

REVENUES / EXPENDITURES REPORT AND ITS INFLUENCE ON ROMANIA'S POPULATION FOOD CONSUMPTION

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Abstract. The food consumption of the population is a matter of vital importance, being considered one of the main criteria that determines the ratio of incomes / expenditures of the population (but simultaneously it is a quantitative and qualitative determinant element of the food structure). This paper presents on one hand the situation of food consumption level of the population in Romania and on the other hand a presentation of consumption forms in the dynamics of the period 2011-2017. The structure of the indicators used in the paper is focused on the expression in physical and percentage units (annual comparisons capture variations in the analyzed dynamics). Levels of food consumption are reproduced through the specific varied forms that deepen a correlation relationship. The presentation of correlative forms is based on the knowledge of the interrelation between daily average food consumption and gross domestic product per capita, labor productivity and nominal earnings. Standard averages and deviations are complemented by the coefficient of variation, elasticity, and growth rate. Through the regression equations, the calories consumption level (Y_{ca}) can be ascertained on the basis of changes in Gross Domestic Product ($Y_{caj_1} = 12,77 X_1 + 2950$), labor productivity ($Y_{caj_2} = 5,013 X_2 + 3033$) and Nominal Earning ($Y_{caj_3} = 0,2215 X_3 + 2994$), along with the protein consumption according to the functions (Y_{pa}) that are similarly rendered according to Gross Domestic Product ($Y_{paj_1} = 0,068X_1^2 - 4,1434X_1 + 171,2$), $Y_{paj_2} = 0,012X_2^2 - 1,483X_2 + 153,8$) and Nominal Earning ($Y_{paj_3} = 97,56 X_3 + 0,0072$). The results of the consumption correlations of calories / proteins (Y_c , Y_p) and the influence of each of the influence factors (X_1 , X_2 , X_3) were also presented by the graphic form, resulting in the evolutionary trend. The standard deviation and the coefficient of variation highlight the degree of scattering of the elements and their degree of homogeneity. The structural package and the level of indicators presented underlie the calorie and protein basis, the growth rate of food consumption at national level.

Keywords: food consumption, standard deviation, rhythm of growth, elasticity.

Introduction

On food consumption, it can be said that it is permanently linked directly to the possibilities of the amount of income earned. But it is also found that these food expenditures influence all other non-food expenditure. This paper seeks to highlight through a three-dimensional knowledge system: the annual level and the

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increasing pace of these consumptions, on the total and by the structure of expenditures (food); the comparison given by the annual levels presented in the dynamics of the years 2011-2017 compared to the base year 2011; substantiation by correlated forms resulting from the regression equations complemented by basic statistical indicators of the variational system. Through the structural analysis of this analysis system focused/exemplified by consumptions in calories and proteins, the elements specific to food consumption were captured precisely through the income/expense report. The comparative level of the current consumption of calories and proteins was highlighted, as well as the specific food consumption trends in Romania. The manifestation of variations in the annual levels of food consumption was given by using appropriate statistical indicators. At the same time, the presentation and the graphical form of the results emerged from the calculation constitute a complement to the knowledge of the socio-economic two-dimensional effect with both income/expense ↔ food consumption.

Materials and methods

In this paper, the form of the methodological criteria was focused on the normative-constructive field, the technical-economic indicators and the appropriate statistic indicators, complemented by the results of the regression functions system. Through these indicators for the dynamics of 2011-2017 have actually been pursued the annual levels for: the physical indicators of consumption represented by calories, proteins, lipiars and carbohydrates; value indicators represented by revenue, earnings, costs, productivity expressed in Lei/household and Lei/employee. The indicators presented by the percentage form have created a basis for comparison both to the annual succession of the period analysed, but also to the first year of this period (2011).

Further, the main indicators of consumption, with reference to calories (Y_{caj}) and proteins (Y_{paj}), were integrated with the main influence factors represented by gross domestic product (X_1), labour productivity (X_2) and nominal earnings (X_3) in regression functions. Based on the annual variation of influence factors (with reference to variables $\pm x$), consumption levels (Y) have been determined by using regression equations/functions ($Y = a + bx$) to determine the adjusted level for the years Analyzed.

