

History of fruit consumption in WBC and Europe

Training 2 Fruit consumption

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Today's objective

- To be able to distinguish between different theories and methods of fruit consumption this time by looking through historic perspective
- It provides trainees with:
 - Information on the historical perspective of fruit consumption in Europe and WBC
 - Overview of fruit consumption in different countries
 - Insight into selected fruit consumption statistics

Agenda

- Sources
- Fruit within the EU
- Fruit within the WBC
 - Production, consumption and other indicators
- Case studies
 - Serbia, Montenegro and Slovenia
- Example
 - The ISAFruit project

Sources 1/4

- FAOStat
- EUROStat
- USDA
- National institutes
 - E.g. CBS in NL or Swiss Federal Statistical Office
- Companies
 - E.g. AC Nielsen, GfK, Mintel, Datamonitor

Sources 2/4

- Varieties in definition of fruit
 - E.g. nuts, honey or grapes for consumption versus grapes for wine
- Varieties in data analysis
 - E.g. panel data versus apparent human consumption data

Make sure you compare apples with apples,
not pears

Sources 3/4

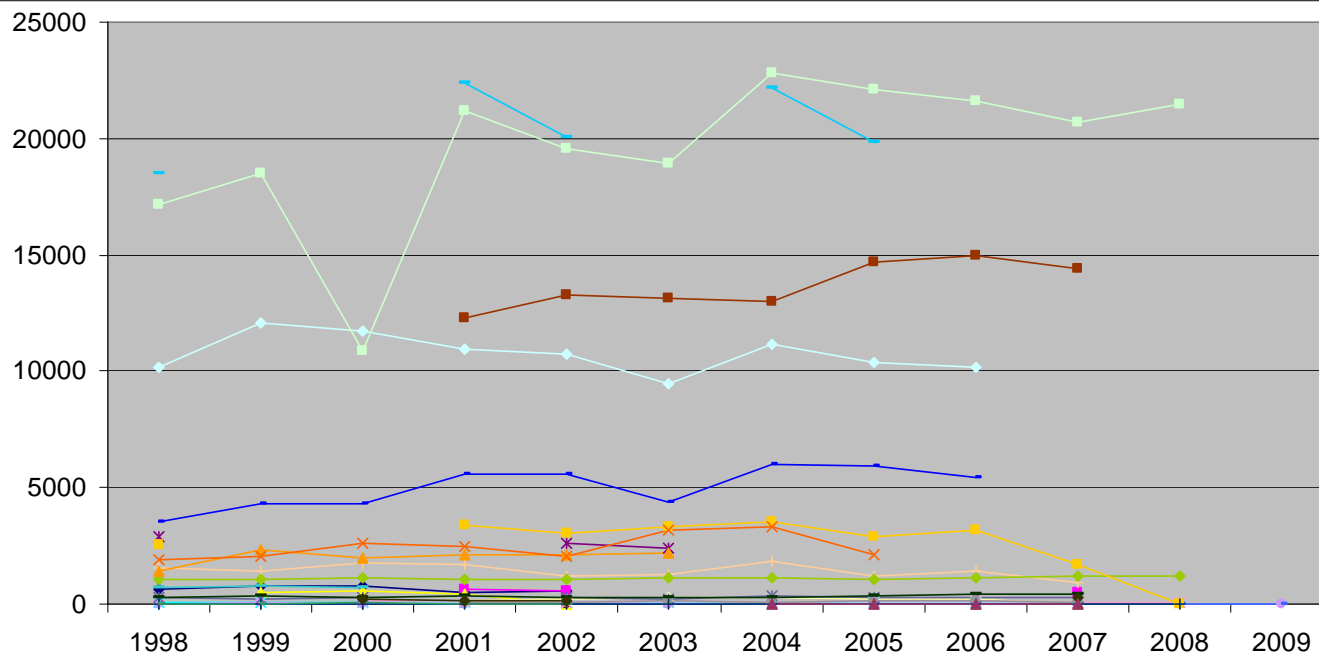
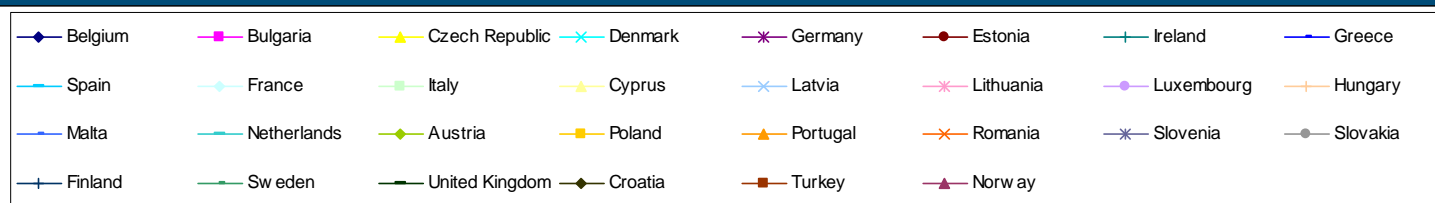
- Apparent Human Consumption:
 - (commercial production + estimated own account production for self consumption + import + opening stocks) –
(exports + usage input for processed food + feed + non-food usage + wastage + closing stocks).

