



European  
Commission

# HEALTH EQUITY PILOT PROJECT

## Estonia

### Profile of socio-economic inequalities in alcohol, nutrition and physical activity





## CONTENTS

Summary .....	4
Introduction .....	6
Background information .....	7
Inequalities in behaviours and outcomes .....	9
Lifecourse .....	15
(a) Lifecourse stage - A good start in life .....	15
(b) Lifecourse stage - Ages 11 to 15 .....	18
(c) Lifecourse stage - Ages 15 to 24 .....	23
(d) Lifecourse stage - Adult behaviour .....	33
Annex .....	41

## SUMMARY

This report compares socio-economic inequalities relating to alcohol, nutrition and physical activity in Estonia with gradients for the European Union as a whole.

To set this in context, life expectancy in Estonia is less than that in the EU as a whole for men and women – 4.9 and 1.4 years of life less, respectively. Differences in healthy life expectancy are larger – around nine and five years less than the EU as a whole for men and women, respectively. There are substantial income inequalities in Estonia by level of educational attainment and life expectancy increases with level of educational attainment – a 13 year difference among males and a nine year difference among females.

There are very steep gradients in self perceived health by education and income - differences are greater than for the EU as a whole for both men and women. Gradients in long term illness by education and income are also steeper than those for the EU as a whole for both males and females. There is also a gradient in self-reported diabetes among women than it does among men and both gradients are similar to those for the EU as a whole.

Some of the differences in health and the behaviours that lead to these differences are apparent from early in life. There is a gradient in both obesity and pre-obesity among women at ages 15 to 44, the principal reproductive ages, in both cases slightly steeper than for the EU as a whole. At ages 11 to 15, boys from high family affluence groups are more likely to consume sugar-sweetened beverages than those in low ones. Both boys and girls in these groups are more much more likely to consume fruit daily. Girls are also more likely to report daily physical exercise than those in low affluence groups and less likely to be overweight. At ages 15 to 16, the proportion of male students who drank alcohol in the previous month and who reported binge drinking in the previous month, increased with level of mother's education while the proportion of both male and female students who consumed alcohol at age 12 or less decreased with increasing levels of mothers education, as did the proportion of female students who had got drunk in their lifetime.

Among adults, fruit and vegetable consumption increased more sharply with increased levels of educational attainment than in the EU as a whole for both men and women. Although physical activity outside work also increased with increasing education, the gradient was less steep than for the EU as a whole. As in the EU as a whole, physical activity in work was least for those with tertiary education. Among women both obesity and pre-obesity decreased with level of educational attainment though less sharply than for the EU as a whole. Among men, pre-obesity increased with increasing level of educational attainment.

At ages 18 to 64, the proportion of men and women who consume alcohol every day is much lower than in the EU as a whole at each level of educational attainment and is greatest for those with lower levels of educational attainment. Among men, binge drinking at least monthly decreases with increasing levels of educational attainment. For both men and women, those with lower levels of education are much more likely to do so than is the case for those with this level of education in the EU as a whole.

## INTRODUCTION

This report summarises the data that are available to compare socio-economic inequalities relating to alcohol, nutrition and physical activity in Estonia with gradients for the European Union as a whole. It is based solely **on data sources harmonised across Member States, available on or before April 2018**, from data bases such as Eurostat and WHO European Health Information Gateway. All graphs and tables presented in this report relate **solely to data for Estonia**.

Inequalities in life chances, behaviours and their health outcomes begin at the earliest stages in life, through intergenerational transmission, and accumulate across the life-course<sup>1</sup>. This observation provides two guiding principles for the structure of this report. First, the presentation of results is ordered according to the stages of the life course – from conditions in the womb through to adult behaviours. Second, both to reflect differentials that are established early in life and to achieve the greatest level of comparability, level of educational attainment is used as the principle measure of socio-economic variation in this report<sup>2</sup>. Other indicators, such as family affluence or income are used where this significantly extends the range of analyses possible.

---

<sup>1</sup> World Health Organization (2013) Review of Social Determinants of Health and the Health Divide in the WHO European Region: final report of a consortium chaired by Michael Marmot. WHO Regional Office for Europe, Copenhagen.

<sup>2</sup> Mackenbach, J.P. (2016), [\*Health Inequalities in Europe\*](#), Erasmus University Publishing, Rotterdam

## BACKGROUND INFORMATION

The average population of Estonia during 2017 was 1.3 million, around a third of one percent of the figure for the European Union (EU) as a whole. Half of the population was aged under 41.8 years – the comparable figure for the EU was 42.8 years. Net migration was 0.8 per 1,000 population (2.4 for the EU as a whole). In terms of age dependency, the number aged under 15 or 65 and over was 55.2 percent of the figure for age 15 to 64 - the comparable figure for the EU was 53.9 per cent.

In 2016, life expectancy at birth was 73.3 years for males and 82.2 years for females – a gender gap of 8.9 years. Comparable figures for the EU were 78.2, 83.6 and 5.4 years. The comparable figures for healthy life years in Estonia were 54.4, 59.0 and 4.6 years (i.e. women stayed healthier for longer than men in Estonia) and 63.5, 64.2 and 0.7 years for the EU. These figures meant that men in Estonia could expect to spend 18.9 years in ill-health and women 23.2 years – a difference of 4.3 years. The comparable figures for the EU were 14.7 and 19.4 years – a difference of 4.7 years.

---

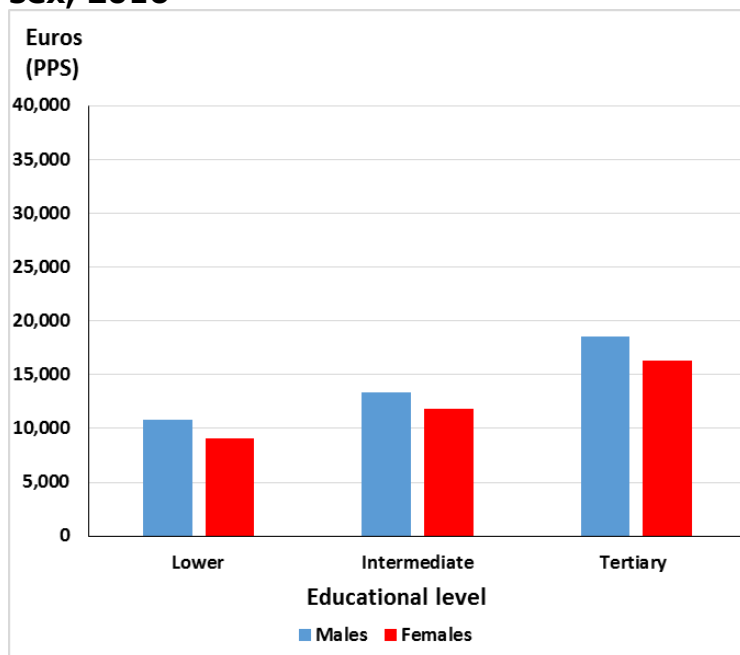
## INCOME INEQUALITY

### INEQUALITIES WITHIN COUNTRY

In terms of income inequality, the Gini coefficient was 32.7 for Estonia compared to 30.8 for the EU. The fifth of the population with the highest incomes received 5.6 times the income of the lowest fifth – the ratio across the EU was 5.2.

Both equivalised mean and median income per household increased with level of educational attainment in 2016. Average equivalised household income was around 7,700 Euros higher for men with tertiary education than for those with lower levels of educational attainment. For women the difference was around 7,200 Euros. The comparable differences in median income were 7,800 and 7,200 Euros, respectively.

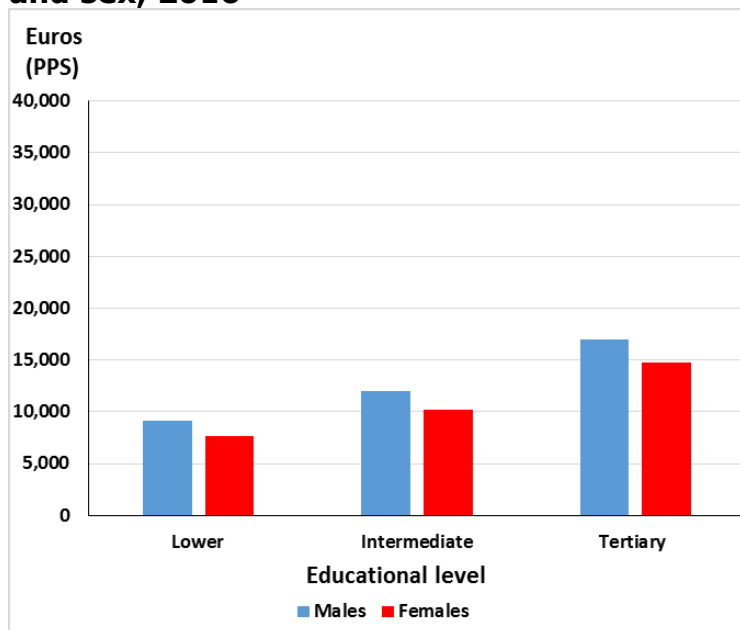
### Equivalised mean income (pps) by level of educational attainment and sex, 2016



Sources, numbers and definitions: See Annex

COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE  
 No figures are available for the EU as a whole.

### Equivalised median income (pps) by level of educational attainment and sex, 2016



Sources, numbers and definitions: See Annex

COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE  
 No figures are available for the EU as a whole.



## INEQUALITIES IN BEHAVIOURS AND OUTCOMES

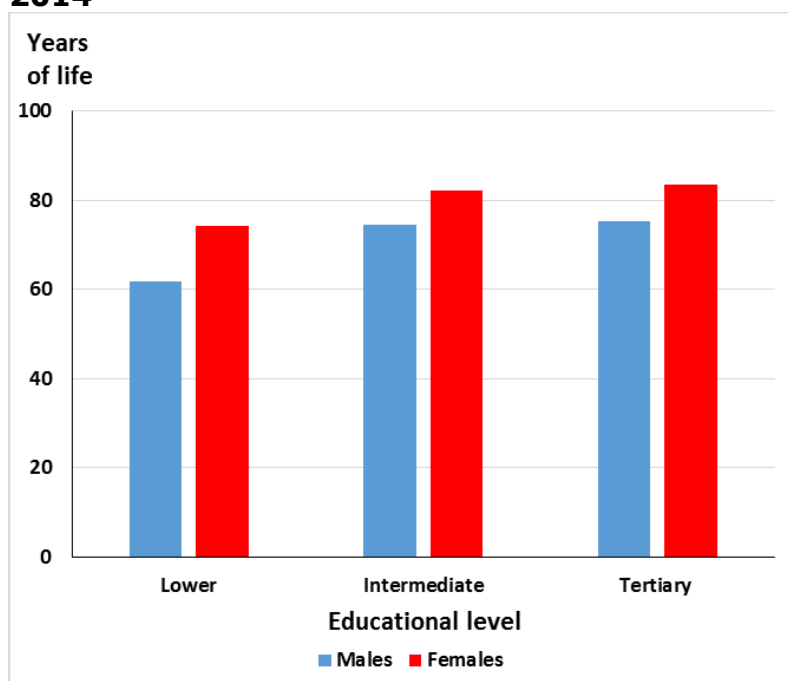
### HEALTH AND LIFE EXPECTANCY

#### LIFE EXPECTANCY

##### INEQUALITIES WITHIN COUNTRY

The data suggest there is a social gradient in life expectancy for Estonia. Life expectancy at birth increases with level of educational attainment. There is a 13.4 and 9.2 year gap in life expectancy for men and women respectively between those with a lower level of educational attainment and those with tertiary education.

#### **Life expectancy at birth by level of educational attainment and sex, 2014**



Sources, numbers and definitions: See Annex

##### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

No figures are available for the EU as a whole. Only 16 Member States report these data to Eurostat, of which three are for earlier years than 2015. In all these 16 Member States there are social gradients in life expectancy by educational attainment.

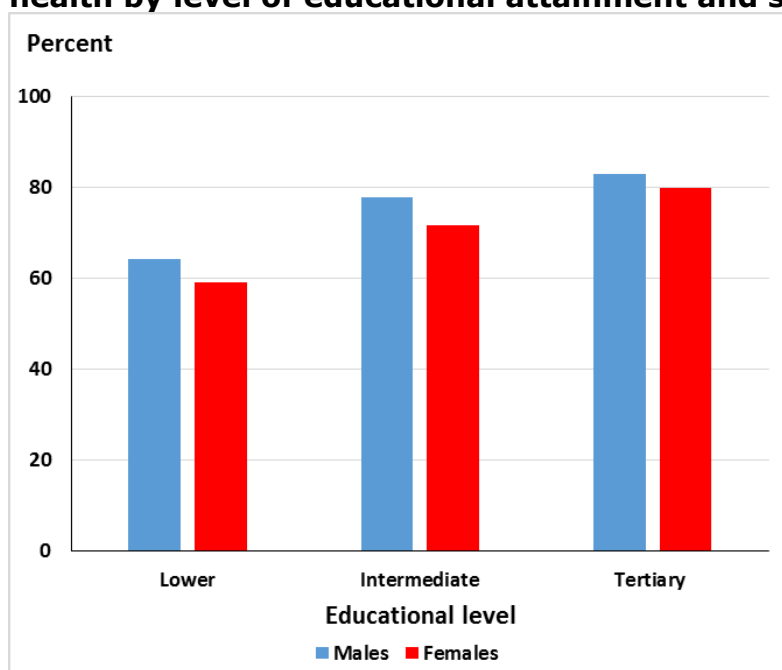
## SELF PERCEIVED HEALTH

### (a) By educational attainment

#### INEQUALITIES WITHIN COUNTRY

The data suggest there is a clear social gradient in self-perceived good or very good health in Estonia by level of educational attainment. Among men, self-perceived health of the least educated is 18 percentage points less than the most educated. Among women, the gradient is slightly steeper with a gap of 20 percentage points.

