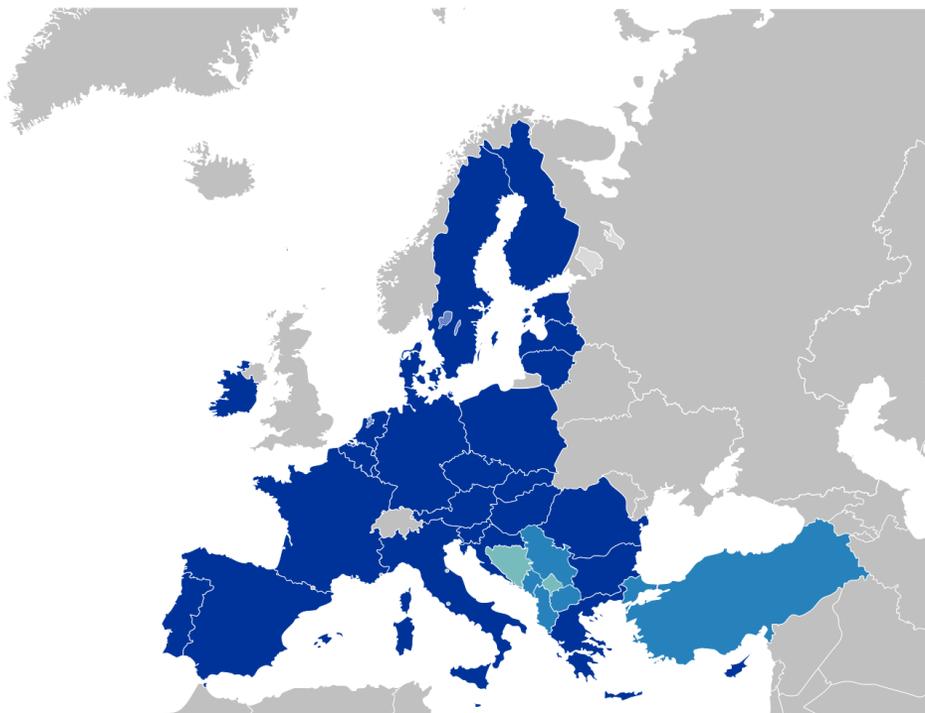
▶ **Potential pitfalls/shortcomings:**

- ▶ Estimations on % processing & loss of production for producing countries
- ▶ Population changes (average accounted for 2012-2020 period)
- ▶ Focus on main categories' consumed (orange, lemon, grapefruit & soft)
- ▶ Data until 2017 for Norway (COMTRADE), until 2019 for UK (Brexit effect) & from 2015 for Spain (WCO production data)



Not a single story...?