Sources 4/4

- Understanding facts: Look beyond fruit production and consumption:
 - Economics
 - Demographics
 - Culture
 -

Fruit within the EU 1/7

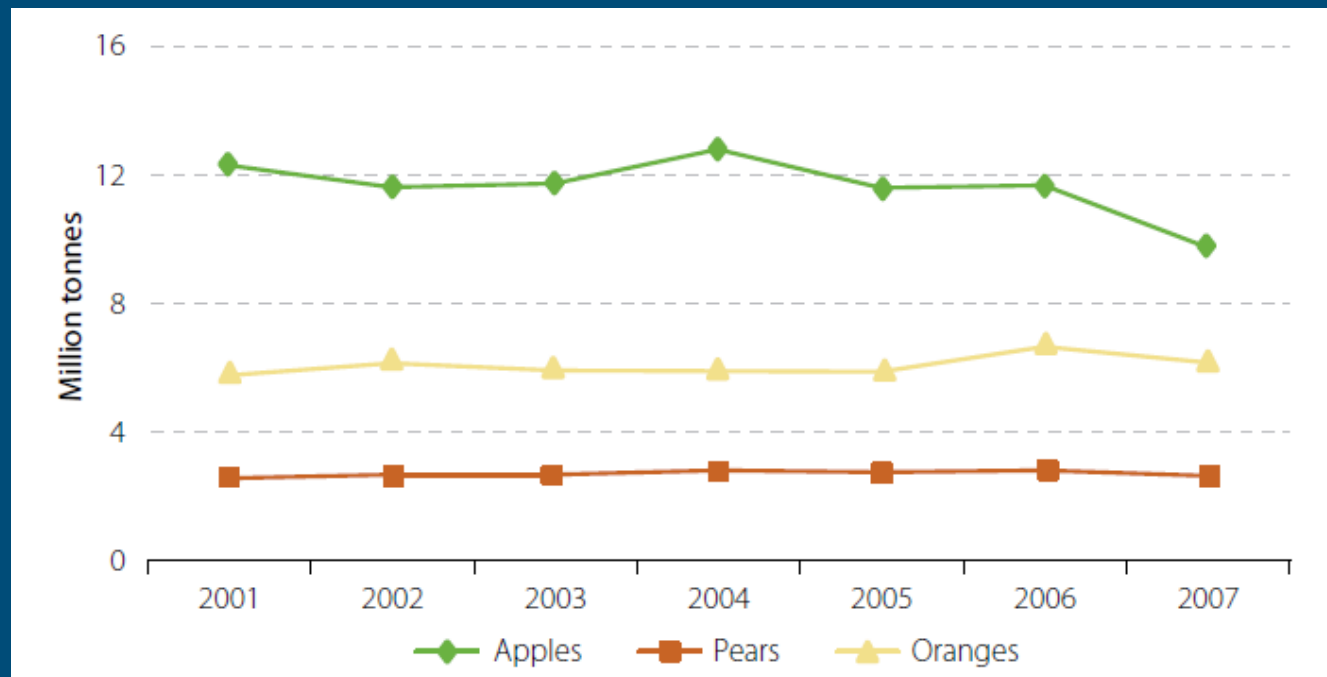
Fruit production in 1000 t per country 1998-2009