### Age standardised percentage with good or very good self-perceived health by level of educational attainment and sex, 2016



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

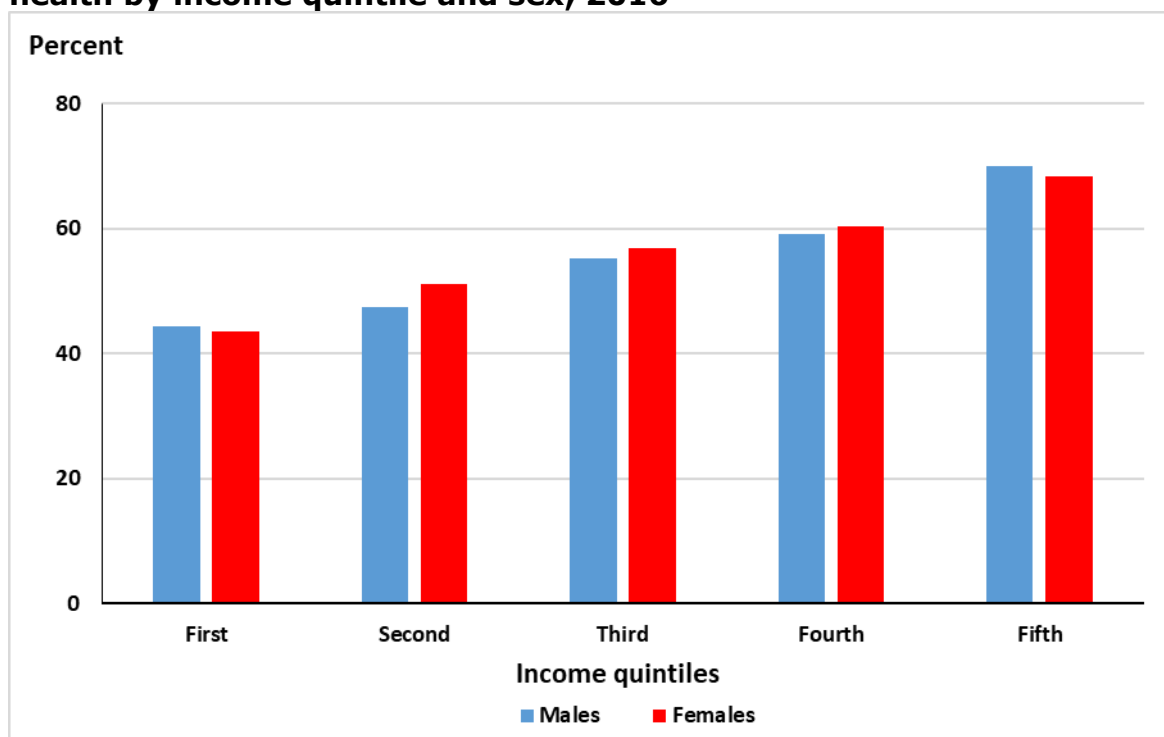
The data suggest there is a clear social gradient in self-perception of good or very good health in the EU as a whole. Self-reported health of the least educated men is 14 percentage points less than the most educated. For women, the gradient is slightly steeper with a gap of 16 percentage points.

### (b) By income

#### INEQUALITIES WITHIN COUNTRY

The data suggest there is a clear social gradient in self-perceived good or very good health in Estonia by income quintile. Self-perceived health of men in the lowest income quintile is 26 percentage points less than those in the top income quintile. For women, the gradient is similar, 25 percentage points.

### Age standardised percentage with good or very good self-perceived health by income quintile and sex, 2016



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

The data suggest there is a clear social gradient in self-perception of good or very good health in the EU as a whole. Self-reported health of men in the lowest income quintile is 18 percentage points less than for those in the highest income quintile. For women, the gradient is similar with a gap of 19 percentage points.

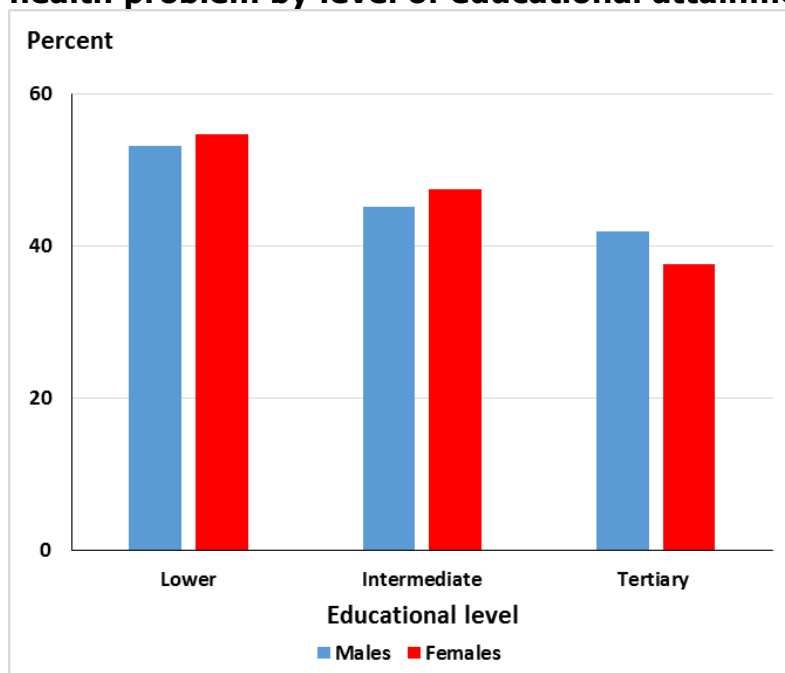
#### LONGSTANDING ILLNESS OR HEALTH PROBLEMS

##### (a) By educational attainment

##### INEQUALITIES WITHIN COUNTRY

The data suggest there is a clear social gradient in reporting a long-standing illness or health problem in Estonia by level of educational attainment. Self-reported long-standing ill-health of the least educated men is 11 percentage points greater than that of the most educated. For women, the gradient is slightly steeper with a gap of 17 percentage points.

### Age standardised percentage reporting a long-standing illness or health problem by level of educational attainment and sex, 2016



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

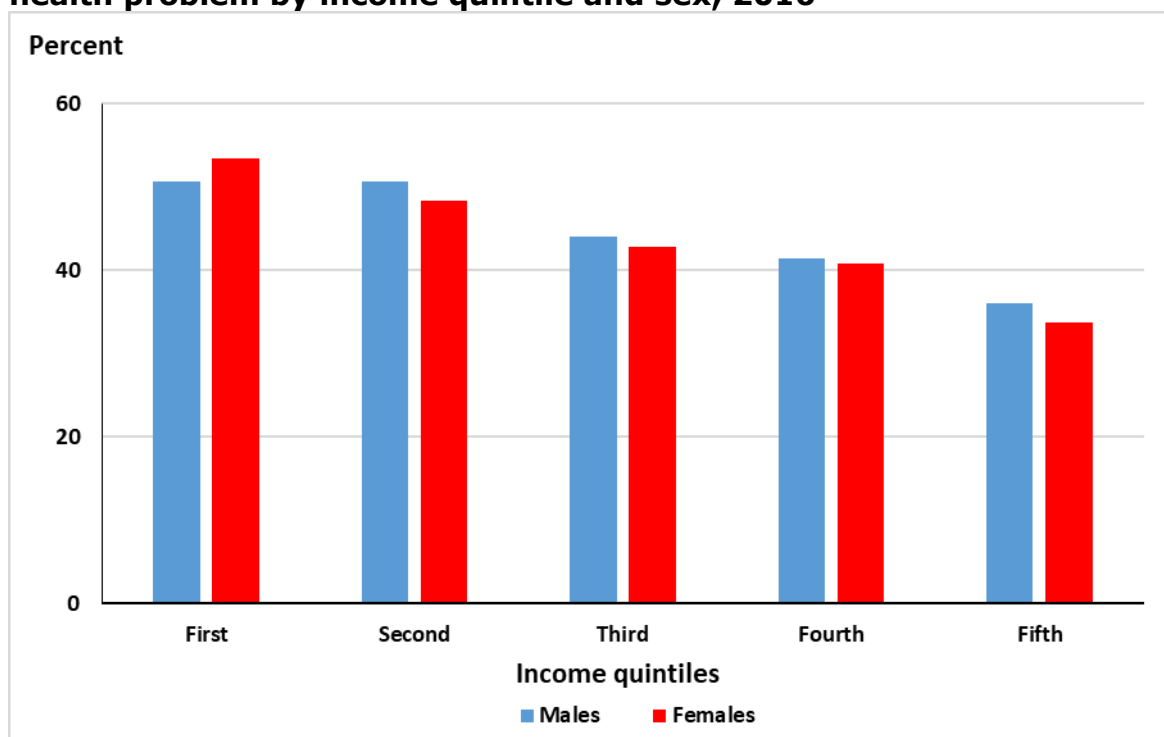
The data suggest that those with tertiary education are much less likely to report a long-standing illness or health problem than those with less educational attainment in the EU as a whole. Reporting of long-standing ill-health is four percentage points lower for the most educated men than for the least educated. For women, the gap is five percentage points.

#### (b) By income

##### INEQUALITIES WITHIN COUNTRY

The data suggest there is a clear social gradient in reporting a long-standing illness or health problem in Estonia by income quintile. Self-reported long-standing ill-health of men in the lowest income quintile is 15 percentage points greater than for those in the top income quintile. For women, the gradient is steeper with a gap of 20 percentage points.

### Age standardised percentage reporting a long-standing illness or health problem by income quintile and sex, 2016



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

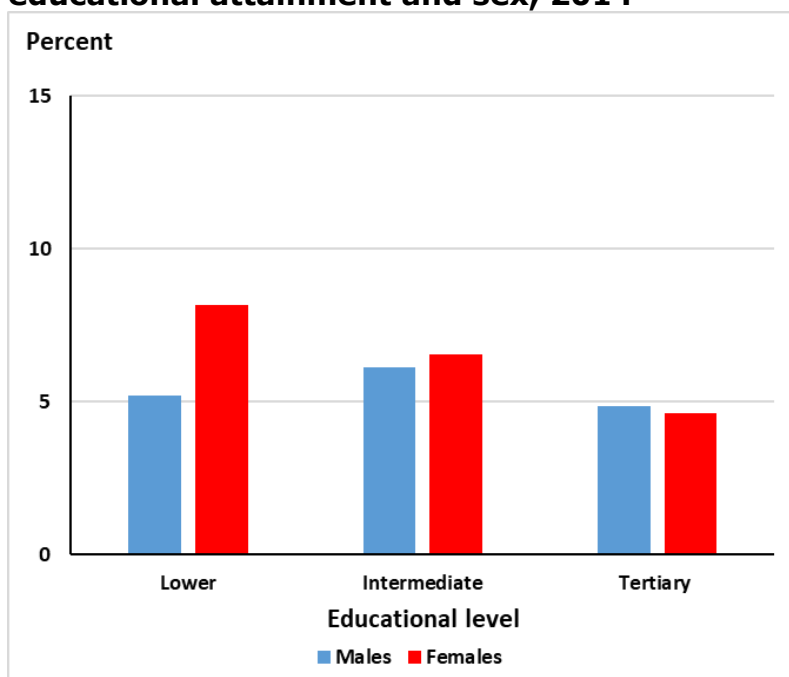
The data suggest there is a clear social gradient in reporting a long-standing illness or health problem in the EU as a whole. Self-reported long-standing ill-health in the lowest income quintile is 11 percentage points higher than for those in the highest income quintile, for both men and women.

#### SELF REPORTING OF DIABETES

##### INEQUALITIES WITHIN COUNTRY

The data suggest there is a clear social gradient in self-reporting of diabetes in Estonia by level of educational attainment among women. Self-reported diabetes among the least educated women is four percentage points greater than for the most educated. Among men, those with intermediate levels of educational attainment have the highest level of reporting.

### Age standardised percentage reporting diabetes by level of educational attainment and sex, 2014



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

The data suggest that those with tertiary education are less likely to report having diabetes than those with less educational attainment in the EU as a whole. Reporting of diabetes is three percentage points lower for the most educated men than for the least educated. For women, the gap is four percentage points.

## LIFECOURSE

### A) LIFECOURSE STAGE - A GOOD START IN LIFE

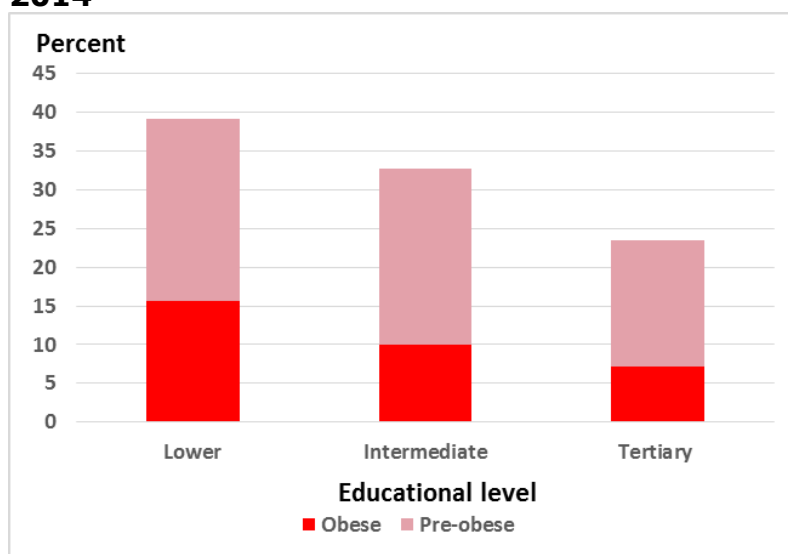
The events at which a good start in life needs to be established include pre-conception, conception, pregnancy and birth, the first thousand days, pre-school and primary education.

