

DEVELOPMENT OF EXPENDITURES FOR FOODSTUFFS IN CONSIDERATION OF THE NUMBER OF MAINTAINED CHILDREN

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Abstract

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The paper describes the income analyses and consumer demand analyses for foodstuffs, mainly meat and meat products of the childless and households with more maintained children in SR. Following the carried out analysis we can state that compared with the childless families the expenditures for foodstuffs in families with maintained children are by 40% lower for commodities such as meat, fish, fruits, vegetables. Potatoes only reach a 50% share in childless households. The demand for meat in total was price elastic within all groups of households ($E_{pi} = -1.01$ to -1.57) and for pork the price elastic demand was observed only with one maintained child ($E_{pi} = -1.292$) and in households with three and more maintained children ($E_{pi} = -1.179$). The demand for poultry with regard to the change of the own price ($E_{pi} = -1.011$) and emoluments ($E_l = 1.001$) developed proportionally.

income, foodstuffs expenditures, price and income elasticity, cross price elasticity, childless households and households with more than one maintained child

The structural changes accompanying social and economic development create new challenges and also negative phenomena in our society. The polarisation of wealth and poverty represent a special problem of the globalising world. In the course of the social-and-economic transformation the notion „poverty“ in Slovakia but also in the countries of Central and Eastern Europe becomes a new phenomenon. The vertical, social-and-economic polarisation is manifested in creation of social inequality both at individual and universal levels. A new social and demographic structure of inhabitants is being created. We can observe a decrease the number of families with more children, increase in the number of singular households, households with one child and the proportion of old age pensioners is growing gradually. The expenditures of households with three and more maintained children for foodstuffs, clothing, transport, housing fell and form less than half of the childless households expenditures.

The principal strategy of the majority of households is an effort to eliminate negative effects of economic changes (inclusive of those related to the fi-

nancial and economic crisis) by mobilisation of all accessible sources and limitation of expenditures and this also leads to the decrease in the foodstuffs consumption and changes in consumption habits.

As regards the foodstuffs consumption we can observe a substantial decrease in demand for beef. The falling demand which was 11.9% in 1999, reached 24.7% in 2001 and a certain slow-down tendency has been recorded by several authors (Křížová, Chajdiak, 2006) who expect stagnation of the falling down consumption and predict its growth and 2013 and expect it will reach the level of 17.5 kg per person and year, close to the EU-25 countries level which was in average 18 kg /per inhabitant in 2006. A similar, but slighter falling tendency is seen in the demand for pork and a substitution position is taken over by a gradually growing consumption of poultry. A similar tendency of growth and drop is manifested also in the consumption of other basic foodstuffs. This work target is to present the results of an analysis of incomes and the expenditures for foodstuffs development in total and to analyse prices development and their impact on consumption of individual kinds of

meat and to compare possible substitution relations in childless families, in families with one, three and more children in the Slovak Republic.

MATERIAL AND METHODS

The published official results of statistical surveys by the Bureau of Statistics SR within family budgets over the years 1998–2007 served as the source material. The household incomes and individual consumption classification are surveyed each year following the recommendations by the European Bureau of Statistics and COICOP and it includes 12 fields. In 2006 the selection of households over the Slovak Republic included 4701 households selected at random in the form of a two-step stratified random selection of international classification for family budgets statisticsn EUROSTAT (COCOIP-HBS). According to this selection criterion a maintained child is considered to be a person up to completion of his/her school education inclusive of students and apprentices which prepare themselves for their future vocation but till 28 years of the age at the latest. The data about incomes, expenditures and household consumption were drawn from the publication „Incomes, expenditures and consumption

of private households in the SR.“ The data on consumer prices were drawn from the publication “Consumer prices indices in the SR“ and own calculations from the base data on monetary expenditures for individual foodstuffs commodities, quantity of material consumption and consumer prices, individually in childless households, in households with one child, two, three and more maintained children. For base data entering the quantitative analysis, total net money income, total and net money expenditures for foodstuffs and non-alcoholic beverages were chosen. The subject of investigation was formed of private households expenditures for meat (material consumption and price) as an aggregated parameter and also beef, pork and poultry meat consumption and their price in the disaggregated form.

