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## CONSUMPTION AND INDUSTRIAL DEMAND FOR FRUIT JUICES AND CONCENTRATES

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**Abstract:** The market of food products in the EU there is great competition. Consumers significantly “dictated” by changes in products and innovative solutions. The trend of healthy lifestyles, increasing consumer interest in exotic flavors and an attractive organic food, are the main reasons for the observed increase in fruit juice market. Manufacturing companies in the EU also have a demand for fruit juices and concentrates, the more you require a guaranteed product quality continuously/safe products and safe delivery of fresh products. Producers in developing countries have great opportunities for marketing their products in the markets of developed countries, if they meet certification requirements, which is often complicated, and for many producers/exporters is very expensive. Certified producers and exporters will have access to much of the market. Producers in developing countries should explore possibilities for placement of products in each EU country, as some member countries/trading partners can be attractive for certain products.

**Key words:** fruit juices, concentrates, consumption, demand, EU

### Introduction

The trend of a healthy lifestyle of consumers in particular have an impact on the market “soft drinks” where a mixture of fruit juices and soft drinks based on fruit and vegetables are gaining increasing popularity. The main sources of data use for goal setting research publications: *The European Fruit Juice Association, Food and Drink Europe, Food News and Weekly Eurofood from Agronet, the Organisation of European Industries*

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*Transforming Drink Fruit and Vegetables, Fruit Processing Magazine and ITC Market News Service on Fruit Juices.* In this regard, based on the research has found that the fruit juice market the most innovative in Europe (40% of new products/fruit juices in the world), followed by Asia-Pacific region with 33% (much less participate innovation in the 2005. year when it was 39%). It is expected to further increase production of fruit juices. "Fruit juices are an important source of bioactive compounds, but techniques used for their processing and subsequent storage may cause alterations in their contents so they do not provide the benefits expected by the consumer." (Esteve Maria, Frigola Ana, 2007) We should emphasize benefits of fruit juices such as "super fruits", which can be a great opportunity for manufacturers and exporters in developing countries (exotic fruits with high content of vitamins, antioxidants and fiber, such as pomegranate, acerola, etc.). The most important trends in consumption of fresh fruit and fruit products related to health, comfort, atmosphere, "responsible"/"clean" methods of production, versatility in the choice of products, and ethnicity (eg, immigrants consume more exotic fruit juices). "Depending on the content ingredients fruit that do not dissolve, fruit juices and nectars are placed on the market such as: bright, blurry and mushy." (Gvozdrenović, Vračar, Tepić Aleksandra, 2006) "Wellness" has taken a central position in marketing, which means the creation of marketing activities on the basis of "traditional" health care and quality of products where everyone wins. This does not mean a single label or prescribed by the marketing approach, but every manager of marketing analysis and creates a special marketing program for a particular product or product line. Consumers are increasingly showing interest in a healthy way/ style of life, and accordingly consume safe and healthy food. The so-called "healthy food" products, which includes in its description contains a smaller percentage of fat or contain healthy fats, with limited sugar and salt content, additional vitamins and minerals, and other functional food additives which serve to promote health. "In recent years consumers have increasingly sought so called "fresh" products (like fresh products), stored in refrigeration. This has led the food industry to develop alternative processing technologies to produce foods with a minimum of nutritional, physicochemical, or organoleptic changes induced by the technologies themselves." (Esteve Maria, Frigola Ana, 2007) Fruit has natural presence of vitamins, minerals and antioxidants. "The Republic of Serbia in the agroecological conditions has all the prerequisites for a rational production of fruit." (Štrbac Maja, 2009)