Fruit within the EU 2/7

■ Production

Evolution of the production of certain fruits, EU-27, 2001-2007

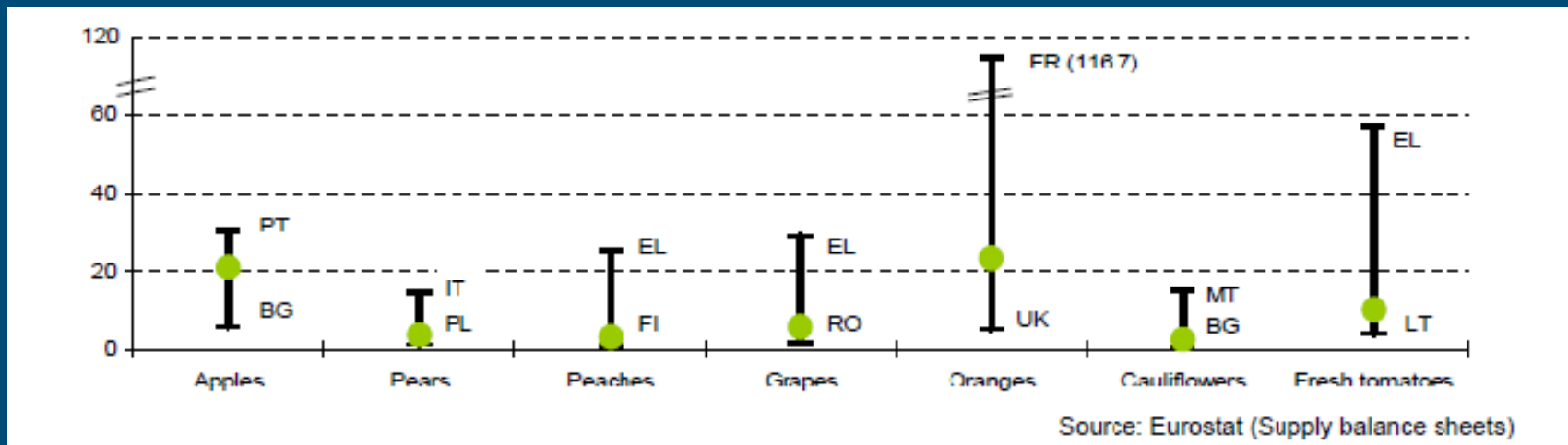


Source: Eurostat Agricultural statistics 2008 edition, Main results – 2006-2007, ISSN 1830-463X

Fruit within the EU 3/7

■ Consumption

- Gross human apparent consumption of selected fruit and vegetables, available Member States, 2006 (kg per head)*



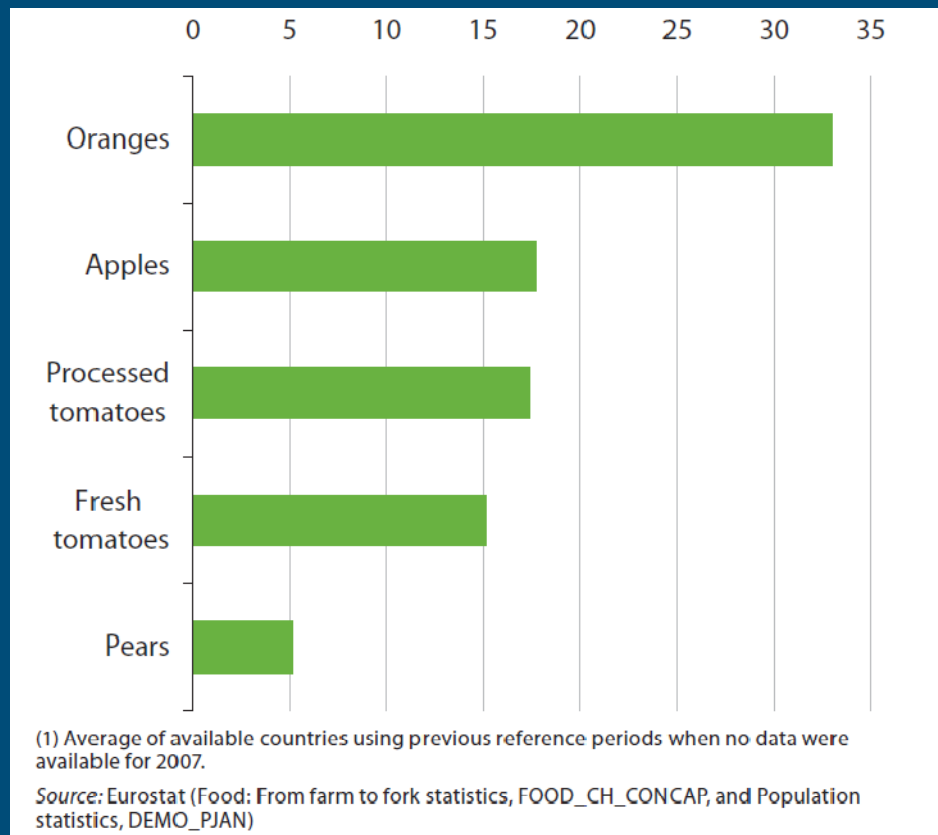
* Portugal (2005 and fruit only), Finland (2005). Data not included for Denmark (partial data for 2004) and Spain (2003).

Data not available: the Czech Republic, Cyprus, Latvia, the Netherlands, Slovenia and Slovakia.

