

Department HEALTH BEHAVIOURS AND WELLBEING of Health

- Smoking is associated with lower levels of wellbeing with evidence of a causal link.
- Physical activity is beneficial to wellbeing; those who met government physical activity guidelines reported the highest levels of wellbeing.
- An increase in the number of portions consumed is associated with increases in levels of wellbeing.
- People of normal weight had higher levels of wellbeing compared with those who were overweight or obese. Perceptions of body weight also matters to wellbeing.
- Psychiatric disorders were more prevalent in a drug-dependant population.

1. Smoking

- Approximately 20% of the English population are smokers¹, with the highest prevalence among 20-24 year olds². The percentage of the population who smokes has been in decline since the 1980s, with smoking falling from 40% to 20%¹.
- Smoking affects subjective wellbeing. Individuals who smoke are more likely to report lower satisfaction with many aspects of their lives, e.g., jobs, non-working activities, financial conditions, family life, friendships, residential area, health and physical conditions, and self-rated health than those who do not smoke³.
 - Men who do not smoke have been found to have higher average levels of wellbeing than men who smoke⁴ (see Figure 1)
 - Women who had ever smoked in the past had lower levels of wellbeing than women who had never smoked⁴. (see Figure 2)
 - **Smokers tend to report elevated levels of anxiety**, with and without controlling for other factors⁵.
 - There is evidence of a causal link between smoking and wellbeing: quitting smoking tends to reduce anxiety, with the effect likely to be larger in those who have a psychiatric disorder or those who smoke to reduce stress⁶.



Figure 1: Linear regression coefficients for men's wellbeing by smoking status (Source: *Predicting Wellbeing*, 2013)

A Compendium of Factsheets: Wellbeing Across the Lifecourse

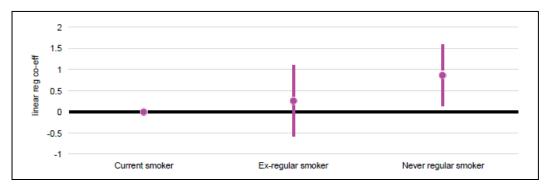


Figure 2: Linear regression coefficients for women's wellbeing by smoking status (Source: *Predicting Wellbeing*, 2013)

- Smoking has a strong association with poor mental health. A third of people with a mental health disorder were regular smokers compared with a fifth of the population as a whole⁷.
- There are many factors associated with smoking, including: social class, employment status, income, smoking status of family and friends⁸. A number of these factors are also associated with people's wellbeing levels, for example employment status.
- Smoking behaviour is spread through both close and distant social ties, and evidence suggests that groups of interconnected people stop smoking collectively⁹.

2. Physical Activity

- **Physical activity is highly beneficial to wellbeing**: it has been found to reduce anxiety and depression, improving mood and reducing reactivity to psychosocial stressors^{10,11}.
 - It has been found that exercise is associated with fewer symptoms of depression (e.g., feeling that life is not worthwhile, low spirits), anxiety (e.g., restlessness, tension), and malaise (e.g., rundown feeling, trouble sleeping) in the general population^{11,12}.
- Leisure-time physical activity is associated with longer life expectancy, even at relatively low levels of activity and regardless of body weight¹³.
- 67% of men and 55% of women reported meeting government guidelines for physical activity per week wellbeing¹⁴. Adults who met these guidelines for physical activity (150 minutes per week) also reported the highest levels of wellbeing. Adults who reported being inactive also reported the lowest levels of wellbeing¹⁴.
 - However, adults who reported doing 30-60 minutes of physical activity per week reported higher levels of wellbeing than those who reported doing 60-90 minutes of activity per week¹⁴.
- Individuals who exercise more regularly felt more socially integrated than those exercising infrequently or never¹⁵.