- ▶ Regional differences

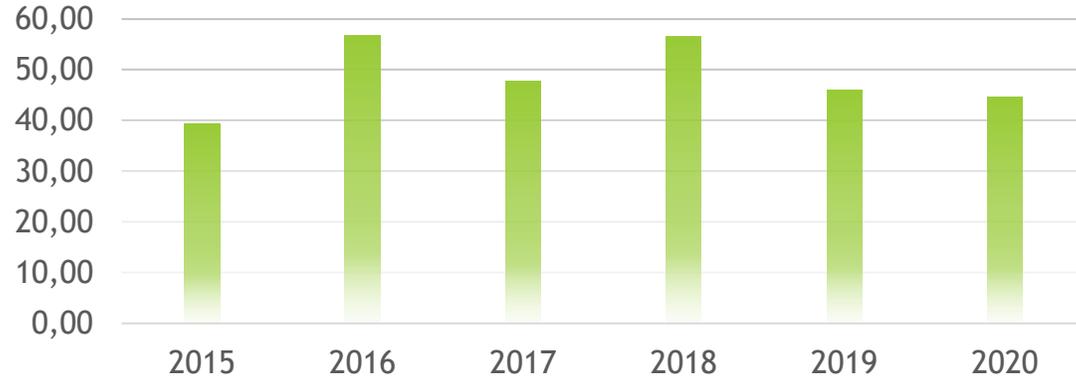


- ▶ Varieties differences



Western Mediterranean: Spain

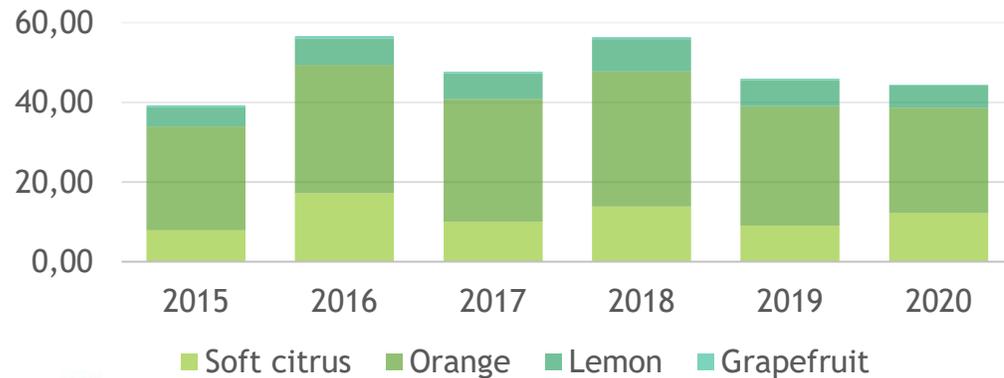
ES: CITRUS CONSUMPTION KG/CAPITA



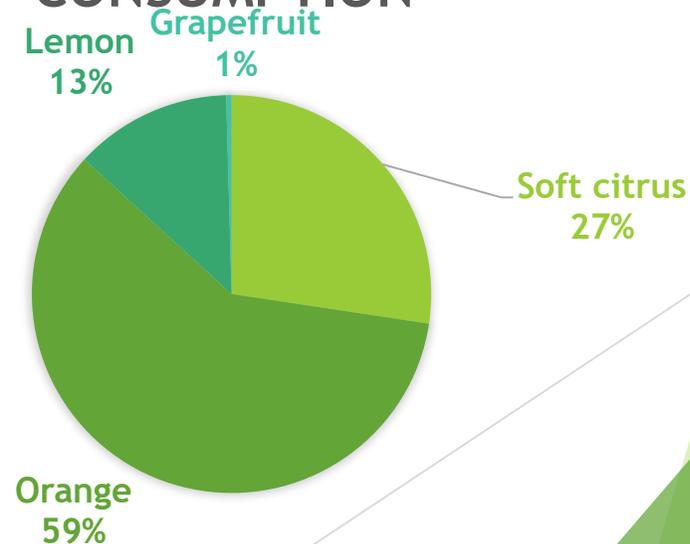
Main highlights:

- Total consumption 44.5 kg/capita
- 2020-2015 overall growth: +13%
- **5-year average annual variation: 5%**
- 2012-20 variation by category:
 - Oranges +1%
 - Lemon +18%
 - Grapefruit -64%
 - Soft citrus +55%

