

## ESTIMATED SUBSISTENCE MINIMUM. METHODOLOGY

The methodology was worked out within the project "The methodology for calculating subsistence minimum and absolute poverty line, and the updating of equivalence scales to be used in calculating social indicators" (Project Manager E.-M. Tiit) in coordination with the Ministry of Social Affairs. The researchers of the Estonian Society of Nutritional Sciences and PLC Resta, also the representatives of the Ministry of Social Affairs as well as Statistics Estonia participated in the project.

Three expenditure groups are included in calculating the subsistence minimum:

- expenditure on food,
- expenditure on dwelling,
- individual non-food expenditures.

Expenditure on alcoholic beverages and tobacco products, package holidays, purchase of vehicles, expenditure in restaurants, other catering establishments and hotels are excluded from the subsistence minimum.

The basis for calculating food expenditure is the minimum estimated food basket, which is scientifically justified by the Estonian Society of Nutritional Sciences.

The minimum estimated food basket is based on the normative method and ensures the general daily need of nutrients, vitamins and minerals per capita without causing health problems. The diurnal energy value of the minimum estimated food basket is 2,400 kcal.

According to the recommended allowance the calculation of the subsistence minimum is based on the basal metabolism coefficient 1.6, which covers the need of energy and micronutrients of unemployed and sedentary 30–60-year-old adults (excluding pregnant women and breastfeeding mothers, people with special needs and chronic diseases).

The basis for calculating a food basket is a sample menu, which is composed on the basis of the recommended allowance of Nordic countries. Also, Estonian socio-cultural situation, consumption expenditures and the habits of nutrition and physical exercises were considered.

In the elaboration of the sample menu it was important to follow that it would be close to Estonian nutrition habits.

The minimum estimated food basket and the amounts of food (sample menu) compiled by nutrition experts, being the basis of calculating the expenditures on food

<b>Foodstuff</b>	<b>Considerable quantity in the estimated minimum food basket per month<sup>1</sup> (kg or l)</b>
Rye bread	5.40
Potatoes	12.00
Pasta products	1.20
Rice	0.60
Oat flakes	0.60
Peeled barley	0.30
Buckwheat	0.60
Semolina	0.30

White bread	0.75
Wheat flour	0.45
Carrots	3.75
Cabbages	5.25
Beets	1.14
Swedes	0.93
Dried vegetables (peas and beans)	0.30
Onions, incl. garlic	1.29
Tomatoes	0.30
Cucumbers	0.15
Apples	3.75
Bananas	1.80
Raisins	0.15
Oranges	1.20
Berries (on average)	0.30
Fresh, chilled or frozen meat of swine	2.16
Fresh, chilled or frozen meat of poultry (with bones)	1.80
Liver	0.21
Frankfurters/cooked sausage	0.30
Fresh, chilled or frozen fish (Baltic herring)	1.95
Fish fingers	0.45
Tinned fish (sprats)	0.45
Eggs <sup>2</sup>	0.51
Milk, fat 2.5%	6.0
Seasoned yoghurt, fat 1.5%	1.5
Kephir, fat 2.5%	1.2
Curds, non-fat	0.45
Cheese, average content of fat	0.45
Sour cream, fat 20%	0.30
Butter	0.30
Oil	0.45
Nuts, seeds	0.12
Sugar	0.75
Juice concentrate, average content of sugar	0.60
Jam	0.60
Cocoa powder	0.03
Coffee powder	0.15
Herb tea	0.03
Salt	0.09

<sup>1</sup> Quantity of food per 30 days.

<sup>2</sup> Eggs are presented in grams, which enables to recalculate it for a price of a piece (1p = 60g), about two eggs per week or 8.5 eggs per month are calculated.

When calculating the cost of food basket, the respective amounts of food were annually multiplied with the purchase prices of the Household Budget Survey of Statistics Estonia for years 2005-2007. The average prices of the expenditure on food in the households with lower income (1st-5th expenditure decile) were used as purchase prices. Starting from 2008 in the recalculation of the cost of food basket the change over previous year of consumer price index of foodstuffs declared by Statistics Estonia is used.