Producers of fruits, fruit juices and concentrates can have great use of the observed trends. "The production of fruit mash in our industry is based on processing: apple fruit (apple, pear, quince), stone fruits (apricot, peach, plum, cherry, fiddle), Berry fruit (strawberries, raspberries, blackberries)." (Gvozdenović, Vračar, Tepić Aleksandra, 2006) New and innovative methods to ensure optimal preservation of nutritional value of processed fruit consumption will stimulate them. "There is a rise in demand for "super products" ("health promoting"), already prepared for use ("ready to eat"), tropical fruits, off-seasons fruit, organic, fair trade and sustainability products." (Štrbac Maja, 2010) One of the obvious consequences of changing lifestyles of European nations has reduced the time spent to prepare meals/dishes. This trend is due to several factors: women are increasingly based on employment in companies; a growing number of individual households/a member of the household; increasing consumption outside the home; fruit juices are gaining importance in the restaurants and hotels; to promote the consumption of five fruits and vegetables a day; governments of many countries to promote consumption of fruit in kindergartens, schools and restaurants in the company; the benefit of the product is popular in northern Europe (United Kingdom, Ireland, Germany) and others. Manufacturers find innovative methods for the production of foods that require less time to prepare. However, consumers in southern Europe (Italy, Spain and Greece) consume more fresh and unprocessed products. The trend of suitable products is represented, however, the market share of products is less favorable in the southern countries and new members.

### **Consumption of fruit juices**

Consumption of fruit juices and nectars in the EU in 2007. amounted to 11.2 billion gallons, a drop of 1.5% compared to 2006. year. Value, total expenditure amounted to € 24.1 billion, an increase of 19% compared to 2001. year. In the period 2001-2007. the average consumption of fruit juices and nectars per capita in the European Union increased by 1.5 liters (7%). In 2007. year, this spending makes 17% of the total expenditure so "soft" drinks on the market of the European Union (except bottled water). Germany has the highest consumption of fruit juices and nectars per capita which is 46% higher than average consumption in the European Union. Consumption in Germany makes almost 26% of total consumption in the

EU. Finland is in second place in the EU in per capita consumption, however, the total consumption is on the 11th place. Austria is third in consumption per capita, but total consumption is greater than the same in Finland. Large consumers of fruit juices and nectars in the EU are the United Kingdom and France (each with a share of 13% of the total EU consumption), followed by Spain with 11%. Consumption of fruit juices in EU member states varies considerably depending on climatic conditions and habits of consumption. The largest consumption of fruit juices and nectars in the northern part of Europe's historical in the past, less available fresh fruits especially in the winter and will keep the alternative consumption of fruit juices. Spending in the new EU member states is lower than in the older member states. It is expected to increase spending in the new member states with increasing disposable income. Fruit juices with 100% fruit content are the most popular in Western Europe, except in Italy where the favorite/popular beverages that contain from 25-99% pure fruit content. In Eastern Europe are popular nectars, mainly because of the price that is lower than fruit juices that contain 100% fruit. Population growth in the European Union. 2025. year forecasts further growth, but there are big differences between EU member states. Observed decrease in the population even in some of the new EU member states. Growth in consumption of fruit juices is not only the number of consumers, but also by other demographic factors. Composition/structure of the population is changing, which has a large influence on the pattern of behavior in consumption. Number of elderly people is growing rapidly. Households with fewer members, given that married couples have fewer children. In the addition, a growing number of people living alone (particularly in Western Europe), which as a very important market segment. The aforementioned trends are observed in all Member States of the European Union. Consumers usually buy food with which they "meet". Eating habits adopted in childhood and is often very difficult to change. Many consumers fruit associated with health, while fresh fruit is often considered healthier than products such as fruit juices. Increased awareness of the effects of food on human health is often crucial for changes in the diet of a nation. In this respect, governments in many EU countries have special programs to raise awareness of healthy eating habits of the population. Such a large number of consumers buying organic fruit, because it believes that "organic" fruit contains more vitamins and minerals. Consumers who want to contribute to a better life for local producers in developing countries to buy "fair trade" products. "Organic" and "fair trade"

