

## Adult lifestyle from the National Survey for Wales 2016 to 17 to 2019 to 20: additional analysis by disability, ethnic group, marital status, religion, sexual orientation <sup>1</sup>

### Summary

Information on healthy lifestyle behaviours among adults in Wales comes from the National Survey for Wales. This article combines four years of data to analyse healthy lifestyle behaviours by selected protected characteristics (disability, ethnic group, marital status, religion, sexual orientation). There are some differences in healthy lifestyle behaviours between groups, and the patterns of difference can vary depending on the lifestyle behaviour. Overall, after taking age into account:

- non-disabled adults were more likely to report having two or more healthy lifestyle behaviours than disabled adults
- adults in the Asian or Asian British group were more likely to report having two or more healthy lifestyle behaviours than those in the White group
- adults who were married or in a civil partnership were more likely to report having two or more healthy lifestyle behaviours than those who were single or those who were separated or divorced
- adults identifying as Muslim were more likely to report having two or more healthy lifestyle behaviours than those in other groups (although the difference compared with the Other religion group, which includes Buddhist, Hindu, Jewish, Sikh, and any other religion, was not statistically significant); those reporting No religion were least likely to do so
- adults identifying as bisexual were more likely to report having two or more healthy lifestyle behaviours than those in other groups

### Background

Information on healthy lifestyle behaviours among adults in Wales comes from the [National Survey for Wales](#), with results published annually. This includes estimates by age, sex, local authority, health board, and deprivation.

To date, estimates have not been produced by the protected characteristics of ethnic group, marital status, religion, sexual orientation due to small sample size, nor have they been produced routinely by disabled status. This article contains additional analysis using responses from four years of the survey

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<sup>1</sup> Notes on the use of statistical articles can be found at the end of this document.

combined (from 2016 to 17 to 2019 to 20) to boost the sample size. Despite combining four years of data, the sample sizes for many groups are still small, and it's only possible to produce results for high level groups. Nevertheless, this still provides more information than has been available to date.

The healthy lifestyle behaviours included in this article are:

- not smoking
- not drinking above weekly guidelines (includes not drinking)
- eating five or more portions of fruit and vegetables the previous day
- being physically active for at least 150 minutes the previous week
- maintaining a healthy weight or body mass index
- having two or more of the five healthy lifestyle behaviours (this is a Wellbeing of Future Generations national indicator)

This article shows results for the following characteristics:

- disability
- ethnic group
- marital status
- religion
- sexual orientation

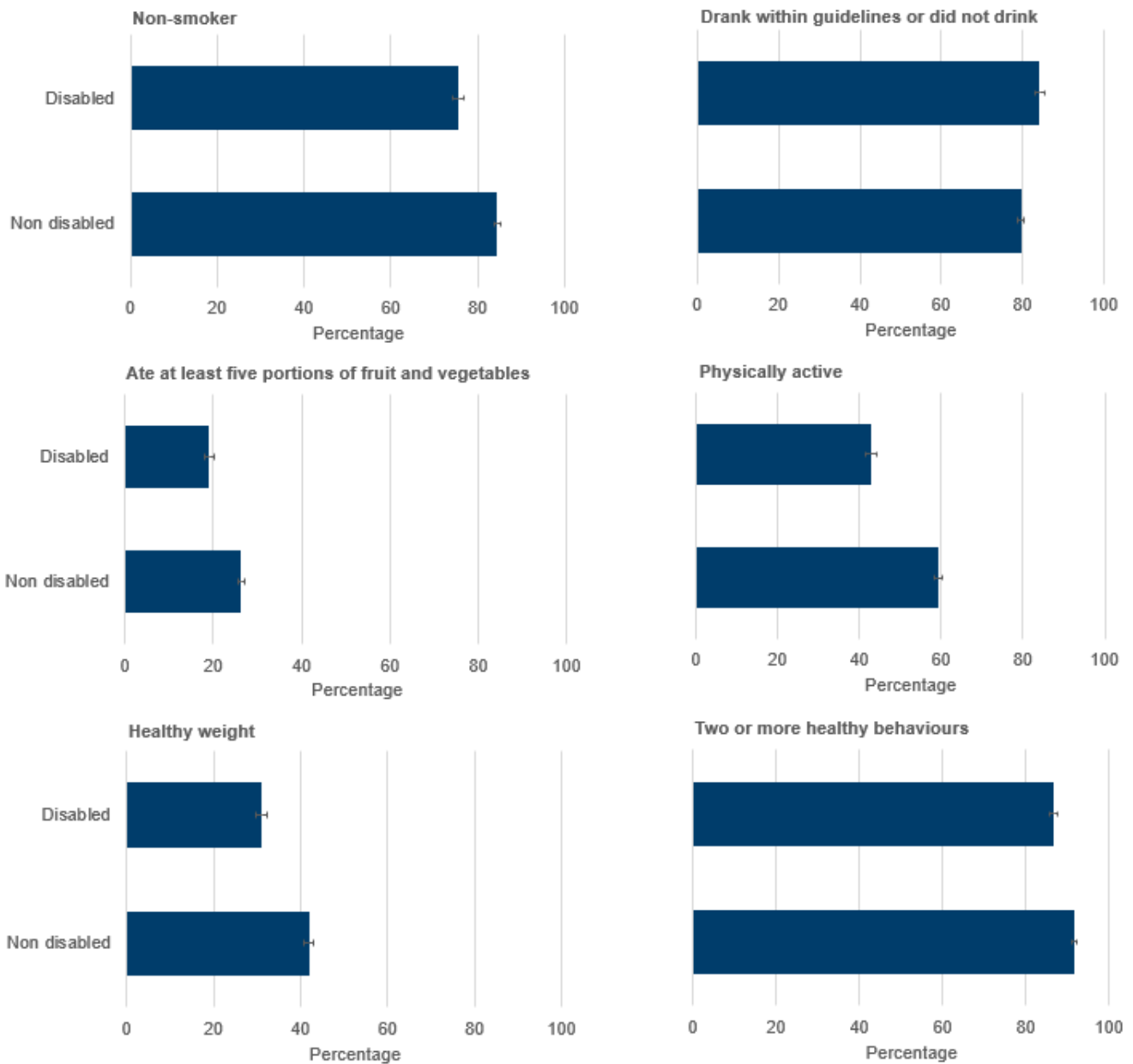
Further information on these lifestyle behaviours and the groups used for analysis are described in the section on [notes and definitions](#).

