

HEALTH EQUITY PILOT PROJECT

Czech Republic

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



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SUMMARY

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

To set this in context, life expectancy in the Czech Republic is less than that in the EU as a whole - around two years less for men and one and a half years for women. Differences in healthy life expectancy are smaller. There are substantial income inequalities in the Czech Republic by level of educational attainment and life expectancy is strongly related to educational attainment among males – an 11 year difference – with a smaller difference of three years among females.

There are steep gradients in self perceived health by both education and income – for males, differences are greater than for the EU as a whole. For females the difference is greater than the EU as a whole by education but slightly smaller by income. Gradients in long term illness are steeper than those for the EU as a whole by both education and income for males and females. Self-reported diabetes varies more by education among women than it does among men and both gradients are steeper than those for the EU as a whole.

Some of the differences in health and behaviours that lead to these differences are apparent early in life. The odds of a baby whose mother has a lower level of educational attainment dying in infancy are over three and a half times those of a baby whose mother has tertiary education. At ages four to seven, there are gradients in obesity by education for both boys and girls. At ages 11 to 15, daily fruit consumption and physical exercise are more common among children from high family affluence groups than low ones. Girls in these groups are also less likely to be overweight. However, both boys and girls are more likely to consume alcohol weekly in high family affluence groups. But, at ages 15 to 16, the proportion ever drunk decreases with increasing level of mother's education, as does drinking heavily in the last month. These differences at ages 15 to 16 are larger than those in the EU as a whole.

Among adults, daily fruit and vegetable consumption and physical activity outside work all increase with increased levels of educational attainment. These differences are considerably larger than those for the EU as a whole. Both obesity and pre-obesity decrease with level of educational attainment for women at a slightly steeper rate than for the EU as a whole. Although daily alcohol consumption among men decreases with level of educational attainment, the gradient is less steep than for 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 the Czech Republic 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 the Czech Republic**.

Inequalities in life chances, behaviours and their health outcomes begin at the earliest stages in life, through intergenerational transmission, and accumulate across the life-course¹. 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 report². Other indicators, such as family affluence or income are used where this significantly extends the range of analyses possible.

¹ 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.

² Mackenbach, J.P. (2016), <u>Health Inequalities in Europe</u>, Erasmus University Publishing, Rotterdam

BACKGROUND INFORMATION

The population of the Czech Republic in 2017 was 10.6 million, slightly over 2 percent of the population of the European Union (EU) as a whole. Half of the population was aged under 41.9 years – the comparable figure for the EU was 42.8 years. Net migration was 1.9 per 1,000 population (2.4 for the EU as a whole). In terms of the age dependency ratio – the size of the population aged either under 15 or 65 and over as a percentage of the number aged 15 to 64 – the ratio for the Czech Republic was 52.4 percent compared to 53.9 per cent for the EU as a whole.

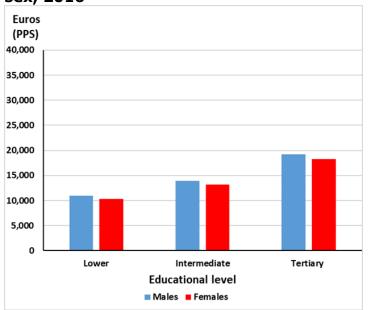
In 2016, life expectancy at birth was 76.1 years for males and 82.1 years for females – a gender gap of 6.0 years. Comparable figures for the EU were 78.2, 83.6 and 5.4 years. The comparable figures for healthy life years in the Czech Republic were 62.7, 64.0 and 1.3 years (i.e. women stayed healthier for longer than men in the Czech Republic) and 63.5, 64.2 and 0.7 years for the EU. These figures meant that men in the Czech Republic could expect to spend 13.4 years in ill-health and women 18.1 years – a difference of 4.7 years. The comparable figures for the EU were 14.7 and 19.4 years – also a difference of 4.7 years.

INCOME INEQUALITY

INEQUALITIES WITHIN COUNTRY

In terms of income inequality, in 2016, the Gini coefficient was 25.1 for the Czech Republic compared to 30.8 for the EU. The fifth of the population with the highest incomes received 3.5 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 8,200 Euros higher for men with tertiary education than for those with lower levels of educational attainment. For women of this age the difference was around 7,900 Euros. The comparable differences in median income were 6,600 and 6,300 Euros, respectively.

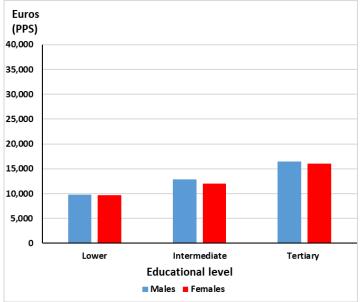


Equivalised mean income (pps) by level of educational attainment and sex, 2016

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 clear social gradient across life expectancy in the Czech Republic. The life expectancy of the least educated Czech men is 11 years less than the most educated. For Czech women, the gradient is less steep with a gap in life expectancy of just over 3 years. Across all three educational domains life expectancy in the Czech Republic is below the median for those countries in the EU for which data are available.

Years of life 100 60 60 40 20 0 Lower Intermediate Tertiary Educational level 9 Males Females

Life expectancy at birth by level of educational attainment and sex, 2015

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.