Fruit within the EU 4/7

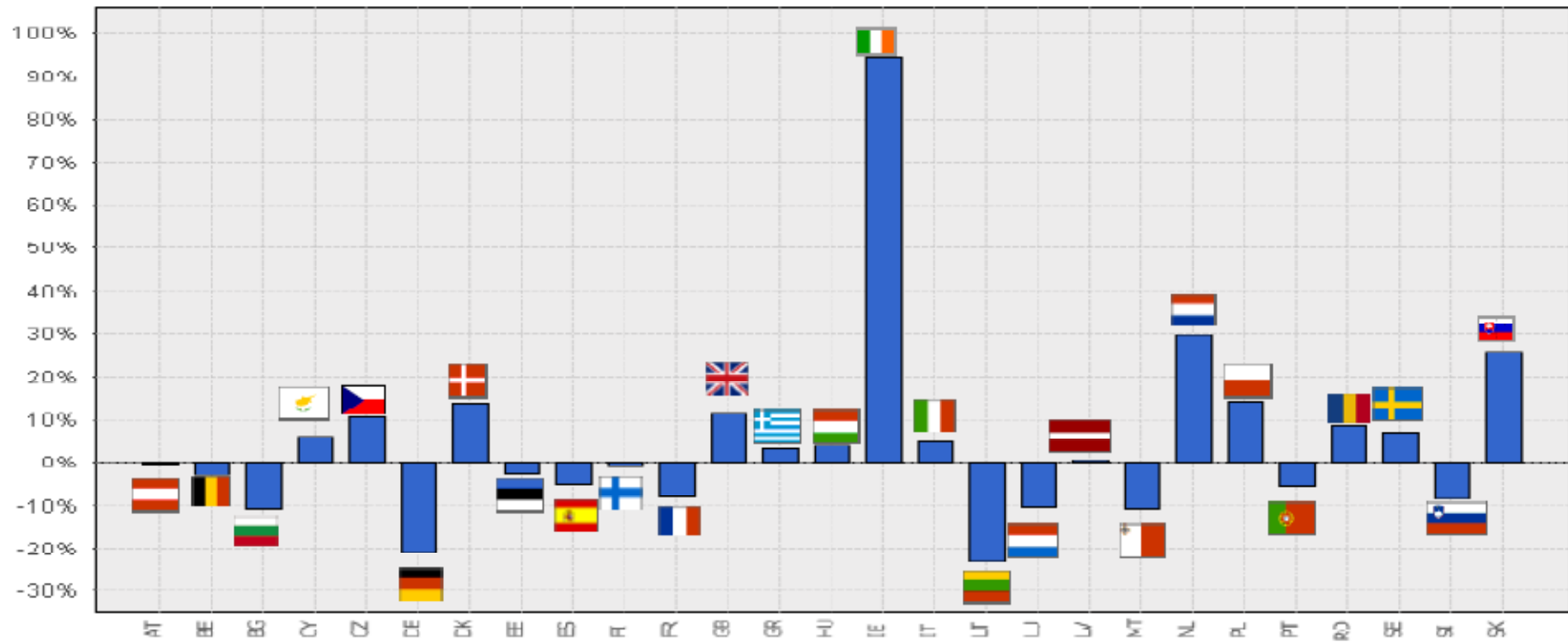
	Apples	Oranges	Pears
EU (1)	17.7	32.9	5.1
BE	26.0	19.1	5.9
BG	5.7	10.2	1.3
CZ	:	:	:
DK	53.6	:	7.8
DE	16.9	5.9	2.4
EE	25.2	25.3	3.6
IE	12.8	66.8	9.7
EL	20.6	60.3	5.6
ES	17.3	30.8	8.2
FR	24.0	116.6	5.3
IT	17.5	38.3	12.4
CY	:	:	:
LV	:	:	:
LT	6.1	10.9	0.7
LU	21.8	:	4.5
HU	24.5	15.2	3.2
MT	20.7	24.9	3.2
NL	:	:	:
AT	28.6	5.7	7.6
PL	7.9	13.2	0.9
PT	30.0	23.2	10.6
RO	13.3	9.0	1.8
SI	:	:	:
SK	:	:	:
FI	22.0	48.7	3.3
SE	21.9	36.3	6.1
UK	11.6	5.1	2.4

Gross human apparent consumption per capita (availability for human consumption), EU average, 2007 (1) (kg)



Fruit within the EU 5/7

■ Decreasing fruit consumption



Source: Freshfel Fruit & Vegetable Production, Trade & Consumption Monitor in the EU (2007)

