

# Tobacco, alcohol and unhealthy food and drink: how commercial interests impact mental health

*A briefing from Action on Smoking and Health, the Alcohol Health Alliance, the Centre for Mental Health and the Obesity Health Alliance*

## SUMMARY

**Commercial determinants of mental health** describe how the actions of private companies positively and negatively affect people's mental health.

Business practices influence our economic, social, environmental, and cultural surroundings. This includes how companies pay and treat workers to produce, advertise and sell products that may directly harm the health of consumers, lobby for laws and regulations, shape consumer preferences, and more.

Commercial determinants of mental health affect everyone, and as mental ill health is now one of the most prevalent and expensive health challenges facing the UK (Cardoso & McHayle, 2024) it is vital we identify these harms and act to prevent them.

In this briefing we focus more on commercial risk factors (to promote understanding and work towards mitigating them) but it is important to state that properly regulated responsible commerce can be beneficial to mental health by producing good jobs, tax revenue and vital products (including vaccines and medicines).

**Commercial employment practices can leave people without sufficient means to protect their mental wellbeing and create stresses that makes them more vulnerable to harmful products:**

- 22% of people in the UK are living in poverty, in October 2023 around 4.2 million households were going without essentials due to the high cost of living (Joseph Rowntree, 2024).
- 38% of people with a long-term limiting mental health condition are living in poverty, and those in minority ethnic groups and those with disability also experience poverty at higher rates (Joseph Rowntree, 2024).
- Not having the financial means to support basic needs is fundamental to securing mental wellbeing. Poverty leads to stress which drives demand for products (gambling, tobacco, alcohol, ultra-processed food) that harms mental health (Mullainathan & Shafir, 2014).

**Unhealthy food and drink, alcohol and tobacco products harm mental health, whilst those industries make huge profits**

- There is a bi-directional relationship between the products covered by this briefing and mental health – they both cause mental health harm and people with mental ill health are more likely to use them, worsening their mental and physical health further.
- People with severe mental illnesses are three times more likely to smoke, and more likely to use food or alcohol to cope with distress. The physical health problems caused

by consumption of these products is the biggest contributor to a difference in life expectancy of up to 20-year for those with severe mental illness (Chan et al, 2023).

- Industries that produce, advertise and sell these products further damage mental health by framing the product-related harm as the responsibility of individuals who, they suggest, should be counting and controlling their calories, alcoholic units, carbon etc and not ‘misusing’ their products (Maani, Petticrew & Galea, 2023).

### **Health-harming commercial industry tactics exploit people with fewer resources and poor mental health widening health inequalities**

- Private producers of unhealthy food and drink, alcohol and tobacco products exploit people on low incomes by targeting areas with greater deprivation (which also have disproportionately more people with mental health conditions) with six times more adverts and outlets selling unhealthy products than wealthier areas (Scott et al, 2023).
- This means that those who are short on time, money and mental energy (Mullainathan & Shafir, 2014) are primed to turn to commercial products such as fast food, which are cheap, quick, easily available and initially gratifying. When combined with the addictive-nature of these commercial products, this keeps people using them despite harms to their mental and physical health.

## **INTRODUCTION**

Mental illness in the UK is becoming more widespread and severe affecting millions of families. It is now *the* leading cause of absence from work, a major source of service demand, with over one million people waiting for NHS treatment, (Darzi, 2024) and costs society over £300 billion a year in England alone (Cardoso & McHayle, 2024).

Health, including mental health, outcomes are driven by:

- Social determinants (like income and working conditions)
- Environmental factors (housing and air pollution for example)
- Activities related to commercial products including smoking tobacco, drinking alcohol, unhealthy food and drink, and gambling (WHO, 2017).

These factors often compound together to drive poor health amongst the most disadvantaged people in our communities.

Clearly commercial entities and businesses influence the factors listed above, as most people:

- Are employed in the private sector (80%) and rent or buy housing commercially (84%), determining the resources people have to meet their needs.
- Are exposed to the advertising, placement and promotion of alcohol, unhealthy food, gambling and other products that can harm their health.

Whilst the role of businesses in these health risks has recently gained more attention through publications like *The Commercial Determinants of Health* (Maani, Petticrew & Galea, 2023) their influence on mental health has been less well explored. This policy briefing brings together some of the evidence that links commercial determinants to mental and physical health outcomes, and how those intersect.

