Bread and grain foods consumption development in Slovakia

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FOR AGRICULTURE AND FOOD INDUSTRY
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Variety of bread and bakery products

It can be produced more than 2 100 different types of products:
- bread (bagels, pitta, ciabatta ...)
- rolls
- cakes
- croissants
- cookies
- pancakes
- pizza
- waffles
- noodles
- pasta
- pastry
- strudel
- breakfast cereals
- sandwiches
- puff dough
- crackers
- baguettes
Main raw materials for bread and bakery products in Slovakia

- flour from cereals (food wheat, durum wheat, rye, oats, corn, barley, buckwheat, spelt)
- water
- leavening agents (yeast, baking soda)
- ingredients (salt, eggs, powder milk, sugar, butter, margarine, raisins, onion, raisins, sunflower seeds, flaxseeds, cumin, amaranth, cocoa powder, hazelnuts, walnuts etc.)
Benefits of bread and bakery products consumption

a) Main source of food
b) Staple part of the diet in Slovakia
c) Health benefits (B-vitamins, carbohydrates, minerals, trace elements, proteins)
d) Positive health effect (intestinal, gastric, cognitive, digestive)
e) Vegetarian type of diet
f) Important source of income for cereal growers
f) Basic source of income for food industry (wholesale bakers, small bakeries, in-store bakeries, cookie/crackers manufacturers etc.)
g) Economic activities in rural areas
Influencing factors on bread and bakery products consumption

- Income level
- Price
- Quality and freshness
- Taste and texture characteristics, nutritional and caloric value
- Product differences and baking procedures (industrial production, in store-bakeries, craft bakers, artisan bakers)
- Availability and assortment in retail
- Eating habits, consumer preferences, lifestyle
- Changing age profile
- Health consciousness and concerns
- Food safety
- Advertising, promotions of products, information campaign
- Urbanization
- Globalization
- Labelling
- Consumerism
- Climate impact
Factors affecting food cereal supply in Slovakia:

- weather development and climatic changes
- common EU agricultural policy (interventions, direct payments, environmental regulations, rural development etc.)
- national state support policy and trade strategy
- business strategies of farmers, food processors, retailers and input materials suppliers
- input costs
- transport costs
- arable land limits
- feed market development (livestock numbers and health)
- preferences and eating habits of consumers
- demographic trends
- biofuels market
- export and import
- cultivation, irrigation, fertilization and storage practices
Wheat production and domestic consumption in Slovakia (´000 tons)

[Graph showing the trend of wheat production and domestic consumption from 1998/99 to 2008/09 estimate.]
Rye production and domestic consumption in Slovakia (’000 tons)

![Graph showing rye production and domestic consumption in Slovakia from 1998/99 to 2008/09, with estimates for 2008/09. The graph indicates fluctuations in production and consumption over the years.](image-url)
Oats production and domestic consumption in Slovakia (’000 tons)
Barley production and domestic consumption in Slovakia (´000 tons)

- Production
- Domestic consumption
- Food consumption


Quantities: 0 to 1000 tons
Main obstacles of Slovak bakery industry

a) High perishability of products
b) Labour intensive
c) Energy demanding
d) Historically low profit margins
e) Vulnerability to input prices fluctuations
f) Rising manufacturer costs (raw materials, transport costs)
g) Traceability
h) Rather low purchasing power of consumers
i) Access to commercial credits (for processing machinery and equipment)
j) Lack of young workers
k) Retail chains (slotting fees, strong negotiating position)
Problems in Slovak bakery industry relating to consumption

a) Downsizing products (weight reduction, cheating on consumers)

b) Reducing product count in packages

Per capita wheat and rye flour consumption in Slovakia (kilograms)
Problems in Slovak bakery industry relating to consumption

c) Demographic changes (smaller households – single families)
d) Differences in consumption within family (more varied diets)

Share of group male over 60 years old and female over 55 years old on total population in Slovakia (%)
Problems in Slovak bakery industry relating to consumption

e) Expenditures of private households (EUR)