Fruit within the EU 6/7

■ Fruit consumption 2006

MEMBER STATE	2006 Fruit Kg/person
AU - Austria	148,82
BE - Belgium	79,32
BG - Bulgaria	57,53
CY - Cyprus	243,79
CZ - Czech Republic	87,37
DE - Germany	67,07
DK - Denmark	79,58
EE - Estonia	60,19
ES - Spain	180,32
FI - Finland	47,93
FR - France	83,94
GR - Greece	281,20
HU - Hungary	117,92
IE - Ireland	93,74

IT - Italy	178,83
LT - Lithuania	51,00
LU - Luxembourg	84,45
LV - Latvia	64,47
MT - Malta	111,72
NL - The Netherlands	94,67
PL - Poland	95,51
PT - Portugal	130,29
RO - Romania	127,13
SE - Sweden	69,18
SK - Slovakia	116,64
SV - Slovenia	40,08
UK - United Kingdom	62,56
EU-27	107,22

Source: Freshfel Fruit & Vegetable Production, Trade & Consumption Monitor in the EU (2007)

Fruit within the EU 7/7

■ Summary

- Production versus consumption
- Institutes (FAOStat) versus companies (Freshfell)
- Preview: Tables, figures,...
- Category: Percentages, number, currency,...

Fruit within WBC 1/3

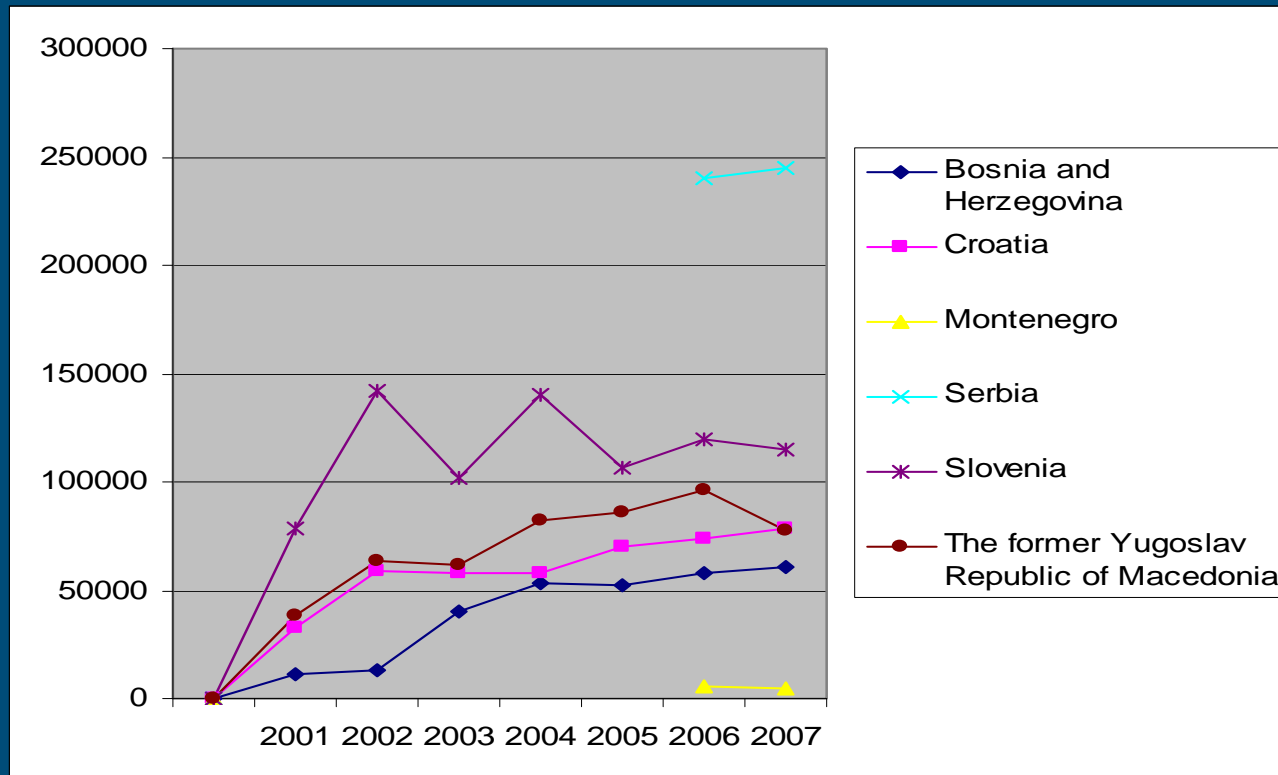
- Fruit and vegetable production in 1000 tonnes (% of world share)