3. Diet and Obesity

- People of normal weight (BMI of 18.5 to less than 25) had the highest wellbeing scores compared with those who were overweight (BMI of 25 to less than 30) or obese (BMI of 30 or more)¹⁴.
 - Additionally, those who perceived themselves to be the right weight had the highest wellbeing scores compared with those who thought they were too heavy. Those who thought they were too light had the lowest wellbeing scores, with scores for men lower than women in this group¹⁴ (see Figure 3).
- Two thirds of the adult population ate fewer than 5 portions of fruit and vegetables in the previous day; 11% of boys and 8% of girls in the 11-18 age group met the 5-a-day recommendation¹⁶.
 - There is a dose-relationship between the number of portions and fruit and vegetables consumed per day and levels of wellbeing in adults, with an increase in the number of portions corresponding with an increase in average levels of wellbeing⁴ (see Figures 4 and 5)
- Fish consumption in particular was significantly associated with higher self-reported mental health status. Fish is a source of v-3 fatty acids which are beneficial for brain function¹⁷.

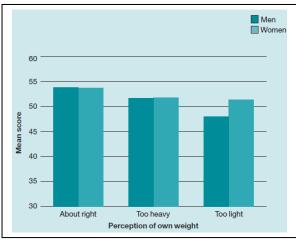


Figure 3: Wellbeing score by perception of own weight and gender (Source: Health Survey for England, 2012)

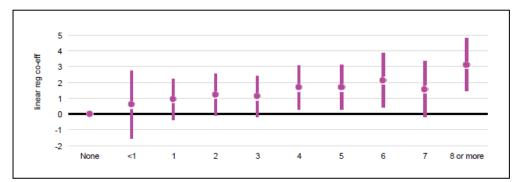


Figure 4: Linear regression coefficients for men's wellbeing by fruit and vegetable consumption (Source: *Predicting Wellbeing*, 2013)

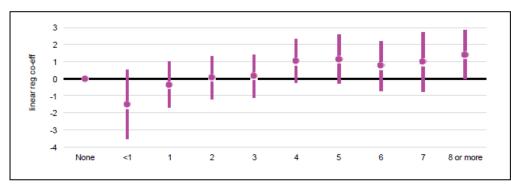


Figure 5: Linear regression coefficients for women's wellbeing by fruit and vegetable consumption (Source: *Predicting Wellbeing*, 2013)

4. Alcohol and Drug Consumption

- The proportion of adults exceeding 3/4 units of alcohol on at least one day during the previous week was higher for men (34%) than for women (28%). Similarly, the proportion drinking heavily (over 8/6 units) was greater for men (18%) than for women (12%) as was the proportion drinking very heavily, with 9% of men and 6% of women exceeding 12/9 units¹⁸.
 - An individual's drinking habits are strongly affected by the habits of their family and friends. Drinkers were more likely to have social contacts that drank similar amounts. Non-drinkers were more likely to have friends and relatives that were non-drinkers¹⁹.
- Alcohol is a causal factor for depression, in some European countries up to 10% of male depression is linked to alcohol consumption²⁰.
- However, moderate levels of alcohol consumption have been linked with better cognition, higher levels of subjective wellbeing and fewer depressive symptoms, when compared with total non-consumption²¹.
 - Moderate consumption interacts with sociability and can be associated with higher levels of wellbeing.
- 36% of all adults have taken an illicit drug in their lifetime (over 10 million people)²². Up to 12% of the non-drug dependent population were assessed as having any psychiatric disorder compared with 45% of the drug dependent population²⁰.

Health Improvement Analytical Team Department of Health January 2014

¹ HSCIC (2013). Statistics on Smoking: England, 2013. Available at <u>https://catalogue.ic.nhs.uk/publications/public-health/smoking/smok-eng-2013/smok-eng-2013-rep.pdf</u>

² HSCIC (2012). Statistics on Smoking: England, 2012. Available at <u>https://catalogue.ic.nhs.uk/publications/public-health/smoking/smok-eng-2012/smok-eng-2012-rep.pdf</u>

McManus, S., Meltzer, H., Campion, J. (2010). Cigarette smoking and mental health in England: data from the Adult Psychiatric Morbidity Survey 2007. NatCen Social Research

Twigg, L., Moon, G., Jones, K. (2000). Predicting small-area health-related behaviour: a comparison of smoking and drinking indicators. Social Science and Medicine, 50, 1109-1120.