#### WOMEN OVERWEIGHT AT FERTILE AGES 18 TO 44

##### INEQUALITIES WITHIN COUNTRY

Among overweight adults (BMI of 25 or more), the European Health Interview Survey (EHIS) separately identifies the proportions obese (BMI of 30 or more) from those who are not (i.e. pre-obese with BMI of at least 25 but less than 30). Among women at ages 18 to 44, for both obesity and pre-obesity, the data for Estonia suggest that there is a consistent social gradient - as educational attainment level increases, the prevalence of obesity and pre-obesity falls.

#### Women overweight at ages 18-44 by level of educational attainment, 2014



Sources, numbers and definitions: See Annex

##### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

For the EU as a whole, there is a social gradient in both pre-obesity and obesity among women aged 18 to 44. Among those with lower levels of educational attainment, 24.1 percent are pre-obese. This figure falls to 17.6 per cent among those with tertiary education. The comparable figures for obesity are 14.3 and 7.7 per cent.

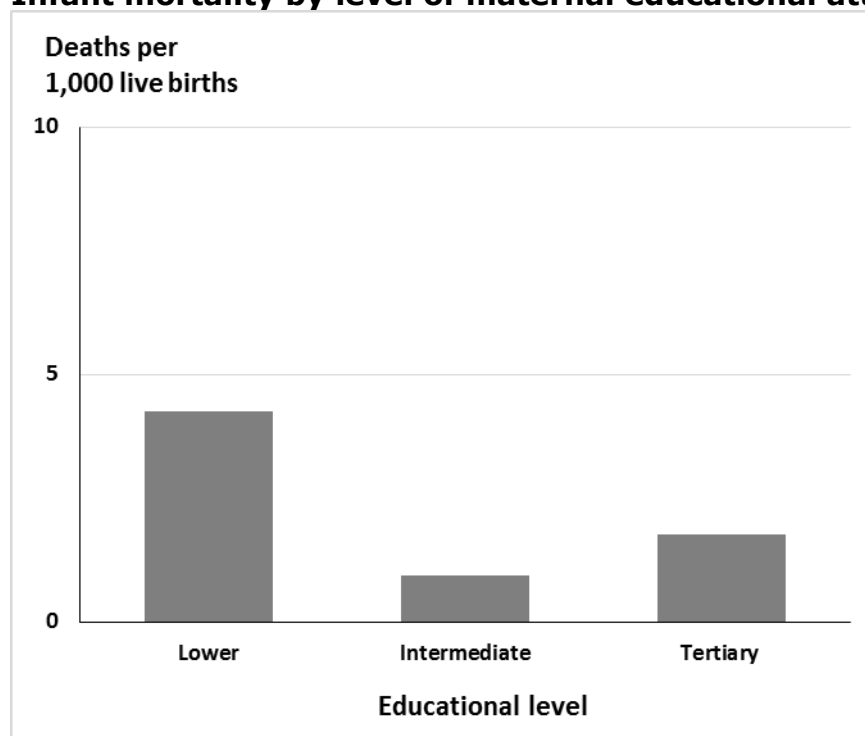
---

## INFANT MORTALITY

### INEQUALITIES WITHIN COUNTRY

The infant mortality data suggest that rate of mortality is highest for infants whose mothers have a lower level of educational attainment and is least when the mother has an intermediate level of educational attainment.

#### **Infant mortality by level of maternal educational attainment, 2013**



*Sources, numbers and definitions: See Annex*

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

A consistent social gradient occurs across the other eight countries in the EU for which data are available.

---

## ALCOHOL CONSUMPTION DURING PREGNANCY

No EU harmonised data available by socio-economic status.

---

## FOETAL ALCOHOL SPECTRUM DISORDER

No EU harmonised data available by socio-economic status.

---

## BREAST FEEDING AND COMPLIMENTARY FEEDING

No EU harmonised data available by socio-economic status.

---

## SUGAR SWEETENED BEVERAGES IN EARLY CHILDHOOD

No EU harmonised data available by socio-economic status.



---

#### SALT CONSUMPTION IN EARLY CHILDHOOD

No EU harmonised data available by socio-economic status.

---

#### SATURATED FAT CONSUMPTION IN EARLY CHILDHOOD

No EU harmonised data available by socio-economic status.

---

#### FRUIT CONSUMPTION IN EARLY CHILDHOOD

No EU harmonised data available by socio-economic status.

---

#### VEGETABLE CONSUMPTION IN EARLY CHILDHOOD

No EU harmonised data available by socio-economic status.

---

#### OVERWEIGHT IN EARLY CHILDHOOD

##### INEQUALITIES WITHIN COUNTRY

No EU harmonised data available by socio-economic status for Estonia.

##### INEQUALITIES IN THE EU AS A WHOLE

In the majority of the nine countries in the EU for which data are available, at ages four to seven, children whose mothers attained post-secondary education are less likely to be either obese or pre-obese than those whose mothers have lower levels of educational attainment.

## B) LIFECOURSE STAGE - AGES 11 TO 15

The Health Behaviour of School Age Children (HBSC) survey 2013/2014 is the principal source of information at ages 11 to 15. To derive their Family Affluence Scale (FAS) the survey used a six-item assessment of common material assets or activities. Responses were scored and summed to form a summary score.

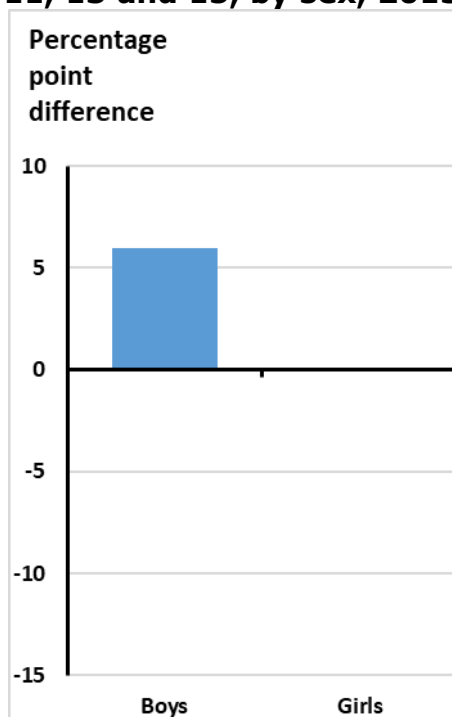
Additional information is available from ESPAD on alcohol consumption and is presented in the next section.

### SUGAR SWEETENED BEVERAGES AT AGES 11 TO 15

#### INEQUALITIES WITHIN COUNTRY

The HBSC survey shows that boys aged 11 to 15 from high family affluence groups are more likely to consume sugar sweetened beverages daily than those from low family affluence groups – difference of six percentage points. There is no difference among girls.

#### **Percentage point difference in prevalence of drinking soft-drinks at least once a day between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14**



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

The HBSC survey does not provide estimates for the EU as a whole. However, soft drink consumption is significantly related to low family affluence for girls in nearly half of EU countries for which these data are available. For boys, the pattern differs between EU countries with few countries showing significant differences.

---

### SALT CONSUMPTION AT AGES 11 TO 15

No EU harmonised data available by socio-economic status.

---

### SATURATED FAT CONSUMPTION AT AGES 11 TO 15

No EU harmonised data available by socio-economic status.

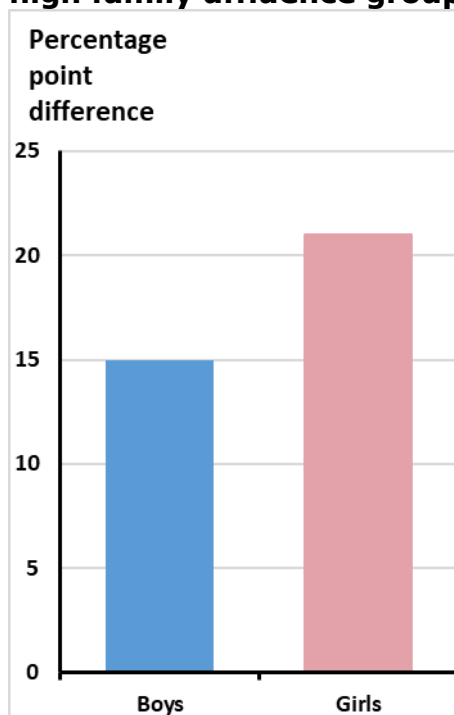
---

### FRUIT CONSUMPTION AT AGES 11 TO 15

#### INEQUALITIES WITHIN COUNTRY

The HBSC survey shows that children aged 11 to 15 from high family affluence groups are more likely to consume fruit daily than those from low family affluence groups - a 15 and 21 percentage point difference for boys and girls, respectively.

#### **Percentage point difference in daily fruit consumption between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14**



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

The HBSC survey does not provide estimates for the EU as a whole. However, fruit consumption is significantly related to family affluence across most EU countries for which these data are available.

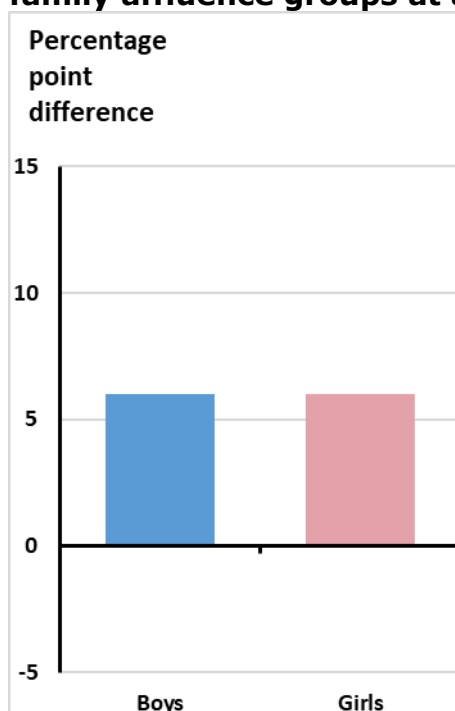
---

## PHYSICAL ACTIVITY AT AGES 11 TO 15

### INEQUALITIES WITHIN COUNTRY

The HBSC survey shows that children aged 11 to 15 from high family affluence groups are more likely to report daily physical activity than those from low family affluence groups – a difference of six percentage points for girls. A similar figure for boys is not statistically significant.

### **Percentage point difference in prevalence of reporting at least one hour of moderate or vigorous physical activity daily, between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14**



*Sources, numbers and definitions: See Annex*

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

The HBSC survey does not provide estimates for the EU as a whole. However, physical activity is significantly related to family affluence in around half of EU countries for which these data are available. In these countries it is more common among both boys and girls in high family affluence groups than in low ones.

---

## OVERWEIGHT AT AGES 11 TO 15

### INEQUALITIES WITHIN COUNTRY

The HBSC survey shows that children aged 11 to 15 low family affluence groups are more likely to be overweight than those from high family affluence groups – a difference of seven percentage points for girls. The slightly smaller difference for boys is not statistically significant.

### Percentage point difference in those overweight between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

The HBSC survey does not provide estimates for the EU as a whole. However, being overweight is significantly related to family affluence across most EU countries for which these data are available.

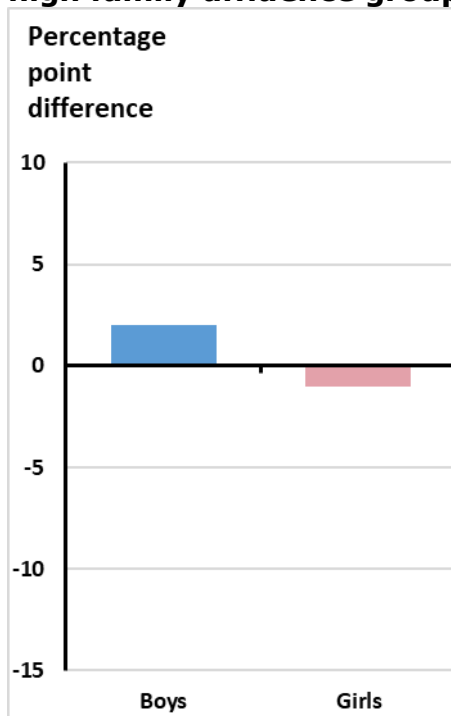
---

#### WEEKLY ALCOHOL CONSUMPTION AT AGES 11 TO 15

##### INEQUALITIES WITHIN COUNTRY

The HBSC data for underage drinking shows no consistent difference in weekly use of alcohol. For both boys and girls, the differences are not statistically significant.

**Percentage point difference in weekly use of alcohol between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14**



*Sources, numbers and definitions: See Annex*

**COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE**

The HBSC survey does not provide estimates for the EU as a whole. Weekly alcohol consumption is not significantly related to family affluence in the majority of EU countries for which these data are available.

## C) LIFECOURSE STAGE - AGES 15 TO 24

### ALCOHOL CONSUMPTION REPORTED AT AGES 15 AND 16

The main purpose of the European School Survey Project on Alcohol and Other Drugs (ESPAD) project is to collect comparable data on substance use among 15 to 16 year- old students in as many European countries as possible. The target group consists of students who turn 16 during the year of data collection, which in 2011 meant students born in 1995. The surveys are conducted in schools in the participating country, during the same period of time and using a common methodology.