	'79-'81	'89-'91	'99-'01	'03	'04
Yuugoslavia	5813 (.92)	5346 (.66)			
Bosnia and Herzegovina			783 (.19)	901 (.18)	941 (.18)
Croatia			1006 (.08)	876 (.07)	933 (.07)
FYRoM			897 (.07)	862 (.06)	916 (.07)
Serbia and Montenegro			2322 (.19)	2873 (.21)	2998 (.22)
Slovenia			308 (.03)	351 (.03)	474 (.03)

Source: FAOSTAT, 2006

Fruit within WBC 2/3

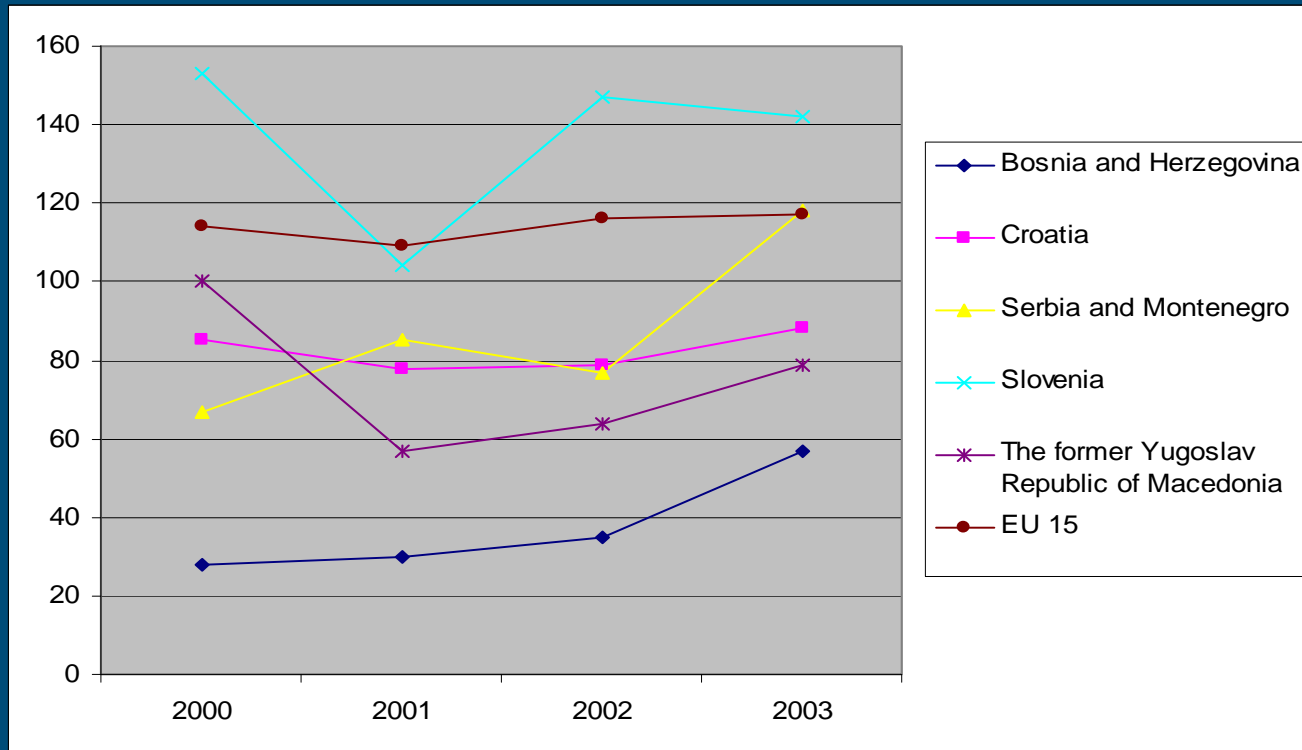
■ Apple production in tonnes/year (2001-2007)



Source: FAOSTAT; <http://faostat.fao.org/site/609/default.aspx#ancor>

Fruit within WBC 3/3

- Fruits consumption quantity kg/capita/year (excl. wine)