By the values derived from the standard deviation calculations and the coefficient of variation, the dispersion of the annual values and the degree of homogeneity was determined, indicating the link between the binding variables (X_1, X_2, X_3) and the consumption of calories (Y_{caj}) and proteins (Y_{paj}). The assessment of the extent of scores spreading around the average was included in the structure of the following steps: values lower than 15% which indicated a low spreading rate, those with values between 15-30% which showed moderate

spreading, and those with a variation over 30% showing a large scatter (in this case the average is not a good indicator of the trend).

The iterative percentage change of a variable that was expressed using elasticity took into account the iterative percentage change of another variable. It was considered a special concept, because in any interpretation about the food consumption of the population, an important role belongs to the factors of influence. Elasticity was expressed by a positive value (an absolute value), thus: if its value is less than 1 it can be said that the variable y through x is inelastic; if the coefficient of elasticity is greater than 1 then y is considered to be elastic with regard to x , since each percentage change of the factor leads to an even greater change in y .

On this basis, the intensity of growth rate and elasticity between calorie consumption (Y_{caj}) and protein (Y_{paj}) and the main factors of influence gross domestic product (X_1), labor productivity (X_2) and nominal earning (X_3) were determined.

At the same time, by drawing up the scenarios, the prospective knowledge of consumption was monitored as a result of variation in the influence factors level ($x \rightarrow \pm 5\% \dots \pm 15\%$).

The methodological form followed, on the one hand, by the interpretations resulting from the level of the presented indicators, respectively the highlighting of the actual situation, the level and the causes of the variation of the calorie and protein consumption, and a further highlighting of the possibilities / presumptive way of developing the researched phenomena.

Results and discussions

The phenomenon analyzed for the period 2011-2017 was repeated in a form appropriate to the problems of general knowledge of consumption and factors of influence. On this basis, according to the uni-factor regression functions and the statistical indicators for the consumption of calories and proteins were analyzed the analytical adjustments that were further substantiated by the statistical indicators.

I. The evolution of the level of consumption and influence factors at national level

Food consumption in Romania through the presentation of the absolute consumption of calories, proteins, carbohydrates and lipids, as well as the level of indicators, permanently implies a deepening of the knowledge of the economic and social factors influencing these human consumption. Table 1 shows this structure by indicators in absolute and percentage terms (by comparison with 2011), which for the period 2011-2017 could be interpreted in a staggering manner in the dynamics mentioned.

a). Consumers' incomes and earnings are differentiated to annual growth rates as compared to 2011. Thus, if the total monthly income per household increases by + 37.0% in 2017, money income, gross monthly and gross nominal earning growth rates for the same reference base are + 55.0%, + 62.7% and + 61.9%, respectively.

b). The monthly labor cost and labor productivity analyzed in the same annual dynamics is represented by increases, but for the last year they are + 56.0% and + 49.1% respectively (2016) respectively.

c). Calories and main nutritional factors concerning the consumption per inhabitant give a delimitation in the levels of consumption per inhabitant in the structure of the analyzed years. Compared to the year 2011, it is found that for the years 2012-2014, this level of calories is lower (these are recorded in values between 96.9% and 97.9%), and in the period 2015-2017 to record increases (the values being between 102.1% and 103.2%). A similar situation is also found for proteins and lipids. With reference to the carbohydrate nutrient factor it is found that the levels of all the years analysed are inferior to the level of the year 2011.

Table 1. Evolution of the level of income, expenditure and food consumption in Romania

Specify	MU	2011	2012	2013	2014	2015	2016	2017	
Total monthly income per household	Lei Monthly	2,417	2,475	2,559	2,500	2,687	2,945	3,392	
	% versus year 2011	100	102.3	105.8	103.4	111.1	121.8	137.0	
Cash income on a household	Lei Monthly	1,975	2,039	2,137	2,103	2,362	2,633	3,063	
	% versus year 2011	100	103.2	108.2	106.4	119.5	133.3	155.0	
Nominal monthly gross average earnings	Lei/employee per total economy	1,980	2,063	2,163	2,328	2,555	2,809	3,223	
	% versus year 2011	100	104.1	109.2	117.5	129.0	141.8	162.7	
Nominal monthly net average earnings	Lei/employee per total economy	1,444	1,507	1,579	1,697	1,859	2,046	2,338	
	% versus year 2011	100	104.3	109.3	117.5	128.7	141.6	161.9	
Monthly labour cost (total economy)	LEI/employee	2,569	2,675	2,813	2,988	3,189	3,493	4,008	
	% versus year 2011	100	104.1	109.4	116.3	124.1	135.9	156.0	
Labour productivity on a busy person	Lei/person	54,593.8	60,413.9	65,409.5	68,537.9	73,481.8	81,424.1	-	
	% versus year 2011	100	110.6	120.0	125.4	134.6	149.1	-	
Average daily dietary consumption (calorie expression and nutritional factors) per inhabitant	Calories	3390	3,287	3,302	3,321	3,464	3,462	3,500	3,500
		100	96.9	97.4	97.9	102.1	102.2	103.2	103.2
	Protein	110.0	106.6	108.4	108.6	112.3	112.4	114.1	114.1
		100	96.9	98.5	98.7	102.0	102.0	103.7	103.7
	Lipids	104.3	103.6	99.6	106.6	111.7	113.6	116.2	116.2
		100	99.3	95.4	102.2	107.0	108.9	111.4	
	Carbohydrates	481.4	460.8	471.8	460.4	479.9	476.3	477.8	477.8
		100	95.7	98.0	95.6	99.6	98.9	99.2	99.2