## Results

The charts and commentary in this article are based on age-standardised results to take account of differences in the age profile of individual groups. More information on age standardisation is in the section on [notes and definitions](#). The commentary generally highlights differences which are statistically significant (as outlined in the section on [notes and definitions](#)). The charts also show 95% confidence intervals to give an indication of the precision of results. The confidence intervals for some smaller groups are relatively wide, making it hard to detect significant differences. Groups with fewer respondents may be less likely to show significant differences compared with other groups. More information on precision is in the section on [notes and definitions](#). The accompanying reference tables show both observed and age-standardised results.

# Disability

**Figure 1: Age-standardised percentage of adults with healthy lifestyle behaviours by disability**



Descriptive text for Figure 1: A set of six small multiple bar charts showing the variation in health behaviours by disability. The error bars show 95% confidence intervals. The differences are described in the commentary below, with disabled adults generally reporting less healthy lifestyle behaviours than non-disabled adults except for alcohol consumption.

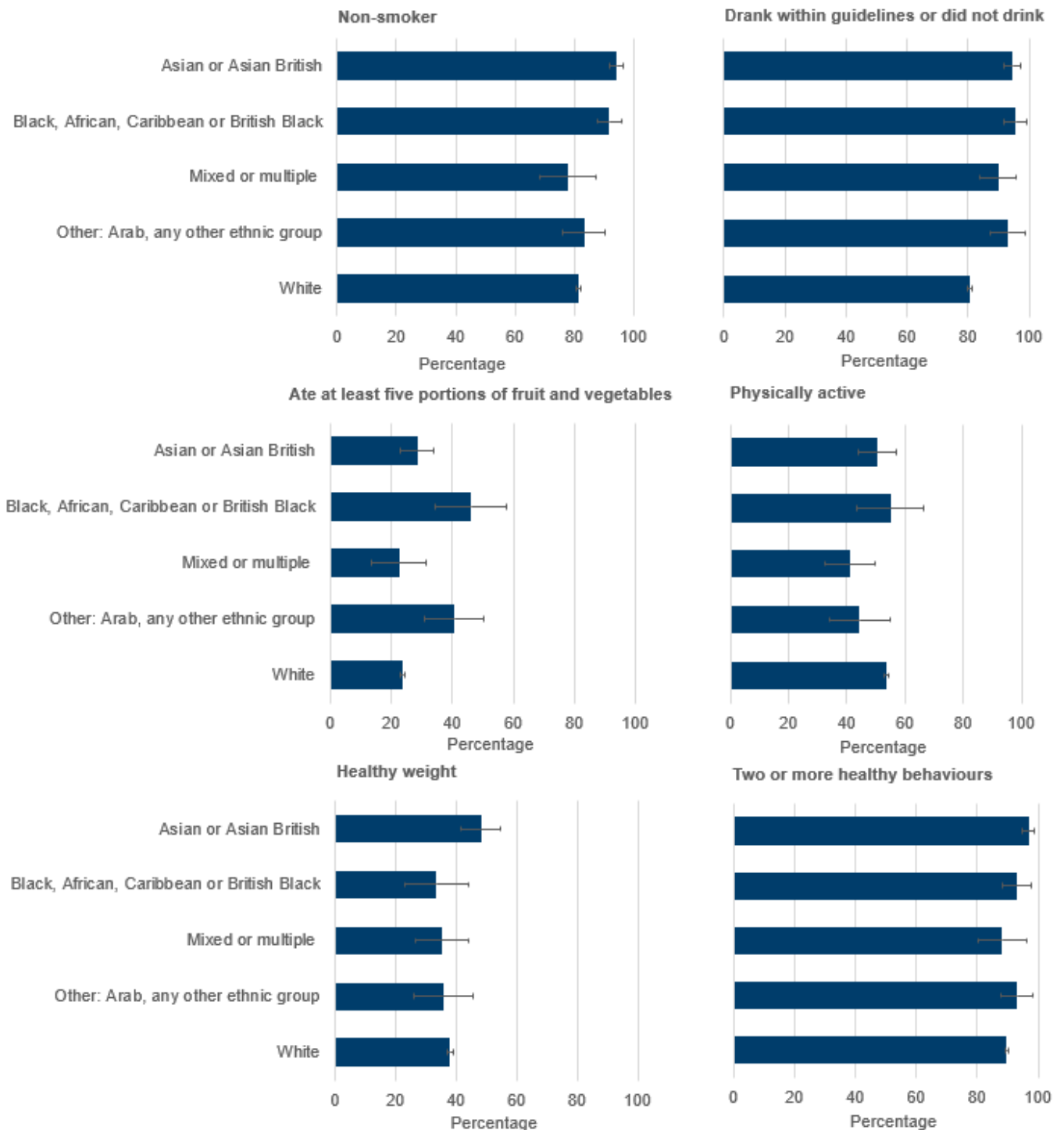
Source: National Survey for Wales, Welsh Government

- Non-disabled adults were more likely to be non-smokers than disabled adults. They were also more likely to eat at least five portions of fruit and vegetables, to be physically active, and to be a healthy weight than disabled adults.
- Disabled adults were more likely to drink within alcohol guidelines or not drink than non-disabled adults.

- Non-disabled adults were more likely to report having two or more healthy lifestyle behaviours than disabled adults.

## Ethnic group

**Figure 2: Age-standardised percentage of adults with healthy lifestyle behaviours by broad ethnic group**



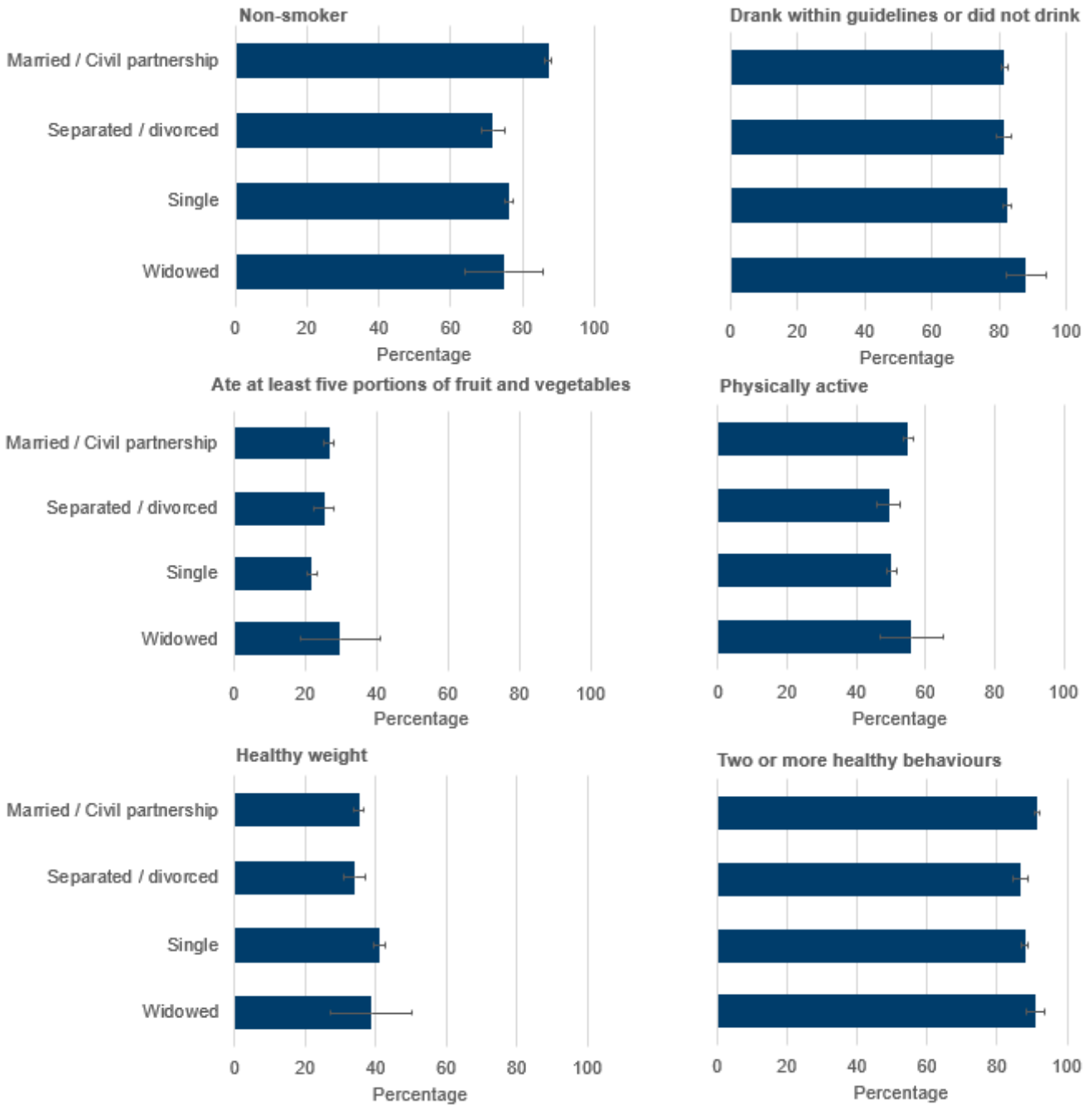
Descriptive text for Figure 2: A set of six small multiple bar charts showing the variation in health behaviours by broad ethnic group. The error bars show 95% confidence intervals. The confidence intervals for many groups are relatively wide, making it hard to detect statistically significant differences. There are some differences in healthy lifestyle behaviours between groups, and the patterns of difference can vary depending on the lifestyle behaviour. The differences are described in the commentary below.