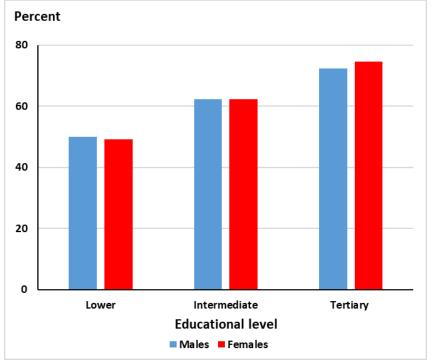
SELF PERCEIVED HEALTH

(a) By educational attainment

INEQUALITIES WITHIN COUNTRY

The data suggest there is a clear social gradient in self-perception of good or very good health in the Czech Republic by level of educational attainment. Self-reported health of the least educated Czech men is 22 percentage points less than the most educated. For Czech women, the gradient is steeper with a gap of 26 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

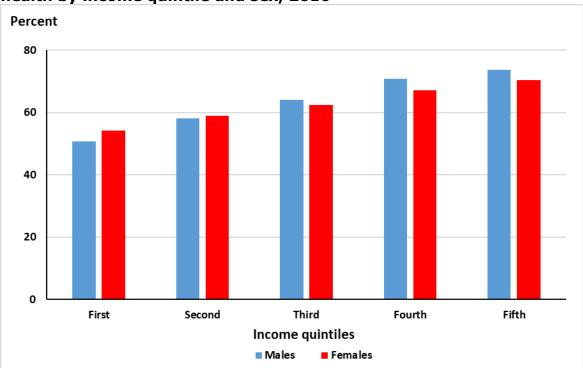
COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

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-perception of good or very good health in the Czech Republic by income quintile. Self-reported health of men in the lowest income quintile is 23 percentage points less than those in the top income quintile. For Czech women, the gradient is less steep with a gap of 16 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

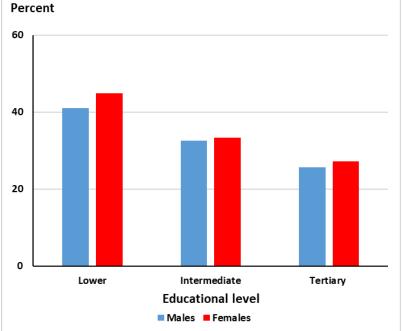
The data suggest there is a clear social gradient in self-perception of good or very good health in the EU as a whole. Self-reported health of men in the lowest income quintile is 18 percentage points less than for those in the highest income quintile. For women, the gradient is similar with a gap of 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 the Czech Republic by level of educational attainment. Self-reported long-standing ill-health of the least educated Czech men is 15 percentage points greater than for the most educated. For Czech women, the gradient is slightly steeper with a gap of 18 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

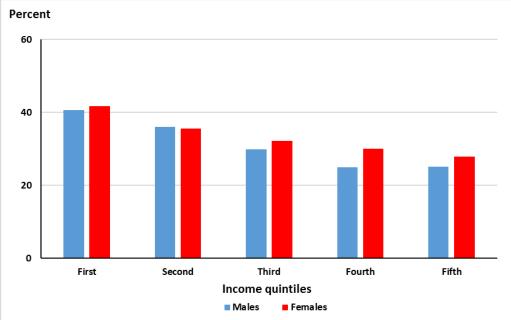
COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

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 the Czech Republic by income quintile. Self-reported long-standing ill-health by men in the lowest income quintile is 16 percentage points greater than for those in the top income quintile. For Czech women, the gradient is slightly less steep with a gap of 14 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

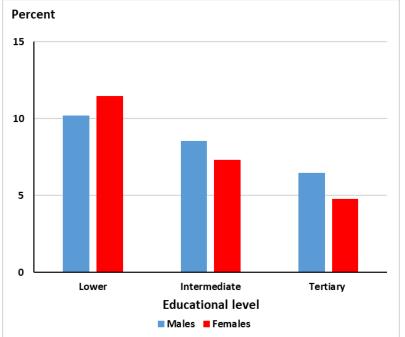
COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

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 the Czech Republic by level of educational attainment. Self-reported diabetes among the least educated men is four percentage points greater than for the most educated. For women, the gradient is slightly steeper with a gap of seven percentage points.



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

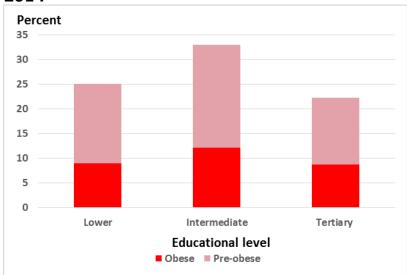
A) LIFECOURSE STAGE - A GOOD START IN LIFE

The events at which a good start in life needs to be established include preconception, 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 in the Czech Republic, there is no clear social gradient in either pre-obesity or obesity – for both the proportions are greatest for women with intermediate levels of educational attainment.



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

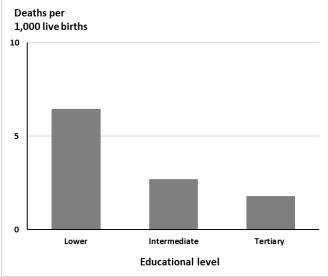
For the EU as a whole, there is a social gradient in both pre-obesity and obesity among women aged 18 to 44. Among those with lower levels of educational attainment, 24.1 percent are pre-obese. This figure falls to 17.6 per cent among those with tertiary education. The comparable figures for obesity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

INFANT MORTALITY

INEQUALITIES WITHIN COUNTRY

The data suggest that there is a social gradient in the Infant Mortality Rate (IMR) in the Czech Republic, based on mothers' educational status. The rate is more than four times higher for those with the lowest level of educational attainment compared to those who have completed tertiary education.

Infant mortality by level of maternal educational attainment, 2016



Sources, numbers and definitions: See Annex

COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

A similar social gradient occurs across all but one of 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

Based on a study by Ruiz et al. that included 10 EU Member States, there are social gradients at ages four to seven years in obesity (equivalent to BMI of 30 or more at age 19) and overweight (a BMI value equivalent to 25 or more at age 19) for both boys and girls in the Czech Republic, but not clear gradients in pre-obesity (i.e. overweight but not obese).

Percent 16 14 12 10 8 6 4 2 0 Lower Medium Post secondary Educational level Boys Girls Pre-obese 🖉 Obese 📕 Pre-obese 📕 Obese

Children overweight at ages four to seven by level of maternal educational attainment and sex, born in 1983-2006

Sources, numbers and definitions: See Annex

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.