ES: EVOLUTION OF CONSUMPTION BY VARIETY

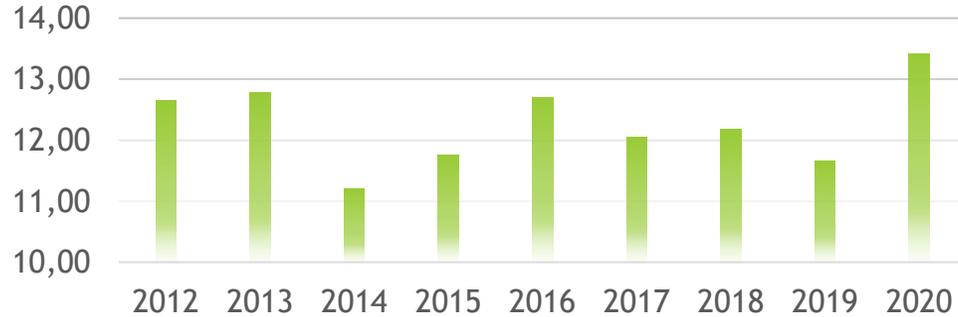


2020 ES CITRUS CONSUMPTION

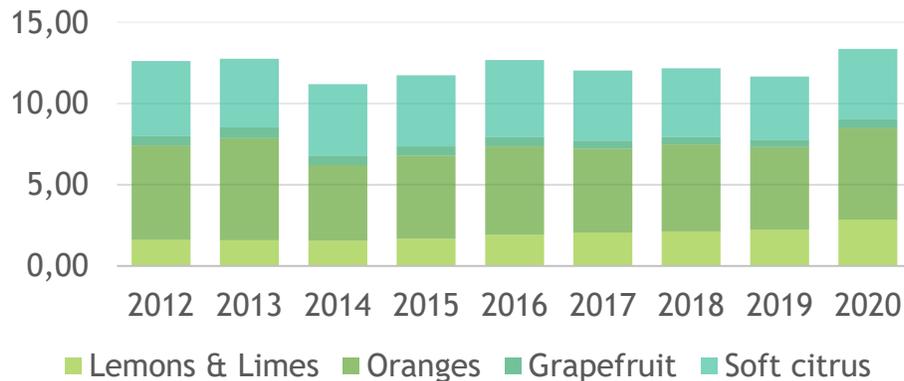


Central Europe: Germany

GERMANY CITRUS CONSUMPTION (KGR/CAPITA)



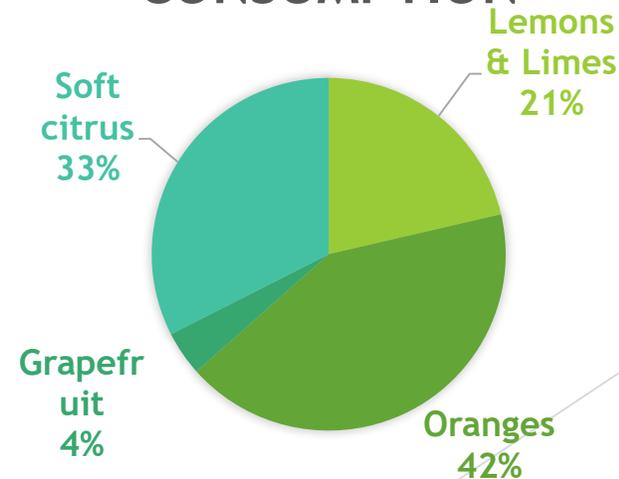
GERMANY: EVOLUTION OF CONSUMPTION GR/CAPITA



Main highlights:

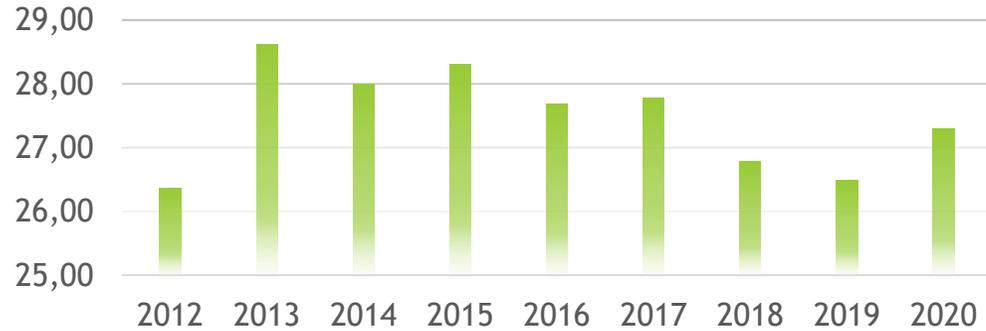
- Total consumption 13.4 kg/capita
- 2020-2012 overall growth: 6%
- **7-year average annual variation: +1%**
- 2012-20 variation by category:
 - Oranges -4%
 - Lemon 79%
 - Grapefruit -4%
 - Soft citrus -6%