Source: National Survey for Wales, Welsh Government

- Adults in the Asian or Asian British group and the Black, African, Caribbean or Black British group were more likely to be non-smokers than those in the White group and Mixed or multiple ethnic groups.
- Adults in the White group were less likely to drink within alcohol guidelines or not drink than those in other groups.
- Adults in the Black, African, Caribbean or Black British group were most likely to eat at least five portions of fruit and vegetables (although the difference compared with those in the Other ethnic group, which includes Arab and any other ethnic group, was not statistically significant).
- Adults in the White group were more likely to be physically active than those in Mixed or multiple ethnic groups.
- Adults in the Asian or Asian British group were more likely to be a healthy weight than those in the White group.
- Adults in the Asian or Asian British group were more likely to report having two or more healthy lifestyle behaviours than those in the White group.

## Marital status

**Figure 3: Age-standardised percentage of adults with healthy lifestyle behaviours by broad marital status**



Descriptive text for Figure 3: A set of six small multiple bar charts showing the variation in health behaviours by broad marital status. The error bars show 95% confidence intervals. The confidence intervals for many groups are relatively wide, making it hard to detect statistically significant differences. There are some differences in healthy lifestyle behaviours between groups, and the patterns of difference can vary depending on the lifestyle behaviour. The differences are described in the commentary below.

