



Exotic Superfruits – consumer trends in Europe between health and hype

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Structure



1. Health potential of selected superfruits
2. Trade statistics and market trends
3. Developments in the nutraceutical market
4. Outlook



1. Health potential of selected superfruits





1. Health potential of selected superfruits



- Fruits with high content in polyphenols (anthocyanins, flavonols, flavones, etc.) Vitamin C and other anti-oxidants.
 - E.g., pomegranate, mangosteen, blackberry, blueberry,...
- Beneficial against skin ageing, cancer, diabetes, cardiovascular diseases, arteriosclerosis, viral and bacterial infections,...



1. Health potential of selected superfruits



Species	total phenolics		
	mg GAE/kg FW	range	source
Pomegranates (4 cultivars)	4,100.3	3,260.1-5,224.6	Gözlekçi et al., 2011
Pomegranate juice (4 cultivars)	1,218.2	784.4-1,551.5	Gözlekçi et al., 2011
Pomegranate peel (4 cultivars)	2,746.8	1,775.4-3,547.8	Gözlekçi et al., 2011
Pomegranate juice	11,000.0		Kalita and Jayanty, 2014
Mangosteen flesh	1,332.9	1,128.5-1,537.3	Chaovanalikit et al., 2012
Mangosteen inner pericarp	34,040.9	30,821.7-37,260.1	Chaovanalikit et al., 2012
Blackberry		1,210-4,400	Manach et al., 2004
Blueberry		2,280-7,360	Manach et al., 2004
Blueberry (DW)	8,100.0		Kalita and Jayanty, 2014



1. Health potential of selected superfruits



Diverse findings:

- Proven effects of several plant-based antioxidants against skin cancer and/or skin ageing (e.g. lycopene (tomatoes), resveratrol (grapes, berry fruits), anthocyanins (pomegranate), (Afaq & Mukhtar, 2011)
- Many of the claims unsubstantiated (Haneke & Baran, 2011)
- Experimental setup often unsatisfactory as cannot distinguish treatment effects (Grether-Beck, 2015)



2. Trade statistics and market trends

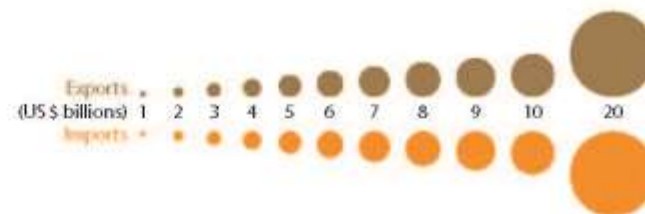




2. Trade statistics and market trends



- Calculated total value of fruit and vegetables exported is US\$180 billion
- **Countries identified where fruit and vegetable exports or imports exceed US\$2 billion (2008)**
- Despite huge volumes exported, one estimate is that 93% of fruit and vegetables are produced and consumed locally