Source: INS, Statistical Yearbook of Romania 2018, Bucharest

From the analysis of the evolution of incomes, expenditures and food consumption in dynamics 2011-2017 results differentiated levels and rhythms. For income, wage earnings, monthly cost and labour productivity, a succession of annual increases is recorded, with differentiated levels. For the consumption of calories, proteins and lipids it can be delimited a first period (2012-2014) in which they are below the level of 2011, after which increases exceeding the level of 2011 are recorded. The carbohydrate nutrient factor is every year below the level of the year 2011, but at which a rhythm of growth is found.

Hence, the conclusion that although revenues, earnings, monthly costs and productivity are fraught with a successive annual increase, growth rates are more pronounced than consumption. It is observed that these annual consumption does not align with the other increases of incomes and expenditures, from which it follows that in the analyzed dynamics are noted decreases of the growth rate. Socio-economic factors influence both calorie consumption (as a qualitative factor) and protein, carbohydrate and lipid (considered qualitative factors).

II. The level of calorie consumption as a result of variations in influence factors

Human consumption of calories expresses the main element of comparison in the analysis of the population's standard of living. At the same time, the question of knowledge of the level and influence of influence factors arises. This knowledge was analysed by the interpretative forms of regression functions and statistical indicators presented in table 2.

A). – The adjusted levels of the average daily calorie food consumption (Y_c) result from the regression functions of the influence factors (X) that have been taken into question, with the indication that for each differentiations can be reported. The establishment of linear, unifactorial regression function between gross domestic product, labour productivity, nominal earnings and inflation rate was achieved with the EXCEL spreadsheet program. In this way, it was created the possibility of expressing the evolution of consumption when the influence factors are known (X_1, X_2, X_3). From the analysis of the influence factors nominal earnings (X_3) can be considered with the most significant influence (because the adjusted Y_{caj} values₃ are the highest).

B). – As regards the statistical indicators, the oscillations of the annual consumption level and the variation in the influence factors were particularly discussed. Thus, at an annual average consumption (Y_{caj}) of 3389 kcal are determined values that are differentiated from the average.

▪ the standard deviation with low values for gross domestic product and labor productivity shows that the values are slightly spaced from the average, and the nominal earning by the very high consumption figures shows that the data are distanced, scattered strongly against the average.

▪ The coefficient of variation which is only 2.6% in the case of consumption, for gross domestic product and productivity shall be considered as reduced (less than 15%), and for nominal earnings the situation of a moderate spread (15-30%).

▪ The growth rate (expressed in percentage terms) means an increase in consumption in the dynamics of the influence factors growth (it can be mentioned the increased influence of the labor productivity and the nominal earnings).

▪ Elasticity highlights in the case of consumption that all three factors (X_1 , X_2 , X_3) record a sub unitary coefficient of elasticity ($X_1 = 0.14$, $X_2 = 0.12$, $X_3 = 0.15$). So, from the calculations it has emerged that the changes of all factors influence very little the consumption (elasticity indicates that variable y by x is inelastic). *In an exemplified/explanatory form* for the productivity factor (X_2) the determination of the elasticity coefficient can be given as follows: for perspective based on the year 2017, if the labor productivity will increase by 1% will reach 82.2 thousand lei/ person ($81.42 + 0.81$). By introducing in the equation that refers to productivity ($Y_{caj_2} = 5,013X_2 + 3033$), an elasticity coefficient of 0.12% is delimited.

