



HELLENIC REPUBLIC



HELLENIC STATISTICAL AUTHORITY

Piraeus, 5 October 2022

## PRESS RELEASE FOOD SECURITY

### 2021 Survey on Income and Living Conditions (Income reference period: 2020)

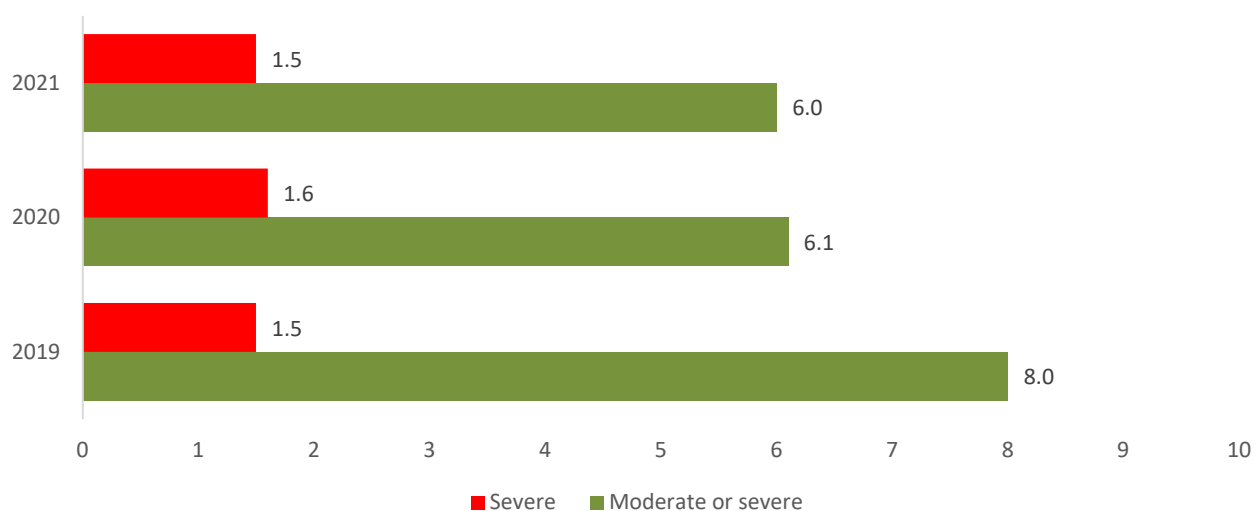
The Hellenic Statistical Authority (ELSTAT) announces data on food security, based on the 2021 Survey on Income and Living Conditions of Households (EU-SILC), **with reference income period the year 2020**. This survey is the main source for comparable statistics on income distribution and social exclusion at European level.

ELSTAT included eight questions in the Income and Living Conditions Survey, since 2019, proposed by Food and Agriculture Organization (FAO) for the calculation of indicator 2.1.2 of the objective 2 of Sustainable Development (elimination of hunger by 2030), concerning the prevalence of moderate or severe food insecurity.

The questions in this section refer to the period of the 12 months, prior to the survey conduct, and are intended to capture the possibility or not of providing all household members with adequate and suitable amount of food, to ensure each member's nutritional conditions necessary for a healthy living.

#### Graph 1. Prevalence of food insecurity in the population, based on the Food Insecurity Experience Scale (FIES): SILC 2019 - 2021

%



- 6.0% of total population (6.1% in 2020 and 8.0% in 2019) experienced moderate or severe levels of food insecurity, while 1.5% of total population (1.6% in 2020 and 1.5% in 2019) experienced only severe levels of food insecurity (according to the FIES).