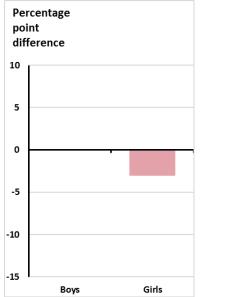
Additional information is available from ESPAD on alcohol consumption and is presented in the next section.

SUGAR SWEETENED BEVERAGES AT AGES 11 TO 15

INEQUALITIES WITHIN COUNTRY

Although the HBSC survey shows a higher figure for consumption of soft drinks among girls aged 11 to 15 from low family affluence groups than from more affluent families in the Czech Republic, this difference is not statistically significant. The survey shows no difference between family affluence groups for boys.

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

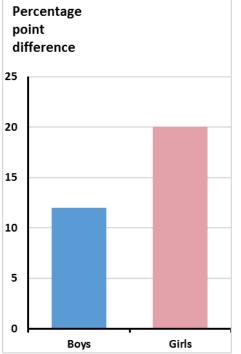
No EU harmonised data available by socio-economic status

FRUIT CONSUMPTION AT AGES 11 TO 15

INEQUALITIES WITHIN COUNTRY

The HBSC survey suggests that, at ages 11 to 15 in the Czech Republic, the proportions of boys and girls from high family affluence groups consuming fruit daily are greater than the corresponding proportions for low affluence family groups. There is a 12 and 20 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

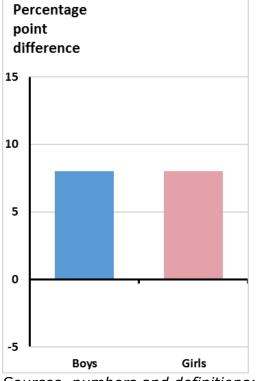
The HBSC survey does not provide estimates for the EU as a whole. However, fruit consumption is significantly related to family affluence across most EU countries for which these data are available.

PHYSICAL ACTIVITY AT AGES 11 TO 15

INEQUALITIES WITHIN COUNTRY

The HBSC survey data show that moderate or vigorous physical activity, in the Czech Republic, is more common among both boys and girls in high family affluence groups than in low ones (an eight percentage point difference in both cases).

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

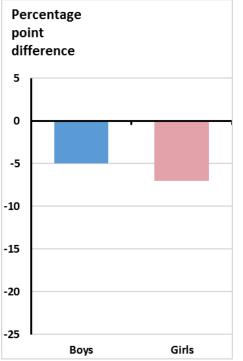
The HBSC survey does not provide estimates for the EU as a whole. However, physical activity is significantly related to family affluence in around half of EU countries for which these data are available. In these countries it is more common among both boys and girls in high family affluence groups than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

OVERWEIGHT AT AGES 11 TO 15

INEQUALITIES WITHIN COUNTRY

Among children at ages 11 to 15 in the Czech Republic the HBSC data suggest that children in high family affluence groups are less likely to be overweight than in low affluence families – a seven percentage points difference for girls. The smaller figure 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

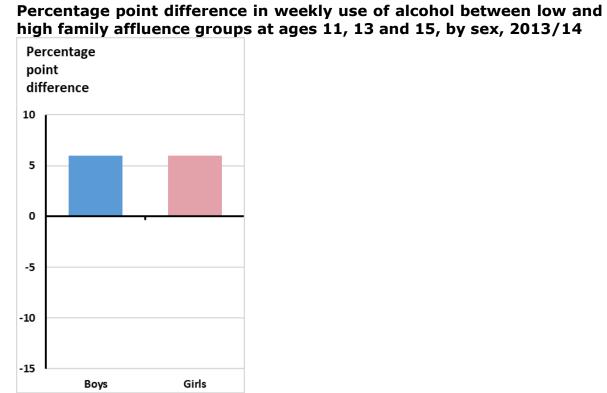
COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

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 show that underage drinking is more common among both boys and girls at ages 11 to 15 in the Czech Republic from high family affluence groups than in low ones (a six percentage point difference in both cases).



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

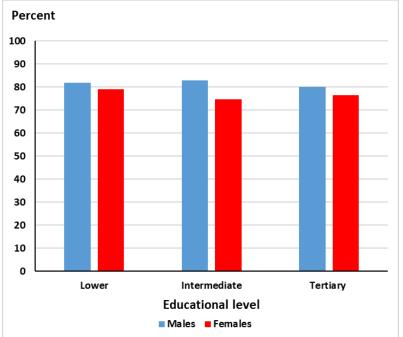
The main purpose of the European School Survey Project on Alcohol and Other Drugs (ESPAD) project is to collect comparable data on substance use among 15 to 16 year- old students in as many European countries as possible. The target group consists of students who turn 16 during the year of data collection, 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 the Czech Republic to the average for all survey participants in the EU.

DRANK ALCOHOL IN THE LAST MONTH

INEQUALITIES WITHIN COUNTRY

The percentage of male and female students aged 15 to 16 years who drank alcohol in the preceding month differed little by level of maternal educational attainment in the Czech Republic.



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

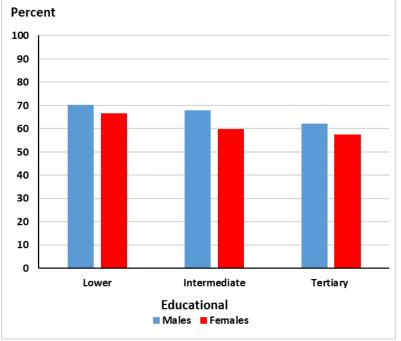
For both males and females, the percentage of participating EU students aged 15 to 16 years who drank alcohol in the preceding month was least among those whose mothers had a lower level of educational attainment.