Table 2. Substantiation through regression functions and statistical indicators of calorie consumption indicators and influence factors

No.	Year/ Indicator	Average daily food consumption	Gross domestic product (X_1)	Labour productivity (X_2)		Nominal earnings (X_3)		
		(Y_c)	Thousand Lei/inhabitant	$Y_{caj_1} = 12,77X_1 + 2950$	Thousand Lei/person	$Y_{caj_2} = 5,013X_2 + 3033$	Lei/ employee Net Month	$Y_{caj_3} = 0,2215X_3 + 2994$
		KCAL (number)		KCAL (number)		KCAL (number)		KCAL (number)
1	2011	3,390	27.9	3,306.2	54.59	3,307	1,444	3,313.8
2	2012	3,287	29.6	3,328.0	60.41	3,336	1,507	3,327.8
3	2013	3,302	31.8	3,356.0	65.41	3,361	1,579	3,343.7
4	2014	3,320	33.6	3,378.7	68.54	3,377	1,697	3,369.9
5	2015	3,464	35.9	3,409.1	73.48	3,401	1,859	3,405.8
6	2016	3,462	38.8	3,445.8	81.42	3,441	2,046	3,447.2
7	2017	3,500	x	X	x	x	2,338	3,511.9
8	Average (KCAL)	3,389	33	X	67	x	1,781	x
9	Standard deviation (kcal)	88	4	X	10	x	322	x
10	Coefficient of variation (%)	2.6	12.3	X	14.1	x	18.1	x
11	Growth rate (%)	0.53	6.83	X	8.32	x	8.36	x
12	Elasticity (%)		39.2	0.14	82.2	0.12	2361	0.15

Source: INS, 2018, Romanian Statistic Yearbook 2017

It follows from this that the levels reported by the level of the statistical indicators for the food consumption in terms of calories, nominal earnings have a significant influence which has a predominant character. This is because the consumer is still predominant in purchasing food products in the situation where the nominal earning increases (it can be mentioned that in the current stage there is a certain behavior shown by the consumer and which expressed in calories shows his degree of satiety).

III. The protein consumption and influence of variation in the main influence factors in food consumption

The consumption of proteins in the current stage of human nutrition is considered one of the most important problems, for which the factors of influence need a particular knowledge. Related to the problem of calorie consumption (as a quantitative side), protein consumption (qualitative side) was analyzed by the same influence factors that structurally was given in table 3. It was sought that through the use of regression functions and statistical indicators to be known the adjusted levels of consumption, which were supplemented by the synthesis of the values of variational level of consumption (Y_c) following the influence of factors (X_1, X_2, X_3).

a). – With the regression functions presented, resulted an adjusted succession of annual protein consumption, but to which the influence factors were known (X_1, X_2, X_3). Effectively, from the analysis of influence factors on consumption it is found that the nominal earning factor (X_3) is most representative because in most years the adjusted Y_{paj3} values are the highest.

b). – The oscillations of the level of protein consumption have been analyzed and given interpretatively from the results of the main statistical indicators resulting from the differentiated values compared to the average.

- Standard deviation of consumption indicates for GDP and labour productivity a small deviation from the average (of 4 thousand lei/person and 10 thousand lei/person, which percentage represents 12.12% and 14.92% respectively), but a sharp distancing of the level of consumption by the influence of nominal earnings (322 LEI/employee net on month representing 18.07% compared with the average).

- The coefficient of variation as a percentage expression frames the influence of GDP and labour productivity at a reduced level of spreading, and in terms of nominal earnings at the range of a scatter class these increases are moderate.

- The growth rate expressing the tendency to increase consumption that compared to the average expresses similar values for the influence of labour productivity and nominal earnings (8.32 and 8.36) and a lower level by the influence of GDP (6.83%).

▪ Elasticity as a level expressed by the coefficient of comparison 1 for the situation of consumption by the influence of the three factors renders a lack of elasticity (values being sub unitary, respectively by $X_1 = 0,41$, $X_2 = 0.36$, $X_3 = 0.15$). As such, the consumption of proteins is very little influenced by these factors.