Source: FAOSTAT; <http://faostat.fao.org/site/609/default.aspx#ancor>

WBC and other indicators 1/2

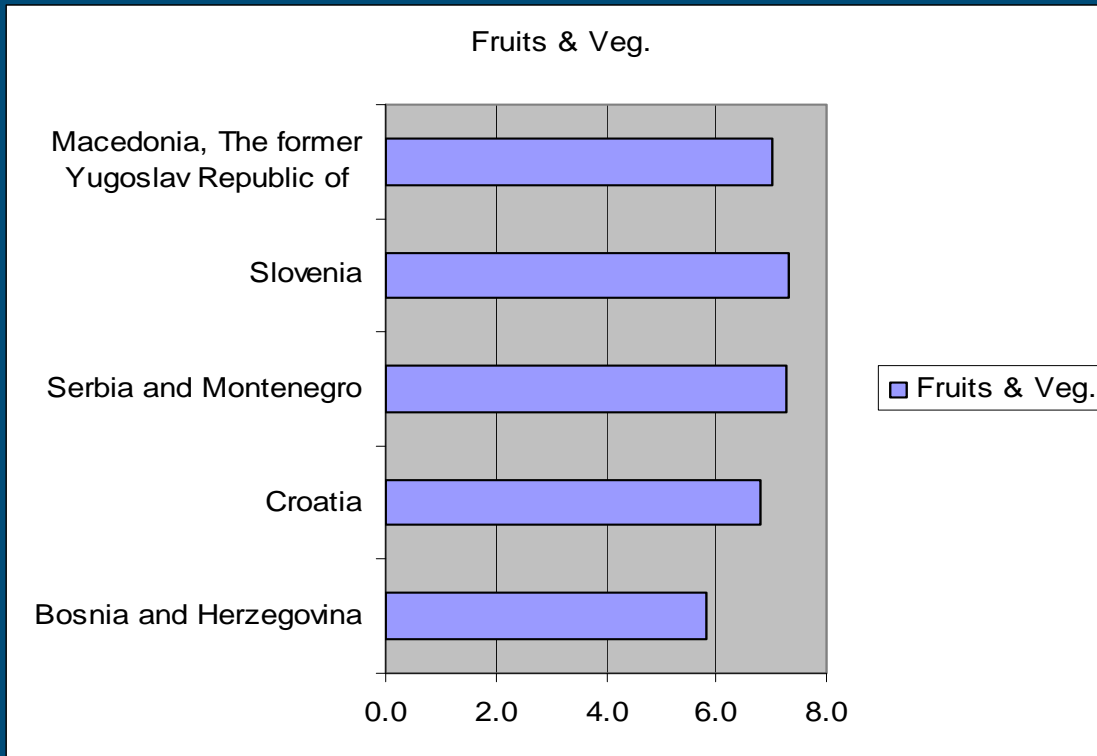
■ Economic and demographic indicators

Country	Population (2008)	Median age (2008)	Inflation rate (consumer prices) (2007)	Main agriculture products	Population below poverty line
Bosna Herzegovina	4.590.310	39,4	1.5%	wheat, corn, fruits, vegetables; livestock	25% (2004)
Croatia	4.491.543	40,8	11% (2003)	wheat, corn, sugar beets, sunflower seed, barley, alfalfa, clover, olives, citrus, grapes, soybeans, potatoes; livestock, dairy products	2.2% (2007)
Macedonia	2.066.000		8.4%	Wheat, corn, sorghum, soybean, sugar beets.	7% (2003)
Serbia	10.159.046 (incl. Kosovo)	37,5	10.1%	wheat, maize, sugar beets, sunflower, raspberries, beef, pork, milk	6.5% (2007)
Slovenia	2.007.711	41,4	5.6%	potatoes, hops, wheat, sugar beets, corn, grapes; cattle, sheep, poultry	12.9% (2004)