#### Information on methodological issues:

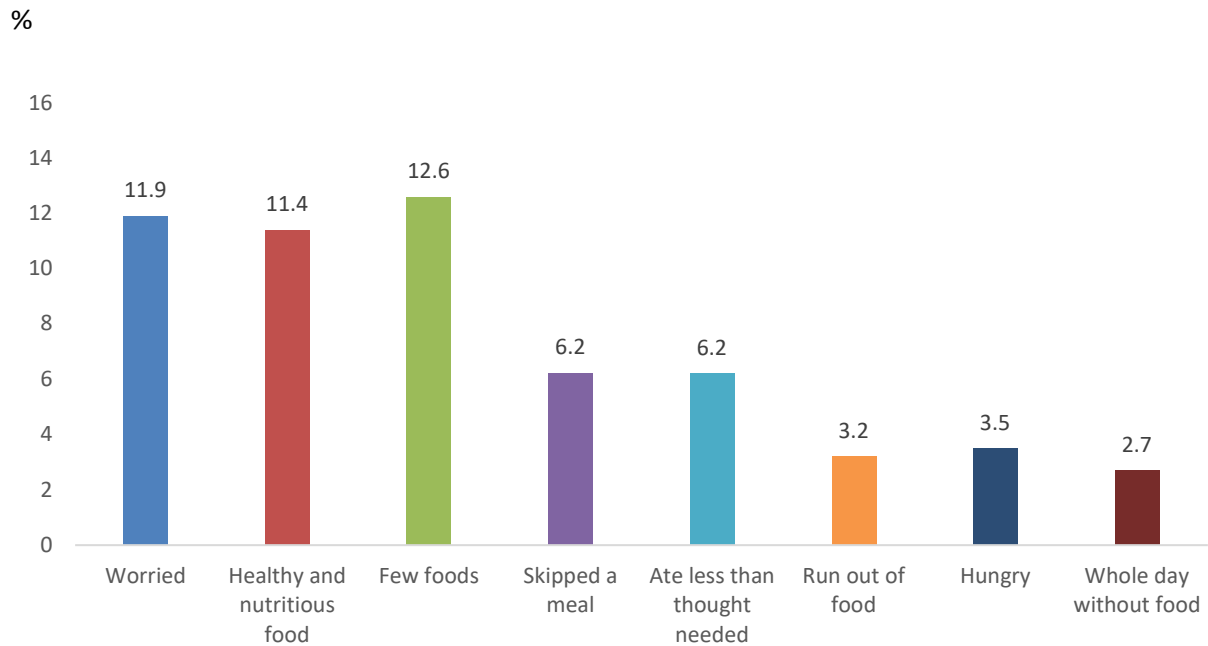
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- A household is experiencing *moderate or severe levels of food insecurity*, when at least one household member reports having to skip a meal, eating less than needed, running out of food, being hungry but not eating, not eating for a whole day, due to lack of money or other resources to obtain food, during the 12 months prior to the survey conduct.
- A household is experiencing *severe levels of food insecurity*, when at least one household member reports not eating for a whole day due to lack of money or other resources to obtain food, during the 12 months prior to the survey conduct.

**Graph 2. Food Insecurity Experience Scale - FIES by component. Percentage (%) distribution of total population: 2021**



Graph 2 shows the percentages of population per component of the Food Insecurity Experience Scale (FIES). More specifically:

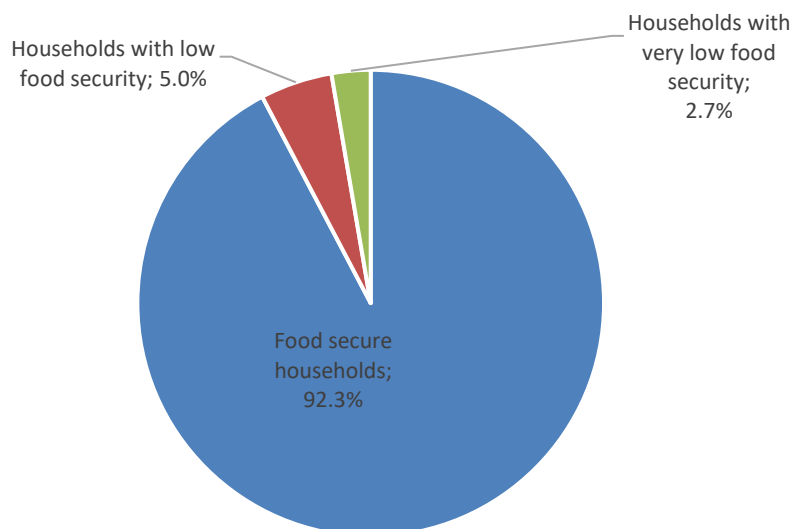
- 11.9% of total population worried that would not have enough food to eat
- 11.4% of total population was unable to eat healthy and nutritious food
- 12.6% of total population ate only a few kinds of food
- 6.2% of total population had to skip a meal
- 6.2% of total population ate less than thought he/she needed
- 3.2% of total population run out of food
- 3.5% of total population was hungry and didn't eat
- 2.7% of total population went without eating for a whole day

Table 1 below shows the percentages of population per component of the Food Insecurity Experience Scale (FIES) for the years 2021 and 2020.

**Table 1. Percentages of population per component of the Food Insecurity Experience Scale: 2021 and 2020**

<b>Components of the Food Insecurity Equivalence Scale</b>	<b>2021</b>	<b>2020</b>
Worried	11.9	13.2
Healthy and nutritious food	11.4	12.8
Few foods	12.6	14.1
Skipped a meal	6.2	6.2
Ate less than thought needed	6.2	6.6
Run out of food	3.2	2.7
Hungry	3.5	3.0
Whole day without food	2.7	2.2

**Graph 3. Food security by level of security**



Graph 3 shows the percentages of households by level of food security (note that the terms for describing the levels of food insecurity severity differ from the labels used by FAO to report FIES results). More specifically:

- ✓ 92.3 % of households have food security
- ✓ 5.0 % of households have low food security
- ✓ 2.7 % of households have very low food security

Table 2 shows the prevalence of food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) in Europe and the World: 2019-2021.

**Table 2. Prevalence of food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) all over the World: 2019-2021**

<b>Countries</b>	<b>Prevalence of moderate or severe food insecurity</b>	<b>Prevalence of severe food insecurity</b>
<b>Greece</b>	<b>6.8</b>	<b>1.6</b>
Romania	13.4	3.7
Portugal	11.6	3.2
Ireland	6.5	3.2
Bulgaria	15.5	2.9
Finland	8.8	2.4
Hungary	10.6	2.1
Spain	8.6	2.0
Italy	6.3	1.9
Lithuania	9.8	1.9
Croatia	11.4	1.6
Czechia	5.8	1.6
Slovakia	7.7	1.6
Malta	5.2	1.4
Netherlands	4.4	1.4
Denmark	5.5	1.4
Austria	3.3	1.3
Belgium	4.8	1.3
Island	6.3	1.3
Sweden	5.3	1.3
Germany	3.5	1.1
France	5.9	1.0
Norway	4.3	1.0
Poland	7.4	0.9
Estonia	7.9	0.8
Luxembourg	2.8	0.7
Latvia	9.4	0.7
Slovenia	7.4	0.6
Switzerland	2.2	0.5
Europe	7.4	1.4
World	28.1	10.7
Africa	55.5	22.0
Asia	23.9	9.5
Latin America and Caribbean	37.3	12.3
Oceania	12.9	3.7
North America	8.1	0.8

## EXPLANATORY NOTES

**European Union - Statistics on Income and Living Conditions - EU-SILC** The Survey on Income and Living Conditions (EU-SILC) is part of a European Statistical Programme in which all Member States participate, and which replaced, in 2003, the European Household Panel Survey with a view to improving the quality of statistical data concerning poverty and social exclusion.

The basic aim of the survey is to study, both at national and European level, the households' living conditions mainly in relation to their income. This survey is the basic source for comparable statistics on income distribution and social exclusion at European level. The use of commonly accepted questionnaires, primary target variables and concepts – definitions ensure data comparability.