Table 3. Substantiation through regression functions and statistical indicators of protein consumption indicators and influence factors

	Year/Indicator	Average daily food consumption	Gross domestic product (X_1)		Labour productivity (X_2)		Nominal earnings (X_3)	
		Yp Protein (GR)	Thousand Lei/person	Ypaj ₁ = 0,068X ₁ ²⁻⁴ , 1434X ₁ + 171,2	thousand Lei/person	Ypaj ₂ = 0,012X ₂ ²⁻¹ , 483X ₂ + 153.8	Lei/employee Net Month	Ypaj ₃ = 97,56X ₃ + 0.0072
				Protein (GR)		Protein (GR)		Protein (GR)
1	2011	110	27.9	108.8	54.59	108.98	1,444	108.0
2	2012	106.6	29.6	108.4	60.41	108.45	1,507	108.4
3	2013	108.4	31.8	108.5	65.41	108.65	1,579	108.9
4	2014	108.6	33.6	109.1	68.54	109.08	1,697	109.8
5	2015	112.3	35.9	110.5	73.48	110.24	1,859	110.9
6	2016	112.4	38.8	113.3	81.42	113.35	2,046	112.3
7	2017	114.1	X	X	X	X	2,338	114.4
8	Media (GR)	110	33	X	67	X	1,781	X
9	Standard deviation (GR)	3	4	X	10	X	322	X
10	Coefficient of variation (%)	2.4	12.3	X	14.9	X	18.1	X
11	Growth rate (%)	0.61	6.83	X	8.32	X	8.36	X
12	Elasticity (%)	X	39.2	0.41	82.2	0.36	2,361	0.15

Source: INS, 2018, Romanian Statistical Yearbook 2017

IV. Forecasts of the level of consumption of calories/proteins by influencing the variation of the main influence factors.

The influence of human behaviour on food consumption is in a permanence mobility, which is why the agri-food market must have different levels of consumption. With reference to the consumption of calories and proteins in this work, the consumption scenarios were made based on the variation of the three factors (X_1 , X_2 , X_3) from the regression equations. Variational steps of increase of the three factors (+ 5%, + 10%, + 15%) were based on the last year of the adjusted level of dynamics of the period analyzed.

Table 4. Scenarios on the forecast of calories consumption per inhabitant ($Y_{caj} \rightarrow \text{kcal}$) function of increasing influence factors (X_1, X_2, X_3)

Influence factor	Regression function	Um	Levels resulting from the increase in factor X_1, X_2, X_3		
			5	10	15
$X_1 = \text{GDP}$	$Y_{caj_1} = 12,77X_1 + 2950$	Thousand Lei/Place	40.77	42.71	44.65
	Calorie consumption	KCAL (no.)	3,470.6	3,495.4	3,520.2
		%	0.72	1.44	2.16
$X_2 = \text{Labour productivity}$	$Y_{caj_2} = 5,013X_2 + 3033$	Thousand Lei/pers	85.50	89.57	93.64
	Calorie consumption	KCAL (no.)	3,462	3,482	3,502
		%	0.59	1.19	1.78
$X_3 = \text{nominal earning gain}$	$Y_{caj_3} = 0,2215X_3 + 2994$	LEI/employee	2,454.9	2,571.8	2,688.7
	Calorie consumption	KCAL (no.)	3,537.8	3,563.7	3,589.5
		%	0.74	1.47	2.21

The calculation base is the level of the last year of dynamics ($X \rightarrow$ The value of the years 2016, 2017)

a). – The forecast of calorie consumption was given by the scenarios presented in table 4 to which the level of increases was pursued by the influence of GDP, labor productivity and earning wage. Thus: the consumption of calories per inhabitant records increases in levels between 3,470.6 and 3,520.2 calories per inhabitant, which represents an increase of 2.16% at a GDP gain of 15%; in the case of labour productivity, growth is lower, representing shares between 0.59% and 1.78%; The earning wage can be considered a significant growth factor (the increase is registering for all the highest level scenarios, which also trains the highest percentage levels, which are between 0.74% and 2.21%).