The basis for the calculation of dwelling expenditure are the actual dwelling expenditure based on the data of the Household Budget Survey 2004. In calculation median expenditure of households are used, which are corrected with the coefficients of expert evaluations. When ascribing coefficients, regular

expenditure of dwelling (rent, maintenance expenditure, refuse collection, sewerage services, water supply, etc.) and irregular expenditure (repair expenditure) are differentiated.

Median expenditure is found separately in case of regular and irregular expenditure. After that in the first case 95% and in the second case 35% of median expenditure are taken to the calculation of subsistence minimum (no equivalence scales are used in finding the median of dwelling expenditure).

The basis for calculating the share of individual non-food expenditure is the actual expenditure based on the data of the Household Budget Survey 2004.

The list of individual non-food expenditure involves about 200 expenditure groups, which according to the used international classification are assembled to eight bigger expenditure groups:

- expenditure on clothing and footwear;
- expenditure on household equipment and operation – purchase of furniture, food and dishes, soft furnishings, purchase and repair of household appliances, purchase of cleaning agents (e.g. washing powder), etc.;
- expenditure on medical care and health services – purchase of medicines and miscellaneous goods related to health care (thermometers, vitamins) and paying for treatment and rehabilitation services, etc.;
- expenditure on education – payment of private lessons and courses, tuition fee in private schools, etc.;
- expenditure on communications – services of telephone and data communication (Internet) and purchase of telephones;
- expenditure on transport – expenditure on personal and public transport (excl. the purchase of vehicles);
- expenditure on recreation, leisure and entertainment – sports, purchase of magazines and study materials, hobby, purchase and repair of radios, televisions, computers, etc.;
- expenditure on miscellaneous goods and services – expenditure related to personal care (hairdresser, cosmetics, nappies, payment of kindergarten, etc.).

In calculating the share of individual non-food expenditure in subsistence minimum, separate median expenditure per household member was calculated for every expenditure group (no equivalence scales are used in finding the median). After that, the expenditure is corrected by the coefficients (developed for different expenditure groups), which are presented in the following table.

Calculated consumption coefficients of non-food expenditure

<b>Expenditure group</b>	<b>COICOP code for goods or services</b>	<b>Coefficient</b>
Expenditure on clothing and footwear per household member	03	0,5
Expenditure on household equipment and operation per household member	05	0,35
Expenditure on medical care and health services per household member	06	0,75
Expenditure on transport per household member	072 - 073	0,3
Expenditure on communications per household member	08	0,85
Expenditure on recreation, leisure and entertainment per household member	091 – 095	0,4
Expenditure on education per household member	10	0,25
Expenditure on miscellaneous goods and services per household member	12	0,5

Coefficients are based on the results of the analysis of average actual expenditure of the Household Budget Survey and on the basis of expert evaluations. The following positions were taken into account:

- coefficients are relatively low in consumption groups, where the variety of prices is large, calculating the expensive luxury goods and services on the market (clothing and footwear, expenditure on household equipment and operation and recreation, leisure and entertainment, expenditure on transport, which cover also the international flights, and other expenditure, incl. personal expenditure). In all those spheres, there are products and services with lower prices on the market for price sensitive users;
- coefficients of medical care and health services and communications services are remained relatively high.

At the same time it is observed that the size of expenditure would not be smaller than the actual consumption of the households (1st–3rd expenditure decile) with lower standard of living in 2004.

In the recalculation of the share of dwelling expenditure and individual non-food expenditure for the year 2005 (and every subsequent year) the average annual growth rate of consumer price of the respective expenditure groups declared by Statistics Estonia is used.

#### **Calculation of subsistence minimum of a household**

According to the previously described methodology, the size of the subsistence minimum is calculated for the first adult member of a household, using the methodologies elaborated for the calculation of three expenditure components.

For the calculation of the subsistence minimums of different-sized households, international equivalence scales are used. For Estonia, OECD traditional equivalence scales appear to be the most appropriate in the economic situation of 2004 – 1: 0.7: 0.5.

According to the equivalence scales, the consumption of the first (or the only) adult member of a household is considered to be the consumption unit. The consumption of each second and following adult member of a household accounts for 70% and under-age child (younger than 14) 50% of it.

Updated methodology has been in use since 2005 (the base year is 2004).