DRUNK IN LIFETIME

INEQUALITIES WITHIN COUNTRY

The percentage of male and female students aged 15 to 16 years who had ever been drunk in their lifetime decreased with increased level of maternal educational attainment in the Czech Republic. For males and females there were eight and nine percentage point differences, respectively, between lower levels of maternal educational attainment and tertiary education.

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

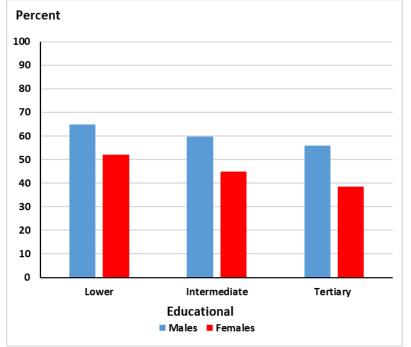
The percentage of participating EU students aged 15 to 16 years who had ever been drunk in their lifetime differed little by level of maternal educational attainment. For both males and females, it was slightly greater for those whose mothers had intermediate levels of educational attainment and slightly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

HEAVY DRINKING IN THE LAST MONTH

INEQUALITIES WITHIN COUNTRY

The percentage of 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 in the Czech Republic. For males and females there were nine and 14 percentage point differences, respectively, between lower levels of maternal educational attainment and tertiary education.

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

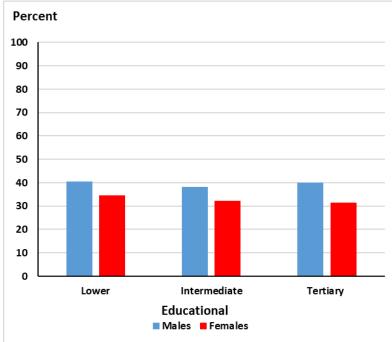
The percentage of participating EU students aged 15 to 16 years who had five or more drinks on one occasion in the previous month decreased with increased level of maternal educational attainment, with a six percentage point difference between lower levels of maternal educational attainment and tertiary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

GOT DRUNK AT AGE 14 OR LESS

INEQUALITIES WITHIN COUNTRY

The percentage of students aged 15 to 16 years who got drunk at age 14 or less decreased slightly by level of maternal educational attainment for females in the Czech Republic, with a three percentage point difference between lower levels of educational attainment and tertiary education. 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

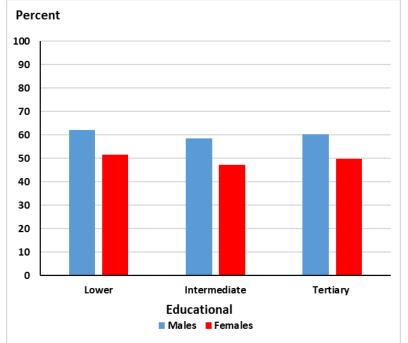
COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

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 was between three and five percentage points lower among those whose mothers had intermediate levels of educational attainment than among other groups for males and females.



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

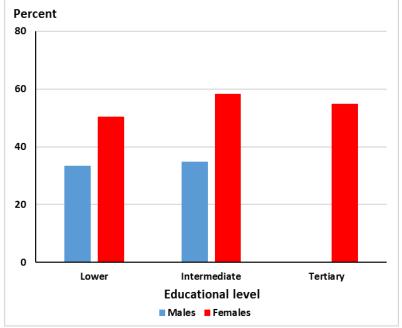
SATURATED FAT CONSUMPTION AT AGES 15 TO 24 No EU harmonised data available by socio-economic status

FRUIT CONSUMPTION AT AGES 15 TO 24

INEQUALITIES WITHIN COUNTRY

Data from EHIS suggest that there is no consistent pattern of fruit consumption at ages 15 to 24 by educational level attained in the Czech Republic, although many in this age group will not have attained their final lifetime level of educational attainment and there are no figures for men who have attained a tertiary level of 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

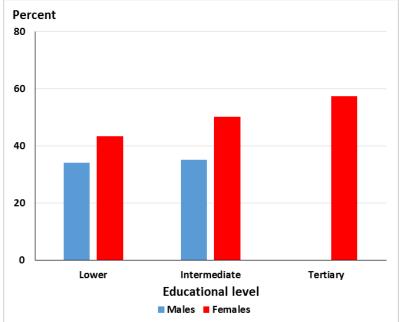
Data from EHIS for the EU as a whole suggest that there are consistent gradients in vegetable consumption among young men and women aged 15 to 24, with those who attained a tertiary level of education most likely to eat fruit at least daily. However, many in this age group will not have attained their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

VEGETABLE CONSUMPTION AT AGES 15 TO 24

INEQUALITIES WITHIN COUNTRY

There is a consistent social gradient in the data from EHIS, by educational level attained, in vegetable consumption among young women aged 15 to 24 the Czech Republic, but no clear difference among men of this age. Many in this age group will not have attained their final lifetime level of educational attainment and there are no figures for men who have attained a tertiary level of education.





Sources, numbers and definitions: See Annex

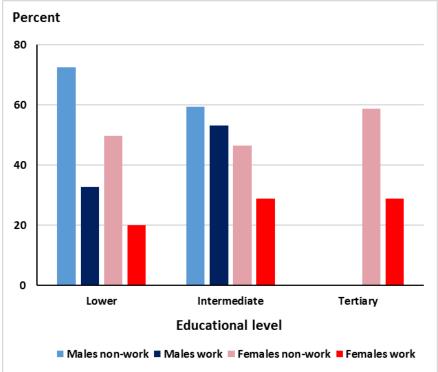
COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

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

Physical activity recorded in EHIS shows no clear relationship between in-work physical activity and educational attainment level, at ages 15 to 24 in the Czech Republic. 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. Many in this age group will not have attained their final lifetime level of education and no data are available for men who have attained a tertiary level of education.



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.