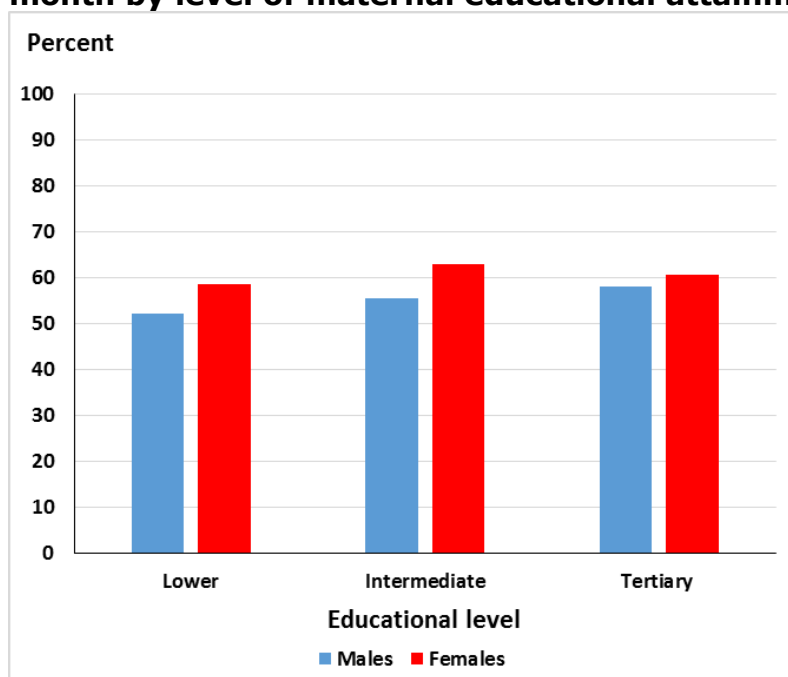
The ESPAD survey was not conducted in all EU member States in 2011 – no ESPAD data are available for Austria, Germany, Luxembourg and Spain for 2011. However, it did cover 23 Member States as well as Flanders (in Belgium). It is therefore possible to compare figures for Estonia to the average for all survey participants in the EU.

### DRANK ALCOHOL IN THE LAST MONTH

#### INEQUALITIES WITHIN COUNTRY

The percentage of male students aged 15 to 16 years who drank alcohol in the preceding month increased with increased levels of maternal educational attainment in Estonia, with a six percentage point gap between the highest and the lowest levels of maternal educational attainment. Females whose mothers had intermediate levels of educational attainment were more likely than others to have drunk alcohol in the preceding month.

### Percentage of 15 and 16 year old students who drank alcohol in the last month by level of maternal educational attainment and sex, 2011



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

For both males and females, the percentage of participating EU students aged 15 to 16 years who drank alcohol in the preceding month was least among those whose mothers had a lower level of educational attainment.

---

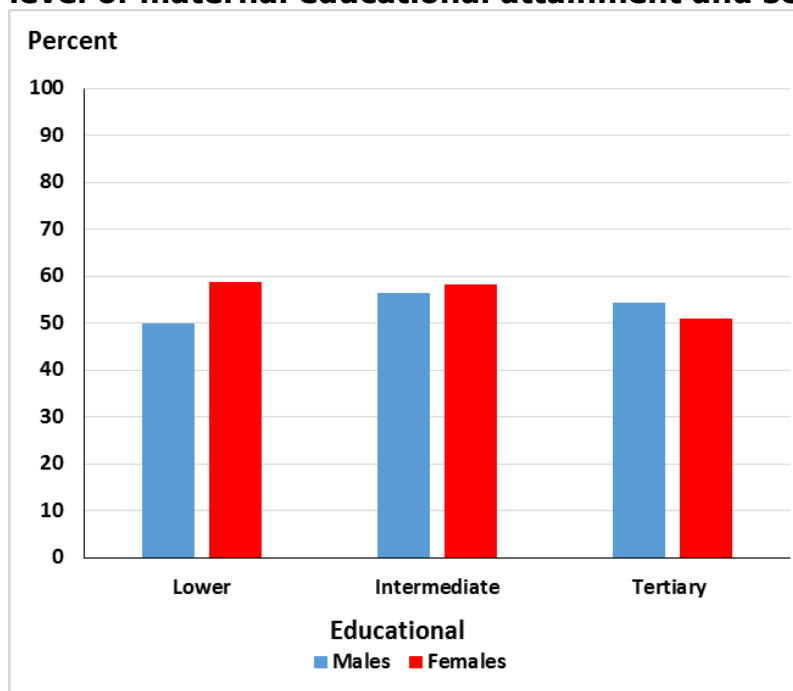
#### DRUNK IN LIFETIME

##### INEQUALITIES WITHIN COUNTRY

The percentage of female students aged 15 to 16 years who had ever been drunk in their lifetime decreased with increased level of maternal educational attainment in Estonia, with an eight percentage point gap between the highest and the lowest levels of maternal educational attainment. For males, those whose mothers had intermediate levels of educational attainment were more likely than others to have ever been drunk in their lifetime.



### Percentage of 15 and 16 year old students who had ever been drunk by level of maternal educational attainment and sex, 2011



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

The percentage of participating EU students aged 15 to 16 years who had ever been drunk in their lifetime differed little by level of maternal educational attainment. For both males and females, it was slightly greater for those whose mothers had intermediate levels of educational attainment and slightly lower for those whose mothers had a tertiary education.

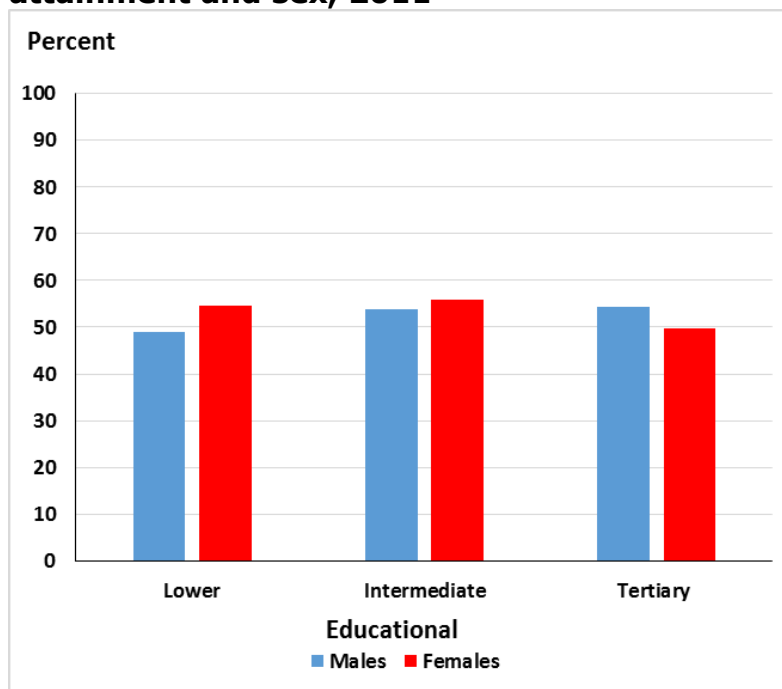
---

#### HEAVY DRINKING IN THE LAST MONTH

##### INEQUALITIES WITHIN COUNTRY

The percentage of male students aged 15 to 16 years who had five or more drinks on one occasion in the previous month increased with increased level of maternal educational attainment in Estonia, with a five percentage point gap between the highest and the lowest levels of maternal educational attainment. Females whose mothers had intermediate levels of educational attainment were more likely than others to have had five or more drinks on one occasion in the previous month.

**Percentage of 15 and 16 year old students who drank heavily on at least one occasion in the last month by level of maternal educational attainment and sex, 2011**



Sources, numbers and definitions: See Annex

**COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE**

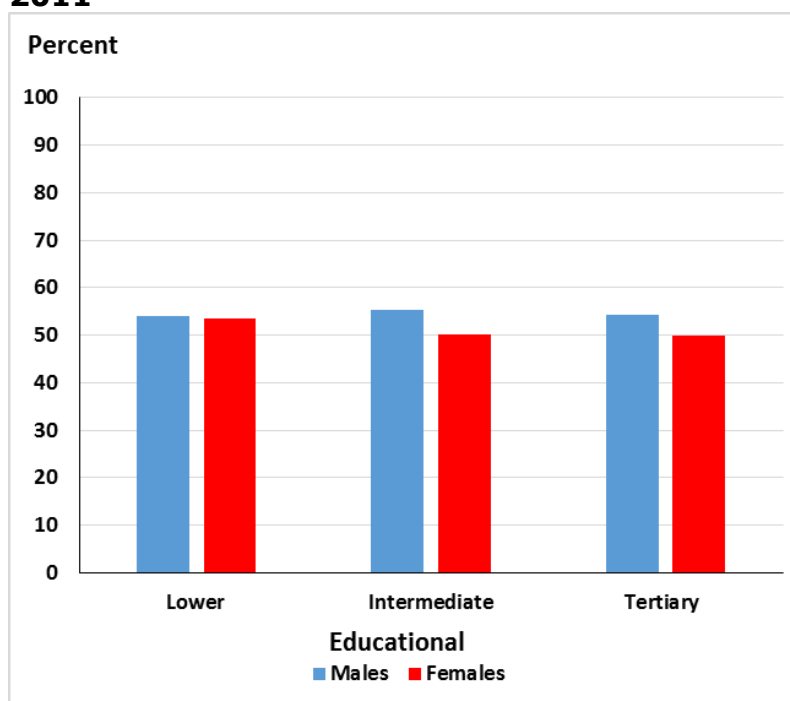
The percentage of participating EU students aged 15 to 16 years who had five or more drinks on one occasion in the previous month decreased with increased level of maternal educational attainment, with a six percentage point difference between lower levels of maternal educational attainment and tertiary education for both males and females.

**GOT DRUNK AT AGE 14 OR LESS**

**INEQUALITIES WITHIN COUNTRY**

The percentage of female students aged 15 to 16 years in Estonia who got drunk at age 14 or less decreased slightly by level of maternal educational attainment, with a three percentage point difference between the lowest and highest levels of maternal educational attainment. Among males there was little difference by level of maternal educational attainment.

**Percentage of 15 and 16 year old students who had ever been drunk at age 14 or less by level of maternal educational attainment and sex, 2011**



*Sources, numbers and definitions: See Annex*

**COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE**

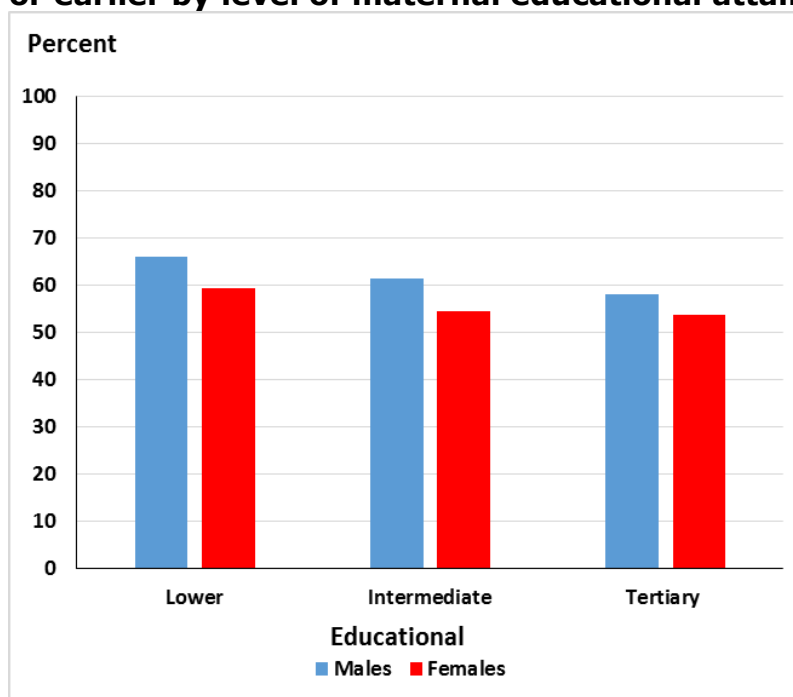
The percentage of participating EU students aged 15 to 16 years who got drunk at age 14 or less differed little by level of maternal educational attainment for both males and females. For both males and females, it was slightly greater for those whose mothers had intermediate levels of educational attainment and slightly lower for those whose mothers had a tertiary education.

**FIRST DRANK ALCOHOL AT AGE 12 OR EARLIER**

**INEQUALITIES WITHIN COUNTRY**

The percentage of students aged 15 to 16 years who had first drunk alcohol at age 12 or less decreased with level maternal educational attainment. For males and females, respectively, there were eight and six percentage point gaps between the lowest and highest levels of maternal educational attainment.

### Percentage of 15 and 16 year old students who drank alcohol at age 12 or earlier by level of maternal educational attainment and sex, 2011



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

The percentage of participating EU students aged 15 to 16 years who had first drunk alcohol at age 12 or less decreased with increased level of maternal educational attainment. Among males and females, it was five and six percentage points, respectively, lower among those whose mothers had a tertiary education than among those whose mothers had lower levels of educational attainment.

#### DIET AND EXERCISE AT AGES 15 TO 24

The European Health Interview Survey (EHIS) is the principal source of information at ages 15 and over. The survey consists of four modules on health status, health care use, health determinants and socio-economic background variables. EHIS targets the population aged at least 15 and living in private households.

#### SUGAR CONSUMPTION AT AGES 15 TO 24

No EU harmonised data available by socio-economic status.

#### SALT CONSUMPTION AT AGES 15 TO 24

No EU harmonised data available by socio-economic status.

