УДК 339.13(4):613:292-027.2

J. Kozonova*✉*, N. Povarova
Odessa National Academy of Food Technologies, 112 Kanatnaya str, Odessa, 65039, Ukraine
✉ kozonova5@gmail.com

LEADING TRENDS IN THE EUROPEAN FUNCTIONAL FOOD MARKET

Functional foods market is changing rapidly. Now the market has the highest growth. In the European Union food producers try to fit virtually every product under the "functional" definition. In this article we will review major trends in the EU functional foods market and try to analyze them. It is well known that foods fortified with nutritional and disease-preventing qualities are invigorating the world food industry. Health-conscious consumers are driving the demand for products that aim to promote better health, increase longevity and prevent the onset of chronic diseases. With a fast-emerging middle class, more disposable income, and a greater number of working/more educated women in emerging markets, the worldwide potential for functional foods/beverages is unprecedented. Milk formula, energy drinks, probiotic yogurt, juice drinks, sports drinks, cereal, and biscuits were among the top-performing functional global health and wellness food categories in 2014. There is a breakout of the year's top trends driving the market for functional foods and beverages. A review of recent deal drivers, the fastest-growing products and innovation trends can help businesses identify the most promising entry points to this market.
Key words: *functional food; EU food market; fortified products; healthy food; nutrients.*

Ю. Козонова, Н. Поварова
Одеська національна академія харчових технологій, вул. Канатна, 112, Одеса, 65039, Україна

ПРОВІДНІ ТЕНДЕНЦІЇ У РОЗВИТКУ ЄВРОПЕЙСЬКОГО РИНКУ ФУНКЦІОНАЛЬНИХ ПРОДУКТІВ

Розвиток суспільства диктує потребу в сучасному підході до технології виробництва продуктів харчування. Турбота про власне здоров'я стимулює попит на нові, що дозволяють підтримувати здоров'я. Функціональні харчові продукти є оптимальною основою для введення оздоровлюючих компонентів, що створюють додаткову корисність, відповідають сучасним вимогам ринку та задовольняють потреби покупця.
Ключові слова: *функціональні продукти; європейський ринок функціональних продуктів; збагачені продукти; здорове харчування; нутрієнти.*

DOI: 10.15673/0453-8307.4/2015.44785

I. INTRODUCTION

It is believed that the connection between food and its healing properties was made long before this association could be documented. Hippocrates (460-377 BC), the father of modern medicine, shared his wisdom by saying: "Let food be thy medicine and medicine thy food".

The modern concept of functional foods has its roots in Japan in 1984 when the Japanese Ministry of Education, Science and Culture initiated a National Project on Functional Foods whose main goal was to improve the nation's health via functional foods.

There is presently no firm legal definition for functional foods, as each country continues with efforts to coin a suitable term that needs to satisfy many requirements. In the US, in 1994, the Food and Nutrition Board of the National Academy of Sciences defined functional foods as "any modified food or food ingredient that may provide health benefit beyond the traditional nutrients it contains".

II. PURPOSE OF THE ARTICLE

Today, the wide range of functional ingredients frequently incorporated into foods spans from the well-studied vitamins and minerals, across probiotics and prebiotics, to equally interesting omega-3 fatty acids, plant sterols and polyphenolic antioxidants. Examples of food products containing these functional ingredients include cereals with added vitamins and minerals, yogurt with added probiotics, margarine containing plant sterols, and cheese or eggs with added omega-3 fatty acids.

It is easy to take advantage of the relatively broad definition of functional foods and include products that do not belong to this category in marketing efforts based on inadequate science or empty promises. Keeping both consumer welfare and long-term business success in mind, it is important to insist on objective criteria and sound science in marketing functional ingredients. After all, those with quality products in hand have nothing to fear besides their own misconceptions.

Functional foods market is changing rapidly. Now the market has the highest growth. In the European Union food producers try to fit virtually every product under the "functional" definition. In this article we will review major trends in the EU functional foods market and try to analyze them.