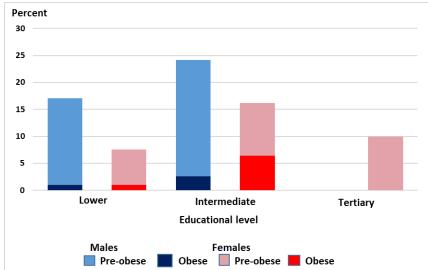
Physical activity outside work similarly shows no clear relationship with educational attainment level, at ages 15 to 24 across the EU as a whole. Those with intermediate levels of educational attainment are least likely to engage in significant physical activity outside work at these ages.

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

In the Czech Republic, 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 more common among young men and women with intermediate levels of educational attainment than among those who had ceased education at lower levels. No data are available for young men who had already completed tertiary education at this age. Among young women with a tertiary level of education, there is negligible obesity but a similar level of pre-obesity to those who with intermediate levels of educational attainment. Many in this age group will not have attained their final lifetime level of 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 data by socio-economic status

SATURATED FAT CONSUMPTION IN ADULTS

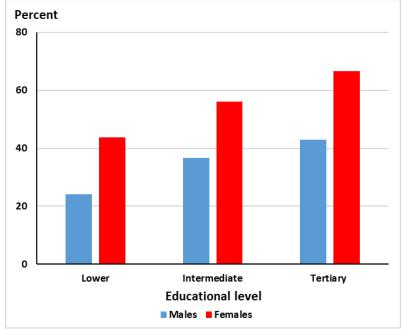
No EU harmonised data available data by socio-economic status

FRUIT CONSUMPTION AT AGES 18 AND OVER

INEQUALITIES WITHIN COUNTRY

Data from EHIS suggests that there is a social gradient in fruit consumption in the Czech Republic for both adult men and women aged 18 and over, with levels of consumption increasing with the level of education attained. Similar patterns of fruit consumption are apparent in many other EU Member States, although in many cases this is at a higher overall level than in the Czech Republic.

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

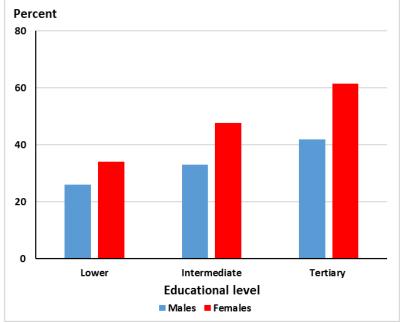
Data from EHIS for the EU as a whole suggest that those with intermediate levels of educational attainment were least likely to eat fruit at least daily at ages 18 and over, with those who attained a tertiary level of education generally most likely to eat fruit at least daily.

VEGETABLE CONSUMPTION AT AGES 18 AND OVER

INEQUALITIES WITHIN COUNTRY

Data from EHIS suggests that there is a social gradient in vegetable consumption in the Czech Republic for both adult men and women aged 18 and over, with levels of consumption increasing with the level of education attained.

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



Sources, numbers and definitions: See Annex

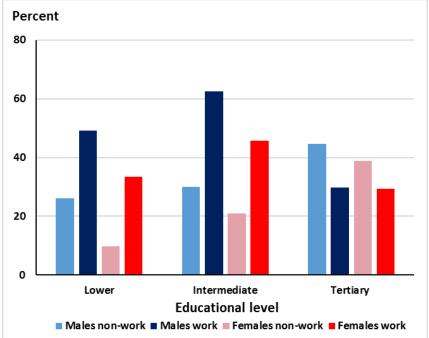
COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

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 the Czech Republic, 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 - with particularly low levels among women with lower levels of education (10 per cent participation). 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.



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

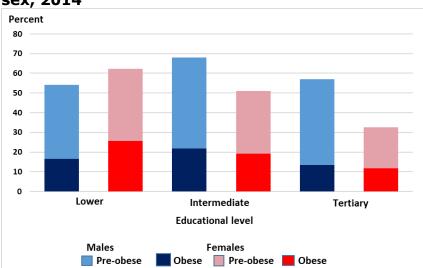
COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

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

In the Czech Republic, there is a social gradient among 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 Czech men at this age, the highest levels of both pre-obesity and obesity are among those with intermediate levels of educational attainment.



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

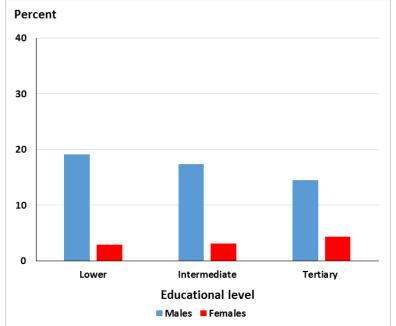
CANCER DEATHS

No EU harmonised data available by socio-economic status

DAILY ALCOHOL CONSUMPTION AT AGES 18 AND OVER

INEQUALITIES WITHIN COUNTRY

Based on EHIS data, among men aged 18 and over in the Czech Republic, there is a social gradient in the proportion drinking alcohol daily – the figure decreases with the level of education attained. However, among women, there is a small increase with the level of educational attained, albeit at a very much lower level than for men.



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

Sources, numbers and definitions: See Annex

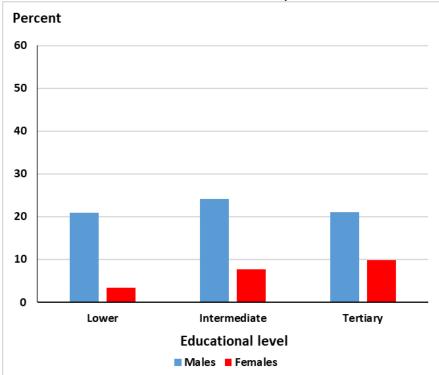
COMPARISON WITH INEQUALITIES IN THE EU AS A WHOLE

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

Based on EHIS data, among adult women aged 18 and over in the Czech Republic, there is a clear social gradient in the proportion drinking heavily at least monthly - the figure increases with the level of educational attainment. Among men, there is no clear gradient – the proportion is slightly higher among those with intermediate levels of educational attainment than others. In each educational attainment group, the proportion of men drinking heavily at least monthly is greater than it is for women.