<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditures (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>67.97</td>
</tr>
<tr>
<td>1999</td>
<td>65.01</td>
</tr>
<tr>
<td>2000</td>
<td>68.66</td>
</tr>
<tr>
<td>2001</td>
<td>71.67</td>
</tr>
<tr>
<td>2002</td>
<td>74.1</td>
</tr>
<tr>
<td>2003</td>
<td>81.73</td>
</tr>
<tr>
<td>2004</td>
<td>91.7</td>
</tr>
<tr>
<td>2005</td>
<td>96.08</td>
</tr>
<tr>
<td>2006</td>
<td>103.74</td>
</tr>
<tr>
<td>2007</td>
<td>123.62</td>
</tr>
<tr>
<td>2008</td>
<td>149.56</td>
</tr>
</tbody>
</table>

bread/cereals products
Problems in Slovak bakery industry relating to consumption

f) Share of expenditures

Share of average private household expenditures on food and soft drinks from total net annual expenditures (%)
Bakery products consumption potentials and possible improvements in Slovakia

a) Innovations (unconventional ingredients, new tastes, flavours, baking methods, delicious and gourmet products, artisan breads, specialty baked goods, flavoured breads)

b) Prolongation of shelf life

c) Packaging and portability (new types of packages-lidding films, chub films, peel&reseal lids, durable bakeware, foils, different size packages)

d) Convenience (in-store bakeries, prebaked and frozen products)

e) Functionality (ingredients/probiotics/additives with health properties, nutritional fortification)

f) Organic (natural ingredients)

g) Health and wellness (gluten-free products, superior quality products)
Bread and selected bakery products per capita consumption in Slovakia (kilograms)

Source: Statistical Office of the Slovak republic
Further bread and selected bakery products per capita consumption in Slovakia (kilograms)

Source: Statistical Office of the Slovak republic
Correlation between expenditures and consumption of bread and cereals products in Slovakia

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>household expenditures per bread and cereals products in SKK per capita</td>
<td>2 692</td>
<td>2 868</td>
<td>2 924</td>
<td>3 104</td>
<td>3 164</td>
<td>3 391</td>
<td>3 672</td>
<td>3 708</td>
<td>3 864</td>
<td>4 176</td>
</tr>
<tr>
<td>Exchange rate SKK/EUR</td>
<td>39,603</td>
<td>44,115</td>
<td>42,589</td>
<td>43,309</td>
<td>42,699</td>
<td>41,491</td>
<td>40,045</td>
<td>38,593</td>
<td>37,248</td>
<td>33,781</td>
</tr>
<tr>
<td>household expenditures in EUR</td>
<td>67,97</td>
<td>65,01</td>
<td>68,66</td>
<td>71,67</td>
<td>74,10</td>
<td>81,73</td>
<td>91,70</td>
<td>96,08</td>
<td>103,74</td>
<td>123,62</td>
</tr>
<tr>
<td>per capita bread, wheat pastry and pastries consumption</td>
<td>107,80</td>
<td>100,20</td>
<td>96,30</td>
<td>96,00</td>
<td>92,50</td>
<td>88,60</td>
<td>90,40</td>
<td>89,70</td>
<td>85,60</td>
<td>87,50</td>
</tr>
</tbody>
</table>
Correlation calculation between expenditures and consumption of bread and cereals products in Slovakia

<table>
<thead>
<tr>
<th>household expenditures per bread and cereals products</th>
<th>bread, pastry a pastries consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>household expenditures per bread and cereals products</td>
<td>1</td>
</tr>
<tr>
<td>bread, wheat pastry and pastries consumption</td>
<td>-0.7525</td>
</tr>
</tbody>
</table>

mid-sized linear correlation, with growing financial expenditures of private households for bread and cereals products, the consumption is declining
Bread and pastries production in Slovakia

- Bread (in tons)
- Pastries (in tons)

Year: 2001 to 2008

- 2001: Bread - 109,700, Pastries - 11,900
- 2002: Bread - 110,623, Pastries - 14,943
- 2003: Bread - 110,623, Pastries - 14,943
- 2004: Bread - 110,623, Pastries - 14,943
- 2005: Bread - 109,700, Pastries - 18,000
- 2006: Bread - 109,700, Pastries - 18,000
- 2007: Bread - 210,149, Pastries - 18,000
- 2008: Estimate - Bread - 210,149, Pastries - 18,000
Thank you for your attention

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