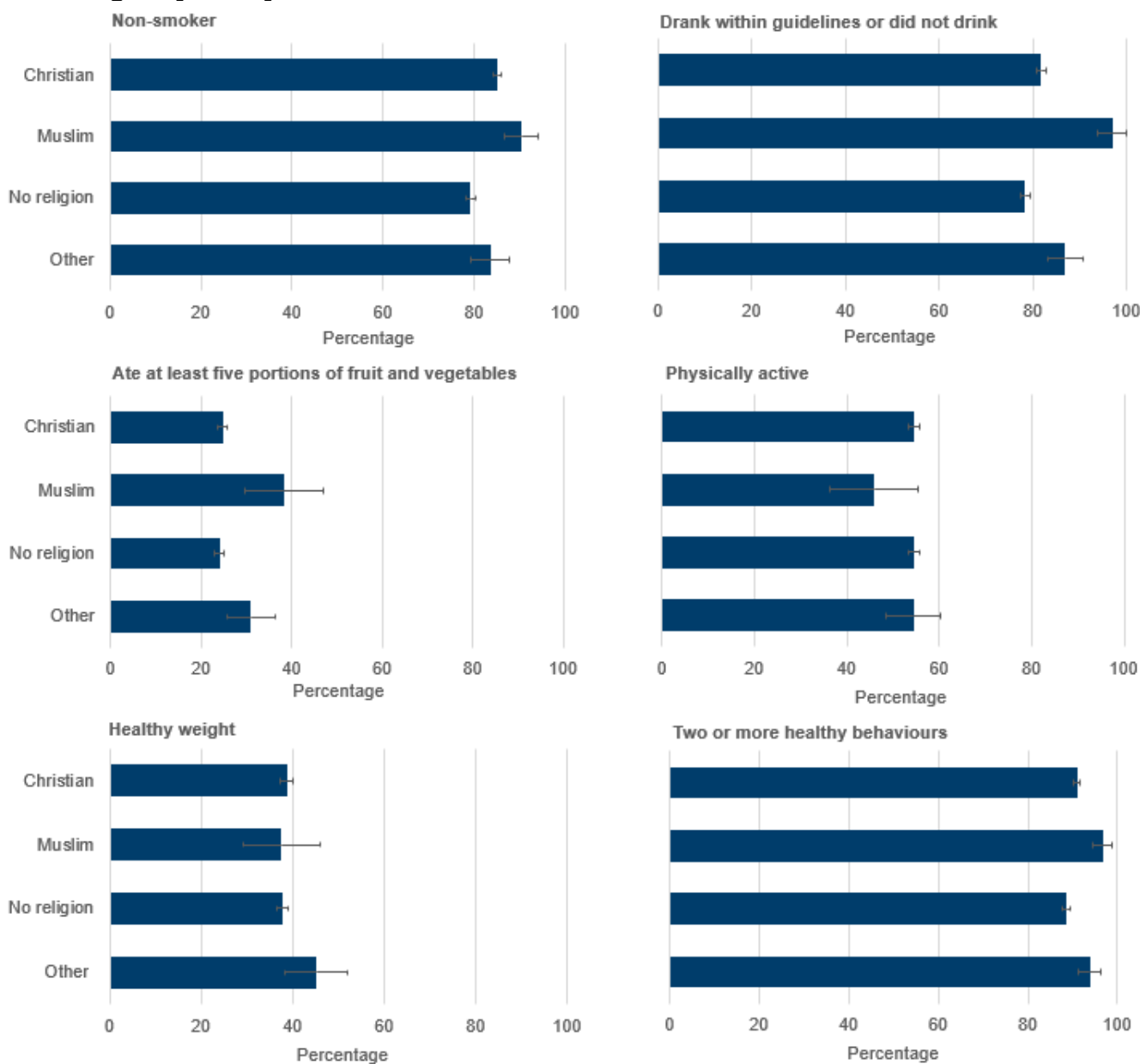
Source: National Survey for Wales, Welsh Government

- Adults who were married or in a civil partnership were more likely to be non-smokers than other groups.

- There was no significant difference between marital status groups in adults drinking within alcohol guidelines or not drinking.
- Adults who were married or in a civil partnership were more likely to eat at least five portions of fruit and vegetables than those who were single.
- Adults who were married or in a civil partnership were more likely to be physically active than those who were single or those who were separated or divorced.
- Adults who were single were more likely to be a healthy weight than those who were married or in a civil partnership or those who were separated or divorced.
- Adults who were married or in a civil partnership were more likely to report having two or more healthy lifestyle behaviours than those who were single or those who were separated or divorced.

## Religion

**Figure 4: Age-standardised percentage of adults with healthy lifestyle behaviours by broad religion [note 1]**



Descriptive text for Figure 4: A set of six small multiple bar charts showing the variation in health behaviours by broad religion. The error bars show 95% confidence intervals. The confidence intervals for many groups are relatively wide, making it hard to detect statistically significant differences. There are some differences in healthy lifestyle behaviours between groups, and the patterns of difference can vary depending on the lifestyle behaviour. The differences are described in the commentary below.