Christakis, N.A., and Fowler, J.H (2008). The collective dynamic of smoking in a large social network. The New England Journal of Medicine, 358, 2249-2258.

¹⁰ Sport England (2013). Sport and Health. Available at <u>http://www.sportengland.org/research/benefits-of-sport/health-benefits-of-</u> sport/ ¹¹ Stoll, L., Michaelson, J., and Seaford, C. (2012). Wellbeing evidence for policy: A review. New Economics Foundation

¹² Ross, C.E., and Hayes, D. (1988). Exercise and psychological wellbeing in the community. American Journal of Epidemiology, 127(4), 762-771.

¹³ Moore, S.C., Patel, A.V., Matthews, C.E., Berrington de Gonzalez, A., Park, Y., et al. (2012) Leisure Time Physical Activity of Moderate to Vigorous Intensity and Mortality: A Large Pooled Cohort Analysis. PLoS Med 9(11): e1001335

Health and Social Care Information Centre (2013). Health Survey for England 2012. Prepared for the Department of Health. ¹⁵ Hassmen, P., Koivula, N., and Uutela, A. (2000). Physical exercise and psychological wellbeing: a population study in Finland. Preventative Medicine, 30, 7-25

¹⁶ NatCen Social Research (2012). National Diet and Nutrition Survey: Findings. Prepared for Department of Health.

¹⁷ Silvers, K.M., and Scott, K.M. (2001). Fish consumption and self-reported physical and mental health status. *Public Health Nutrition*, 5(3), 427-431

¹⁸ Office for National Statistics (2013). Drinking (General Lifestyle Survey Overview – a report on the 2011 General Lifestyle Survey). Available at http://www.ons.gov.uk/ons/dcp171776 302636.pdf

¹⁹ Rosenquist, J.N., Murabito, J., Fowler, J.H., and Christakis, N.A. (2010). Spread of alcohol use in a large social network. Annals of Internal Medicine, 152(7), 1-36

²⁰ Jane-Llopis, E., and Matytsina, I. (2006). Mental health and alcohol, drugs and tobacco: a review of the comorbidity between mental disorders and the use of alcohol, tobacco and illicit drugs. Drugs and Alcohol Review, 25(6), 515-536

²¹ Lang, I., Wallace, R.B., Huppert, F.A., and Melzer, D. (2006). Moderate alcohol consumption in adults is associated with better cognition and wellbeing than abstinence. *Age and Ageing, 36*(3), 256-261 ²² Home Office (2013). Drug misuse: Findings from the 2012-2013 Crime Survey for England and Wales. Available at

https://www.gov.uk/government/publications/drug-misuse-findings-from-the-2012-to-2013-csew

³ Oshio, T. and Kobayashi, M. (2009). The effect of Smoking on Individual Wellbeing. Available at <u>http://www.ier.hit-</u> u.ac.jp/pie/stage2/Japanese/d_p/dp2009/dp453/text.pdf

Chanfraeu, J., Lloyd, C., Byron, C., Roberts, C., Craig, R., De Feo, D., McManus, S (2013). Predicting Wellbeing. Prepared by NatCen Social Research for the Department of Health http://www.natcen.ac.uk/media/205352/predictors-of-wellbeing.pdf

Annual Population Survey (2012). Analysis of the Annual Population Survey (2011/12) undertaken internally by Cabinet Office.

⁶ McDermott, M.S., Marteau, T., Hollands, G., Hankins, M., and Aveyard, P. (2013). Change in anxiety following successful and unsuccessful attempts at smoking cessation: cohort study. The British Journal of Psychiatry, 202, 62-67.