#### SATURATED FAT CONSUMPTION AT AGES 15 TO 24

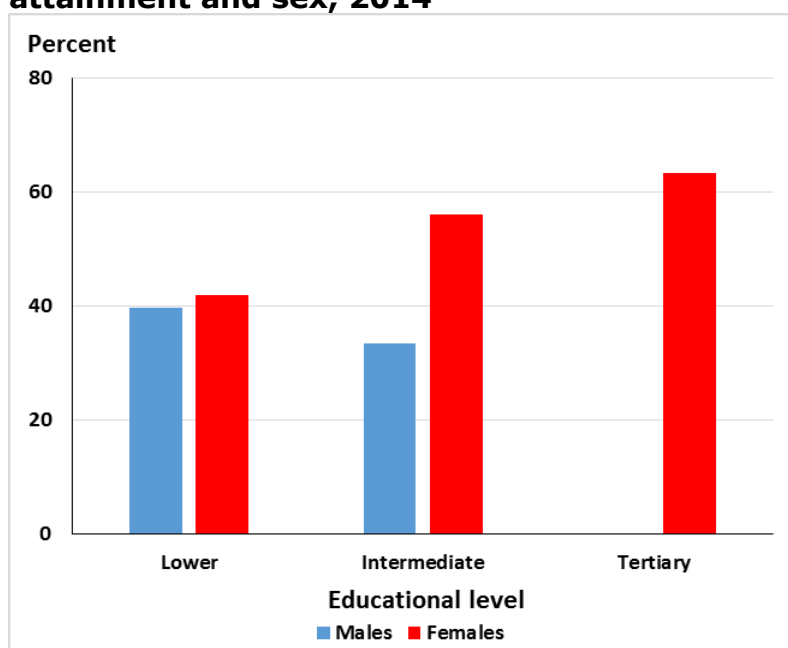
No EU harmonised data available by socio-economic status.

## FRUIT CONSUMPTION AT AGES 15 TO 24

### INEQUALITIES WITHIN COUNTRY

Data from EHIS suggest that there is a clear social gradient in daily fruit consumption for females at ages 15 to 24 in Estonia - the proportion eating fruit daily increases with level of educational attainment, although many in this age group will not have attained their final lifetime level of education. Among men at ages 15 to 24, those with lower levels of educational attainment are more likely to consume fruit daily than those with intermediate levels of educational attainment. Data are not available for men with tertiary education.

### **Fruit consumption at least daily at ages 15 to 24 by level of educational attainment and sex, 2014**



*Sources, numbers and definitions: See Annex*

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

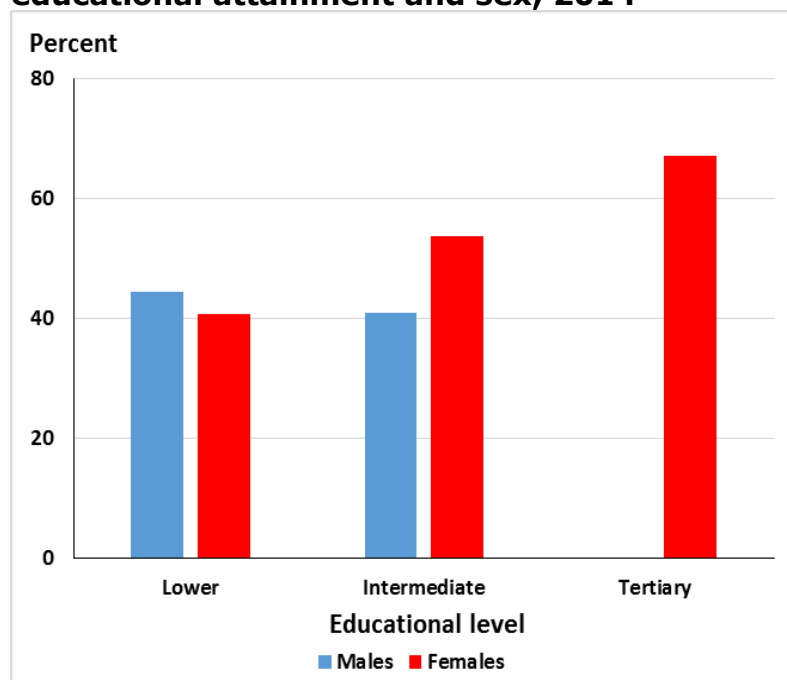
Data from EHIS for the EU as a whole suggest that there is a consistent gradient in fruit consumption among young women aged 15 to 24, with those who attained a tertiary level of education most likely to eat fruit at least daily. Among young men, those with intermediate levels of educational attainment were least likely to eat fruit at least daily. However, many in this age group will not have attained their final lifetime level of educational attainment.

## VEGETABLE CONSUMPTION AT AGES 15 TO 24

### INEQUALITIES WITHIN COUNTRY

Data from EHIS suggest that there is a clear social gradient in vegetable consumption for females at ages 15 to 24 in Estonia - the proportion consuming vegetables daily increases with level of educational attainment, although many in this age group will not have attained their final lifetime level of education. Among men at ages 15 to 24, those with lower levels of educational attainment are more likely to consume vegetables daily than those with intermediate levels of educational attainment. Data are not available for men with tertiary education.

### Vegetable consumption at least daily at ages 15 to 24 by level of educational attainment and sex, 2014



Sources, numbers and definitions: See Annex

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

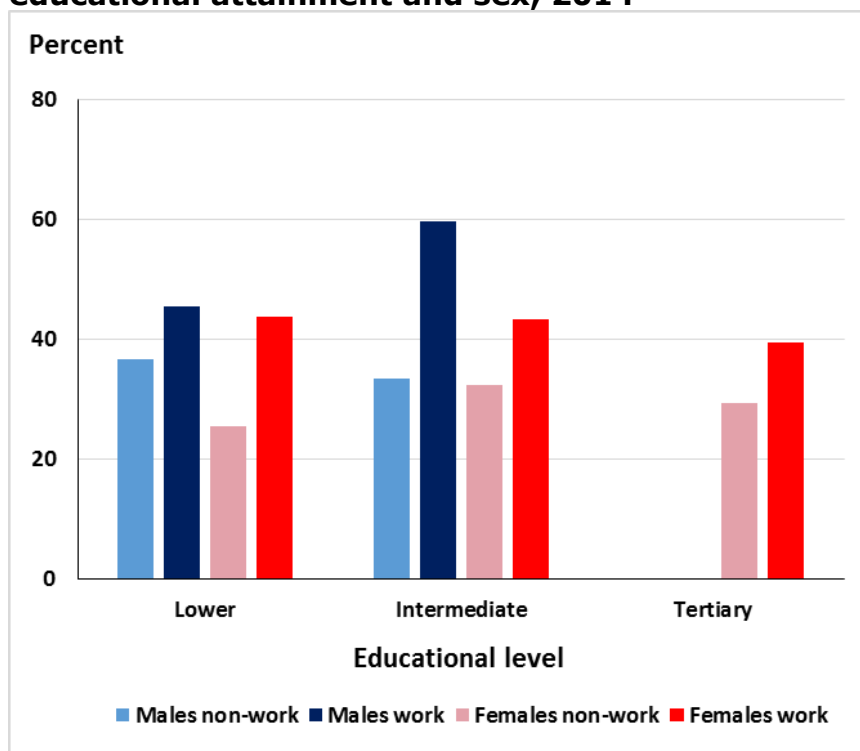
Data from EHIS for the EU as a whole suggest that there are consistent gradients in vegetable consumption among young men and women aged 15 to 24, with those who attained a tertiary level of education most likely to eat fruit at least daily. However, many in this age group will not have attained their final lifetime level of educational attainment.

## PHYSICAL ACTIVITY AT AGES 15 TO 24

### INEQUALITIES WITHIN COUNTRY

For women aged 15 to 24, the EHIS data suggest a small decrease in physical activity at work with increased levels of educational attainment but no clear pattern in physical activity outside work. Many in this age group will not have attained their final lifetime level of education. For men at these ages, physical activity outside work is more common among young men with lower levels of educational attainment than among those with intermediate levels of educational attainment, while the reverse is true for in-work physical activity. Figures are not available for men with tertiary education at this age.

### Work and non-work related physical activity at ages 15 to 24 level of educational attainment and sex, 2014



Sources, numbers and definitions: See Annex

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

Physical activity recorded in EHIS shows no clear relationship between in-work physical activity and educational attainment level, at ages 15 to 24 across the EU as a whole. Those with intermediate levels of educational attainment are most likely to engage in moderate or heavy physical activity in-work and those with lower levels of attainment least likely to do so. Physical activity outside work is more common among young men with lower levels of educational attainment than among those with intermediate levels. For young women, the highest levels are among those who had attained a tertiary level of education at this age.

Physical activity outside work similarly shows no clear relationship with educational attainment level, at ages 15 to 24 across the EU as a whole. Those with intermediate levels of educational attainment are least likely to engage in significant physical activity outside work at these ages.

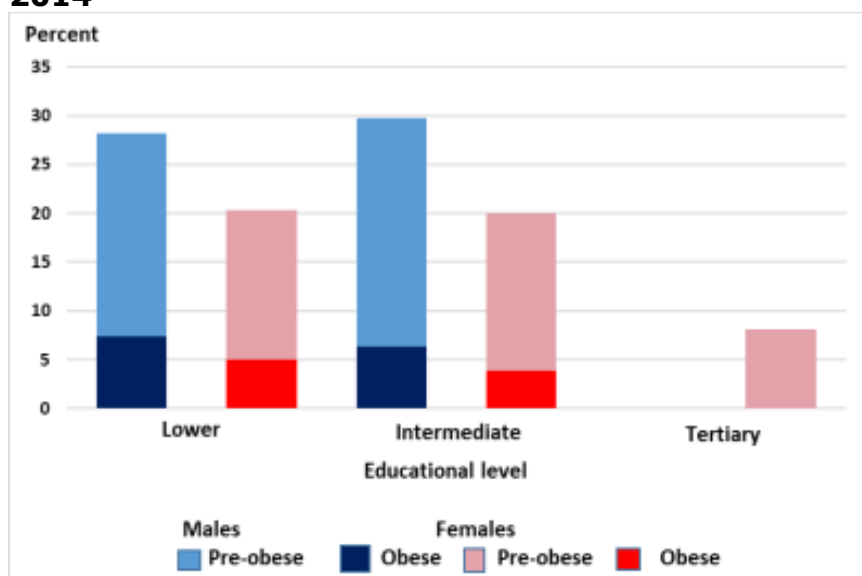
Many in this age group will not have attained their final lifetime level of educational attainment.

## OVERWEIGHT AT AGES 15 TO 24

### INEQUALITIES WITHIN COUNTRY

EHIS data suggest that obesity (equivalent to BMI of at least 30 at age 19) is higher among those with lower levels of educational attainment than among those with intermediate levels for both sexes at ages 15 to 24. Many in this age group will not have attained their final lifetime level of education. Pre-obesity (equivalent to BMI of at least 25 but less than 30 at age 19) is higher for those with intermediate levels of educational attainment than others although no data are available for men with tertiary education.

### Overweight at ages 15 to 24 by level of educational attainment and sex, 2014



Sources, numbers and definitions: See Annex

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

In the EU as a whole, at ages 15 to 24, EHIS data suggest that both pre-obesity (equivalent to BMI of at least 25 but less than 30 at age 19) and obesity equivalent to (BMI of 30 or more at age 19) are generally more common among young men and women with intermediate levels of educational attainment than at other levels of attainment. Many in this age group will not have attained their final lifetime level of education.



## D) LIFECOURSE STAGE - ADULT BEHAVIOUR

### SUGAR CONSUMPTION IN ADULTS

No EU harmonised data available by socio-economic status.

### SALT CONSUMPTION IN ADULTS

No EU harmonised data available by socio-economic status.

### SATURATED FAT CONSUMPTION IN ADULTS

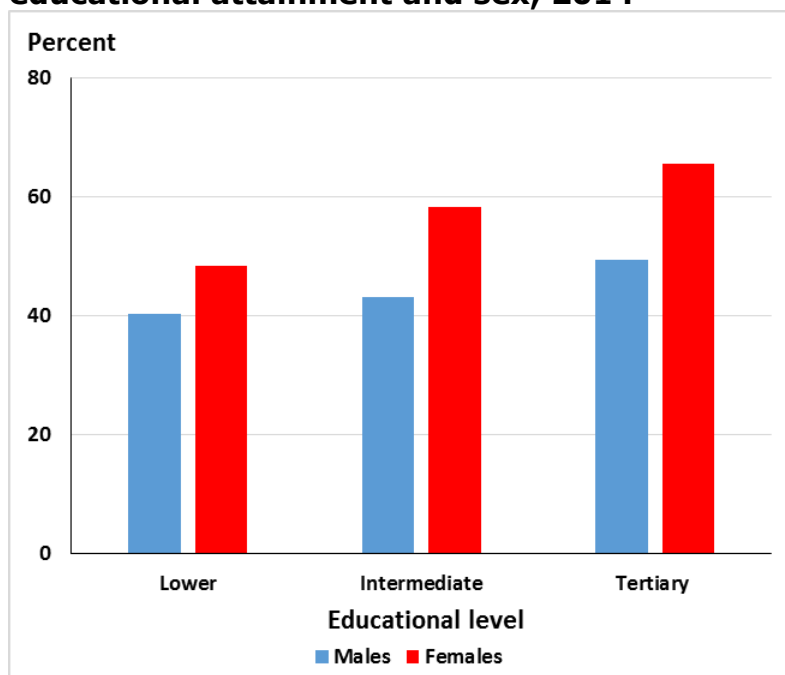
No EU harmonised data available by socio-economic status.

### FRUIT CONSUMPTION AT AGES 18 AND OVER

#### INEQUALITIES WITHIN COUNTRY

There is a social gradient in those consuming fruit at least daily in Estonia for both adult men and women at ages 18 and over, in the EHIS data – the proportion doing so increasing with level of educational attainment.