RESULTS AND DISCUSSION

Development tendency of nominal and real emoluments and expenditures for foodstuffs

Consumer spendings in households are underlain with the purchasing power of inhabitants which further depends on the level and development of cash flow and overall economic situation in Slovakia. It

I: Development of households net nominal and real money income and expenditures for foodstuffs in SKK per capita and per year according to COICOP

Indicator	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Net money income in households										
no children										
nom.	68 795	91 121	100 011	115 575	121 642	123 052	106 830	114 814	122 459	139 114
real.	64 475	82 388	89 296	107 712	117 756	113 412	99 377	111 796	117 186	135 114
1 child										
nom.	66 609	69 327	75 528	83 164	86 629	92 537	94 120	94 119	107 087	119 596
real.	62 426	62 683	67 436	77 506	83 862	85 288	87 553	91 645	102 476	116 339
3 and more										
nom.	44 650	45 452	50 056	55 068	58 577	62 111	59 016	60 893	63 776	74 837
real.	41 846	41 096	44 693	51 322	56 706	57 245	54 899	59 292	61 030	72 799
Net money expenditures for foodstuffs and non-alcoholic beverages										
no children										
nom.	21 523	23 057	23 237	23 742	24 759	25 389	27 694	29 041	28 265	29 814
real.	20 343	22 451	22 088	22 485	24 417	24 554	26 426	29 453	27 875	28 667
1 child										
nom.	17 224	16 924	17 391	17 946	18 233	19 228	20 028	21 086	22 129	23 775
real.	16 280	16 479	16 531	16 994	17 981	18 596	19 111	21 385	21 823	22 861
3 and more										
nom.	13 339	13 162	13 705	14 440	14 982	15 488	15 049	15 430	16 370	17 844
real.	12 608	12 816	13 028	13 674	14 775	14 989	14 360	15 649	16 144	17 158

Source: Incomes, expenditures and consumption of private households in SR, ŠÚSR (Bureau of Statistics), own calculations, Index of consumer prices (previous year = 100)

can be observed that the development of the money income of households was uneven within the years 1998–2007. Till the year 2003 the net monetary incomes of childless families increased in a more progressive way with an average growth coefficient ($k' = 1.153$), that is by 15.3% annually in average. The income growth in families with one maintained child was about 6.8% in average and in families with three and more maintained children by 7%. This development was also manifested in the growth of real money incomes, which was 7.7% in families with one maintained child and 7.9% in three and more maintained children families. In the next period, as shown in Table I, the growth of net money income slowed down and in childless families it was only 3.1% in average over the years 2003–2007. The expenditures of households for foodstuffs experienced a more balanced development over the past decade, at the level of about 3.3% to 3.7% with any remarkable differences between childless households and households with several maintained children. But it is necessary to note, that while the difference in rated incomes was by 0.4% in average lower compared to the growth of real incomes, nominal expenditures for foodstuffs were lower by 0.2%. This fact enabled to preserve a certain life standard in nutrition the households were used to. The structure and income level of individual households was intervened by several demographic, economic and social factors and they together determined their differentiation profile at the scale of income bands. According to the findings by EU SILC as shown (Olexa, 2006), the annual value of the medium of disposable income of households in Slovakia was SKK 16,307 per month, and the average of a disposable income was SKK 19,913. Within the interval from SKK 6,001 till 16,000 per month in the year 2005 even 42% of households could be found. The deepening of unevenness and poverty is the accompanying feature of Central and Eastern Europe Economies transformation (Bartová, 2004), (Ošková, 2008).

Development of expenditures for foodstuffs in individual groups of households

With number of children also the costiness is increased and therefore social assistance by the state and other interest organisations fulfills an important role. Childless households are usually ranked among higher income bands compared to families with more children. As given by (Bartová, 2004 and Ošková, 2008) even in case of one maintained child the family moved back on the band range to the lower income values actually to the band of social poverty. This risk of poverty endangers 10.7% of inhabitants in Slovakia. In 2007 in families with one child 6% of persons were endangered, with two children 11%, with three and more children even 25% of persons. The lower net money incomes relate to lower expenditures per one member of a family with several children. The expenditures for foodstuffs are reduced in families with three and more maintained children to less than by 40% and the expenditures for some food commodities represent only a half (50%) proportion of the expenditures compared with childless families. As we can notice from the relative values in Table II, the smallest difference, compared with the childless families within the surveyed decades, has been found with the expenditures for the basic foodstuffs such as bread and cereals (20–27%), milk, cheese and eggs (20–34%), meat and meat products (30–50%). They are the commodities which are not replaceable in healthy nutrition of the inhabitants and also the life standard of individual families can be appreciated according to the level of their provision.