WBC and other indicators 2/2

■ Nutritional balance

- Share of fruit and vegetables of the total energy consumption (2001-2003) in %

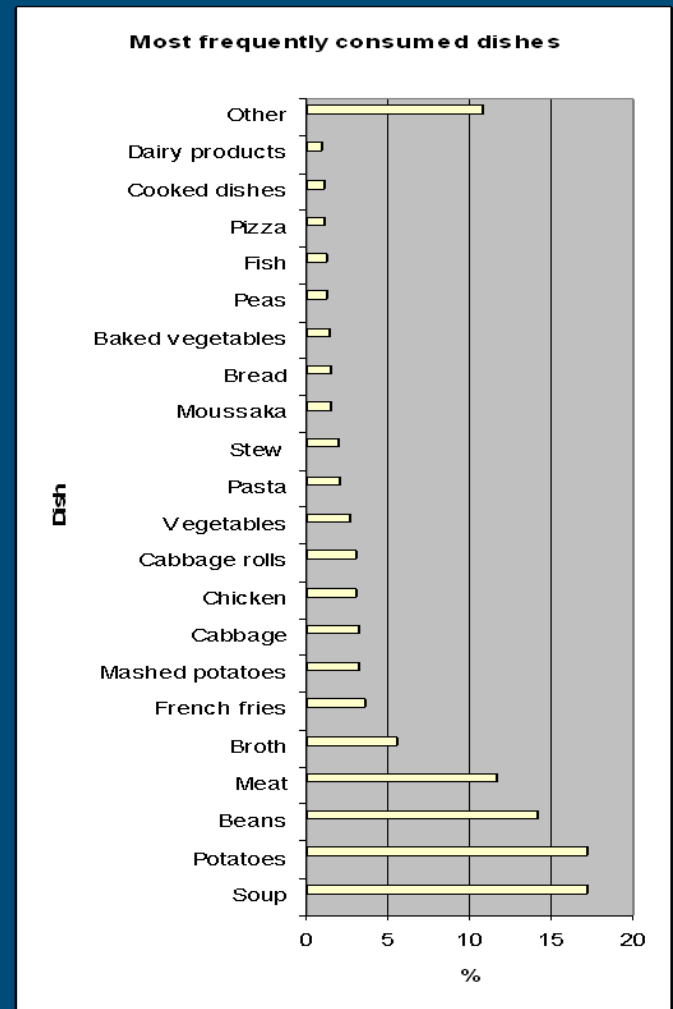


Source: FAOSTAT

Case study; Serbia

■ Eating habits in Belgrade

- 1000 citizens;
- over 15 years of age;
- using the face-to-face method;
- at respondents' households;
- by GfK;
- 2006.



Source: GfK Belgrade, Eating Habits, 2006

Case study 1; Slovenia

Average annual allocated assets of Slovenian households in 2005

	Average households	Average per household members	Structure
	EUR		%
Allocated assets	17215	6435	100
Consumption expenditure	14956	5591	86.9
Food and non-alcoholic beverages	2489	930	14.5
Food:	2250	841	13.1
Bread and cereals	482	180	2.8
Meat	584	218	3.4
Fish	63	24	0.4
Milk, cheese and eggs	361	135	2.1
Oils and fat	79	29	0.5
Fruit	179	67	1.0
Vegetables	192	72	1.1
Sugar, jam honey, chocolate and sweets	206	77	1.2
Other food products	105	39	0.6
Non-alcoholic beverages	239	89	1.4

Source: http://www.stat.si/letopis/index_vsebina.asp?poglavje=14&leto=2007&jezik=en

Case study 2; Slovenia

- Annual quantity of purchased food, beverages/household member

Product	Unit	1990	1995	1999	2000	2001	2002	2003	2004	2005
Apples	kg	17.8	14.9	13.7	14.3	13.5	13.4	13.0	12.9	12.6
Plums	kg	0.6	1.0	0.3	0.4	0.3	0.3	0.2	0.3	0.2
Grapes	kg	1.7	2.3	3.9	1.9	1.9	1.7	1.8	2.3	2.9
Peaches and apricots	kg	2.5	3.2	2.6	2.8	2.7	2.7	2.5	2.7	2.7
Other fresh fruits	kg	1.3	0.8	0.9	0.8	0.6	0.7	0.6	0.7	0.6
Oranges and lemons	kg	8.6	8.3	12.8	13.0	13.1	13.4	14.2	14.8	15.2
Other southern fruits	kg	3.8	7.2	10.9	11.2	11.3	12.3	12.5	12.0	11.5
Processed and preserved fruit	kg	2.0	2.5	1.8	1.9	2.0	2.0	2.0	2.0	2.1

Source: http://www.stat.si/eng/iskanje_novo.asp

Example; The ISAFruit project 1/4

- Expert interviews in GR, NL, PL, SP on fruit trends
 - Both experts from inside the fruitsector as well as outside the sector were interviewed
 - Positive news: all experts believe the consumption of fruit will rise in the future
- Important elements in fruit trends
 - Health
 - Convenience
 - Economic factors
 - Product variance / innovation
 - Quality
 - Demographics



Example; The ISAFruit project 2/4

- Trend impact analysis, based on:
 - Historical consumption data
 - Expert interviews, using Delphi method

Expected fruit consumption per capita per year, in kilogram

	Greece	Netherlands	Poland	Spain
2007	166	156	61	132
2025	181	195	87	166

Example; The ISAFruit project 3/4

- Motives for fruit consumption:
 - Health and pleasure
 - Awareness of life
 - Good looking
 - Fruit is convenient
 - To take with you (Tangerine)
 - To eat (Apple)
 - To buy (every supermarket has it)
 - To store (Kiwi, apple, etc.)
 - Fruit is cheap
 - Fruit of the season
 - Bargains



Example; The ISAFruit project 3/4

- Barriers to fruit consumption:
- Quality doesn't meet expectations and desires
 - Taste of fruit not homogeneous
 - Most fruit can't be eaten at time of purchase (ripeness of the product)
- Product characteristics
 - Pips
 - Hairy skin
 - Juiciness
 - Difficult to take some fruit varieties with you
 - Size: Some types of fruit aren't convenient for small sized families (e.g. watermelon, pineapple)
- Personal characteristics
 - Laziness
 - Lack of time
 - Income



Let's start and good luck

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