products coexist, while the consumption of these products depends on the available income of consumers, given that they have a higher price. Income consumers affected by the consumption of certain types of fruit juices and nectars. Generally, the available means higher income and consumption/purchase of products that are suitable for use, have additional practical value and luxury products, such as, for example, exotic mixture of fruit juices and juice-based “super fruits”. These products meet consumer demands for healthy products, convenience and hedonism. The aforementioned trends are more represented in the old EU member states, especially in northern countries like Great Britain, Germany and the Netherlands. In the new member states spending increases with the increase of available income, a better supply of various products, improved “style”/product presentation and others. During the economic crisis, the so-called “conservation” becomes important for consumers, given that the focus be more activities at home. That means less spending outside the home, and more in household consumption which includes luxury and hedonistic products. Consumers are spared the money, which is not meant to necessarily give up the luxury. Consumption of luxury goods at home was the largest in the UK, the Netherlands and Germany, then in Poland, Italy and Spain. Traditionally, the so-called, “orange” juices are the most popular type of fruit juices in the European Union. However, compared with consumption in 2001. years, the popularity of “orange” juices record decline, as rising consumption of soft drinks of peach, pineapple, apple and mixed fruit juices. Growing interest in various types of strawberry juice. Many consumers are open and willing to try innovative products that will give them pleasure in discovering new flavors (eg, exotic products that are luxurious). Remarkable is the increase in consumption of soft drinks on the basis of tropical and exotic fruits such as pineapple, pomegranate and acai. Supermarkets are an important area for the promotion and introduction of innovative products to consumers. Thus, at the request of the consumer products being introduced on the basis of 100% fruit composition (puree and concentrates), fruit snacks, “organic” products and others. Selling “organic” fruit-based products is increasing in almost all EU member states. Germany, Sweden and Denmark are leading, followed by France and Great Britain. The market for organic products is less developed in the southern and eastern Europe, but there is potential for growth. Basic principles of organic production are listed in the EC Directive 834/2007. “Potential exporters need to meet a number of requirements related to the production

and marketing of fruits and vegetables in the EU. Requirements relating to health and safety of consumers, genetically modified organisms, additives, the maximum permitted amount of pesticides in fruits and vegetables, organic products, packaging, labeling and information on environmental protection.” (*Štrbac Maja*, 2009) Increased social awareness of consumers in the European Union on ways of production and income distribution in developing countries has led to an increase in demand for “fair trade” products/fruit juices with fair trade label. There is a tendency to fruit juices have an “organic” and “fair trade” label. Ethnic groups in the European Union also affect the growth of consumption of fruit juices on the basis of exotic fruits. They adopted elements of European cuisine and retain part of its culinary tradition. Ethnic trend is present throughout the European Union, but it is the largest retail sales of ethnic products in the UK and France.

#### **Industrial demand for fruit juices and concentrates**

Juice industry is the most important end user/consumer “semi-finished form” fruit juices and concentrates. Only a minor part of and that about 5% of fruit juice concentrate is used in the manufacture of ice cream and bakery industry. There are no detailed and reliable data on consumption of fruit juice concentrate imports. In general, based on surveys of member countries of the European Union, it can be concluded that almost all imports meant for consumption in the juice industry. The European Union is a major producer of fruit juices, but has limited production of concentrates. Manufacturers are not obliged to register their production, and there is no detailed and reliable data on production. Significant level of concentrate producers are Italy (with floating lemon produces about 80,000 tons and orange), Spain and Greece (orange), Poland (apple), followed by Germany and Hungary. Concentrates in Spain and Italy have a different quality. Poland, Germany and Italy (together accounted for 35%) are the main producers of apple concentrate in the European Union. China is the world's leading manufacturer of concentrated apple (60% of world production). “Concentrate of fruit, in addition to finalizing the wider opportunities in the factories for processing fruit throughout the year, known as our export products, particularly concentrated apple or cherries, raspberries and blackberries, as ordered. The perspective for the provision of high quality apple concentrate (export mark) will be provided from the apple industry