2020 DE CITRUS CONSUMPTION

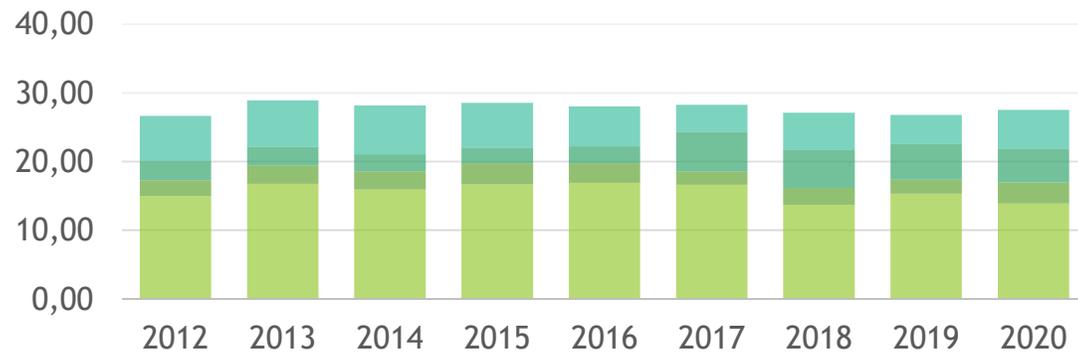


Benelux: Netherlands

NETHERLANDS: CITRUS CONSUMPTION (KG/CAPITA)



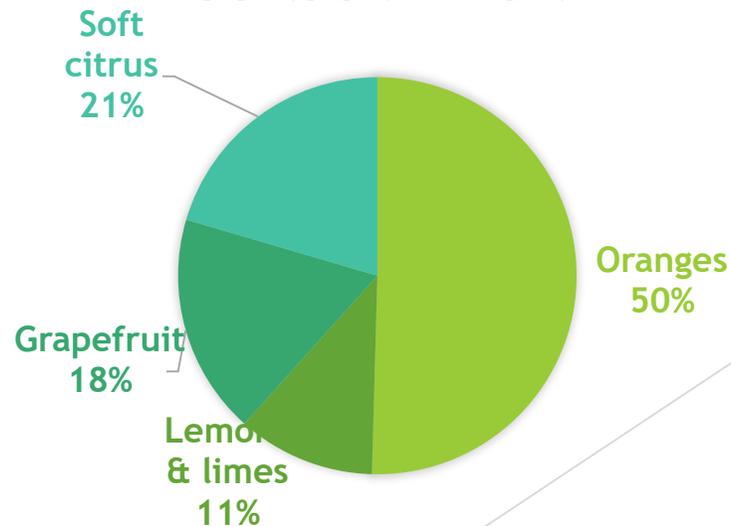
NETHERLANDS CITRUS CONSUMPTION EVOLUTION BY VARIETY (KG/CAPITA)



Main highlights:

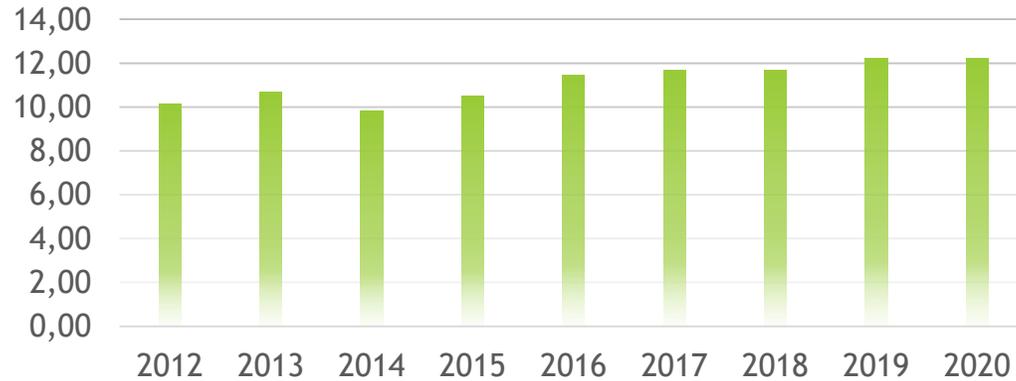
- Total consumption 27.3 kg/capita
- 2020-2012 overall growth: 4%
- **7-year average annual variation: 0%**
- 2012-20 variation by category:
 - Oranges -7%
 - Lemon +32%
 - Grapefruit +77%
 - Soft citrus -15%