The structure of foodstuff expenditures in families with more children has not improved over the past decade. It occurred not only the decrease of income growth but also the decrease of expenditures almost for all foodstuffs commodities. Greater differences compared to childless families can be found with families having three and more children and smaller

II: Household expenditures

Annual expenditures per capita in SKK	no children	1 child		2 children		3 children	
		1998	2007	1998	2007	1998	2007
foodstuffs in total	100	78.95	78.71	67.76	66.89	62.30	60.02
bread and cereals	100	82.97	82.25	76.92	75.64	77.91	73.04
meat in total	100	70.97	73.63	58.13	60.49	52.05	52.20
fish in total	100	88.98	77.85	74.46	59.74	66.28	49.20
milk, cheese, eggs	100	87.40	88.69	75.99	77.72	67.91	66.46
oils and fats	100	66.82	65.97	59.20	55.76	60.53	57.72
fruit	100	87.82	75.42	75.48	60.28	62.38	52.17
vegetables, potatoes	100	85.62	76.20	66.44	60.63	58.12	53.15
sugar and sweets	100	79.13	79.69	70.65	68.72	63.37	65.54
foodstuffs else not specified	100	79.22	86.07	65.68	70.84	62.97	63.75

Source: Own calculations

with families having two children. Statistical characteristics in Tables III and IV document substantially greater differences in material consumption of

beef and pork meat in childless families compared to families with one and especially three and more maintained children.

III: *The level and development of meat consumption in private households in the years 1998–2007*

Indicator	Meat consumption in kg per capita in households											
	Meat in total			Beef			Pork			Poultry		
	no chil- dren	1 child	3 chil- dren	no chil- dren	1 child	3 chil- dren	no chil- dren	1 child	3 chil- dren	no chil- dren	1 child	3 chil- dren
Average	69.99	45.65	34.9	4.56	2.52	1.97	18	10.69	7.58	23.1	15.21	10.89
Standard deviation.	4.23	4.05	2.65	1.44	0.7	0.58	1.35	1.48	0.83	3.21	2.26	1.95
Var. coefficient	6.04	8.87	7.61	31.42	27.78	29.88	7.54	13.84	11	13.9	14.86	17.87
Basic index	1.137	1.212	1.12	0.526	0.59	0.563	1.165	1.473	1.08	1.403	1.473	1.623
Average growth coef.	1.014	1.022	1.01	0.931	0.943	0.938	1.017	1.044	1.01	1.038	1.044	1.055

Source: own calculations

IV: *The level and development of meat consumer price in private households in the years 1998–2007*

Indicator	Meat consumer prices in SKK/kg								
	Beef			Pork			Poultry		
	no children	1 child	3 children	no children	1 child	3 children	no children	1 child	3 children
Average	125.12	127.70	120.50	109.62	115.90	109.00	76,35	80.99	77.27
Standard deviation.	10.55	11.96	10.93	7.08	7.82	7.75	5.16	5.12	5.57
Var. coefficient	8.43	9.37	9.07	6.46	6.75	7.13	6.76	6.32	7.24
Basic index	1.25	1.18	1.18	1.08	1.109	1.16	1.092	1.109	0.99
Average growth coef.	1.025	1.019	1.019	1.009	1.012	1.02	1.01	1.012	0.99

Source: own calculations

The households with several maintained children orientated themselves at the consumption of poultry and its consumption in 2007 compared to the year 1998 was increased to 162.3% and showed a 5.5% average growth coefficient ($k' = 1.055$). The growth of poultry consumption at all households was due to the available consumer price which as follows from the average growth coefficient has a constant level in the course of the decennial surveyed period ($k' = 0.99$ – 1.012). While the meat consumption variability in individual households was relatively high (especially of beef) and ranged from 6.04–31.42%, as expressed by the variation coefficient, the variability of consumer prices was substantially lower ($V = 6.32$ – 9.37%). In 2007 in families with three and more children the consumption of foodstuffs, so important for man's health and development as are albumens of animal origin, fish, fruit and vegetables, was at the margin of 50–53% considering the childless families expenditures. Also in comparison with the EU countries the consumption is markedly lower, especially of fruit and vegetable by 91.6%, milk and dairy products by 88 kg and beef by 12.6 kg and this applies first of all to the increasing number of old age pensioners, representing 11.99% in the SR

population structure in 2007, unemployed and also inhabitants at the productive age with several maintained children.