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

No EU harmonised data by socio-economic status for the Czech Republic

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 No EU harmonised data by socio-economic status for the Czech Republic

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 THE CZECH REPUBLIC, 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

| | Educatio | nal attainme | Definition | |
|--------------------------------|----------|-------------------|------------|---|
| | Lower | Inter- mediate | Tertiary | |
| Males | 10,936 | 13,970 | 19,183 | Mean equivalised |
| Females | 10,333 | 13,161 | 18,280 | household income (pps) for males and females aged 18 and over |
| Source: Euros http://appsso | | | | taset=ilc_di08⟨=en |

Accessed 23 March 2018

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

| | Educatio | nal attainme | Definition | |
|---------|----------|-------------------|------------|---|
| | Lower | Inter- mediate | Tertiary | |
| Males | 9,783 | 12,900 | 16,419 | Median equivalised |
| Females | 9,715 | 11,973 | 16,047 | household income (pps) for males and females aged 18 and over |

Source: Eurostat, EU-SILC survey [ilc_di08] 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 <u>International</u> <u>standard classification of education (ISCED)</u>. 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, 2015

| | Education | al attainment l | Definition | |
|---------|-----------|-------------------|------------|---------------------------------------|
| | Lower | Inter- mediate | Tertiary | |
| Males | 66.3 | 76.1 | 77.4 | Mean number of |
| Females | 79.5 | 81.7 | 82.5 | years still to be lived from birth |

Source: Eurostat [demo_mlexpecedu]

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_mlexpecedu&lang =en

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

| | Educatio | nal attainme | Definition | |
|---------|----------|-------------------|------------|--|
| | Lower | Inter- mediate | Tertiary | |
| Males | 49.95 | 62.28 | 72.25 | Percent reporting good or |
| Females | 49.08 | 62.28 | 74.67 | very good health, standardised for age using the European Standard Population |

Source: Eurostat [hlth_silc_02]

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_silc_02&lang=en Accessed 18 March 2018

Note. Age standardisation for males and females in the Czech Republic 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

| | Incom | e quintil | e | Definition | | | |
|---------|-------|-----------|-------|------------|-------|--|--|
| | First | Second | Third | Fourth | Fifth | | |
| Males | 50.78 | 58.04 | 64.15 | 70.93 | 73.81 | Percent reporting good or | |
| Females | 54.30 | 58.97 | 62.48 | 67.11 | 70.42 | very good health, standardised for age using the European Standard Population | |

Source: Eurostat [hlth_silc_10]

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_silc_10&lang=en Accessed 18 March 2018

Note: Age standardisation for males in the Czech Republic is based on ages 16 to 24, then ten-year 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 highest income quintile. Age standardisation for females in the Czech Republic 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 level of educational attainment and sex, 2016

| | Educational attainment level | | | Definition |
|---------|------------------------------|-------------------|----------|--|
| | Lower | Inter- mediate | Tertiary | |
| Males | 41.08 | 32.64 | 25.59 | Percent reporting a long- |
| Females | 44.88 | 33.28 | 27.24 | standing illness or health problem, standardised for age using the European Standard Population |

Source: Eurostat [hlth_silc_05]

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 the Czech Republic 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 | e quintile | 1 | Definition | | |
|---------|--------|------------|-------|------------|-------|--|
| | First | Second | Third | Fourth | Fifth | |
| Males | 40.63 | 36.09 | 29.91 | 24.95 | 25.10 | Percent reporting a |
| Females | 41.71 | 35.65 | 32.17 | 30.07 | 27.90 | long-standing illness or health problem, standardised for age using the European Standard Population |

Source: Eurostat [hlth_silc_11]

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 the Czech Republic is based on ages 16 to 24, then ten-year 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 the Czech Republic 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 that they have diabetes by level of educational attainment and sex, 2014

| | Educatio | nal attainme | ent level | Definition |
|---------|----------|-------------------|-----------|--|
| | Lower | Inter- mediate | Tertiary | |
| Males | 10.19 | 8.55 | 6.47 | Percent reporting that |
| Females | 11.47 | 7.31 | 4.75 | they have diabetes, standardised for age using the European Standard Population |

Source: Eurostat [hlth_silc_05]

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_cd1e&lang=en Accessed 11 October 2018

Note: Age standardisation for females in the Czech Republic is based on age groups 15 to 44, 45 to 54, 55 to 64, 65 to 74 and 75 and over. For males, the same age groups are used except that the age group 45 to 64 is used in place of 45 to 54 and 55 to 64 due to the unavailability of finer age breakdowns at middle ages for self-reported diabetes among 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

| | Educat | ional attai | nment level | Definition | | |
|--|--|-------------|-------------|-----------------------------------|--|--|
| | Lower | Inter- | Tertiary | | | |
| | | mediate | | | | |
| Pre-obese | | | | Percent with a BMI of at least 25 | | |
| | 16.1 | 20.9 | 13.6 | but less than 30 | | |
| Obese | 9.0 | 12.1 | 8.7 | Percent with a BMI of 30 or more | | |
| Source: Euro | Source: Eurostat, [hlth_ehis_bm1e], European Health Interview Survey | | | | | |
| http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_bm1e⟨=en | | | | | | |
| Accessed 25 | 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, 2016

| | Educational attainment level | | | Definition |
|---|------------------------------|-------------------|----------|------------|
| | Lower | Inter- mediate | Tertiary | |
| Infant6.462.701.79Deaths in the first year of life per 1,000 live births | | | | |
| Source: Eurostat [demo_minfedu], [demo_faeduc] | | | | |

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_minfedu&lang=en http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_faeduc&lang=en Accessed 18 May 2018

OVERWEIGHT IN EARLY CHILDHOOD

Ruiz et al. (2016) defined overweight cases using the age and gender-specific thresholds for BMI recommended by the International Obesity Task Force (IOTF) in each national cohort, which correspond to a BMI value of 25 kg/m^2 at 18 years of age. Obese cases in each cohort were also defined by the IOTF as the age-and gender-specific BMI values that are comparable to an adult BMI value of 30 kg/m².