This briefing will cover:

- Commercially available health harming products and their impact on mental health.
- How wider socioeconomic determinants increase the risk of harm and impact of harm from these products for the most disadvantaged

For a longer briefing that covers the wider economic and social determinants of health, such as the commercial interests in housing, employment, and the environment, please find the extended version of this briefing at: [Centre for Mental Health](#).

## **TOBACCO**

### **Prevalence**

In 2024, around 11.6% of the general population over the age of 18 in England were smokers (OHID, 2024). In those with mental health conditions this was found to be significantly higher:

- 70% of those with substance abuse issues used tobacco
- 41% of those with a severe mental illness used tobacco
- 26% of those with depression and anxiety used tobacco
- 24% of the most deprived tenth of the population use tobacco compared to 7% of the least deprived.

Given that smoking kills two out of three long term users, high levels of smoking among people with mental health difficulties are a leading cause of premature death and disease and smoking accounts for two-thirds of the reduced life expectancy of people with a severe mental illness (ASH, 2022).

### **Tobacco, mental health and disparities**

Whilst prevalence is a good indicator of how the harms from unhealthy and addictive products are concentrated on those with poor mental health, it is important to recognise the bidirectional nature of this relationship which traps people with poor mental health in a cycle of dependence.

For example, smoking exacerbates poor mental health, with growing evidence demonstrating that smoking contributes to the development of some mental health conditions including schizophrenia and depression (Firth et al., 2020). Added to this, those with poor mental health are often heavier smokers, who find it harder to quit. This increases dependency and worsens physical health all of which worsen mental health, trapping people in a stress cycle of dependence (ASH and PHIMC, 2022).

Smoking also compounds other economic and health disadvantages. The average person who smokes in the UK spends £2,500 a year on tobacco, a spend which pushes 31% of all smoking households below the poverty line after smoking expenses are considered (ASH, 2023). This clear economic burden stands in stark contrast to tobacco industry profits, in the UK alone the industry revenue from sale of tobacco was £7.3 billion in 2022/3 (ASH, OHA, AHA 2023). Quitting smoking puts money back in people's pockets and improves physical health, all of which reverses the cycle of poor mental health and tobacco use.

### **Mental health impacts of quitting**

Increasing the rates of people quitting can improve population level mental health, reduce the burden on the NHS and improve the wealth and employment prospects of people with mental

health conditions. There is now good evidence that stopping smoking improves mental health (Taylor et al., 2014). There must be comprehensive efforts to reduce smoking but without targeted action, people with mental health difficulties will be left behind. People with mental health conditions are similarly motivated to quit compared to people without a mental health condition, and with the right support can be equally successful – but higher levels of addiction and multiple other barriers undermine quit success (Centre for Mental Health, 2020).

Vaping may have particular importance for people who smoke and have mental health problems (who tend to be more addicted to smoking) and has been shown to work for this population. They have proven an effective aid for supporting the implementation of smokefree policies in mental health hospitals. It is therefore important that measures introduced by the government to tackle youth vaping do not make vapes inaccessible to people using them as quitting aids. There is already a lack of public understanding of the relevant risks of vaping verses smoking, with ASH finding that 50% of the public believe that vapes are equally or more harmful than smoking despite evidence that vaping is significantly less harmful than smoking (RCOP, 2024).

### **Industry Tactics**

Despite the clear health harming impacts and economic burden that tobacco products cause, the tobacco industry has repeatedly challenged legislative attempts to regulate tobacco and reduce smoking prevalence. They have argued that regulations are an attack on personal freedom, despite being a life-threatening addiction, impossible to police and enforce, despite widespread public support, and likely to increase the black market, despite no evidence of this (Tobacco Tactics, 2024).

The tobacco industry has given financial gifts and sponsored political events despite the UK's commitments under the Framework Convention on Tobacco Control (FCTC), an international treaty which aims to limit the impact of the tobacco industry on public health.