Source: National Survey for Wales, Welsh Government

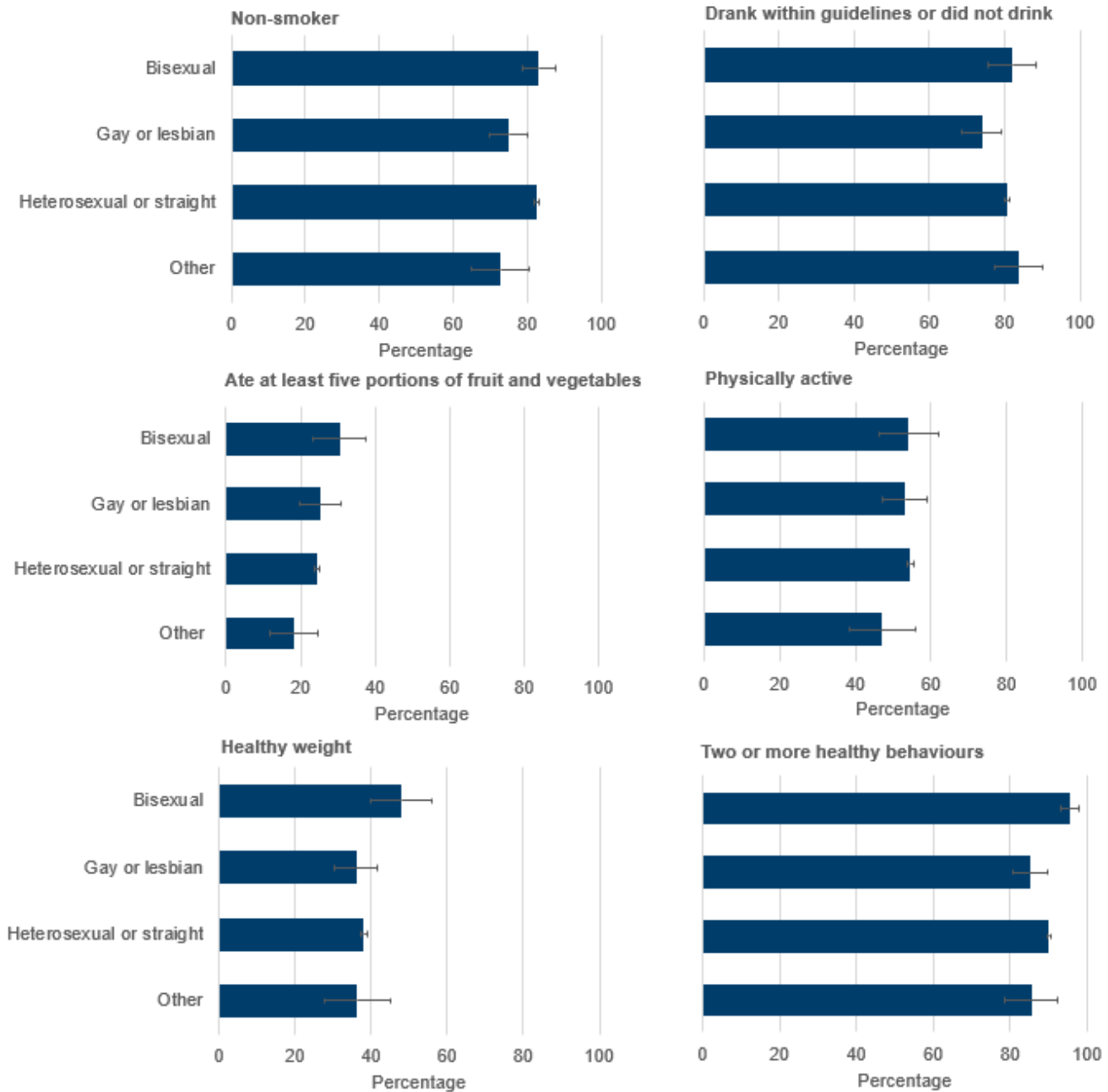
[Note 1] The 'Other' group includes Buddhist, Hindu, Jewish, Sikh, and any other religion.

- Adults identifying as Muslim were most likely to be non-smokers and those reporting No religion were least likely to be so (although differences compared with the Other religion group, which includes Buddhist, Hindu, Jewish, Sikh, and any other religion, were not statistically significant).
- Adults identifying as Muslim were most likely to drink within alcohol guidelines or not drink and those reporting No religion were least likely to do so.
- Adults identifying as Muslim were more likely to eat at least five portions of fruit and vegetables than those identifying as Christian or those reporting No religion.
- There was no significant difference in adults being physically active, or in adults being a healthy weight, between religion groups.
- Adults identifying as Muslim were more likely to report having two or more healthy lifestyle behaviours than those in other groups (although the difference compared with the Other religion group, which includes Buddhist, Hindu, Jewish, Sikh, and any other religion, was not statistically significant); those reporting No religion were least likely to do so.



## Sexual orientation

**Figure 5: Age-standardised percentage of adults with healthy lifestyle behaviours by broad sexual orientation**



Descriptive text for Figure 5: A set of six small multiple bar charts showing the variation in health behaviours by broad sexual orientation. The error bars show 95% confidence intervals. The confidence intervals for many groups are relatively wide, making it hard to detect statistically significant differences. There are some differences in healthy lifestyle behaviours between groups, and the patterns of difference can vary depending on the lifestyle behaviour. The differences are described in the commentary below.

Source: National Survey for Wales, Welsh Government

- Adults identifying as heterosexual or straight were more likely to be non-smokers than those identifying as gay or lesbian or as Other sexual orientation.