Income elasticity of demand for meat at individual household groups

The fall in spendings for foodstuffs in Slovak households in the structure of consumer spendings is reflected in different way. The spendings of childless households in 2007 dropped to 22.9%, in families with one or two children they were about 21% and in families with three and more children they were at the level of 25.0% and their nominal value was SKK 17.844 per capita and year. The second highest spending item in families with three and more children were expenditures for housing, water, power, in average about SKK 12.200 and that was 17.1% of all consumer spendings.

To evaluate the dependence of spendings for foodstuffs and non-alcoholic beverages in relation to real money income over the past decade from the view of childless families and families with several maintained children, the linear and power regression model following the assumption that:

$$VP = f(RPP)$$

and demand function for a foodstuff q_i as a function of net money incomes and prices p_i and so:

$$q_i = f(p_i, \text{ČPP})$$

at $i = 1, 2, 3, 4$ (meat in total, beef, pork and poultry).

The dependence size of real expenditures for foodstuffs and non-alcoholic drinks (VP) on the real money incomes (RPP) spent by the households over the years 1998–2007 are represented by regression equation parameters in Table V. Considering that the difference in consumer demand for foodstuffs in households with two, three and more children are not very expressive, the analysis of income and price elasticity in households with two children was left out.

Parameters of the linear regression model show that a childless family at the growth of the real money income by SKK 1.000 to increase the foodstuff expenditures by 116.9 per capita and year in average will be sufficient. A family with one maintained child needs to increase its expenditures for foodstuffs by SKK 133.9 per capita and year in average. A family with three and more children with an increase of real income by SKK 1.000 requires to spend for foodstuffs SKK 152.1 per capita and year. In the years 1998–2007 a childless family with an average net real income

SKK 103.872 per capita and year spent SKK 24.875.6 for foodstuffs, a household with three and more children had to make both ends meet with an average real annual income of SKK 54.092.8 and spent only SKK 14.520.1 per capita and year for foodstuffs.

In relative expression one percent increase of a real money income of a childless family is sufficient to increase the expenditures for foodstuffs by 0.488%. One child family could think over the increase for foodstuffs expenditures in the ratio 1 : 0.596% and a family with three and more children in the ration 1 : 0.567%. That is, in childless families at a smaller income elasticity of foodstuff expenditures a larger space for other – discretionary expenditures (culture, recreation, transport, education) remains than it is enabled by incomes in households with several children. The applied demand models (Table V) are statistically highly conclusive and except for childless households they explain for 90–95% the closeness of the dependence of real expenditures for foodstuffs on net real money incomes. The conclusion abilities of the linear and power models are relevant and enable coincident interpretation of closeness and dependence size of expenditures for foodstuffs in relation to pensions.

V: Income elasticity and parameters of regression equations

Indicator	Function parameters	Correlation index	Income elasticity
Household with no children	VP = 12734.37 + 0.1169 RPP	0.593**	0.488
	VP = 128.29 *RPP ^{0.456}	0.617**	0.456
Household with 1 child	VP = 7589.61 + 0.1339 RPP	0.908**	0.596
	VP = 25.10 *RPP ^{0.584}	0.899**	0.584
Household with 3 and more children	VP = 6291.65 + 0.1521 RPP	0.959**	0.567
	VP = 32.54 *RPP ^{0.560}	0.957**	0.560

Source: Own calculations

** – a model statistically documented at $\alpha < 0.01$

Empirical results of the demand for meat and individual kinds of meat

From the wide possible range of foodstuffs offer and demand and for examination of mutual links and substitutions in the consumer behaviour of individual households at the given disposable pensions we have focused our attention at the analysis of demand for the commodity meat and meat products. Meat and its consumption participate with the greatest share (23–26%) in the structure of expenditures for foodstuffs and in the majority of countries it is appraised as a measure for the maintenance level. In Slovakia we can observe a negative development in the maintenance of the inhabitants especially in the material consumption of beef meat and also partially of pork meat but also of other foodstuffs such as milk for drinking, vegetables (Křížová, 2007 and Kubicová, 2008).