Maternal education was ascertained at entry to each cohort study, either during pregnancy or near the time of birth. The country-specific coding scheme provided by ISCED-1997 was used to classify mothers into the following categories:

- post-secondary non-tertiary to second stage of tertiary education (ISCED) 4-6).
- upper secondary education (ISCED 3), and
- pre-primary to lower secondary or second stage of basic education • (ISCED 0-2).

Children overweight at ages four to seven by level of maternal educational attainment and sex, born in 1983-2006

| | Educatio | onal attain | ment level | Definitions | | |
|---|----------|-------------|------------|-------------------------------------|--|--|
| | Lower | Inter- | Tertiary | | | |
| | | mediate | | | | |
| Pre-obese | <u>j</u> | | | | | |
| Boys | 8.6 | 9.5 | 7 | Percent with BMI that is equivalent | | |
| Girls | 11.3 | 8.1 | 9.1 | to at least 25 but less than 30 at | | |
| | | | | age 18 | | |
| Obese | | | | | | |
| Boys | 3.3 | 1.9 | 1.1 | Percent with BMI that is equivalent | | |
| Girls | | | | | | |
| Source: Ruiz et al (2016) Impact of Low Maternal Education on Early Childhood | | | | | | |
| Overweight and Obesity in Europe | | | | | | |
| http://onlinelibrary.wiley.com/doi/10.1111/ppe.12285/full | | | | | | |

Accessed 25 April 2017

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

| 11, 13 anu | 11, 13 and $13, by 3ex, 2013/14$ | | | | | |
|------------|----------------------------------|---|--|--|--|--|
| | Percentage point difference | Definition | | | | |
| Boys | 0 | Difference in prevalence between those in | | | | |
| Girls | -3 | the low and high affluence groups based | | | | |
| | | on the Family Affluence Scale (FAS) | | | | |

Source: HBSC 2016 https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_6-difference-indrinking-soft-drinks-by-fas/ 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 | Definition |
|-------|------------------|---|
| | point difference | |
| Boys | 12 | Difference in prevalence between those in |
| Girls | 20 | the low and high affluence groups based |
| | | on the Family Affluence Scale (FAS) |

Source: HBSC 2016

https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_4-difference-in-eating-fruit-by-fas

Accessed 14 March 2017

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 | 8 | Difference in prevalence between those in |
| Girls | 8 | the low and high affluence groups based on the Family Affluence Scale (FAS) |

Source: HBSC 2016

https://gateway.euro.who.int/en/indicators/hbsc-indicators/hbsc_12-difference-inmoderate-to-vigorous-physical-activity-by-fas/

Accessed 14 March 2017

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

| | Percentage | Definition | | | | | |
|------------------------------|-------------------------|---|--|--|--|--|--|
| | point difference | | | | | | |
| Boys | -5 | Difference in prevalence between those in | | | | | |
| Girls | -7 | the low and high affluence groups based | | | | | |
| | | on the Family Affluence Scale (FAS) | | | | | |
| Source: HBSC 2016 | | | | | | | |
| https://gatev bmi-by-fas/ | way.euro.who.int/en/ind | icators/hbsc-indicators/hbsc_83-differences-in- | | | | | |

Accessed 14 March 2017

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

| J | · · · · · · · · · · · · · · · · · · · | | | | | | |
|--|---|---|--|--|--|--|--|
| | Percentage | Definition | | | | | |
| | point difference | | | | | | |
| Boys | 6 | Difference in prevalence between those in | | | | | |
| Girls | 6 | the low and high affluence groups based | | | | | |
| | | on the Family Affluence Scale (FAS) | | | | | |
| Source: HBS | Source: HBSC 2016 | | | | | | |
| https://gateway.euro.who.int/en/indicators/hbsc_88-differences-in-alcohol- | | | | | | | |
| consumption-by-fas/ | | | | | | | |
| Accessed 14 | March 2017 | | | | | | |
| Source: HBS0 https://gatev consumption | C 2016 vay.euro.who.int/en/ind -by-fas/ | the low and high affluence groups base on the Family Affluence Scale (FAS) | | | | | |

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

| | Education | al attainmen | Definition | | | | |
|---|-----------|-------------------|------------|---|--|--|--|
| | Lower | Inter- mediate | Tertiary | | | | |
| Males | 81.9 | 82.9 | 80.1 | Percent who had any | | | |
| Females | 79.0 | 74.6 | 76.5 | alcohol beverage to drink during the last 30 days | | | |
| 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

| | Education | al attainment | t level | Definition |
|---------------|-----------|-------------------|----------|---|
| | Lower | Inter- mediate | Tertiary | |
| Males | 70.3 | 67.8 | 62.2 | Percent who have been |
| Females | 66.5 | 59.8 | 57.6 | 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 |
| 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

| | Educatio | onal attainme | nt level | Definition |
|--------------|----------|-------------------|----------|---|
| | Lower | Inter- mediate | Tertiary | |
| Males | 64.8 | 59.7 | 55.9 | Percent who had five or |
| Females | 52.1 | 44.8 | 38.4 | more drinks on one occasion during the last 30 days |
| Source: ESPA | | | | |