2020 NL CITRUS CONSUMPTION



Eastern Europe (North): Poland

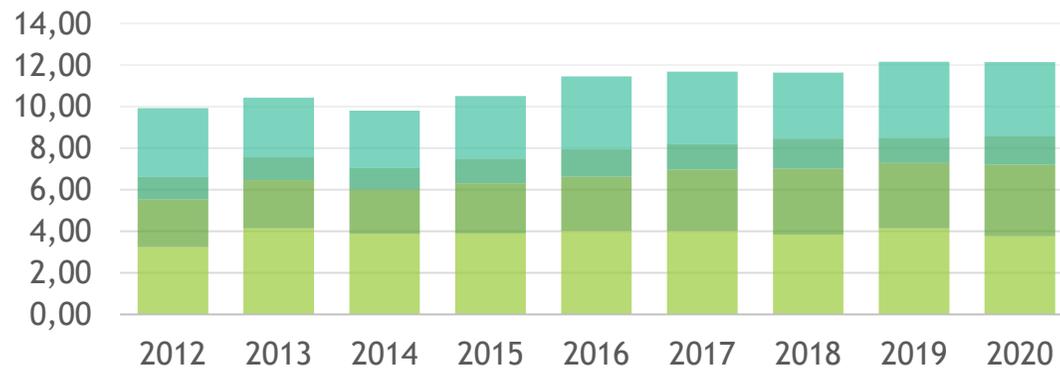
POLAND: CITRUS CONSUMPTION (KG/CAPITA)



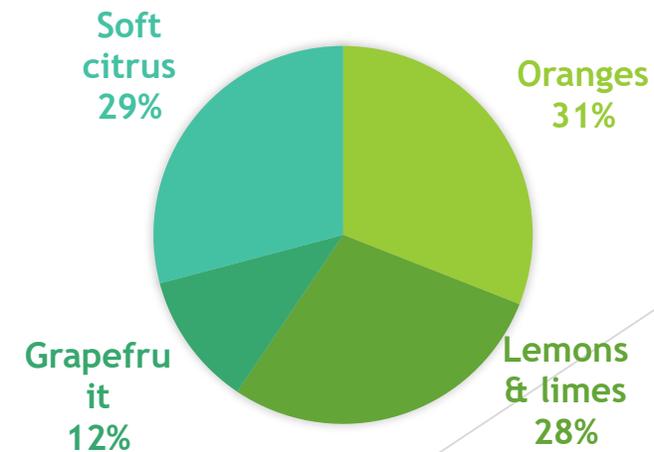
Main highlights:

- Total consumption 12.23 kg/capita
- 2020-2012 overall growth: 21%
- **7-year average annual variation: 3%**
- 2012-20 variation by category:
 - Oranges 16%
 - Lemon 51%
 - Grapefruit 29%
 - Soft citrus 7%