## **ALCOHOL**

### **Prevalence**

Alcohol is both often used to try and manage mental health difficulties, and can also contribute to worsening mental health,

- People with common mental disorders (depression, anxiety, phobia) are *twice* as likely to report an alcohol use disorder than people without common mental disorders (Puddephatt, 2021)
- In England, almost three-quarters of adults starting alcohol treatment expressed a mental health treatment need (OHID 2024).
- Alcohol dependence for inpatients in mental health hospitals is over five times that of the general population (8% compared to 1.4%) (Ibid).
- Mental health and behavioural disorders are the second most common reason for deaths that are a direct consequence of alcohol (ONS, 2025).

People with co-occurring alcohol use disorders and mental health problems often face discontinuities in their care, e.g., exclusion from mental health services due to alcohol problems and vice versa (NCCMH, 2019).

### **Mental health impacts of alcohol**

Alcohol is a depressant that disrupts brain neurotransmitters, affecting mood, thoughts, and behavior. It also slows brain processing, impairs emotional understanding and decision-making whilst inebriated. Long-term use depletes neurotransmitters needed to manage anxiety and depression, creating a cycle of dependence as people drink more to relieve these feelings, but are often left feeling lower, worsening mental health. There are common risk factors for alcohol use disorders and mental health problems, including exposure to traumatic events (including in childhood) or genetic and environmental risks (Goodwin, 2022).

Those who are dependent on alcohol are approximately 2.5 times more likely to die by suicide than the general population, and nearly half of all patients under the care of mental health services who die by suicide have a history of an alcohol use disorder (Samaritans 2022).

### **Alcohol and health disparities**

Alcohol-specific mortality disproportionately impacts those that are more socioeconomically deprived. The number of deaths from diseases known to be a direct consequence of alcohol are 50% higher than those in the least deprived groups (Institute of Alcohol Studies, 2020). There are also vast regional disparities, with the rate of alcohol-specific deaths in the North East twice as high as that in London (Fingertips PHE 2023). One study found that those with alcohol problems residing in the most deprived areas in the North West of England were at highest risk of reporting low life satisfaction (Bellis et al., 2012).

Alcohol harm also has substantial costs to society with the Institute of Alcohol Studies (IAS) finding that alcohol harm costs England £27.4 billion a year (Institute of Alcohol Studies, 2024). This huge cost to society compares to alcohol industry revenue of £11.2 billion in 2022/3. The alcohol industry makes huge profits whilst its products drain health and social care budgets and makes people too sick to work. This reduces people's ability to care for themselves and stretches public services designed to support the most vulnerable.

### **Regulating alcohol can have a positive impact**

Reducing alcohol consumption overall would have a large benefit on physical and mental health. There is a wealth of evidence on the most effective policies for reducing population-level alcohol consumption, including pricing measures such as minimum unit pricing and alcohol duty increases, restrictions on marketing, increased treatment funding and training for professionals, and restrictions on availability through stronger licensing powers (Public Health England, 2016).

The affordability of alcohol is directly linked to alcohol harm, with heavier drinkers tending to consume products that are both cheaper and stronger on average (Griffith et al., 2017). Alcohol taxation is an effective tool in raising revenue for the Treasury and reducing alcohol harm. The alcohol duty escalator in place between 2008 and 2013/14 led to a fall in deaths from alcohol-related liver disease, the most common cause of alcohol-specific deaths (Williams et al. 2019), whereas cuts and freezes to alcohol duty between 2012 and 2019 are likely to have led to thousands of additional deaths. (Angus and Henney, 2019).

In Scotland, minimum unit pricing has been effective in reducing overall alcohol consumption by 3-3.5% (Giles et al., 2022). In the first year of implementation, Scotland saw a 10% reduction in alcohol-specific deaths within the first year, rising to 13.4% by the end of 2020. The largest reductions were found for those living in the 40% most deprived areas.

Alcohol marketing normalises alcohol consumption and exposes people to alcohol products, which has been linked to people drinking more and at an earlier age (Jernigan et al., 2016). Alcohol adverts are prolific on and near public transport, on prime-time television, and online. Stronger marketing regulations are needed to protect children and others impacted by alcohol harm from exposure.

Levels of alcohol harm also correlate with the density of licensed premises, which is linked to inequalities: in England, outlet density increases with increasing neighbourhood deprivation (Angus et al. 2017). Adding an additional objective to protect and improve public health would give local authorities the practical ability to address the wider social impact of licensing. A more comprehensive review of the Licensing Act could also help to address growing concerns around increasing online sales (Alcohol Change 2022).