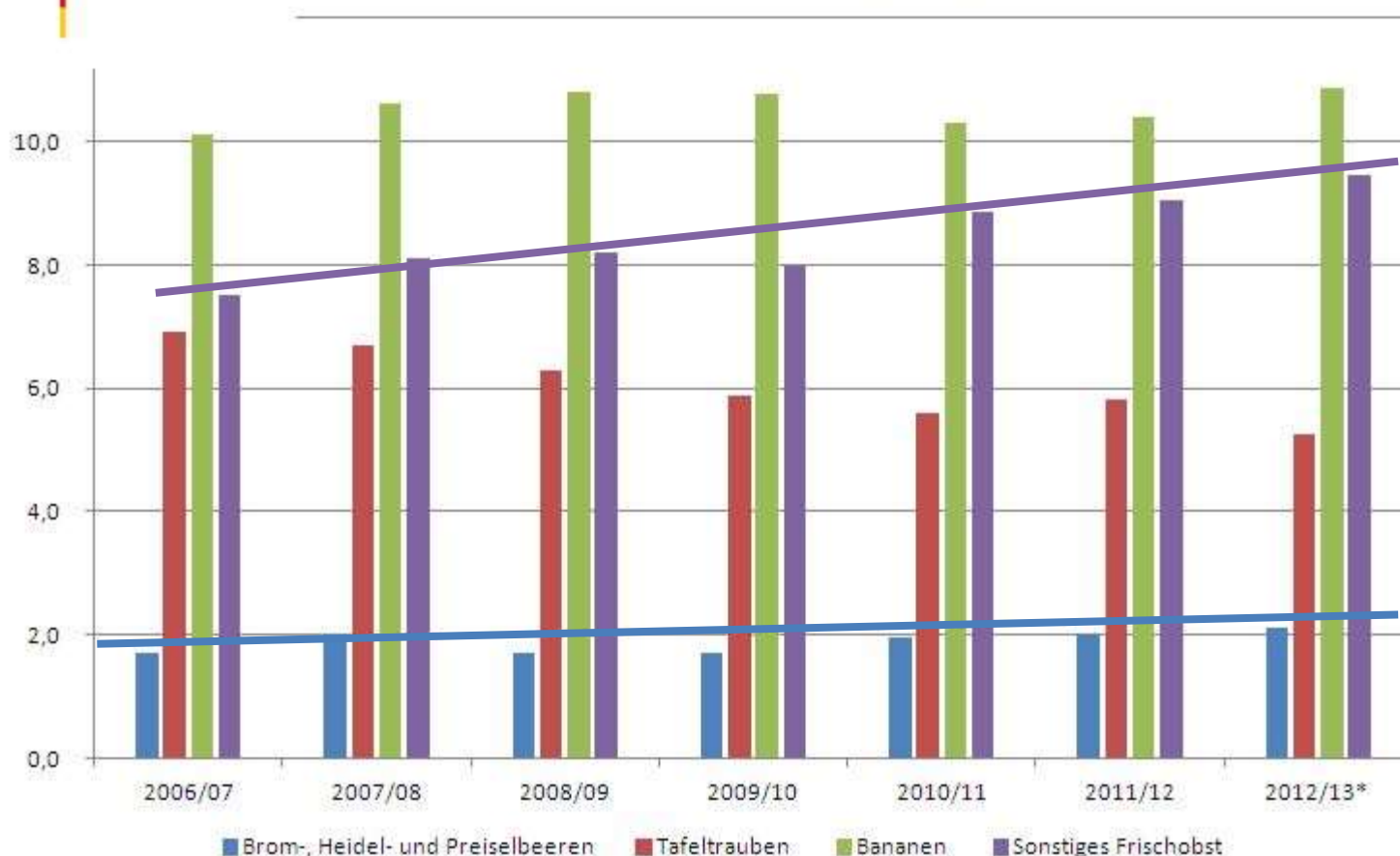




2. Trade statistics and market trends



Verbrauch von Obst nach kg/Kopf





2. Trade statistics and market trends



- Regulation (EC) No [1924/2006](#) of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods.
- Recent publicity against exaggerated health claims of superfoods.

verbraucherzentrale *Nordrhein-Westfalen*



Which?





2. Trade statistics and market trends



Which?

2007

Screenshot of the Which? website showing the article "Sales of latest 'superfood' soar" dated 16 March 2007. The article discusses the surge in demand for pomegranates, which have overtaken blueberries as Britain's fastest growing superfood, according to Tesco. The article mentions that the country's biggest supermarket chain sold 3.8 million pomegranates in the past year, an increase of two million on the previous year. Consumer demand for the fruit was prompted by the launch of pre-packed pomegranate juice.

Sales of latest 'superfood' soar

Demand for pomegranates hits record high

16 March 2007

Pomegranates are the latest fruit to enjoy a sales surge after being dubbed a 'superfood', a retailer said today.

Demand for the seed-filled fruit has grown by 76 per cent across all stores over the past year, figures from market analysts TNS show.

Pomegranates have overtaken blueberries as Britain's fastest growing superfood, according to Tesco.

The country's biggest supermarket chain sold 3.8 million pomegranates in the past year - an increase of two million on the previous year.

Consumer demand for the fruit was prompted by the launch of pre-packed pomegranate juice.

Vitamin C

Tesco pomegranate buyer Kevin Patel said: 'In the last few years there has been tremendous publicity surrounding pomegranates and their supposed health-giving qualities and that has led to the phenomenal rise in



2. Trade statistics and market trends



Which?