From the results obtained following the analysis of the demand for meat as an aggregate parameter

and three disaggregate parameter we have found (Table VI) that meat is a standard goods and that its consumption grows with its price drop and on the contrary, the demand function has a negative tendency. Responses of individual household groups to the change of the meat own price and incomes are different. As follows from Table VI the demand for meat in total responds at all household groups price elastic. At the increase of the meat own price by 1% the childless household response is a drop in demand by 1.57%, similarly a household with one maintained child (–1.46), while with the household with three and more children the coefficient of own price elastic reaches the value one (–1.01) and it is a demand unit elastic. The household responses to the change of the meat own price proportionally, when the own price is increased by 1% the demand for meat drops by the same value.

From the aspect of income elasticity the demand for meat is not elastic and the income growth in

VI: Estimation of regression equations parameters (b_1, b_2), price (E_{pi}) and income elasticities (E_i) of demand for meat and meat products in dependence on prices and net money incomes at childless households and households with one, three and more maintained children

Foodstuffs group	Household	b_1	b_2	E_{pi}	E_i	R^2
Meat in total	childless	-1.075	0.00023	-1.570	0.361	0.528*
	1 child	-0.630	0.00027	-1.460	0.526	0.855**
	3 and more children	-0.347	0.00028	-1.010	0.468	0.857**
Beef meat	childless	0.0064	-6.7E-05	0.176	-1.607	0.794**
	1 child	0.0357	-5.1E-05	1.826	-1.812	0.564*
	3 and more children	0.0242	-7.2E-05	1.480	-2.069	0.663**
Pork meat	childless	-0.1173	3.8E-05	-0.714	0.237	0.483-
	1 child	-0.1192	9.1E-05	-1.292	0.748	0.836**
	3 and more children	-0.0823	9.4E-05	-1.179	0.718	0.703**
Poultry meat	childless	-0.276	0.00014	-0.912	0.702	0.566*
	1 child	-0.109	0.00013	-0.585	0.789	0.837**
	3 and more children	-0.143	0.00019	-1.011	1.001	0.855**

Source: Own calculations

** – a model statistically documented at $\alpha < 0.01$

* – a model statistically documented at $\alpha < 0.05$

childless families by 1% underlies the increase of demand for meat only by 0.361%. The households with one, three and more children conditions the increase on demand for meat only by 0.361%. The households with one, three and more children respond more sensitively even by a half percent increase of the consumer demand (0.526% and 0.468%). Our results can be confronted with the results published in the German Federal Republic (Thiele, 2008), where the own meat price elasticity of households in total is shown as (-1.02), in poverty-stricken families (-1.05), in families with two children (-0.92), in richer families (-0.97). From the aspect of income elasticity to the contrary with our results, with all household groups demand is shown as income elastic. Coefficients of income elasticity acquire values higher than 1 within the interval from (1.16) in families with two children, (1.24) with younger families, (1.23) with poorer families, (1.22) with richer families and (1.18) with age older families.

Following the analysis of the households demand for other disaggregate meat kinds the demand development for beef meat was negative. The estimated coefficients of the own price of meat change as well as the change of expenditures do not satisfy theoretical expectations and react in contradiction. The households responded to the growth of the beef meat own price with the growth demand and especially in the households with one child. The same response was from the demand in households with three and more maintained children (1.480).

Equally in contradiction to theoretical assumptions the households responded income elastic in demand for beef meat. Coefficients of income elasticity show negative values and it is possible to interpret

that the beef meat within the surveyed household groups is in terms of revenue situation an inferior goods and at the income increase the demand decrease follows. Beef meat consumption is not an interesting goods of consumption which is assisted by available substitution with cheaper poultry and also partially pork meat.

The increase in the percentage of old age pensioners in the course of the economics transformation and the Slovakia EU entry expressed itself in the routing of consumer demand and the preferences of poultry meat consumption and abundance of the traditional favour of pork meat. The coefficients of change of the own meat price correspond to the theoretical assumptions and the pork price growth and also poultry price growth and price elasticity coefficients result in the demand decrease and the price elasticity coefficients acquire negative values. In the households with one and more maintained children the demand for pork meat is price elastic and the consumer dynamically responds for demand. The increase of the meat own price by 1% will condition the demand drop by 1.292% in one child families and by 1.179% in a family with three and more children. In a childless family the demand is price non elastic (-0.714) and therefore the household does not respond dynamically to the change of the pork meat own price.