### **Industry tactics**

Alcohol industry-funded youth education programmes have been found to contain misinformation and focus on ideas of personal responsibility. Analysis of teaching materials from three common school-based youth education initiatives (Drinkaware for Education, The Smashed Project funded by Diageo and Talk about Alcohol by the Alcohol Education Trust) found that alcohol harm was predominantly framed in terms of peer pressure and 'poor choices,' ignoring important drivers like marketing, price, and availability. All programmes promoted familiarisation of alcohol as a 'normal' adult consumer product which children should learn about and master how to use responsibly when older, while misinforming participants about health risks (van Schalkwyk 2022).

The alcohol industry also directly interferes with public health policy. The Public Health Responsibility Deal (PHRD), adopted by the UK Coalition Government 2010-2015, proposed a partnership approach with industry to reduce health harms. Research found that the Responsibility Deal had allowed alcohol industry bodies to shape the policy agenda and remove life-saving measures such as alcohol minimum unit pricing from the table (Hawkins et al. 2019).

## **FOOD AND DRINK**

### **Prevalence**

Consumption of products that are high in fat, salt and sugar content and of low nutritive value are associated with poorer mental health in adults (Ejtahed et al. 2024). NDNS data (NHS Digital) shows that those with mental health issues, such as anxiety or depression, are more likely to have lower-quality diets.

The relationship between diet and mental health is complex, partly because of the bidirectional relationship. For example, stress can affect appetite and influence food cravings with some medications used to treat mental health conditions having appetite increasing effects. Emerging evidence suggests that low-quality diets may alter stress responses and could be associated with stress-related mental health problems (Bremner et al., 2020). In addition, poor diets over a long period of time increase the risk of obesity and type two diabetes, which are also associated with poorer mental health.

Over 700,000 people in the UK are estimated to have an eating disorder and whilst causes are complex, commercial idealisations about body shape are a factor (NICE, 2024). People with eating disorders have some of the worst outcomes, including premature death, of any group of people with mental health conditions. It is important, to be mindful that some food related

interventions (calorie counting for example) may exacerbate risks around eating disorders for some people.

### **Unhealthy food and drink and health disparities**

We know there is a strong relationship between unhealthy food and drink, socioeconomic deprivation and poor mental health, meaning that the mental health burden of unhealthy foods and drinks falls hardest on those with the fewest resources.

Companies place six times more adverts and outlets for unhealthy foods in deprived areas compared to wealthy areas (Adfree Cities, 2024). The Food Foundation also found that healthy foods cost twice as much, calorie for calorie, as unhealthy foods, with the UK government recommended diet costing half of the disposable income of the lowest fifth of earners (Food Foundation, 2025).

Low incomes are also associated with poorer quality diets including high proportions of ultra-processed foods high in salt, sugar and saturated fats and low in fibre, vitamins and other nutrients. There are several reasons for this including the stress of poverty reducing 'mental bandwidth' for decision making surrounding food and diet (Mullainathan & Shafir, 2014) and there is a greater risk of 'maladaptive coping mechanisms' that drive short-term 'comfort-seeking' including eating highly calorific, ultra-processed products (Algorani & Gupta, 2023). This can leave people dependent on poor quality food, which then negatively impacts their mental and physical health making it harder to make positive changes to diet.

Food insecurity (whereby individuals have poorer access to food than others in society) is also a significant risk factor for several common mental health problems, particularly within the context of a less equal society (Pourmotabbed et al., 2020). When individuals are living in constant worry about not getting enough food, skipping meals or facing chronic hunger they are deprived of the material and social resources to support mental health and wellbeing. This is particularly pertinent in areas where food insecurity is less common and potentially more stigmatised (Elgar et al., 2021).

### **Industry Tactics**

The unhealthy food and drinks industry is poised to take advantage of lower access to healthy food in deprived areas. Fast food outlets per 100,000 population in the most deprived decile of lower tier local authorities are double the level in the least deprived decile (OHID, 2025). This translates into both mental and overall health inequalities, with neighbourhoods with a lower concentration of fast-food outlets having a higher life expectancy, leaving a gap of around two years between the areas with the lowest and highest concentration of fast-food outlets (The Health Foundation, 2024).