#### **Fruit consumption at least daily at ages 18 and over by level of educational attainment and sex, 2014**



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

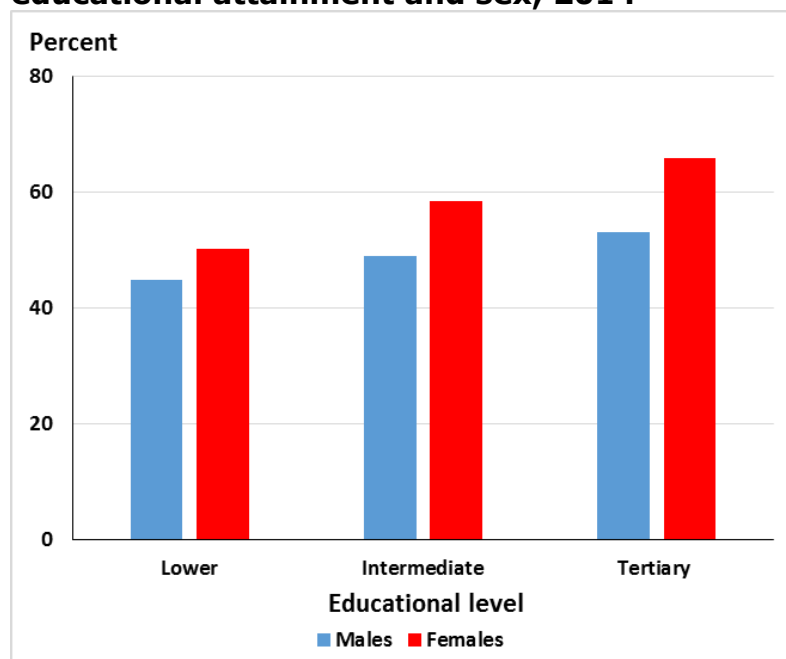
Data from EHIS for the EU as a whole suggest that those with intermediate levels of educational attainment were least likely to eat fruit at least daily at ages 18 and over, with those who attained a tertiary level of education generally most likely to eat fruit at least daily.

## VEGETABLE CONSUMPTION AT AGES 18 AND OVER

### INEQUALITIES WITHIN COUNTRY

There is a social gradient in those consuming fruit at least daily in Estonia for both adult men and women at ages 18 and over, in the EHIS data – the proportion doing so increasing with level of educational attainment.

### **Vegetable consumption at least daily at ages 18 and over by level of educational attainment and sex, 2014**



*Sources, numbers and definitions: See Annex*

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

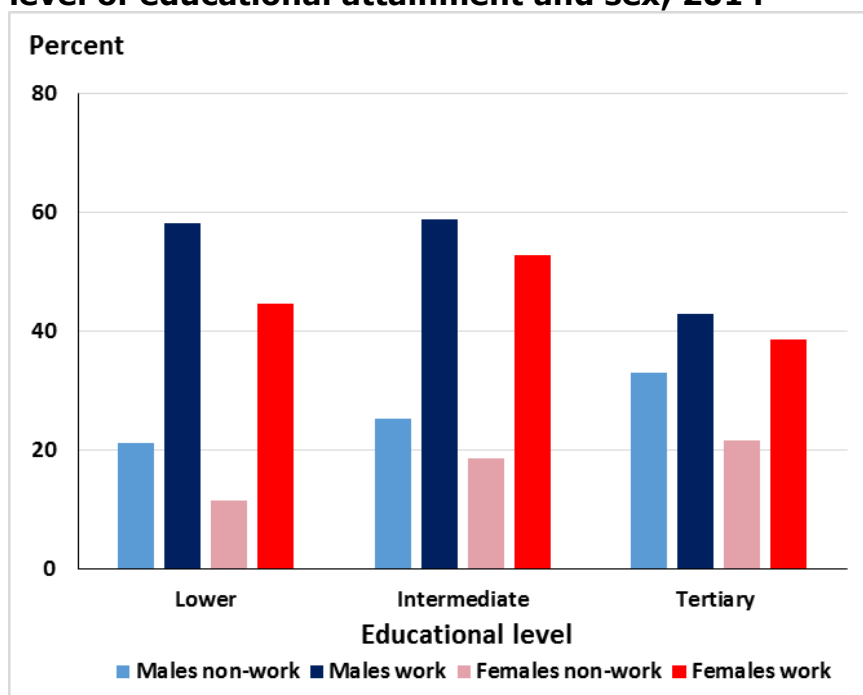
Data from EHIS for the EU as a whole suggest that those with intermediate levels of educational attainment were least likely to eat vegetables at least daily at ages 18 and over, with those who attained a tertiary level of education generally most likely to eat vegetables at least daily.

## PHYSICAL ACTIVITY AT AGES 18 AND OVER

### INEQUALITIES WITHIN COUNTRY

In Estonia, EHIS data suggest that there is a clear social gradient in physical activity outside work for both men and women at ages 18 and over - participation increases with level of educational attainment. For both sexes, the proportions engaging in physical activity in-work are least among those with tertiary education.

## Work and non-work related physical activity at ages 18 and over by level of educational attainment and sex, 2014



Sources, numbers and definitions: See Annex

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

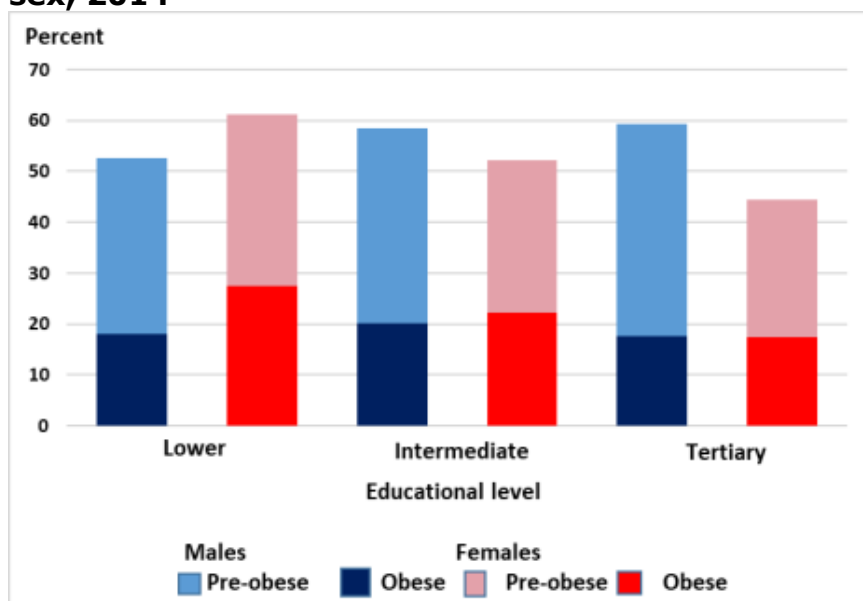
In the EU as a whole, EHIS data suggest that for both men and women there is a marked social gradient in physical activity outside work – the proportion engaging in physical exercise outside work increases with increased levels of educational attainment. Physical activity at work among men and women, aged 18 and over, is most common among those with intermediate levels of educational attainment and least common among those with tertiary education.

### OVERWEIGHT AT AGES 18 AND OVER

#### INEQUALITIES WITHIN COUNTRY

Based on EHIS data, there are consistent social gradients in both pre-obesity (BMI of at least 25 but less than 30) and obesity (BMI of at least 30) among women aged 18 and over in Estonia – proportions decrease as levels of educational attainment increase. EHIS data for males at these ages suggest that pre-obesity increases with level of educational attainment but that there is no consistent pattern for obesity.

## Overweight at ages 18 and over by level of educational attainment and sex, 2014



Sources, numbers and definitions: See Annex

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

For the EU as a whole, there is a social gradient for both men and women in both the proportion who are pre-obese (BMI of at least 25 but less than 30) and obese (BMI of 30 or more) based on EHIS data. That is to say, both decrease as level of educational attainment increases. Among men at this age, however, these differences in levels of pre-obesity by level of educational attainment are small.

### CORONARY HEART DISEASE INCIDENCE

No EU harmonised data available by socio-economic status.

### CORONARY HEART DISEASE DEATHS

No EU harmonised data available by socio-economic status.

### CANCER INCIDENCE

No EU harmonised data available by socio-economic status.

### CANCER DEATHS

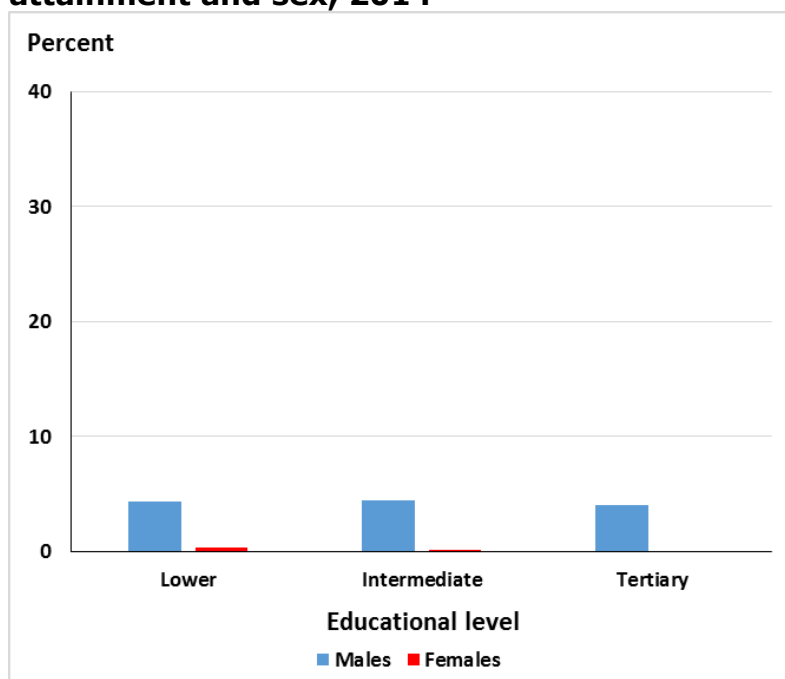
No EU harmonised data available by socio-economic status.

### DAILY ALCOHOL CONSUMPTION AT AGES 18 AND OVER

#### INEQUALITIES WITHIN COUNTRY

Based on EHIS data, the proportions of women aged 18 and over consuming alcohol daily are low at all levels of educational attainment. Among men, the proportions vary little by level of educational attainment, but are all more than ten times those of women.

## Daily alcohol consumption at ages 18 and over by level of educational attainment and sex, 2014



Sources, numbers and definitions: See Annex

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

Based on EHIS data, among women aged 18 and over in the EU as a whole, there is a social gradient in the proportion drinking alcohol daily – the figure decreases with the level of education attained. Among men, while the proportion is highest among those with lower levels of educational attainment it is least among those with intermediate levels of educational attainment. The proportion of women drinking every day is around a third of the figure for men.

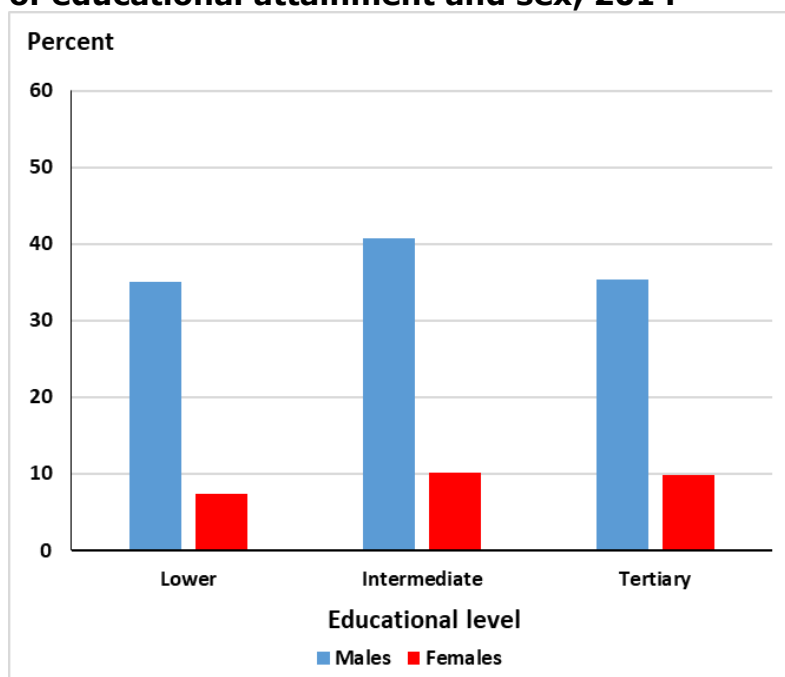
---

### HEAVY EPISODIC DRINKING AT AGES 18 AND OVER

#### INEQUALITIES WITHIN COUNTRY

Data from EHIS suggest that, at ages 18 and over in Estonia, heavy episodic drinking at ages 18 and over is more common among both men and women with intermediate levels of educational attainment than it is for those with other levels of educational attainment.

### Heavy episodic drinking at least monthly at ages 18 and over by level of educational attainment and sex, 2014



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

Based on EHIS data in the EU as a whole there are no clear social gradients in the proportion drinking heavily at least monthly for both sexes at ages 18 and over. While those with lower levels of educational attainment are markedly less likely than others to drink heavily at least monthly, proportions for those with intermediate levels of educational attainment are slightly higher than for those with tertiary education. The proportion of women drinking heavily at least monthly is less than half the proportion among men.

---

#### ALCOHOL RELATED CAUTIONS AND ARRESTS

No EU harmonised data available by socio-economic status.

---

#### ALCOHOL RELATED DEATHS

No EU harmonised data available by socio-economic status.