POLAND: EVOLUTION OF CONSUMPTION BY VARIETY

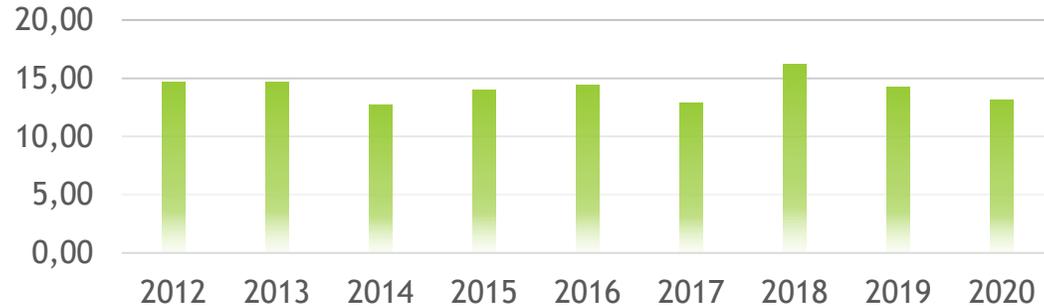


2020 PL CITRUS CONSUMPTION



Nordic countries (EU): Denmark

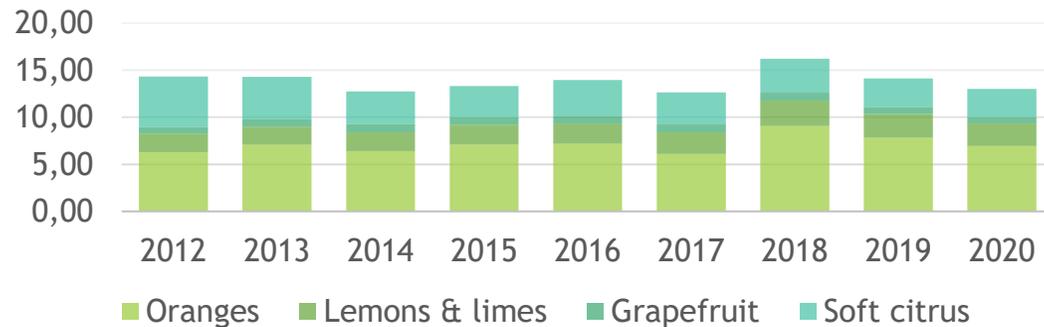
DENMARK CITRUS CONSUMPTION (KG/CAPITA)



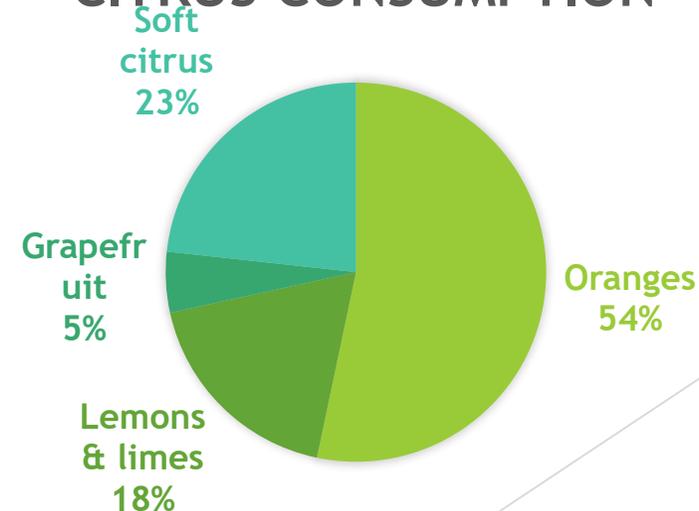
Main highlights:

- Total consumption 13.15 kg/capita
- 2020-2012 overall growth: -10%
- 7-year average annual variation: -1%
- 2012-20 variation by category:
 - Oranges +11%
 - Lemon +19%
 - Grapefruit -5%
 - Soft citrus -44%