- Adults identifying as heterosexual or straight were more likely to drink within alcohol guidelines or not drink than those identifying as gay or lesbian.
- There was no significant difference between adults eating at least five portions of fruit and vegetables, or in adults being physically active, between sexual orientation groups.
- Adults identifying as bisexual were more likely to be a healthy weight than those identifying as heterosexual or straight.
- Adults identifying as bisexual were more likely to report having two or more healthy lifestyle behaviours than those in other groups.

## Notes and definitions

### Healthy lifestyle behaviours

The behaviours included in this article are:

- not smoking
- not drinking above weekly guidelines (includes not drinking and average weekly alcohol consumption no more than 14 units)
- eating five or more portions of fruit and vegetables the previous day
- being physically active for at least 150 minutes the previous week
- maintaining a healthy weight or body mass index (that is, body mass index 18.5 to under 25)
- having two or more of the five healthy lifestyle behaviours (this is a Wellbeing of Future Generations national indicator and national milestone)

Definitions are available on the [National Survey for Wales](#) webpages.

Health-related behaviours can be a complex area to measure and there may be some differences between what people report and what they do. However, survey data still provides a means of comparing patterns for these behaviours between different groups.

The article focuses on health-related lifestyle behaviours. It does not include information on general health by characteristics - this is available from the 2021 Census, where it was asked of the whole population rather than just a sample. Data is available from the [Office for National Statistics](#) .

### Groups used for analysis

The broad groups used for analysis in this article are outlined below (the questions asked to produce these groups can be seen on the [National Survey for Wales](#) webpages). Respondents who did not provide an answer to the relevant question are not included in the analysis. These are broad groups and are largely driven by what sample sizes allow; even after combining four years of data, sample sizes for some groups are small. The article does not adjust for factors such as deprivation which may also have an impact on health behaviours and does not attempt to explain the reasons behind the differences between groups.

**Disability:**

- Disabled: has long-term physical or mental health condition and whose day-to-day activities are limited
- Non-disabled

In line with [Government Statistical Services guidance](#), the question used to assess disability was split into two parts. Firstly, asking whether the individual had a long-term physical or mental health condition or illness, and secondly the extent to which this limited their day-to-day activities. Respondents who reported a long-term physical or mental health condition and whose day-to-day activities were limited have been defined as disabled. This approach aligns with the medical model of disability, which defines people as disabled by their impairment. The Welsh Government has adopted the social model of disability. This model sets out a different way to view disability – rather than defining people as disabled by their impairment (as in the medical model of disability), people with impairments are considered to be disabled by physical, attitudinal and organisational barriers created by society. Where possible, we have used language throughout this article that aligns with the social model of disability.

**Ethnic group:**

- White: White Welsh / English / Scottish / Northern Irish / British, Irish, Gypsy or Irish Traveller, Polish, Any other white background
- Mixed or multiple: White and Black Caribbean, White and Black African, White and Asian, Any other Mixed / Multiple ethnic background
- Asian or Asian British: Indian, Pakistani, Bangladeshi, Chinese, Any other Asian background
- Black, African, Caribbean or Black British: African, Caribbean, Any other Black / African / Caribbean background
- Other: Arab, Any other ethnic group

**Marital status:**

- Single (never married and never registered in a civil partnership)
- Married or civil partnership
- Separated or divorced
- Widowed

**Religion:**

- No religion
- Christian (all denominations)
- Muslim
- Other: Buddhist, Hindu, Jewish, Sikh, Any other religion

The Other group is quite mixed, but sample sizes are not large enough to separate these out.

**Sexual orientation:**

- Heterosexual or straight
- Gay or lesbian

- Bisexual
- Other

## Data used for the analysis

All results are for adults aged 16 and over.

The results in this article are from the [National Survey for Wales](#). They are based on four years of data combined to boost sample size and allow analysis of some groups which would not be possible using a single year's data. The four years of data combined are the years 2016 to 17 to 2019 to 20. (The survey methodology changed during the pandemic, and so it's not possible to combine more than four years of data). Except in 2016 to 17, questions on health-related lifestyle behaviours were asked of about half the survey sample, further limiting the numbers (in 2016 to 17, they were asked of the full sample). Despite combining four years of data, the sample sizes for many groups are still small, and it's only possible to produce results for high level groups. Sample sizes are too small to allow for further breakdown within the groups, for example by sex, age, deprivation.

The results of the National Survey for Wales are weighted to compensate for unequal selection probabilities and differential non-response (that is to ensure that the age and sex distribution of the final dataset matches that of the Welsh population). The survey weights for each individual year are scaled to match the adult population in private households in Wales. This means that when the data are combined, each survey year contributes roughly the same number of weighted survey responses. The weights were not re-scaled after combining the four years of data.