**Legal basis** The survey is in compliance with the Regulation (EU) 2019/1700 of the European Parliament and of the Council concerning Social Statistics and is being conducted upon decision of the President of ELSTAT.

**Income reference period** The income reference period is a fixed twelve-month period, namely the previous calendar year of the survey.

**Coverage** The survey covers all private households throughout the country irrespectively of their size or socio-economic characteristics. The following are excluded from the survey:

- Institutional households of all types (boarding houses, elderly homes, hospitals, prisons, rehabilitation centres, camps, etc.). Households with more than five lodgers are considered institutional households.
- Households with foreigners serving in diplomatic missions.

**Methodology** The survey is conducted under a simple rotational design, which was selected as the most suitable for a single cross-sectional and longitudinal survey. The final sampling unit is the household. The sampling units are the households and their members.

Every year the sample consists of 4 replications, which have been in the survey for 1-4 years. With the exception of the first three years of the survey, any particular replication remains in the survey for 4 years. Each year, one of the 4 replications from the previous year is dropped and a new one is added. In order to have a complete sample the first year of the survey, the four panels began simultaneously. For the EU-SILC longitudinal component, the people who were initially selected are interviewed for a period of four years, equal to the duration of each panel.

EU-SILC survey is based on a two-stage stratified sampling of households from a frame of sampling which has been created on the basis of the results of the 2011 population census and covers completely the reference population.

There are two levels of area stratification in the sampling design.

i) The first level is the geographical stratification based on the division of the total area of the country into thirteen (13) formal administrative regions corresponding to the European NUTS II level. The two major city agglomerations of Greater Athens area and Greater Thessalonica area constitute two separate major geographical strata.

ii) The second level of stratification entails grouping municipalities and communes within each NUTS II Region by degree of urbanization. i.e. according to their population size. The scaling of urbanization was finally designed in four groups:

- >= 30,000 inhabitants
- 5,000 - 29,999 inhabitants
- 1,000 - 4,999 inhabitants
- 0-999 inhabitants

#### Sample selection schemes

i) In this stage, from any ultimate stratum (crossing of Region with the degree of urbanization), -say stratum  $h$ ,  $n_h$  primary units were drawn; where the number  $n_h$  of draws was approximately proportional to the population size  $X_h$  of the stratum (number of households according to the 2011 population census).

ii) In this stage from each primary sampling unit (selected area) the sample of ultimate units (households) is selected. Actually, in the second stage a sample of dwellings is drawn. However, in most cases, there is one to one relation between household and dwelling. If the selected dwelling consists of one or more households, then all of them are interviewed.

The survey was designed in 2003 to provide reliable estimates of interest at the national level. In 2020 the sample design based on the results of the "Study of the current sampling design of the Survey of Income and Living Conditions (SILC) with the objective to increase/adjust the sample at regional (NUTSII) level" in order to improve the estimates of regional EU-SILC indicators.