DENMARK: EVOLUTION CONSUMPTION/CAPITA VARIETIES

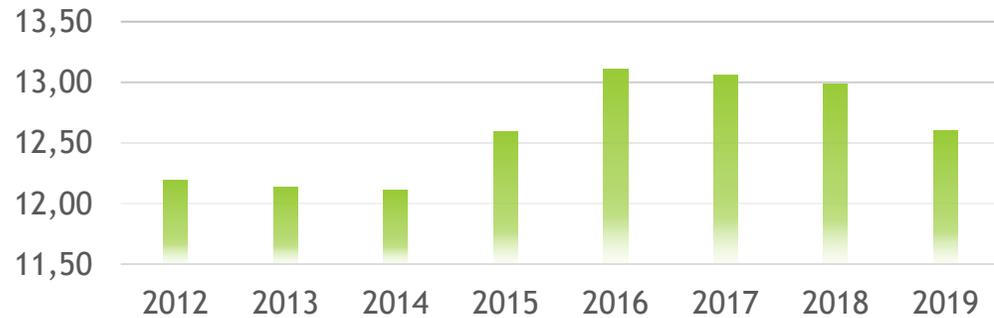


2020 DENMARK CITRUS CONSUMPTION



British isles: United Kingdom

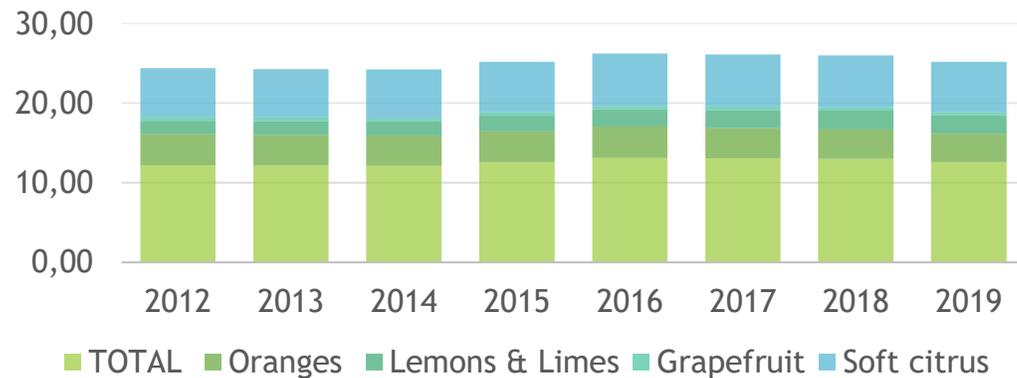
UK: CITRUS CONSUMPTION KG/CAPITA



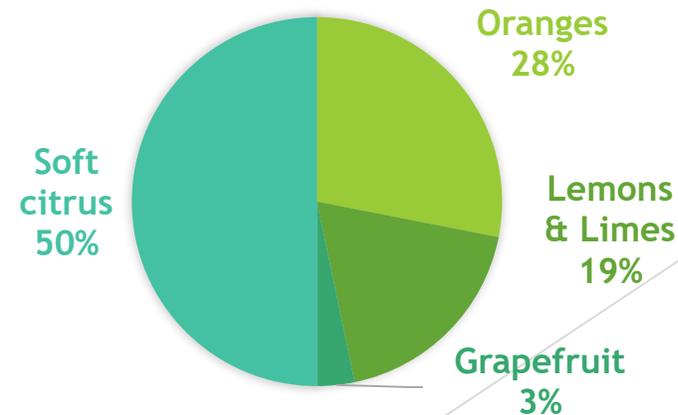
Main highlights:

- Total consumption 12.6 kg/capita
- 2019-2012 overall growth: +3%
- **7-year average annual variation: 1%**
- 2012-20 variation by category:
 - Oranges -9%
 - Lemon +40%
 - Grapefruit -21%
 - Soft citrus +3%