---

#### RARHA ALCOHOL DATA

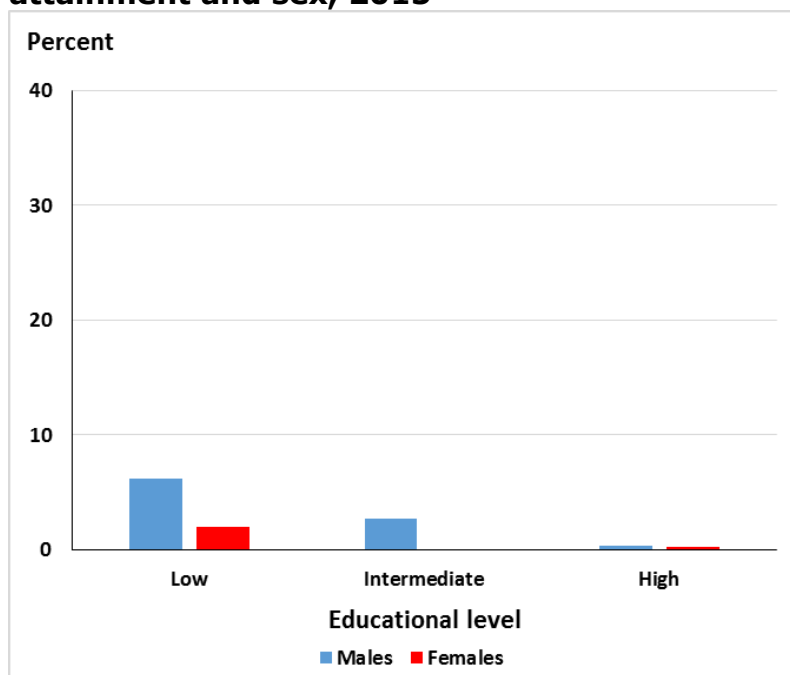
The EU Joint Action on Reducing Alcohol Related Harm Standardised European Alcohol Survey (RARHA SEAS) was a comprehensive survey of alcohol consumption and harm conducted in 17 EU countries and two non-EU countries. Survey data was gathered from representative samples of the general populations aged 18-64.

## DAILY ALCOHOL CONSUMPTION AT AGES 18 TO 64

### INEQUALITIES WITHIN COUNTRY

RARHA survey data for Estonia suggest that the proportion of both men and women aged between 18 and 64 who consume alcohol daily is greatest among those with lower levels of educational attainment.

### Daily alcohol consumption at ages 18 to 64 by level of educational attainment and sex, 2015



Sources, numbers and definitions: See Annex

### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

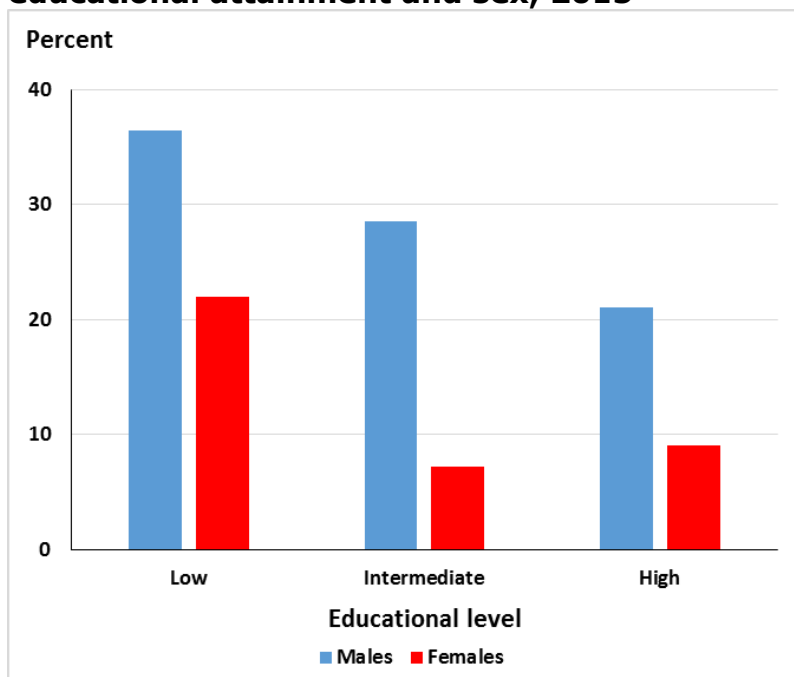
RARHA survey data for the 17 participant EU Member States suggest that there are clear social gradients by educational attainment in the proportions of both men and women aged between 18 and 64 who consume alcohol every day. The gradient is steeper for men than for women and, in each educational attainment category, the proportion of women who drink alcohol daily is less than that for men. Among women with lower levels of educational attainment the proportion drinking every day is less than a third of the figure for their male counterparts.

## HEAVY EPISODIC DRINKING AT LEAST MONTHLY AT AGES 18 TO 64

### INEQUALITIES WITHIN COUNTRY

For men aged between 18 and 64 in Estonia, RARHA survey data suggest that there is a social gradient in the proportion who drink heavily at least monthly – this figure decreases with increased level of educational attainment. Among women, the proportion is markedly higher for those with a low level of educational attainment than others.

### Heavy episodic drinking at least monthly at ages 18 to 64 by level of educational attainment and sex, 2015



Sources, numbers and definitions: See Annex

#### COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

RARHA survey data for the 17 participant EU Member States suggest that there is a clear reverse social gradient in the proportion of women aged between 18 and 64 who drink heavily at least monthly. The proportion is least among women with lower levels of educational attainment and greatest among those with tertiary education. Among men the proportion is greatest among those with intermediate levels of educational attainment.



## ANNEX

### DATA FOR ESTONIA, SOURCES AND DEFINITIONS

#### INCOME INEQUALITY

**Income** is computed in EU SILC on the basis of the total equivalised disposable income attributed to each member of the household. The data (for each person) are ordered according to the value of the total equivalised disposable income.

#### Equivalised mean income in Euros (PPS) at ages 18 and over by level of educational attainment and sex, 2016

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	10,785	13,316	18,499	Mean equivalised household income (pps) for males and females aged 18 and over
Females	9,061	11,860	16,282	

Source: Eurostat, EU-SILC survey [ilc\_di08]

[http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc\\_di08&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di08&lang=en)

Accessed 23 March 2018

#### Equivalised median income in Euros (PPS) at ages 18 and over by level of educational attainment and sex, 2016

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	9,176	12,043	16,976	Median equivalised household income (pps) for males and females aged 18 and over
Females	7,636	10,239	14,801	

Source: Eurostat, EU-SILC survey [ilc\_di08]

[http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc\\_di08&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di08&lang=en)

Accessed 23 March 2018

#### HEALTH AND LIFE EXPECTANCY

##### Life expectancy at birth by level of educational attainment

**Life expectancy** represents the mean number of years still to be lived by a person, if subjected throughout the rest of his or her life to the current mortality conditions (age-specific probabilities of dying).

**Level of educational attainment** is defined according to the [International standard classification of education \(ISCED\)](#). The educational attainment level of an individual is the highest ISCED level successfully completed.

Educational attainment levels are presented for three main categories:

- Lower: Less than primary, primary and lower secondary education (ISCED 2011 levels 0-2)
- Intermediate: Upper secondary and post-secondary non-tertiary education (ISCED 2011 levels 3 and 4)
- Tertiary: Tertiary education (ISCED 2011 levels 5-8)

### Life expectancy at birth by level of educational attainment and sex, 2014

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	61.9	74.6	75.3	Mean number of years still to be lived from birth
Females	74.2	82.1	83.4	
<i>Source: Eurostat [demo_mlexpecedu]</i> <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_mlexpecedu&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_mlexpecedu&amp;lang=en</a> Accessed 20 April 2017				

### Self reported health by level of educational attainment and income

The European Statistics of Income and Living Condition (EU-SILC) survey contains a small module on health, composed of three variables on health status and four variables on unmet needs for health care.

The variables on **health status** represent the so called Minimum European Health Module (MEHM), and measures three different concepts of health:

- Self-perceived health
- Chronic morbidity (people having a long-standing illness or health problem)
- Activity limitation – disability (self-perceived long-standing limitations in usual activities due to health problems)

In this report the first two health status concepts are used since these are the ones most likely to result from behaviours, rather than inherited disorders, accidents and the relationship between health status and the availability of aids to daily living that mitigate health conditions.

**Educational attainment level:** the level of education attainment of individuals is classified in EU SILC according to the International Standard Classification of Education (ISCED) version of 1997 and are grouped as follows:

- Pre-primary, primary and lower secondary education
- Upper secondary and post-secondary non-tertiary education
- First and second stage of tertiary education

**Income quintile group** is computed in EU SILC on the basis of the total equivalised disposable income attributed to each member of the household.

The data (of each person) are ordered according to the value of the total equivalised disposable income. Four cut-point values (the so-called quintile cut-off points) of income, dividing the survey population into five groups equally represented by 20 % of individuals each, are found:

- First quintile group of equivalised income
- Second quintile group of equivalised income
- Third quintile group of equivalised income
- Fourth quintile group of equivalised income
- Fifth quintile group of equivalised income.

The first quintile group represents 20 % of population with lowest income and the fifth quintile group 20 % of population with highest income.

### Age standardised percentage with good or very good self-perceived health by level of educational attainment and sex, 2016

	Educational attainment level			Definition
	Lower	Inter- mediate	Tertiary	
Males	43.64	53.95	61.42	Percent reporting good or very good health, standardised for age using the European Standard Population
Females	43.67	52.0	63.64	
<i>Source: Eurostat [hlth_silc_02]</i> <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_silc_02&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_silc_02&amp;lang=en</a> Accessed 18 March 2018				

Note. Age standardisation for males and females in Estonia is based on ages 16 to 24, then ten-year age groups up to age 74 and then 75 and over.

### Age standardised percentage with good or very good self-perceived health by income quintile and sex, 2016

	Income quintile					Definition
	First	Second	Third	Fourth	Fifth	
Males	44.46	47.47	55.26	59.11	70.03	Percent reporting good or very good health, standardised for age using the European Standard Population
Females	43.47	51.12	56.92	60.39	68.28	
<i>Source: Eurostat [hlth_silc_10]</i> <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_silc_10&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_silc_10&amp;lang=en</a> Accessed 18 March 2018						

Note: Age standardisation for males and females in Estonia is based on age groups up to age 64 and then 65 and over, due to unavailability of finer age breakdowns at older ages for self-perceived health and the higher income quintiles.

**Age standardised percentage reporting a long-standing illness or health problem by level of educational attainment and sex, 2016**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	53.07	45.07	41.95	Percent reporting a long-standing illness or health problem, standardised for age using the European Standard Population
Females	54.59	47.51	37.63	

Source: Eurostat [hlth\_silc\_05]

[http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth\\_silc\\_05&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_silc_05&lang=en)

Accessed 18 March 2018

Note. Age standardisation for males and females in Estonia is based on ages 16 to 24, then ten-year age groups up to age 74 and then 75 and over.

**Age standardised percentage reporting a long-standing illness or health problem by income quintile and sex, 2016**

	Income quintile					Definition
	First	Second	Third	Fourth	Fifth	
Males	50.72	50.62	44.02	41.44	36.0	Percent reporting a long-standing illness or health problem, standardised for age using the European Standard Population
Females	53.37	48.42	42.88	40.78	33.75	

Source: Eurostat [hlth\_silc\_11]

[http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth\\_silc\\_11&lang=eneing](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_silc_11&lang=eneing)

Accessed 18 March 2018

Note: Age standardisation for males in Estonia is based on age groups up to age 64 and then 65 and over, due to unavailability of finer age breakdowns at older ages for long-standing ill-health and the highest income quintile. Age standardisation for females in Estonia is based on age groups up to age 74 and then 75 and over.

### Age standardised percentage reporting that they have diabetes by level of educational attainment and sex, 2014

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	5.21	6.12	4.87	Percent reporting that they have diabetes, standardised for age using the European Standard Population
Females	8.16	6.56	4.62	

Source: Eurostat [hlth\_silc\_05]

[http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth\\_ehis\\_cd1e&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_cd1e&lang=en)  
Accessed 11 October 2018

Note: Age standardisation for males in Estonia is based on age groups 15 to 44, 45 to 54, 55 to 64, 65 to 74 and 75 and over. For females it is based on age groups 15 to 44, 45 to 64, 65 to 74 and 75 and over, due to the unavailability of finer age group data for those with lower levels of educational attainment.

## LIFECOURSE

### A) LIFECOURSE STAGE - A GOOD START IN LIFE

**Educational attainment level:** the education attainment levels of individuals are based on data collected in the European Health Interview Survey (EHIS) classified according to the International Standard Classification of Education (ISCED) 2011 and are grouped as above.

### Women overweight at ages 18-44 by level of educational attainment, 2014

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Pre-obese	23.4	22.6	16.3	Percent with a BMI of at least 25 but less than 30
Obese	15.7	10.0	7.2	Percent with a BMI of 30 or more

Source: Eurostat, [hlth\_ehis\_bm1e], European Health Interview Survey

[http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth\\_ehis\\_bm1e&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_bm1e&lang=en)  
Accessed 25 April 2017

### Infant mortality

**Infant deaths** - the death of a live-born infant who has not yet completed one year of life

**Level of educational attainment** - see life expectancy by educational attainment

### Infant mortality by level of maternal education, 2013

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Infant mortality rate	4.26	0.93	1.77	Deaths in the first year of life per 1,000 live births
<i>Source: Eurostat [demo_minfedu], [demo_faeduc]</i> <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_minfedu&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_minfedu&amp;lang=en</a> <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_faeduc&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_faeduc&amp;lang=en</a> Accessed 18 May 2018				

Note: Infant mortality rates are based on 2012 live births and 2013 deaths in Estonia.

### B) LIFECOURSE STAGE - AGES 11 TO 15

The Health Behaviour of School Age Children (HBSC) survey 2013/2014 is the principal source of information at ages 11 to 15. To derive their Family Affluence Scale (FAS) the survey used a six-item assessment of common material assets or activities as follows:

- (1) summing the score on responses to the following six items:
  - Does your family own a car, van or truck? (Responses: no, one, two or more);
  - Do you have your own bedroom for yourself? (No, yes);
  - How many times did you and your family travel out of [insert country/region name] for a holiday/vacation last year? (Not at all, once, twice, more than twice);
  - How many computers do your family own? (None, one, two, more than two);
  - Does your family have a dishwasher at home? (No, yes); and
  - How many bathrooms (rooms with a bath/shower or both) are in your home? (None, one, two, more than two).

(2) comparing the individual's summary score from the FAS to all other scores in the respective country/region. This relative affluence score is then used to identify groups of young people in the lowest 20% (low affluence), middle 60% (medium affluence) and highest 20% (high affluence) in each country and region.