and selected assortment of controlled breeding.” (*Gvozdenović, Vračar, Tepić Aleksandra*, 2006) The European Union has made the industrial production of fruit juices, about 11.7 billion liters (2007). Processing of fruit juices is mainly concentrated in Germany. Germany is the main market of fruit juices in Europe. Fruit juice industry in Germany is composed of 410 producers and together produce around 3.6 billion liters of fruit juices (2008). The United Kingdom is in second place. The main producers of fruit concentrates are *Agrana* (Austria), *Döhler Group* (Germany), *Rudolf Wild GmbH & CO KG* (Germany) and others. The main producers of fruit juices in Europe are several multinational companies and smaller manufacturers such as *Hero* (Switzerland), *Gerber Juice Company Ltd.* (United Kingdom), *Eckes Granini* (Germany), *Emig* (Germany), *Conserve* (Italy) and others. Processing of fruit juices are increasingly conducted in the countries of Eastern Europe due to lower production costs and rising domestic demand. Netherlands, Belgium and Germany make up 79% of the total value of imports of fruit juices and concentrates from developing countries (2008). To keep pace with global competition, fruit juice industry in the EU due to cross-border merger is developing as an internationally-oriented industries, develop new products that are of vital importance for the enterprise to reduce production costs cheaper to by raw materials in developing countries, meets the requirements for standards of quality, production, packaging and others.

### Conclusion

Based on the results of research performed by the following conclusion: growing demand for fruit juices and concentrates in the European Union; the greater the need for fruit concentrates; promotes the importance of fruit juice to maintain and improve the health of consumers; there is a growth in production of luxury products/fruit juices; growing interest for exotic ingredients; increasing production in line with ethical and sustainable standards (“fair trade” and “organic”); the introduction of innovative products to market that meet key customer requirements such as wellness and pleasure; rising imports of tropical and exotic ingredients that can not be to produce in the European Union; increasing joint production with the developing countries because of comparative advantages such as lower costs of processing, packaging and labor; increasing demand for cheaper raw materials in industry and other fruit juices. Perceived to be



more fuel price increases transport costs and thus prices. Rising demand for high quality products and reliable supply. Prerequisites for entry and successful marketing of products on the market the product certification (HACCP, ISO 9000, Global GAP, etc.). There is a lot of pressure on the prices of fruit juices in retail stores due to competition. Manufacturers are forced to be innovative and specialized in the production to successfully promoted their products to existing and "won" the new market.

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Примљено: 06.10.2010.

Одобрено: 06.12.2010.

УДК: 664.856/.857

## ПОТРОШЊА И ИНДУСТРИЈСКА ПОТРАЖЊА ЗА ВОЋНИМ СОКОВИМА И КОНЦЕНТРАТИМА

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### Резиме

На тржишту прехранбених производа у ЕУ постоји велика конкуренција. Потрошачи значајно „диктирају“ промене на производима као и иновативна решења. Тренд здравог начина живота, све веће интересовање потрошача за егзотичним ароматама и атрактивна органска храна су основни разлози за уочен раст тржишта воћних сокова. Прерађивачке компаније у ЕУ такође имају потражњу за воћним соковима и концентратима, све више захтевају гарантован квалитет производа у континуитету/безбедне производе и сигурне испоруке свежих производа. Произвођачи у земљама у развоју имају велике шансе за пласман својих производа на тржиштима развијених земаља, уколико испуне захтеве сертификације која је често компликована и за многе произвођаче/извознике скупа. Сертификовани произвођачи и извозници ће имати приступ на већем делу тржишта. Произвођачи у земљама у развоју треба да истраже могућности за пласман својих производа у свакој земљи ЕУ, јер неке земље чланице/трговински партнери могу бити атрактивнији за одређене производе.

**Кључне речи:** воћни сокови, концентрати, потрошња, потражња, ЕУ

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