2014

http://www.which.co.uk/news/2014/07/ditch-superfc

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Ditch 'superfoods' and save up to £439 a year

Save money with cheap superfood alternatives


21 July 2014

You can save hundreds of pounds by swapping pricey superfoods for cheaper alternatives, without missing out on key nutrients.

Salmon is regularly praised for the long-chain polyunsaturated fatty acids it contains, but salmon is pretty pricey. Meanwhile sardines contain the same fatty acids and are significantly cheaper - a 140g portion of fresh sardines is £2.10 cheaper than fresh salmon.

Over the course of a year swapping two servings of salmon to sardines a week could lead to an annual saving of £268. Swapping out other superfoods such as goji berries and wheatgrass for spinach and broccoli can also lead to considerable savings.

This month as well as looking at superfood alternatives,



How much could you save by ditching superfoods?



2. Trade statistics and market trends



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Acai: Content of antioxidants less than in some red grape variety or in blue berries; high oil content, 250 Kcal /100 g.

Goji: EFSA could not ascertain claims for cardio-vascular effects, difficult to find trustworthy sources for nutrient composition; vitamin C content of dried fruit (29-148 mg/ 100g) similar to fresh oranges (50 mg), strawberries (53 mg) or black currants (177 mg) but dry fruits have much higher energy content than fresh fruit. Dangerous interaction with anti-coagulants.

Pomegranate: EFSA could not ascertain claims of health potential.

Mangostene: Health claims are too unspecific and comparable to carrots and tomatoes.



2. Trade statistics and market trends



EFSA Journal 2010;8(10):1750

SCIENTIFIC OPINION

Scientific Opinion on the substantiation of health claims related to pomegranate/pomegranate juice and maintenance of normal blood cholesterol concentrations (ID 1162, 1320, 2107, 2167), maintenance of normal erectile function (ID 1163), protection of lipids from oxidative damage (ID 1201, 1319, 2123), “antioxidant and anti-aging properties” (ID 1901), increase in appetite after unintentional weight loss leading to an increase in energy intake (ID 2122) and maintenance of normal blood glucose concentrations (ID 4471) pursuant to Article 13(1) of Regulation (EC) No 1924/2006¹

EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA)^{2, 3}

European Food Safety Authority (EFSA), Parma, Italy

On the basis of the data presented, the Panel concludes that a cause and effect relationship has not been established between the consumption of punicalagin/ellagic acid in pomegranate/pomegranate juice and maintenance of normal erectile function.

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On the basis of the data presented, the Panel concludes that a cause and effect relationship has not been established between the consumption of punicalagin/ellagic acid in pomegranate/pomegranate juice and the maintenance of normal blood cholesterol concentrations.



2. Trade statistics and market trends



German radio (WDR2 Quintessenz) 15 July 2015:
“Exotics such as goji berries contain high amounts of valuable compounds but local berries such as black currants are similarly healthy for a fraction of the price.”



Photo: WDR2/dpa





2. Trade statistics and market trends



Food	Serving Size	TAC/serving (μ mol of TE)	
		ORAC	ABTS
Pomegranate	30 ml	21270	7743
Blueberries	40 g	19345	5170
Purple Majesty	173 g	13886	3946
CO97226-2R/R	173 g	5066	3559

Price per serving (\$)

1.14

0.97

0.75

Table 1: Total Antioxidant Capacity (TAC) of pomegranate, blueberries, and potato tubers

Kalita D, Jayanty SS (2014) Comparison of Polyphenol Content and Antioxidant Capacity of Colored Potato Tubers, Pomegranate and Blueberries. J Food Process Technol 5: 358. doi:10.4172/2157-7110.1000358