III. THE MAIN PART

Foods fortified with nutritional and disease-preventing qualities are invigorating the world food industry. Health-conscious consumers are driving the demand for products that aim to promote better health, increase longevity and prevent the onset of chronic diseases.

Functional foods are used, distributed and regulated differently from medical foods and drugs. The primary distinction is that functional foods may be consumed freely as part of everyday life. Medical foods and drugs are used in specific cases to treat or manage a condition under medical supervision (Figure 1).

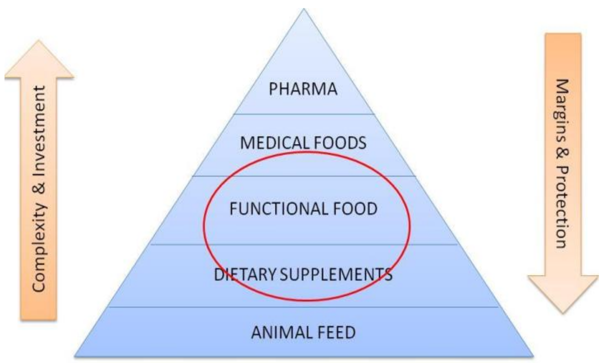

***Figure 1** – The functional food place in the food pyramid*

As it shown at the Figure 2, Japan still holds the top place at functional food market. In the USA, government focuses on preventing food properties and spends a lot of money on research in this field. The USA market is the second in the world. The EU functional food market has the largest grows in last few years.

Advances in food and medical science as well as changing consumer demand and demographics are fueling growth in this market. Its significant potential is likely to attract further investment by food and food technology companies. Moreover, the industry is well-positioned to respond to emerging healthcare trends, including personalized medicine and greater incentives to reduce medical costs.

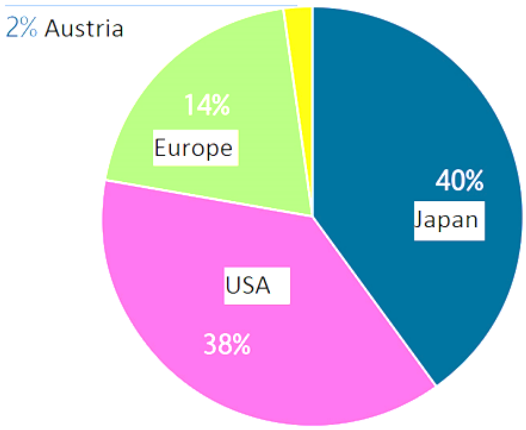

***Figure 2** – Global functional food market by country (% value), 2014*

In 2014, "ingredients added for special health benefits" and "higher in nutrients" (e.g., whole grains, fiber), were the top two attributes that made a food product good for health and wellness, according to one research group.

Moreover, healthfulness is also now a reflection of a combination of attributes—fresh, real, avoidance of certain substances, inclusion of positives, high quality, close to the farm, and, for some, ethical practices or humane treatment. Wellness is seen as positive, shifting from illness, "have to,"□ and treatment to vitality, "taking care,"□ and fun/indulgence.

In 2014, 58% of consumers thought a lot about the healthfulness of their foods/beverages, 47% thought a lot about food ingredients, and 40% frequently turned their thoughts to food safety.

Eight in 10 adults made some effort to eat healthier last year, and one-third (34%) made a lot of effort—behavior patterns that are unchanged over the past six years (FMI, 2013).

Less/reduced calories and sugar-free were the most frequent health claims touted by the best-selling new better-for-you foods/drinks in 2014). For the first time, added fiber/whole grain, more natural/organic, and real fruit/fruit health benefits, outpaced reduced-fat and fortified nutrient claims.

Six in 10 EU adults consume specially formulated functional foods/beverages at least occasionally. Yogurt for digestive health and cereal for heart health are the most-consumed items, followed by cholesterol-lowering butter/margarine, cholesterol-lowering orange juice, shakes/bars to reduce hunger, orange juice for joint health, immune-boosting dairy beverages, and medicinal teas.