<b>Sample size</b>	In 2021 the survey was conducted on a final sample of 12,617 households and on 27,710 members of those households, with 24,333 of them aged 16 years and over. The average household size was calculated at 2.2 members per household.
<b>Weightings</b>	<p>For the estimation of the survey characteristics, the data of each person and household of the sample were multiplied by a reductive factor. The reductive factor results as product of the following three factors (weights):</p> <ol style="list-style-type: none"><li>The reverse probability of selection of the individual, that coincides with the reverse probability of selection of the household.</li><li>The reverse of the response rate of households inside the strata.</li><li>A corrective factor, which is determined in a way that:<ol style="list-style-type: none"><li>The estimation of persons by gender and age groups that will result by geographic region (NUTSII) coincides with the corresponding number that was calculated with projection based on vital statistics (2011 population census, births, deaths, immigration) for the reference year of the survey.</li><li>The estimation of the number of households by size class (1, 2, 3, or 4+ members) and by tenure status coincides with the corresponding numbers calculated with projection based on the trend of the 2001 and 2011 population censuses for the reference year of the survey.</li></ol></li></ol>
<b>Analysis of FIES data</b>	<p>The analysis of the scale data includes the following steps:</p> <ul style="list-style-type: none"><li>➤ Parameter assessment: Calculation of the severity of food insecurity for each component and household.</li><li>➤ Statistical validation of data: Estimation of data quality, if reliable for research purposes according to the Rasch model. The analysis includes (a) which data do not perform reliably in given context, (b) cases with extremely erratic response patterns, (c) pairs of mismatched responses, and (d) the percentage of population variation.</li><li>➤ Calculation of food insecurity: Prevalence of moderate or severe food insecurity</li></ul>
<b>Indicators</b>	<ul style="list-style-type: none"><li>● Prevalence of moderate or severe food insecurity A household experiencing moderate or severe levels of food insecurity, when at least one household member reports having to skip a meal, eating less than needed, running out of food, being hungry but not eating, no eating for a whole day, due to lack of money or other resources to obtain food, during the 12 months prior to the survey conduct.</li><li>● Prevalence of severe food insecurity A household experiencing severe levels of food insecurity when at least one household member reports not eating for a whole day due to lack of money or other resources to obtain food, during the 12 months prior to the survey conduct.</li></ul>

**Definitions of components of Food Insecurity Experience Scale**

**1. Worried**

- *Were you or another member of your household worried that you would not have enough food to eat?*

The question refers to a situation in which there is sadness, anxiety, fear, worry that there will not be enough food, or the food will run out due to lack of money or other resources.

**2. Healthy and nutritious food**

- *You or another member of your household did not have the opportunity to eat healthy and nutritious food?*

The question records the cases in which the household was not able to provide even one member with food that it considers appropriate and nutritious, healthy, able to provide a useful and balanced diet. The answer depends on the subjective opinion of the household on what is considered nutritious and healthy food and refers to the quality of the food and not the quantity of food.

**3. Few foods**

- *Did you or any other member of your household eat only certain foods?*

It is interesting to note the case in which even one member of the household was forced to consume a limited variety of foods, to consume the same food or just a limited number of foods daily. Alternative phrases to understand the question could be: - Have you eaten meals of limited variety? - Did you consume the same food or just a limited number of foods daily? - Were you forced to consume a limited variety of foods? - Were you forced to consume the same food every day? - You had to eat only a few foods?

**4. Skipped a meal**

- *Were you or another member of your household skipped a meal?*

The question investigates the case where even one member of the household was forced to skip a basic meal e.g., breakfast, lunch, dinner, which he/she would normally have consumed. This question refers to the possible insufficient amount of food.

**5. Ate less than thought needed**

- *Did you or any other member of your household eat less than you thought needed?*

The question investigates the case where even one member of the household ate less than he considered necessary, even if he did not miss a meal. The answer depends on the subjective opinion of the household on the amount of food needed. It refers to the amount of food consumed and not to the quality of the diet, while at the same time it does not refer to a specific diet aimed at weight loss or for religious or health reasons.

**6. Ran out of food**

- *Was your household run out of food?*

The question records any experiences of malnutrition for all members of the household due to lack of money, other resources, or any other way of finding food.

**7. Hungry**

- *Were you or another member of your household hungry but did not eat?*

The question records the case where even one member of the household experienced a state of hunger. It does not refer to special diet cases for weight loss or for religious or health reasons.

**8. Whole day without food**

- *Did you or any other member of your household went a whole day without food?*

This question records very specific cases and specifically the absence of food for the whole day (fasting). It does not refer to special diet cases for weight loss or for religious or health reasons.

**References** For further information on the survey please visit ELSTAT's webpage at [Statistics on Income and Living Conditions \(EU-SILC\)](#)