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

| | Education | al attainment | Definition | | | |
|---|----------------|-------------------|--|---------------------------|--|--|
| | Lower | Inter- mediate | Tertiary | | | |
| Males | 40.5 | 38.3 | 40 | Percent who had first got | | |
| Females | 34.7 32.3 31.4 | | drunk on alcohol when aged 14 years of age or less | | | |
| 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 | 62.1 | 58.4 | 60.3 | Percent who first drank at | | |
| Females | 51.7 | 47.3 | 49.7 | least one glass of alcoholic beverage when aged 12 years of age or less | | |
| Source: ESPAD http://www.espad.org/ 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

| | Educat | ional attai | nment level | Definition | | |
|---|--------|-------------------|-------------|----------------------------------|--|--|
| | Lower | Inter- mediate | Tertiary | | | |
| Males | 33.5 | 34.9 | : | Percent consuming fruit at least | | |
| Females | 50.5 | 58.2 | 54.9 | daily | | |
| Source: Eurostat [hlth_ehis_fv1e], European Health Interview Survey http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e⟨=en | | | | | | |

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- | Tertiary | | |
| | | mediate | - | | |
| Males | 34.2 | 35.1 | : | Percent consuming vegetables at | |
| Females 43.5 50.3 57.4 least daily | | | | | |
| Source: Eurostat [hlth_ehis_fv1e], European Health Interview Survey | | | | | |

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&lang=en 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- | Tertiary | | |
| | | mediate | | | |
| Non-work rela | ated phys | sical activit | У | | |
| Males | 72.4 | 59.5 | : | Percent engaging in health- | |
| Females | 49.8 | 46.4 | 58.7 | enhancing aerobic physical activity of 150 or more minutes per week outside work | |
| work-related | physical | activity | | | |
| Males | 32.8 | 53.1 | | Percent engaging in moderate or | |
| Females | 20.1 | 28.8 | 28.8 | heavy physical activity in work. | |
| Source: Eurostat, [hlth_ehis_pe1e, hlth_ehis_pe2e], European Health Interview Survey | | | | | |

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe1e&lang=en http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe2e&lang=en Accessed 17 April 2017

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

| | Educational attainment level | | | Definitions |
|--|------------------------------|---------|----------|-------------------------------------|
| | Lower | Inter- | Tertiary | |
| | | mediate | | |
| Pre-obese | | | | |
| Males | 16.1 | 21.6 | : | Percent with BMI that is equivalent |
| Females | 6.6 | 9.8 | 10.0 | to at least 25 but less than 30 at |
| | | | | age 19 |
| Obese | | | | |
| Males | 1.0 | 2.6 | : | Percent with BMI that is equivalent |
| Females | 1.0 | 6.4 | 0 | to 30 or more at age 19 |
| Source: Eurostat, [hlth_ehis_bm1e], European Health Interview Survey | | | | |
| http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_bm1e⟨=en | | | | |

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- | Tertiary | | |
| | | mediate | | | |
| Males | 24.1 | 36.6 | 43.0 | Percent consuming fruit at least | |
| Females | 43.8 | 56.0 | 66.6 | daily | |
| Source: Eurostat [hlth_ehis_fv1e], European Health Interview Survey | | | | | |
| http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e⟨=en | | | | | |
| Accessed 26 April 2017 | | | | | |

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

| | Educat | ional attai | nment level | Definition | | |
|---|-----------------------|-------------|-------------|---------------------------------|--|--|
| | Lower Inter- Tertiary | | | | | |
| | | mediate | | | | |
| Males | 26.1 | 33.1 | 41.9 | Percent consuming vegetables at | | |
| Females | 34.1 47.7 61.5 | | 61.5 | least daily | | |
| Source: Eurostat [hlth_ehis_fv1e], European Health Interview Survey | | | | | | |

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_fv1e&lang=en 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- | Tertiary | | | |
| | | mediate | | | | |
| Non-work rel | ated physical | activity | | | | |
| Males | 26.1 | 30.0 | 44.7 | Percent engaging in health- | | |
| Females | 9.8 | 21.0 | 38.9 | enhancing aerobic physical activity of 150 or more minutes per week outside work | | |
| Work-related | physical activ | <i>vity</i> | | | | |
| Males | 49.2 | 62.5 | 29.7 | Percent engaging in moderate or | | |
| Females | 33.4 | 45.6 | 29.4 | heavy physical activity in work. | | |
| Source: Eurostat, [hlth_ehis_pe1e, hlth_ehis_pe2e], European Health Interview Survey http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe1e⟨=en http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_pe2e⟨=en Accessed 17 April 2017 | | | | | | |

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

| | Educational attainment level | | | Definitions | |
|--|------------------------------|---------|----------|----------------------------------|--|
| | Lower | Inter- | Tertiary | | |
| | | mediate | | | |
| Pre-obese | | | | | |
| Males | 37.7 | 46.2 | 43.5 | Percent with BMI at least 25 but | |
| Females | 36.7 | 32.0 | 20.7 | less than 30 | |
| Obese | | | | | |
| Males | 16.5 | 21.8 | 13.4 | Percent with a BMI of 30 or more | |
| Females | 25.6 | 19.1 | 11.8 | | |
| Source: Eurostat, [hlth_ehis_bm1e], European Health Interview Survey | | | | | |
| http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_bm1e⟨=en | | | | | |
| 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 | 19.1 | 17.3 | 14.5 | Percent consuming alcohol at | |
| Females | 2.9 | 3.1 | 4.3 | least daily | |
| Source: Eurostat [hlth_ehis_al1e], European Health Interview Survey http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_al1e⟨=en | | | | | |

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- | Tertiary | | |
| | | mediate | | | |
| Males | 20.9 | 24.2 | 21 | Percent ingesting more than | |
| Females | 3.4 | 7.7 | 9.9 | 60gm of pure ethanol on a single | |
| | | | | occasion at least once a month | |
| Source: Eurostat [hlth_ehis_al3], European Health Interview Survey | | | | | |
| http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_al3e⟨=en | | | | | |
| Accessed 26 July 2017 | | | | | |

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