With a fast-emerging middle class, more disposable income, and a greater number of working/more educated women in emerging markets, the worldwide potential for functional foods/beverages is unprecedented.

Milk formula, energy drinks, probiotic yogurt, juice drinks, sports drinks, cereal, and biscuits were among the top-performing functional global health and wellness food categories in 2014.

What follows is a breakout of the year's top trends driving the market for functional foods and beverages.

1. Specialty Nutritionals.

As core supplement users continue to switch from supplements to fortified and functional foods, food marketers must keep pace with the growing demand for specialty nutritional ingredients. New/unique ingredients/formula claims have driven sales of the best-selling new supplements since 2012.

Specialty nutritional ingredients are now second only to vitamins in terms of consumers' nutrition priorities. Nearly nine in 10 adults (86 %) made a strong effort to consume more nutrients in 2012; 78 % made an effort to consume more vitamins, 57 % specialty nutritional ingredients, 55 % minerals, and 45 % herbs/botanicals.

With probiotic claims prohibited or under scrutiny around the world, marketers are relying on high vitamin C components (e.g., acerola in Danone's Actimel Powerfruit Yogurt) to support an immunity claim.

Prebiotics became a mass market opportunity in 2014.

2. Get Real

In 2012, the term real/100 % real exploded into the marketplace, topping the list of health claims driving the best-selling new better-for-you foods/beverages. Right after fresh and made from scratch, real is now the most appealing food descriptor. Six in 10 consumers look for ingredients they recognize while shopping for food, 57 % search for foods made with simple, real ingredients, and the same percentage seek food made with natural ingredients. In addition, 41 % look for a shorter list of ingredients, and 33 % want products made with local/seasonal ingredients.

Just over half (52 %) look for foods absent of artificial ingredients; 50 % want products without artificial sweeteners. Also high on the list of ingredients to avoid are high fructose corn syrup, artificial flavors/preservatives, MSG, artificial colors, and growth hormones. One in five consumers said they were very worried about GMOs in 2014.

3. The Protein Evolution

The report on functional food trends cited protein as a strong mega trend, and in 2014, the protein market is still center stage and diversifying into a powerful next generation of high potential health opportunities.

In 2014, 57 % of consumers made an effort to get more protein, up 9 % vs 2014. Those ages 18…34 and those 65+ were the most likely to try to get more protein. Forty percent of the best-selling new better-for-you foods/beverages in 2014 carried a high protein claim.

The importance of the amino acid leucine and a full complement of all of the essential amino acids to muscle synthesis is another high potential new product differentiator.

4. Kid-Specific

With 41 % of EU moms saying they always buy healthy foods/drinks for their kids and 88 % claiming to do so at least sometimes, a wider range of healthy, convenient, kid-friendly foods/drinks—with nutrient and calorie levels specific to kids—will find a welcome market. One-quarter of 2014's best-selling new foods/drinks touting convenience were targeted to children.

Six in 10 kids under age 12 drink 100 % juice (not orange), 53 % fruit drinks, 28 % smoothies, 24 % vegetable/fruit juice blends, 21 % powdered fruit drinks, 17 % nutritional drink mixes, 13 % vitamin water, and 11 % nondairy milk.

About one-third of moms are making a strong effort to increase fresh/unprocessed foods, vitamins/minerals, whole grains, and calcium in their child's diet; one in three is making that effort with respect to vitamins D and C and dietary fiber, 24 % for fish/omega-3s, and one in five for probiotics/prebiotics.

Half of moms are trying to avoid caffeine; one-third are avoiding artificial sweeteners, high fructose corn syrup, MSG, trans fats, and low/no-calorie sweeteners or sugar; one-quarter strive to avoid artificial flavors/colors. Forty-four percent of children under age 12 consume organic foods/drinks at least once a week.