Calculations for this article were done using the statistical software Stata.

Further information on the survey, including technical reports, quality reports, and questionnaires, is available on the [National Survey for Wales](#) webpages.

## Precision

The sample sizes for many of the groups in this article are relatively small and the results should be treated with caution. A confidence interval can be calculated around a survey estimate, which gives a range within which the true value for the population is likely to fall. In general, the smaller the sample size the wider the confidence interval. For age-standardised results, small numbers in individual age groups (rather than overall) can also result in wide confidence intervals, and this has had a particular impact on results for those who were widowed. The confidence intervals around some of the estimates in this article are relatively wide due to the small sample size for some groups. Sample sizes and confidence intervals are shown in the accompanying data tables, and confidence intervals are shown on the charts. As a rough guide to interpretation, when comparing two groups, if the confidence intervals around the estimates overlap, it can be assumed that the estimates are not statistically significantly different – this approach is not as rigorous as doing a formal statistical test, but is straightforward, widely used, and reasonably robust. The commentary is based on age-standardised results. It generally highlights differences which are statistically significant, based on whether or not the confidence intervals overlap rather than a formal statistical test. This is heavily influenced by sample size, so groups with fewer respondents may be less likely to show significant differences compared with other groups.

## Age standardisation

The age profile of the different groups can vary considerably. Age-standardisation takes into account differences in age profiles between groups, which is important when comparing health behaviours across groups because the prevalence of many vary markedly with age. The charts and commentary in this article are based on age-standardised estimates to allow for the differences in age profiles of individual groups. The accompanying reference tables show both observed and age-standardised results.

Details of age-standardisation are given on the [National Survey for Wales](#) webpages. However, there is one change to the age groups used for standardisation in this article - the two lower age groups of 16 to 24 and 25 to 34 used in routine outputs from the survey have been combined into a single group of age 16 to 34. This is because one analysis group had no survey respondents aged 16 to 24, which prevented the calculation of meaningful age-standardised figures for that group. Rather than suppressing results for the group, the age groups used for standardisation were merged, and this was done across all analyses in the article to ensure consistency. This generally had a small impact on results, with the exception of some results for those who were widowed, separated or divorced. Results in this article using these age groups for standardisation should not be compared with those in the routine survey outputs. Observed results are not adjusted for age and are therefore not affected.

## Accompanying data tables

Detailed data tables are published alongside this article, including observed and age-standardised results and confidence intervals.

## Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural wellbeing of Wales. The Act puts in place seven wellbeing goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the wellbeing goals, and (b) lay a copy of the national indicators before Senedd Cymru. Under section 10(8) of the Well-being of Future Generations Act, where the Welsh Ministers revise the national indicators, they must as soon as reasonably practicable (a) publish the indicators as revised and (b) lay a copy of them before the Senedd. These national indicators were laid before the Senedd in 2021. The indicators laid on 14 December 2021 replace the set laid on 16 March 2016.

Information on the indicators, along with narratives for each of the wellbeing goals and associated technical information is available in the [Well-being of Wales report](#).

This article includes a more detailed breakdown of one of the national indicators, namely the percentage of adults with two or more healthy lifestyle behaviours.

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

## Notes on the use of statistical articles

Statistical articles generally relate to one-off analyses for which there are no updates planned, at least in the short-term, and serve to make such analyses available to a wider audience than might otherwise be the case. They are mainly used to publish analyses that are exploratory in some way, for example:

- introducing a new experimental series of data
- a partial analysis of an issue which provides a useful starting point for further research but that nevertheless is a useful analysis in its own right
- drawing attention to research undertaken by other organisations, either commissioned by the Welsh Government or otherwise, where it is useful to highlight the conclusions, or to build further upon the research
- an analysis where the results may not be of as high quality as those in our routine statistical releases and bulletins, but where meaningful conclusions can still be drawn from the results.

Where quality is an issue, this may arise in one or more of the following ways:

- being unable to accurately specify the timeframe used (as can be the case when using an administrative source)
- the quality of the data source or data used
- other specified reasons.

However, the level of quality will be such that it does not significantly impact upon the conclusions. For example, the exact timeframe may not be central to the conclusions that can be drawn, or it is the order of magnitude of the results, rather than the exact results, that are of interest to the audience.

The analysis presented does not constitute a National Statistic, but may be based on National Statistics outputs and will nevertheless have been subject to careful consideration and detailed checking before publication. An assessment of the strengths and weaknesses in the analysis will be included in the article, for example comparisons with other sources, along with guidance on how the analysis might be used, and a description of the methodology applied.

Articles are subject to the release practices as defined by the release practices protocol, and so, for example, are published on a pre-announced date in the same way as other statistical outputs.



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