### Percentage point difference in prevalence of drinking soft-drinks at least once a day between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14

	Percentage point difference	Definition
Boys	6	Difference in prevalence between those in the low and high affluence groups based on the Family Affluence Scale (FAS)
Girls	0	
<i>Source: HBSC 2016</i> <a href="https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_6-difference-in-drinking-soft-drinks-by-fas/">https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_6-difference-in-drinking-soft-drinks-by-fas/</a> Accessed 14 March 2017		

**Percentage point difference in daily fruit consumption between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14**

	Percentage point difference	Definition
Boys	15	Difference in prevalence between those in the low and high affluence groups based on the Family Affluence Scale (FAS)
Girls	21	
<p><i>Source: HBSC 2016</i>  <a href="https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_4-difference-in-eating-fruit-by-fas">https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_4-difference-in-eating-fruit-by-fas</a>            Accessed 14 March 2017</p>		

**Percentage point difference in prevalence of reporting at least one hour of moderate or vigorous physical activity daily, between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14**

	Percentage point difference	Definition
Boys	6	Difference in prevalence between those in the low and high affluence groups based on the Family Affluence Scale (FAS)
Girls	6	
<p><i>Source: HBSC 2016</i>  <a href="https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_12-difference-in-moderate-to-vigorous-physical-activity-by-fas/">https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_12-difference-in-moderate-to-vigorous-physical-activity-by-fas/</a>            Accessed 14 March 2017</p>		

**Percentage point difference in those overweight between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14**

	Percentage point difference	Definition
Boys	-6	Difference in prevalence between those in the low and high affluence groups based on the Family Affluence Scale (FAS)
Girls	-7	
<p><i>Source: HBSC 2016</i>  <a href="https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_83-differences-in-bmi-by-fas/">https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_83-differences-in-bmi-by-fas/</a>            Accessed 14 March 2017</p>		

**Percentage point difference in weekly use of alcohol between low and high family affluence groups at ages 11, 13 and 15, by sex, 2013/14**

	Percentage point difference	Definition
Boys	2	Difference in prevalence between those in the low and high affluence groups based on the Family Affluence Scale (FAS)
Girls	-1	
<p><i>Source: HBSC 2016</i>  <a href="https://gateway.euro.who.int/en/indicators/hbsc_88-differences-in-alcohol-consumption-by-fas/">https://gateway.euro.who.int/en/indicators/hbsc_88-differences-in-alcohol-consumption-by-fas/</a>            Accessed 14 March 2017</p>		

## C) LIFECOURSE STAGE - AGES 15 TO 24

### ALCOHOL CONSUMPTION REPORTED AT AGES 15 AND 16

The main purpose of the European School Survey Project on Alcohol and Other Drugs (ESPAD) project is to collect comparable data on substance use among 15 to 16 year- old students in as many European countries as possible. The target group consists of students who turn 16 during the year of data collection, which in 2011 meant students born in 1995. The surveys are conducted in schools in the participating country, during the same period of time and using a common methodology.

**Educational attainment level:** the level of education attainment of mothers is used here, grouped using the classification in ESPAD as follows:

*Lower*

Completed primary school or less  
Some secondary school

*Intermediate*

Completed secondary school

*Tertiary*

Some college or university  
Completed college or university

### Percentage of 15 and 16 year old students who drank alcohol in the last month by level of maternal educational attainment and sex, 2011

	Educational attainment level			Definition
	Lower	Inter- mediate	Tertiary	
Males	52.1	55.5	58.0	Percent who had any alcohol beverage to drink during the last 30 days
Females	58.6	62.9	60.7	

Source: ESPAD

<http://www.espad.org/>

Extracted 13 April 2018



**Percentage of 15 and 16 year old students who had ever been drunk by level of maternal educational attainment and sex, 2011**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	50.0	56.4	54.2	Percent who have been intoxicated from drinking alcoholic beverages, for example staggered when walking, not being able to speak properly, throwing up or not remembering what happened, in their lifetime
Females	58.8	58.1	50.9	

Source: ESPAD  
<http://www.espad.org/>  
 Extracted 13 April 2018

**Percentage of 15 and 16 year old students who drank heavily on at least one occasion in the last month by level of maternal educational attainment and sex, 2011**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	49.0	53.9	54.3	Percent who had five or more drinks on one occasion during the last 30 days
Females	54.5	55.9	49.8	

Source: ESPAD  
<http://www.espad.org/>  
 Extracted 13 April 2018

**Percentage of 15 and 16 year old students who had ever been drunk at age 14 or less by level of maternal educational attainment and sex, 2011**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	54.0	55.2	54.3	Percent who had first got drunk on alcohol when aged 14 years of age or less
Females	53.5	50.2	49.8	

Source: ESPAD  
<http://www.espad.org/>  
 Extracted 13 April 2018

**Percentage of 15 and 16 year old students who drank alcohol at age 12 or earlier by level of maternal educational attainment and sex, 2011**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	66.0	61.3	58.0	Percent who first drank at least one glass of alcoholic beverage when aged 12 years of age or less
Females	59.4	54.4	53.8	
<i>Source: ESPAD</i> <a href="http://www.espad.org/">http://www.espad.org/</a> Extracted 13 April 2018				

**DIET AND EXERCISE AT AGES 15 TO 24**

The European Health Interview Survey (EHIS) is the principal source of information at ages 15 and over. The survey consists of four modules on health status, health care use, health determinants and socio-economic background variables. EHIS targets the population aged at least 15 and living in private households.

**Educational attainment level:** the education attainment levels of individuals in EHIS are classified according to the International Standard Classification of Education (ISCED) 2011 and are grouped as follows:

- Lower: less than primary, primary and lower secondary education
- Intermediate: upper secondary and post-secondary non-tertiary
- Tertiary: Tertiary education

**Fruit consumption at least daily at ages 15 to 24 by level of educational attainment and sex, 2014**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	39.7	33.4	:	Percent consuming fruit at least daily
Females	41.9	56.2	63.3	
<i>Source: Eurostat [hlth_ehis_fv1e], European Health Interview Survey</i> <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&amp;lang=en</a> Accessed 26 April 2017				

**Vegetable consumption at least daily at ages 15 to 24 by level of educational attainment and sex, 2014**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	44.5	40.9	:	Percent consuming vegetables at least daily
Females	40.8	53.6	67.1	
<i>Source: Eurostat [hlth_ehis_fv1e], European Health Interview Survey</i> <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&amp;lang=en</a> Accessed 26 April 2017				

### Work and non-work related physical activity at ages 15 to 24 by level of educational attainment and sex, 2014

	Educational attainment level			Definitions
	Lower	Inter-mediate	Tertiary	
<i>Non-work related physical activity</i>				
Males	36.7	33.3		Percent engaging in health-enhancing aerobic physical activity of 150 or more minutes per week outside work
Females	25.5	32.2	29.4	
<i>work-related physical activity</i>				
Males	45.4	59.6		Percent engaging in moderate or heavy physical activity in work.
Females	43.6	43.3	39.4	
Source: Eurostat, [hlth_ehis_pe1e, hlth_ehis_pe2e], European Health Interview Survey <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe1e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe1e&amp;lang=en</a> <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe2e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe2e&amp;lang=en</a> Accessed 17 April 2017				

### Overweight at ages 15 to 24 by level of educational attainment and sex, 2014

	Educational attainment level			Definitions
	Lower	Inter-mediate	Tertiary	
<i>Pre-obese</i>				
Males	20.8	23.5	:	Percent with BMI that is equivalent to at least 25 but less than 30 at age 19
Females	15.3	16.1	8.1	
<i>Obese</i>				
Males	7.4	6.3	:	Percent with BMI that is equivalent to 30 or more at age 19
Females	5.0	3.9	0	
Source: Eurostat, [hlth_ehis_bm1e], European Health Interview Survey <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_bm1e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_bm1e&amp;lang=en</a> Accessed 20 April 2017				

## D) LIFECOURSE STAGE - ADULT BEHAVIOUR

The European Health Interview Survey (EHIS) is the principal source of information at ages 15 and over. The survey consists of four modules on health status, health care use, health determinants and socio-economic background variables. EHIS targets the population aged at least 15 and living in private households.

**Educational attainment level:** the education attainment levels of individuals in EHIS are classified according to the International Standard Classification of Education (ISCED) 2011 and are grouped as follows:

- Lower: less than primary, primary and lower secondary education
- Intermediate: upper secondary and post-secondary non-tertiary
- Tertiary: Tertiary education

**Fruit consumption at least daily at ages 18 and over by level of educational attainment and sex, 2014**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	40.4	43.1	49.4	Percent consuming fruit at least daily
Females	48.4	58.4	65.7	
Source: Eurostat [hlth_ehis_fv1e], European Health Interview Survey <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&amp;lang=en</a> Accessed 26 April 2017				

**Vegetable consumption at least daily at ages 18 and over by level of educational attainment and sex, 2014**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	44.9	48.9	53.1	Percent consuming vegetables at least daily
Females	50.2	58.4	65.9	
Source: Eurostat [hlth_ehis_fv1e], European Health Interview Survey <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&amp;lang=en</a> Accessed 26 April 2017				

**Work and non-work related physical activity at ages 18 and over by level of educational attainment and sex, 2014**

	Educational attainment level			Definitions
	Lower	Inter-mediate	Tertiary	
<i>Non-work related physical activity</i>				
Males	21.1	25.3	33.0	Percent engaging in health-enhancing aerobic physical activity of 150 or more minutes per week outside work
Females	11.5	18.5	21.7	
<i>Work-related physical activity</i>				
Males	58.2	58.8	42.9	Percent engaging in moderate or heavy physical activity in work.
Females	44.7	52.8	38.7	
Source: Eurostat, [hlth_ehis_pe1e, hlth_ehis_pe2e], European Health Interview Survey <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe1e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe1e&amp;lang=en</a> <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe2e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe2e&amp;lang=en</a> Accessed 17 April 2017				

### Overweight at ages 18 by level of educational attainment and sex, 2014

	Educational attainment level			Definitions
	Lower	Inter- mediate	Tertiary	
<i>Pre-obese</i>				
Males	34.6	38.3	41.7	Percent with BMI at least 25 but less than 30 at age 19
Females	33.8	29.9	27.0	
<i>Obese</i>				
Males	18.1	20.2	17.6	Percent with a BMI of 30 or more
Females	27.4	22.3	17.5	
Source: Eurostat, [hlth_egis_bm1e], European Health Interview Survey <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_egis_bm1e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_egis_bm1e&amp;lang=en</a> Accessed 21 February 2017				

### Daily alcohol consumption at ages 18 and over by level of educational attainment and sex, 2014

	Educational attainment level			Definition
	Lower	Inter- mediate	Tertiary	
Males	4.4	4.5	4.1	Percent consuming alcohol at least daily
Females	0.4	0.2	0.1	
Source: Eurostat [hlth_egis_al1e], European Health Interview Survey <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_egis_al1e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_egis_al1e&amp;lang=en</a> Accessed 27 April 2017				

### Heavy episodic drinking at least monthly at ages 18 and over by level of educational attainment and sex, 2014

	Educational attainment level			Definition
	Lower	Inter- mediate	Tertiary	
Males	35.1	40.7	35.3	Percent ingesting more than 60gm of pure ethanol on a single occasion at least once a month
Females	7.4	10.2	9.9	
Source: Eurostat [hlth_egis_al3], European Health Interview Survey <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_egis_al3e&amp;lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_egis_al3e&amp;lang=en</a> Accessed 26 July 2017				

### EU Joint Action on Reducing Alcohol Related Harm Standardised European Alcohol Survey (RARHA SEAS)

RARHA SEAS was a comprehensive survey of alcohol consumption and harm conducted in 17 EU countries and two non-EU countries. Survey data was gathered from representative samples of the general populations aged 18-64. On average 1,500 interviews per country were carried out, most surveys being completed in 2015.

Questions asked included frequency and usual quantity of drinking alcohol and risky single occasion drinking (RSOD) i.e. heavy episodic or binge drinking. It was assumed that drinking 40 grams of 100% alcohol or more per woman and 60 grams or more per man constitutes a threshold of RSOD or heavy episodic drinking.

The survey included a number of social and demographic questions, including "What is the highest school grade you have completed?" Answers to this question have been grouped as follows:

- 1) Less than primary, primary education and lower secondary education (lower)
- 2) Upper secondary (general and vocation), post-secondary non-tertiary education (intermediate)
- 3) Short-cycle tertiary, Bachelors, Masters, Doctoral (tertiary)

**Daily alcohol consumption at ages 18 to 64 by level of educational attainment and sex, 2015**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	6.2	2.7	0.3	Percent consuming alcohol at least daily
Females	2.0	0	0.2	
<i>Source: RARHA SEAS</i> <a href="http://www.rarha.eu/About/Pages/default.aspx">http://www.rarha.eu/About/Pages/default.aspx</a> Accessed 9 April 2018				

**Heavy episodic drinking at least monthly at ages 18 to 64 by level of educational attainment and sex, 2015**

	Educational attainment level			Definition
	Lower	Inter-mediate	Tertiary	
Males	36.5	28.6	21.0	Percent drinking 40 grams of 100% alcohol or more per woman and 60 grams or more per man on a single occasion at least once a month
Females	22.0	7.2	9.0	
<i>Source: RARHA SEAS</i> <a href="http://www.rarha.eu/About/Pages/default.aspx">http://www.rarha.eu/About/Pages/default.aspx</a> Accessed 9 April 2018				

**© European Union, 2018**

Reuse authorised.

The reuse policy of European Commission documents is regulated by Decision 2011/833/EU (OJ L 330, 14.12.2011, p. 39).

For reproduction or use of the artistic material contained therein and identified as being the property of a third-party copyright holder, permission must be sought directly from the copyright holder.

The information and views set out in this report are those of the author(s) UK Health Forum and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this report. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