5. Pharma Foods

Eight in 10 consumers believe that functional foods can help prevent or delay the onset of heart disease, hypertension, osteoporosis, and type 2 diabetes; six in 10 associate it with benefits linked to age-related memory loss, cancer, and Alzheimer's disease.

In 2013, 56 % of consumers bought foods or beverages that targeted a specific condition; 62 % of very health-conscious consumers did so. Cholesterol-lowering foods/drinks were the most purchased condition-specific food or drink, purchased by 29 % of consumers; other benefits and the percentage of consumers seeking the benefit include weight control 24 %, blood pressure 20 %, digestive health 17 %, heart/circulatory 14 %, diabetes 13 %, and bone/joint 11 %. Natural components that help increase circulation (e.g., cocoa flavanols) will be in high demand.

Lower GI issues are moving center stage. Digestive regularity is more important to consumers than general digestive health.

Claims that indicate a product is "suitable for" a specific group (e.g., diabetics, kids, those with gluten/lactose sensitivities) are appearing on products around the world with increasing frequency.

Products focused on reducing diabetic risk factors (e.g., insulin resistance and metabolic syndrome) are other untapped opportunities for food formulators and marketers. Marketers have a good opportunity to tap into the glycemic index to market products in the health/specialty food channel.

6. Alternatives

Eighty percent of households now eat meatless meals—defined as no meat, poultry, or seafood protein—for dinner on occasion. One in five meal preparers serve them regularly; 29 % are eating more fish/seafood.

Eggs are the most popular alternative for meatless meals, prepared by 82 % of consumers, beans/lentils/legumes by 50 %, veggie burgers 21 %, seeds/nuts 20 %, quinoa/other whole grains 18 %, and tofu/tempeh.

One in five meal preparers (19 %) used meatless breakfast alternatives in 2014, 16 % used ground crumbles, 15 % meatless poultry, deli, or hot dogs. Seven percent of consumers described themselves as "vegetarian" in 2014.

7. Performance Nutrition

The explosive sports nutrition category has morphed into two distinct performance-driven opportunities. While hardcore athletes/body builders will remain a lucrative segment, a new, less intense but much larger mainstream market has taken shape.

This new segment, which has driven sports nutrition sales growth over the past few years, is composed of recreational sports participants, casual athletes and gym exercisers, women who use these products to achieve their fitness/weight goals, Baby Boomers who want to age well, and moms looking for nutrition support for their children. Nearly six in 10 adults (58 %) used a sports nutrition product in 2014.

8. Weighing In....

Consumers have taken a dramatic departure from deprivation-style weight loss diets by simply eating healthier and adding specific real food components and/or nutrients. Even commercial weight management programs are focusing on added health-promoting ingredients (e.g., whole grains, good fats, and real sweeteners) vs subtracting them.

Whole grains, fiber, and vitamin D topped the list of ingredients that two-thirds of those trying to manage their weight added to their diet last year; half included more calcium, protein, antioxidants, or omega-3/fish oil.

9. Gen Zen

Born between 1981 and 2000, Millennials are ages 14–33 in 2014; 25 % of Millennials are in the workforce.

Millennials view their food choices as healthier, more expensive, more natural/organic, less processed, and better-tasting than those of their Baby Boomer parents. Fresh is their most important food criteria.

Use of functional foods and beverages is highest among the youngest consumers and decreases with. Millennials are the most likely to believe that functional foods/beverages can be used in place of some medicines.

Millennials are the most likely generation to have adopted a special diet; 45% have tried/adopted a special diet vs 24 % of Boomers. Almost half (46 %) of Millennials use gluten-free for overall health and wellness; 29 % have food allergies or sensitivities vs 16 % of Boomers. Millennials drink a much wider range of beverages than other generations. Juice, sports drinks, energy drinks, hot cocoa, flavored milk, powdered drinks, ready-to-drink coffee, and sparkling drinks top the list.