## **COMMON TECHNIQUES OF HEALTH HARMING INDUSTRIES**

There is a common playbook used by health harming industries to ensure that they maintain a customer base for their products and limit regulations which will harm their businesses.

### **Position themselves as the solution**

Health harming industries will often call for self-regulation and attempt to fund and steer research into the health impacts of their products. However, these are private companies which largely exist to maximise profits, sometimes at the expense of human and environmental health. When asked to voluntarily improve the healthiness of products or practices, through the 2011

‘Public Health Responsibility Deal’, for example, industry fails to deliver significant improvements (Durand et al, 2015). Conversely, the Soft Drinks Industry Levy (SDIL), announced in 2016 and implemented in 2018, has successfully reduced sugar content in soft drinks across all socio-economic groups.

### **Frame health harms as results of individual choice**

Perpetuate the myth of individual ‘responsibility’ by suggesting products are safe if used ‘responsibly’: encouraging choosing healthier options, personal carbon output and gambling spend are all examples of this. The idea being that if companies can show they are helping ‘problematic’ consumers regulate their behaviour by telling them to ‘gamble/drink responsibly’ there should be less need to tax and regulate their products. This is especially pertinent when it comes to mental health, as those experiencing low mood can be sapped of energy and motivation if they are surrounded by unhealthy products being presented as easy, stress-relieving options.

### **Argue that regulation will bring negative economic impacts**

Those that profit from practices and products that harm health often use techniques to reduce these governmental controls fearing they will harm their profits, and therefore harm those that rely on these industries for income. Despite expensive efforts attempting to block, dilute and delay regulation there is little evidence that effective health protection measures harm revenues for example:

- No evidence of harm to the alcohol industry due to minimum unit pricing in Scotland (Scottish Government, 2023)
- No evidence of reduced profits to soft drinks industry following ‘sugary drinks tax’ (LSHTM, 2020)
- Advertising revenue for Transport for London increased after unhealthy food advertising ban (Yau et al, 2022)

### **Downplay evidence whilst lobbying the government**

Influence legislators, media and public - to reduce threat of taxation/pricing controls; restrictions on advertising; package labelling/warnings. This can take the form of donations and gifts to political parties and politicians; lobbying at political events and in consultation groups and processes; advertising revenues to media outlets and even the funding of ‘educational’ programmes in schools.

Alongside this, they create uncertainty about the scientific evidence of harm - fund academics, ‘health’ charities and scientists to water down and counter evidence that shows practices and products harm health. Often ultra-processed food products will make health claims about their products which are not supported by the evidence (Maani, Petticrew & Galea, 2023).

## **CONCLUSION**

Commerce is a tool that, with the right regulation, can be used to benefit mental health by creating good jobs, taxes for services and infrastructure and useful products including healthy food, connectivity and medicines. But all too often, some companies, often very large multi-nationals, appear to have too much power over national governments and expend a lot of effort to minimise regulation and taxes that could be used to protect people, especially those living in

deprivation and with existing mental health conditions from the mental, physical, environmental and economic harm of their practices and products.

Economic instability makes people vulnerable to overuse health harming products, following which people are shamed by suggestions that harms caused by their products are due to individual irresponsibility. From tobacco and alcohol to gambling to unhealthy foods, these products are often aggressively marketed in the most deprived communities, (disproportionately populated by people with mental health conditions) directly harm mental and physical health. Individual and corporate responsibility models are ineffective when companies, not unreasonably, are driven to maximise profits. Government therefore needs to use strong, evidence-based measures to give people the truly free choice of enjoying better mental and physical health