Table 5. Scenarios for protein consumption per inhabitant ($Y_{paj} \rightarrow \text{kcal}$) function of increasing influence factors (X_1, X_2, X_3)

Influence factor	Regression function	MU	Levels resulting from the increase in factor X_1, X_2, X_3		
			5%	10%	15%
$X_1 = \text{GDP}$	$Y_{paj_1} = 0,068X_1^2 - 4,1434X_1 + 171,2$	Thousand Lei Place	40.8	42.7	44.7
	Protein	Gr	115.8	118.8	122.4
		%	2.21	4.88	8.01
$X_2 = \text{Labour productivity}$	$Y_{paj_2} = 0,012X_2^2 - 1,483X_2 + 153,8$	Thousand Lei/pers	85.5	89.6	93.6
	Protein	Gr	115.5	118.1	121.1
		%	1.93	4.21	6.84
$X_3 = \text{nominal earning gain}$	$Y_{paj_3} = 97,56X_3 + 0.0072$	LEI/employee	2,454.9	2,571.8	2,688.7
	Protein	Gr	115.2	116.1	116.9
		%	0.74	1.47	2.21

The calculation base is the level of the last year of dynamics ($X \rightarrow$ The value of the years 2016, 2017)

b). – The scenarios depicted in Table 5 show the results of amplification of the influence factors. It is noted that the highest increases are in the case of GDP growth (the weight being between 2.121% and 8.01%), and in the case of nominal earning growth this increase is the lowest (the weight being between 0.74% and 2.21%).

From this it can be deduced that in the present situation the consumption of calories per inhabitant in the structure of human food appreciated as a quantitative element is possible, even necessary to be amplified because its rhythm under the influence of the nominal earning is the highest. The prospect of protein consumption, which in human nutrition is considered a nutritional factor on the qualitative side, is necessary to increase the increase. This is because the highest weights are recorded in GDP growth and labor productivity, where nominal earning record lower growth rates.

All the problems analyzed relating to the one hand to the fluctuations in the food level and on the other hand to influence factors (with reference to GDP, labour productivity and nominal earnings), a situation that can be synthesised by a form Three-dimensional structural: the dynamics of the main indicators on incomes, earnings, monthly costs and labour productivity through the levels shown in the dynamics give a successive annual growth higher than food consumptions; the consumption of calories, considered a quantitative element, signifies a moderate variation, but whose growth rate is very little influenced by the increase in influence factors; the values of annual protein consumption analysed by annual deviations are found to be forms of moderate increases, a situation due to influence factors that have influenced very little consumption (only for the influence of earning wage is found to be a slight tendency to increase consumption).

Conclusions

The conjectural ensemble regarding the level of the incomes / expenses ratio on the Romanian food consumption can conclude the following:

1.–In the dynamics of the analysed period (2011-2017) there is a definite but differentiated tendency to increase the annual levels of income/expenditure and food consumption indicators. Increases in revenue/expenditure are very much higher (in the succession of the years it can be inferred that in the last year compared to 2011 year, these increases reach percentage values between + 37.0% and + 62.7%). For increases in food consumption, the following can be found: for the consumption of calories, carbohydrates and lipids during the years 2012-2014 a decrease is recorded after which in the period 2015-2017 there are increases (in the last year increases are between + 3.7% and + 11.4%), and for carbohydrates the levels of consumption are located all years 2012-2017 below the limit of 2011 (between 95.7% → 99.2%).

2.–Regarding the human consumption of calories analyzed by the regression functions of influence factors can highlight the influence of nominal earnings (X_3) with the most significant influence. The consumption oscillations highlight differentiated levels compared to the average, which is shown by the values of the standard deviation and the coefficient of variation, eventually an amplification of the growth rhyme can be inferred.

3. – The consumption of proteins analysed by the same influence factors reveals that moderate increases are manifested for annual deviations alongside the same moderate variations, due to influence factors that have influenced very little the consumption (only for the influence of earning is a slight tendency to increase the protein consumption). In the variation of protein consumption the nominal earnings is considered the most representative factor of influence (since in most years the adjusted Y_{paj_3} values are the largest).

4. – The consumption of calories/proteins rendered by scenarios leads to a presumed knowledge of the food consumption of which a continuous mobility is found. The variational steps in regression equations give an increase in calorie consumption under the predominant influence of earning wage and an increase in protein consumption through the predominant growth of GDP and labour productivity, a situation which the nominal earnings record has much lower growth rhythms. All this is because for the consumer there is still a predominant behaviour in the purchase of agri-food products where the nominal salary increases (reference may be made to the fact that in the current stage there is a certain behavior shown by the consumer and expressed in calories is the degree of his satiety).

Hence, the need for a new balance of food security adapted to the national system in Romania, which in the current stage is not proportional to the consumption of calories and nutrients (a phenomenon illustrated by the differentiated rhythms of the annual increases in calories, but also to proteins and carbohydrates).

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