V. CONCLUSIONS

Greater health awareness by consumers and the potential for premium pricing are helping to fuel growth in the EU functional foods market. Sustaining this growth will hinge on manufacturers' ability to focus on food qualities, market effectively, and target the appropriate segments, ideally aligning with the wider public and consumer health and wellness agenda. The functional foods industry is well-suited to participate in emerging healthcare trends, including personalized medicine and the inexorable shift of more healthcare costs to consumers.

The functional foods sector is expected to continue to attract further investment and deals; there is little indication of deceleration in advances in food science and technology or a waning of the increasing consumer appetite for foods that may bolster natural defenses. Moreover, the sector remains dynamic and evolving. Demographic changes in advanced nations are likely to support new products; pharmaceutical and medical advances are likely to further seed demand for new, narrowly tailored food products.

A review of recent deal drivers, the fastest-growing products and innovation trends can help businesses identify the most promising entry points to this market.

REFERENCES

1. Bech-Larsen, T., Grunert, K. G., & Poulsen, J. B. (2001). The acceptance of functional foods in Denmark, Finland and the United States. MAPP working paper 73. The Aarhus School on Business.

2. Bellisle, F., Diplock, A. T., Hornstra, G., Koletzko, B., Roberfroid, M., Salminen, S., & Saris, W. H. M. (Eds.). (1998). Functional Food Science in Europe. British Journal of Nutrition, 80(Suppl. 1), 1-193.

3. Heasman, M., & Mellentin, J. (2001). The functional foods revolution. Healthy people, healthy profits? London and Sterling: Earthscan Publications Ltd.

4. Menrad, K. (2000). Markt und Marketing von funktionellen Leben-smitteln. Agrarwirtschaft, 49(8), 295–302.

5. American Dietetic Association (ADA) (2004**)** **'**Position of the American Dietetic Association: Functional Foods', *Journal of the American Dietetic Association* 104 (5), 814-826.

6. Arias-Aranda D., and M. M. Romerosa-Martinez, (2010) **'**Innovation in the functional foods industry in a peripheral region of the European Union: Andalusia (Spain)', *Food Policy,*35: 240-246

7. European Commission (EC) (2008) Characteristics and Perspectives of the Market for Food Supplements Containing Substances Other than vitamins and Minerals. Commission Staff Working Document, SEC(2008) 2976

8. European Food Safety Authority (EFSA) (2010) Food Supplements, Available Online at:ttp://ec.europa.eu/food/food/labellingnutrition/supplements/index_en.htm (Accessed April 2010).

9. Zawistowski J. (2008) ‘Regulation of Functional Foods in Selected Asian Countries in the Pacific Rim’, Nutraceutical and Functional Food Regulation in the United States and Around the World, edited by Debasis Bagchi. Burlington: Elsevier.
10. Verbeke W. (2006) ‘Functional Foods: Consumer Willingness to Compromise on Taste for Health’, Food Quality and Preference, 17: 126–131.
11. Scott Wolfe Management Inc. (2002) Potential Benefits of Functional Foods and Nutraceuticals to the Agri-Food Industry in Canada, Research conducted for Agriculture and Agri-Food Canada (AAFC), http://www.agr.gc.ca/misb/fb-ba/nutra/ben/pdf/Agrpt_e.pdf (Accessed May 2010).
12. Markosyan A., J. J. McCluskey, and T. I. Wahl (2009) ‘Consumer Response to Information About a Functional Food Product: Apples Enriched With Antioxidants’, Canadian Journal of Agricultural Economics, 57: 325–341.
13. Malla, S., J.E. Hobbs and E. K. Sogah (2013). Functional Foods and Natural Health Products Regulations in Canada and Around the World: Nutrition Labels and Health Claims. Canadian Agricultural Innovation and Regulation Network, 132 pp. http://www.ag-innovation.usask.ca