## REFERENCES

- Alcohol Change UK (2022) Delivering a problem? Report. Available at <https://s3.eu-west-2.amazonaws.com/sr-acuk-craft/documents/Delivering-a-problem-final.pdf> [Accessed 27 February 2025].
- Angus, C., Holmes, J., Maheswaran, R., Green, M.A., Meier, P.S., & Brennan, A. (2017). Mapping patterns and trends in the spatial availability of alcohol using low-level geographic data: a case study in England 2003-2013. *International Journal of Environmental Research and Public Health*. DOI:10.3390/ijerph14040406
- Algorani, E. & Gupta, V. (2023) Coping mechanisms. National Library of Medicine. Available here: <https://www.ncbi.nlm.nih.gov/books/NBK559031/> [Accessed 10 October 2024]
- ASH (2022) Public mental health and smoking. Available here: <https://ash.org.uk/uploads/Public-mental-health-and-smoking.pdf#:~:text=Smoking%20is%20a%20leading%20cause%20in%20the%20gap,of%20the%20reduced%20life%20expectancy%20of%20this%20population.> [Accessed 11 October 2024]
- Attademo, L., Bernardini, F., Garinella, R., and Compton, M. T. (2017) Environmental pollution and risk of psychotic disorders: A review of the science to date. *Schizophrenia Research*, 181, 55–59. Available from: <https://doi.org/10.1016/j.schres.2016.10.003> [Accessed 10 October 2024]
- Bellis MA, Lowey H, Hughes K, Deacon L, Stansfield J, Perkins C (2012), Variations in risk and protective factors for life satisfaction and mental wellbeing with deprivation: a cross-sectional study. *BMC Public Health*. 12:492. doi:10.1186/1471-2458-12-492 [Accessed 10 October 2024]
- Cardoso, F. and McHayle, Z. (2024) The economic and social costs of mental ill health. Centre for Mental Health. Available from: <https://www.centreformentalhealth.org.uk/publications/the-economic-and-social-costs-of-mental-ill-health/>
- CfMH. (2024) The Economic and Social Cost of Mental Ill Health. Available here: [CentreforMH\\_TheEconomicSocialCostofMentalIllHealth-1.pdf](CentreforMH_TheEconomicSocialCostofMentalIllHealth-1.pdf)
- Chan, J. et al (2023) Life expectancy and years of potential life lost in people with mental disorders: a systematic review and meta-analysis. *eClinicalMedicine*, Volume 65, 102294. Available here: [https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(23\)00471-6/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(23)00471-6/fulltext) [Accessed 10 October 2024]
- Daley, F. and Lawrie, C. (2022) Fuelling Failure. University of Sussex. Available from: <https://fossilfuel treaty.org/fuelling-failure> [Accessed 10 October 2024]
- DEFRA (2022) Emissions of air pollutants. Available here: <https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-summary#:~:text=Notable%20sources%20of%20emissions%20of%20air%20pollutants%20in%202022.%20Emissions#:~:text=Notable%20sources%20of%20emissions%20of%20air%20pollutants%20in%202022.%20Emissions> [Accessed 10 October 2024]
- Department for Science, Innovation & Technology (2024) Online Safety Act: explainer. Available from: <https://www.gov.uk/government/publications/online-safety-act-explainer/online-safety-act-explainer> [Accessed 10 October 2024]
- Dominici, F., Peng, R. D., Bell, M. L., et al. (2006) Fine Particulate Air Pollution and Hospital Admission for Cardiovascular and Respiratory Diseases. *JAMA*. 2006;295(10):1127–1134. Available from: <https://jamanetwork.com/journals/jama/fullarticle/202503> [Accessed 10 October 2024]
- Dowling, N.A., Aarsman, S.R., & Merkouris, S.S (2021) Risk, compensatory, and protective factors in problem gambling: The role of positive mental health characteristics. Available from: <https://www.sciencedirect.com/science/article/abs/pii/S0306460320307346> [Accessed 16 September 2024]
- Dun-Campbell, K., Hartwell, G., Maani, N., Tompson, A., van Schalkwyk, M., Petticrew, M. (2024) Commercial determinants of mental ill health: An umbrella review. *Global Public Health*. Available here: <https://journals.plos.org/globalpublichealth/article?id=10.1371/journal.pgph.0003605> [Accessed 10 October 2024]