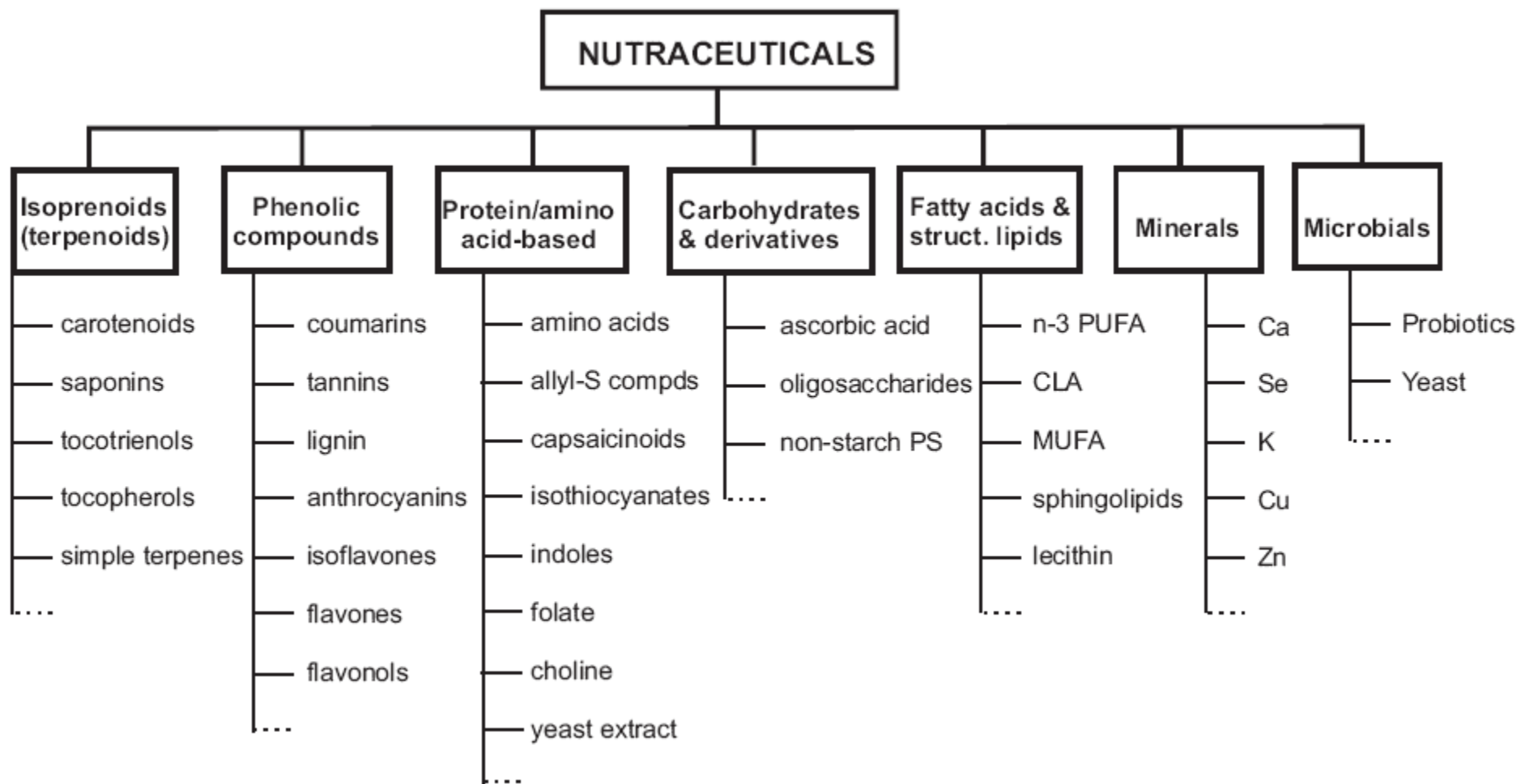


3. Developments in the “nutraceutical” market





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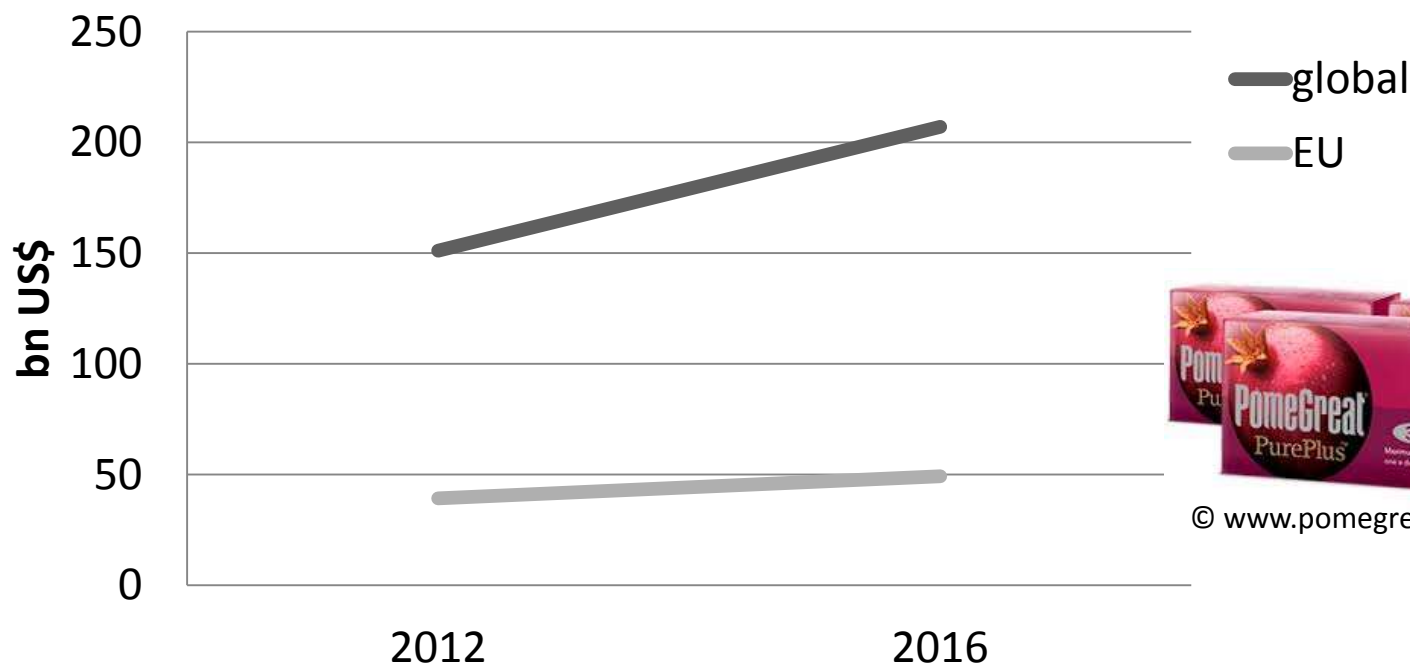


3. Developments in the “nutraceutical” market



Increasing interest in nutraceuticals/botanicals

Trade volume in nutraceuticals (bn US\$)



© www.pomegreatpureplus.com



3. Developments in the “nutraceutical” market



Innocent Smoothie £2.35

A super smoothie is a healthy blend of fruit, veg, botanicals and crushed flax seeds, with added vitamins.

Energy is essential, and not just on sports day. This tasty, lively super smoothie is a blend of delicious crushed fruits and fruit juices, a dash of guarana infusion, some beetroot juice, and added vitamins, including vitamins B6 and C, which help your body release energy from food.



Sea Buckthorn Pomegranate Facial Cream \$34.00

Antioxidant, Free Radical Skin Rejuvenator with Sea Buckthorn, CoQ10, Pomegranate, Hyaluronic acid and CO2 Extracts. One of our Best Organic Skin care products yet! ULTIMATE body and facial moisturizer. Healing, soothing, comforting, restores new skin, stops free radical formation, ultimate antioxidant, and the HOTTEST selling product EVER!





4. Outlook





4. Outlook



- Clear need to move beyond fresh produce.
- Distinguish from rogue producers and traders and their spurious claims.
- More high quality/ statistically sound research on health claims.
- Review and carry out research on new, hitherto less known fruits.
- New product development



4. Outlook



Thank you for your attention!



Everything Balm £19.95

Everything Balm is a composition of magical ingredients from all over the world including certified organic marula and rosehip oil from Namibia, extra virgin olive oil from the Mediterranean Coast; jojoba oil from the Arizona desert and beautiful evening primrose (sun drop) oil and free range honey made in New Zealand.