Received 09 June 2015
Approved 03 July 2015
Available in Internet 30.08.2015

Ю. Козонова*✉*, Н. Поварова
Одесская национальная академия пищевых технологий, ул. Канатная, 112, Одесса, 65039, Украина
✉ kozonova5@gmail.com

ВЕДУЩИЕ ТЕНДЕНЦИИ В РАЗВИТИИ ЕВРОПЕЙСКОГО РЫНКА ФУНКЦИОНАЛЬНЫХ ПРОДУКТОВ

Развитие общества диктует потребность в современном подходе к технологии производства продуктов питания. Забота о собственном здоровье стимулирует спрос на новые продукты, позволяющие поддерживать здоровье. Функциональные пищевые продукты являются оптимальной основой для введения оздоравливающих компонентов, создающих дополнительную полезность, отвечают современным требованиям рынка и удовлетворяют потребности покупателя.
Ключевые слова: *функциональные продукты; европейский рынок функциональных продуктов; обогащенные продукты; здоровое питание; нутриенты.*

ЛИТЕРАТУРА

1. Bech-Larsen, T., Grunert, K. G., & Poulsen, J. B. (2001). The acceptance of functional foods in Denmark, Finland and the United States. MAPP working paper 73. The Aarhus School on Business.
2. Bellisle, F., Diplock, A. T., Hornstra, G., Koletzko, B., Roberfroid, M., Salminen, S., & Saris, W. H. M. (Eds.). (1998). Functional Food Science in Europe. British Journal of Nutrition, 80(Suppl. 1), 1-193.
3. Heasman, M., & Mellentin, J. (2001). The functional foods revolution. Healthy people, healthy profits? London and Sterling: Earthscan Publications Ltd.
4. Menrad, K. (2000). Markt und Marketing von funktionellen Leben-smitteln. Agrarwirtschaft, 49(8), 295–302.
5. American Dietetic Association (ADA) (2004**)** **‘**Position of the American Dietetic Association: Functional Foods’, *Journal of the American Dietetic Association* 104 (5), 814-826.
6. Arias-Aranda D., and M. M. Romerosa-Martinez, (2010) **‘**Innovation in the functional foods industry in a peripheral region of the European Union: Andalusia (Spain)’, *Food Policy*,35: 240-246
7. European Commission (EC) (2008) Characteristics and Perspectives of the Market for Food Supplements Containing Substances Other than vitamins and Minerals. Commission Staff Working Document, SEC(2008) 2976
8. European Food Safety Authority (EFSA) (2010) Food Supplements, Available Online at:ttp://ec.europa.eu/food/food/labellingnutrition/supplements/index_en.htm (Accessed April 2010).
9. Zawistowski J. (2008) ‘Regulation of Functional Foods in Selected Asian Countries in the Pacific Rim’, Nutraceutical and Functional Food Regulation in the United States and Around the World, edited by Debasis Bagchi. Burlington: Elsevier.
10. Verbeke W. (2006) ‘Functional Foods: Consumer Willingness to Compromise on Taste for Health’, Food Quality and Preference, 17: 126–131.
11. Scott Wolfe Management Inc. (2002) Potential Benefits of Functional Foods and Nutraceuticals to the Agri-Food Industry in Canada, Research conducted for Agriculture and Agri-Food Canada (AAFC), http://www.agr.gc.ca/misb/fb-ba/nutra/ben/pdf/Agrpt_e.pdf (Accessed May 2010).
12. Markosyan A., J. J. McCluskey, and T. I. Wahl (2009) ‘Consumer Response to Information About a Functional Food Product: Apples Enriched With Antioxidants’, Canadian Journal of Agricultural Economics, 57: 325–341.
13. Malla, S., J.E. Hobbs and E. K. Sogah (2013). Functional Foods and Natural Health Products Regulations in Canada and Around the World: Nutrition Labels and Health Claims. Canadian Agricultural Innovation and Regulation Network, 132 pp. http://www.ag-innovation.usask.ca

Отримана в редакції 09.06.2015, прийнята до друку 03.07.2015