- Durand, M., Petticrew, M., Goulding, L., Eastmure, E., Knai, C., Mays, N. (2015) An evaluation of the Public Health Responsibility Deal: Informants' experiences and views of the development, implementation and achievements of a pledge-based, public-private partnership to improve population health in England. *Health Policy*, Volume 119, Issue 11, 2015, Pages 1506-1514. Available here: <https://www.sciencedirect.com/science/article/pii/S0168851015002171> [Accessed 11 October 2024]
- Ejtahed, H. S., Mardi, P., Hejrani, B. *et al.* (2024) Association between junk food consumption and mental health problems in adults: a systematic review and meta-analysis. *BMC Psychiatry*, 24 (438).
- Elgar, F. J., Pickett, W., Pförtner, T. K., Gariépy, G., Gordon, D., Georgiades, K., ... & Melgar-Quiñonez, H. R. (2021). Relative food insecurity, mental health and wellbeing in 160 countries. *Social science & medicine*, 268, 113556. Available from: <https://www.sciencedirect.com/science/article/abs/pii/S0277953620307759> [Accessed 19 September 2024]
- Firth, J., Solmi, M., Wooten R.e., Vancampfort D., Schuch F.B., Hoare E., et al. (2020) A meta-review of "lifestyle psychiatry": the role of exercise, smoking, diet and sleep in the prevention and treatment of mental disorders. *World Psychiatry*. [Accessed 10 October 2024]
- Full Fact (nd) The Online Safety Act and Misinformation: What you need to know. Available from: <https://fullfact.org/policy/online-safety-act/> [Accessed 19 September 2024]
- Fuller, G., Friedman, S., Mudway, I. (2023) Impacts of air pollution across the life course: evidence highlight note. Imperial College, London. Available from: <https://www.london.gov.uk/sites/default/files/2023-04/Imperial%20College%20London%20Projects%20-%20impacts%20of%20air%20pollution%20across%20the%20life%20course%20%E2%80%93%20evidence%20highlight%20note.pdf> [Accessed 19 September 2024]
- Giles, L., Mackay, D., Richardson, E., Lewsey, J., Beeston, C. and Robinson, M. (2022) *Evaluating the impact of Minimum Unit Pricing (MUP) on sales-based alcohol consumption in Scotland at three years post-implementation*. Public Health Scotland.
- Gutman, L., Joshi, H., Parsonage, M., & Schoon, I. (2015). Children of the new century: Mental health findings from the Millennium Cohort Study. London: Centre for Mental Health. Available here: <https://www.centreformentalhealth.org.uk/sites/default/files/2018-09/newcentury.pdf> [Accessed 10 October 2024]
- Hart, J. and Parkhurst, G. (2011) Driven to excess: impacts of motor vehicles on the quality of life of residents of three streets in Bristol UK. *World Transport Policy & Practice*, 17, 2: 12-30. Available from: <https://uwe-repository.worktribe.com/output/968892> [Accessed 10 October 2024]
- Health Foundation (2024) In work poverty trends. Available here: <https://www.health.org.uk/evidence-hub/money-and-resources/poverty/in-work-poverty-trends#:~:text=In-work%20poverty%20has%20increased%20over%20the%20last%20two%20decades.%20Percentage> [Accessed 10 October 2024]
- Hepsomali, P., & Groeger, J. A. (2021). Diet, sleep, and mental health: insights from the UK biobank study. *Nutrients*, 13(8), 2573. Available from: <https://www.mdpi.com/2072-6643/13/8/2573> [Accessed 18 September 2024]
- Hiscock, R., Bauld, L., Amos, A., & Platt, S. (2012). Smoking and socioeconomic status in England: the rise of the never smoker and the disadvantaged smoker. *Journal of Public Health*, 34(3), 390-396. Available from: <https://doi.org/10.1093/pubmed/fds012> [Accessed 13 September 2024]
- Hawkins, B., McCambridge, J. (2019) Public-private partnerships and the politics of alcohol policy in England: the Coalition Government's Public Health 'Responsibility Deal'. *BMC public health*, 19 (1). 1477-. ISSN 1471-2458 DOI: <https://doi.org/10.1186/s12889-019-7787-9>
- Institute of Alcohol Studies (2020) Alcohol and health inequalities. Available from: <https://www.ias.org.uk/wp-content/uploads/2020/12/Alcohol-and-health-inequalities.pdf> [Accessed 13 September 2024]
- Institute of Alcohol Studies (2024) Economy. Available from: <https://www.ias.org.uk/factsheet/economy/> [Accessed 13 September 2024]