UK: EVOLUTION OF CONSUMPTION BY VARIETY

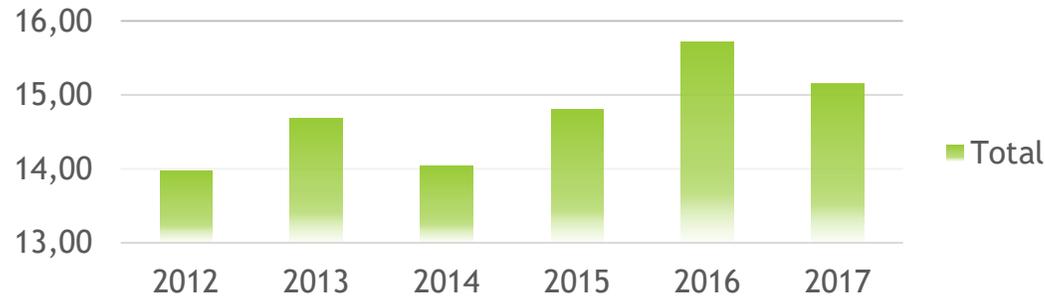


2019 UK CITRUS CONSUMPTION



Nordic countries (non-EU): Norway

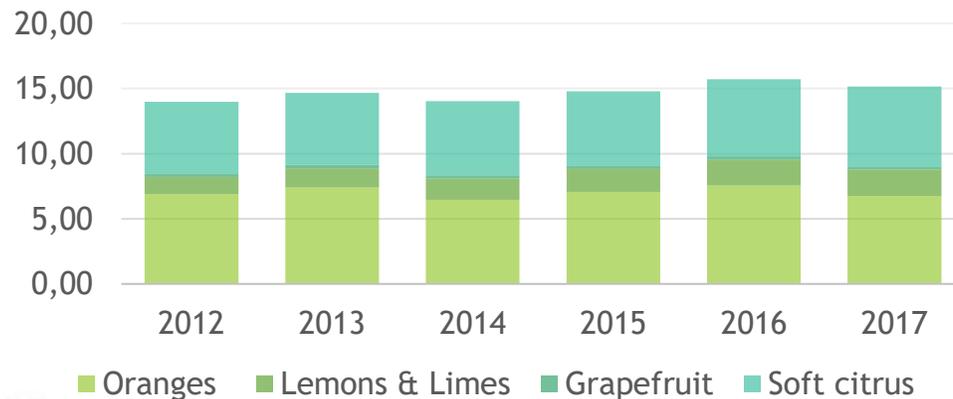
NORWAY: CITRUS CONSUMPTION EVOLUTION (KG/CAPITA)



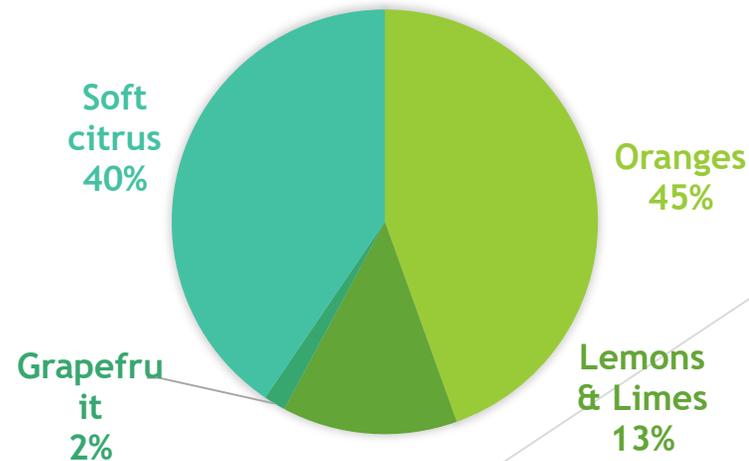
Main highlights:

- Total consumption 15.15 kg/capita
- 2017-2012 overall growth: +8%
- 5-year average annual variation: +2%
- 2012-20 variation by category:
 - Oranges -2%
 - Lemon +52%
 - Grapefruit -5%
 - Soft citrus +12%

NORWAY: EVOLUTION KG/CAPITA VARIETIES



NO CITRUS VARIETIES CONSUMPTION



Concluding remarks

- ▶ Overall **fairly stagnant consumption**, with exception in Eastern Europe where more dynamism in past years since consumption was lower
- ▶ Signals of **convergence** in overall citrus consumption in Europe (aprox 12-13 kg/capita)
- ▶ Significantly **higher consumption in producing** country vs. non-producing
- ▶ **Lemon most dynamic** category in most countries
- ▶ **Orange remains largest** category of almost 50% of consumption in most countries but losing ground to other (soft, lemons) but little development in past years
- ▶ Developments of **soft citrus diverge widely** in each market (growth in Eastern markets, to sharp decrease in Denmark)
- ▶ **Grapefruit boom in Netherlands** and some growth in the East.
- ▶ Overall citrus category in line with **EU big fruit categories** in terms of consumption trends



Thank you!

For any comments or questions please contact the Secretariat at
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