In case of demand for poultry meat the demand is price elastic (and/or proportional) (-1.011) and with families maintaining three or more children and proportionally to the increase of the poultry meat own price its demand will drop. In childless households one percent price increase will condition 0.912% drop in demand for poultry meat and in

families with one maintained child by 0.585 %. *Income elastic* (proportional) is the response to the demand for poultry meat only by households with three and more maintained children (1.001) and one percent increase of income will cause one percent increase of demand for poultry meat. The demand for poultry is income non elastic in childless households and in households with one maintained child. Approximately 0.7% increase of demand for pork and poultry meat falls on the increased income by 1 %. Because there are no substitute products for commodity meat in total, the demand for meat is not that much sensitive to price changes as the individual kinds of meat

are sensitive. With regard that in case of the commodity beef meat the theoretical assumes have not been fulfilled (Fendeková, Strieška, 2007 and Syrovátka, 2006) the effect of the changes of meat own prices and the income changes (Table VI) on the substitution relationships manifestation within the demand for meat products will be shown on the consumer demand for pork meat.

By means of a linear model a multiple dependence of the demand for pork meat (q_1) on the pork meat prices (b_1), beef meat prices (b_2), poultry meat prices (b_3), and money incomes (b_4) was surveyed. On the basis of a multiple regression model (Table VII),

VII: Parameters of the equations of demand for beef and pork meat in dependence on meat own price (b_1), pork meat price (b_2), poultry meat price (b_3) and net money income (b_4)

Foodstuff group	Household	b_1	b_2	b_3	b_4	R^2	α
Beef meat	childless	0.049	-0.099	-0.013	-6.7E-05	0.954**	0.001
	1 child	0.038	-0.035	0.015	-4.6E-05	0.668-	0.161
	3 and more children	0.024	-0.046	0.014	-5.0E-05	0.865**	0.021
Pork meat	childless	-0.079	-0.003	-0.205	63.E-05	0.756*	0.050
	1 child	-0.119	0.088	0.051	2.9E-05	0.898**	0.011
	3 and more children	-0.081	0.057	0.015	3.8E-05	0.908**	0.008

Source: Own calculations

** – a model statistically documented at $\alpha < 0.01$

* – a model statistically documented at $\alpha < 0.05$

– a model statistically not documented $\alpha > 0.05$

that shows statistical proof of the correlation index (R^2), it is possible to state that in case of the demand for pork meat with childless families the cross price elasticity is negative and acts as a complementary product from the aspect of price – beef meat (-0.084) and poultry meat and poultry meat products (-0.869). In households with one, three and more maintained children at the demand for pork meat as the beef so the poultry meat fulfil a substitution function from the price aspect and the growth of beef and poultry meat prices result in the increase of pork meat consumption. If the beef meat price will be increased by 1% in households with one child it can be expected that the demand for pork will grow by 0.946%. In case of a substitution function of poultry meat the consumer demand of households with one maintained child will respond with an increased demand for pork meat by 0.717%. The substitution effect on the basis of a cross price elasticity at households with three and more maintained children at the 1% price increase of beef the consumer demand response is an increased demand for pork meat by 0.906% and for the increased price of poultry meat by 1% the household response is only 0.158% increased demand for pork meat.

The cross price elasticity of the demand for pork meat in childless households on the basis of parameters of multiple regression linear model points

to a difference from households with three and more maintained children that beef meat uses to be a complementary goods but with a very low indirect cross price elasticity (-0.084), while the demand for poultry meat shows its complementary function with a considerably higher elasticity (-0.869). The response for a one percent poultry meat price growth from the consumer demand is a drop of demand for meat by 0.869% in case of beef meat and demand drop for pork meat by 0.084. The poultry meat among these surveyed kinds does represent a clear substitute and a household with three and more maintained children responds price and income elastic proportionally, the demanded quantity of a given kind of meat increases (decreases) proportionally with the increase (decrease) of income and the meat own price.

CONCLUSION

Foodstuffs represent for man one of the basic life needs. With the increased incomes usually a substitution of some foodstuffs for foodstuffs of higher quality and/or affordable is manifested. The structure of foodstuffs consumption is not negligibly affected by the level of consumer prices of specific foodstuffs or substitution foodstuffs and in the first place the income situation of a household. It comes to an income