- London School of Hygiene & Tropical Medicine (2020) *Sugar levy had no lasting negative impacts on UK soft drinks industry*. Available from: <https://www.lshtm.ac.uk/newsevents/news/2020/sugar-levy-had-no-lasting-negative-impacts-uk-soft-drinks-industry>
- Maani, N., Petticrew, M. and Galea, S. (2023) *The Commercial Determinants of Health*. Oxford University Press.
- Ministry of Housing, Communities and Local Government (2024). National Planning Policy Framework. Available at [https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF\\_December\\_2024.pdf](https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf) [Accessed 27 February 2025]
- Mullainathan, S. and Shafor, E. (2013) *Scarcity*. London: Penguin.
- National Collaborating Centre for Mental Health (2019) *The Community Mental Health Framework for Adults and Older Adults*. Available at <https://www.england.nhs.uk/wp-content/uploads/2019/09/community-mental-health-framework-for-adults-and-older-adults.pdf> [Accessed 27 February 2025].
- ONS (2025). Alcohol-specific deaths in the UK. Available at <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/alcohol-specific-deaths-in-the-uk> [Accessed 27 February 2025].
- Office for Health and Disparities(2025). *Wider Determinants of Health: statistical commentary on the location of fast food outlets*, February 2025. Available from: <https://www.gov.uk/government/statistics/wider-determinants-of-health-february-2025-update/wider-determinants-of-health-statistical-commentary-february-2025> [Accessed 20 February 2025]
- Office for Health and Disparities (2024). *Adult substance misuse treatment statistics 2023 to 2024: report*. Available at <https://www.gov.uk/government/statistics/substance-misuse-treatment-for-adults-statistics-2023-to-2024/adult-substance-misuse-treatment-statistics-2023-to-2024-report#mentalhealth> [Accessed 27 February 2025]
- Kemp, S. (2024) *Digital 2024: The United Kingdom*. Datareportal. Available from: <https://datareportal.com/reports/digital-2024-united-kingdom> [Accessed 19 September 2024]
- Pourmotabbed, A., Moradi, S., Babaei, A., Ghavami, A., Mohammadi, H., Jalili, C., Miraghajani, M. et al. (2020) Food insecurity and mental health: a systematic review and meta-analysis. *Public health nutrition*, 23 (10) 1778-1790.
- Puddephatt, J., Irizar, P., Jones, A., Gage, S. and Goodwin, L. (2022) Associations of common mental disorder with alcohol use in the adult general population: a systematic review and meta-analysis. *Addiction*, 117 (6) 1543-1572. Available from: <https://onlinelibrary.wiley.com/doi/ful/10.1111/add.15735>
- Kivimäki, M., Batty, G. D., Pentti, J., Shipley,
- Samaritans (2022) *Insights from experience: alcohol and suicide*.
- Scott, L. J., Nobles, J., Sillero-Rejon, C., Brockman, R., Toumpakari, Z., Jago, R., Cummins, S., Blake, S., Horwood, J. and de Vocht, F. (2023) Advertisement of unhealthy commodities in Bristol and South Gloucestershire and rationale for a new advertisement policy. *BMC Public Health*, 23, 1078. Available from: <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-023-15995-z#citeas> [Accessed 10 October 2024]
- The Food Foundation (2025) *The Broken Plate Report 2025*. Available at <https://foodfoundation.org.uk/publication/broken-plate-2025> [Accessed 27 February 2025]
- Van Schalkwyk, M. C. I., Petticrew, M., Maani, N., Hawkins B., Bonell, C., Katikireddi, S. C., Knai, C. (2022) Distilling the curriculum: An analysis of alcohol industry-funded school-based youth education programmes. *PLOS ONE* 17(1): e0259560. <https://doi.org/10.1371/journal.pone.0259560>
- Williams, R. et al. (2018) 'Gathering momentum for the way ahead: Fifth report of the Lancet Standing Commission on Liver Disease in the UK' *The Lancet* [https://doi.org/10.1016/S0140-6736\(18\)32561-3](https://doi.org/10.1016/S0140-6736(18)32561-3)
- Yau, A. et al. (2022) Changes in household food and drink purchases following restrictions on the advertisement of high fat, salt, and sugar products across the Transport for London network: A

controlled interrupted time series analysis. *PLOS Medicine*. Available here: <https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1003915>