and property differentiation. This development was also reflected at the consumer demand for foodstuffs and differentiation from the aspect of childless families and families with more children. A family with three and more maintained children shows by 40.02 % lower expenditures for foodstuffs than childless family. With important foodstuff commodities such as meat, fish, milk, dairy products, fruit, vegetables and potatoes this proportion is reduced even to a half. Income more elastic are families with one and more children when spending for foodstuffs than childless families. More marked are the differences in response elasticity for the change of the meat on price as an aggregated commodity to which the demand response is elastic with childless families and families with one maintained child while in families with three and more maintained children the change of demand is proportional to the change of the own meat price. A coincident tendency in the price elasticity development was manifested in the demand for pork and poultry meat. The demand for beef meat did not develop in accordance with theoretical assumptions of

the own price change and the expenditures change and points to a fact that in Slovak households the beef is from the view of income and price elasticity considered to be expensive compared to the poultry and pork meat price and any increase in income is not reflected in its higher consumption. The substitution and/or complementary function is carried by pork and in the first place a demand for poultry and poultry semi-products. Considering the fact that the foodstuffs market following the biological substance of nutrition is an example of a limited consumption, it is not realistic to expect in the future a marked material increase but neither decrease of the overall volume of consumption. In general, we can expect that with the growth of the purchasing power of the inhabitants a moderate increase in consumption of beef meat, dairy products, fruit and vegetables will occur and also awareness of the inhabitants what a healthy nutrition is. The present development connected with the global financial crisis does not predict much optimism for greater qualitative changes in the consumer demand in the nearest period.

SÚHRN

Vývoj výdavkov na potraviny so zreteľom na počet nezaopatrených detí

Potraviny predstavujú pre človeka jednu zo základných životných potrieb. S nárastom príjmov sa obvykle prejavuje substitúcia niektorých potravín za potraviny kvalitnejšie, resp. cenovo prístupnejšie. Štruktúru v spotrebe potravín ovplyvňuje významne i úroveň spotrebiteľských cien konkrétnych potravín a potravín substitučných a predovšetkým dôchodková situácia domácností. Dochádza k príjmovej a majetkovej diferenciácii. Tento vývoj sa odráža aj na spotrebiteľskom dopyte po potravinách a diferencovanie najmä z pohľadu bezdetných a viacdenných rodín. Tri a viacdenná rodina s nezaopatrenými deťmi vykazuje o 40,02 % nižšie výdavky na potraviny než rodina bezdetná. Pri dôležitých potravinových komoditách ako je mäso, ryby, mlieko, syry, ovocie, zelenina a zemiaky je tento podiel redukovaný až na polovicu. Príjmovovo pružnejšie reagujú jedno a viacdenné domácnosti pri vynakladaní výdavkov na potraviny než bezdetné rodiny. Výraznejšie sú rozdiely v prejave pružnosti reakcie na premenu vlastnej ceny mäsa ako agregovanej komodity, na ktorú reaguje dopyt elasticky u bezdetných rodín a rodín s jedným nezaopatreným dieťaťom, kým u rodín s tri a viac deťmi, zmena dopytu je proporcionálna k premene vlastnej ceny mäsa. Zhodná tendencia vývoja cenovej pružnosti sa prejavila v dopyte po bravčovom a hydinovom mäse. Dopyt po hovädzom mäse sa nevyvíja podľa teoretických predpokladov premeny vlastnej ceny a premeny výdavkov a poukazuje, že z hľadiska príjmovej a cenovej elasticity je hovädzie mäso považované v slovenských domácnostiach za cenovo drahé v porovnaní s cenou hydinového ale aj bravčového mäsa a zvýšenie príjmu sa neprejavuje na zvyšovaní spotreby. Substitučnú, resp. komplementárnu funkciu plní bravčové a predovšetkým dopyt po hydine a hydinových polotovaroch. Vzhľadom k tomu, že trh s potravinami v dôsledku biologickej podstaty výživy je príkladom limitovanej spotreby, nie je reálne očakávať v budúcnosti výrazne hmotné zvýšenie ale ani zníženie celkového objemu spotreby. Všeobecne sa dá očakávať, že pri raste kúpyschopnosti obyvateľstva nastane mierne zvýšenie spotreby hovädzieho mäsa, mliečnych výrobkov, ovocia a zeleniny a rast uvedomenia obyvateľstva o prospešnosti zdravej výživy. Súčasný vývoj spojený s globálnou finančnou krízou na najbližšie obdobie nedáva veľa optimizmu na väčšie kvalitatívne zmeny v spotrebiteľskom dopyte.

príjem, výdavky na potraviny, cenová a príjmová elasticita, krížová elasticita, bezdetné domácnosti, domácnosti s jedným a viac deťmi

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