

# Know, Feel, Do?

## Health behaviour change in Scotland, 1996 to 2007

September 2010

### Summary

- Analysis of the Health Education Population Survey for 1996 to 2007 shows clear improvement in health behaviour, knowledge and motivation.
- The direction of change was positive for all health behaviours: smoking, physical activity and healthy eating. The picture was also generally positive for knowledge and motivation.
- The greatest increase was in knowledge, followed by motivation, with more modest change in behaviour. Motivation scores across the period were generally higher than those for knowledge, and both were generally higher than those for behaviour.
- The proportion of adult smokers declined, knowledge was stable and motivation to quit increased.
- Physical activity increased; knowledge and motivation both improved.
- Daily fruit and vegetable consumption increased, but this was not consistently supported by results from other routine national surveys. Knowledge improved in some respects and motivation increased.
- The health improvement community can take heart from the improvements shown. Change is happening, though in this analysis we cannot ascribe it to any particular cause. However, the moderate pace of change, the inconsistencies between knowledge, motivation and behaviour, and the variable nature of change by topic suggest cause for concern about the sustainability of change.
- We conclude that there was welcome modest improvement in health behaviour, motivation and knowledge in Scotland between 1996 and 2007.

This briefing is a summary of the full report, which is a web-only publication. The report is available to download from 'publications' at [www.scotpho.org.uk](http://www.scotpho.org.uk)

## Introduction

The Health Education Population Survey (HEPS) was established to monitor progress in achieving change in health behaviours through a health communications approach. Health communication activities have been a strong and consistent element in health improvement in Scotland since at least the early 1990s. This approach to behaviour change recognises that knowledge and motivation are not the only influences on behaviour, but does see them as important influences.

The HEPS ran annually from 1996 to 2007, interviewing a representative sample of the Scottish population aged 16–74. This provides a 12-year span of consistent, comparable data with which to assess the level of improvement in health behaviour, knowledge and motivation.

## Purpose

The aim was to assess the direction and magnitude of change in adult health behaviour, knowledge and motivation in Scotland, from 1996 to 2007. The report provides a high-level assessment of change resulting from all causes over the period. It is not an evaluation of health communications and it is not possible to assess the contribution of specific activities to any changes observed.

## Approach

We analysed three major health topics: smoking, physical activity and healthy eating. We used multiple logistic regression analysis to examine time trends in:

- health behaviour (with HEPS validated against time trends from other national surveys)
- health-related knowledge
- health motivation
- summary scores combining the three topics for behaviour, for knowledge and for motivation.

The achieved sample size of the HEPS was approximately 1,800 each year, with a minimum response rate of 70% attained in all years except 2006 when it dropped to 68%. The survey was suspended for three waves during 1999 to 2000, so the 1999 data were from a sample size half of that usually obtained, with no estimates for the year 2000.

Other national surveys were used to validate the HEPS behaviour time trends: the Scottish Health Survey, Scottish Household Survey, Consumer Attitudes to Food Standards survey and Expenditure and Food Survey.

The HEPS annual samples are too small to assess trends in inequalities.

## Findings

The table opposite summarises the direction of the results. There was statistically significant improvement across all health behaviours. The picture was also generally positive for both knowledge and motivation. The health improvement community in Scotland can take heart from this, even if – as we must emphasise – this analysis provides no evidence that intentional health improvement activity is causally associated with any of these changes.

Indicator	Smoking	Physical activity	Healthy eating
<b>Behaviour</b>			
HEPS	↓	↑	↑
Other national surveys	↓	↑	↔
<b>Knowledge</b>			
Recommendations	n/a	↑	↑
Health-related	↔	↑	↓
<b>Motivation</b>			
	↑	↑	↑

↑ ↓ = improvement over time

↓ ↑ = deterioration over time

↔ = stable over time

On the back cover we present trends for summary health scores for all three health topics combined. For each topic, participants scored one point if they: a) adopted the healthy behaviour; b) demonstrated topic-specific knowledge; c) were motivated to adopt or maintain the healthy behaviour. Scores for health behaviour, health knowledge and health motivation therefore ranged from a minimum of 0 to a maximum of 3. Full details are provided in the main report.

Across the period as a whole, scores for motivation were generally higher than those for knowledge and both were generally higher than behaviour scores. This is consistent with a wider literature that shows no simple causal relationship between knowledge, motivation and behaviour.

## Interpretation

The moderate pace of change, the inconsistencies between knowledge, motivation and behaviour, and the variable nature of change by topic suggest cause for concern as well as for satisfaction. Progress appears uneven with little evidence of a widespread shift in behaviour towards healthier living.

We conclude that there was welcome modest improvement in health behaviour, knowledge and motivation in Scotland between 1996 and 2007.

HEPS reports are available at [www.healthscotland.com/scotlands-health/population/HEPS.aspx](http://www.healthscotland.com/scotlands-health/population/HEPS.aspx)

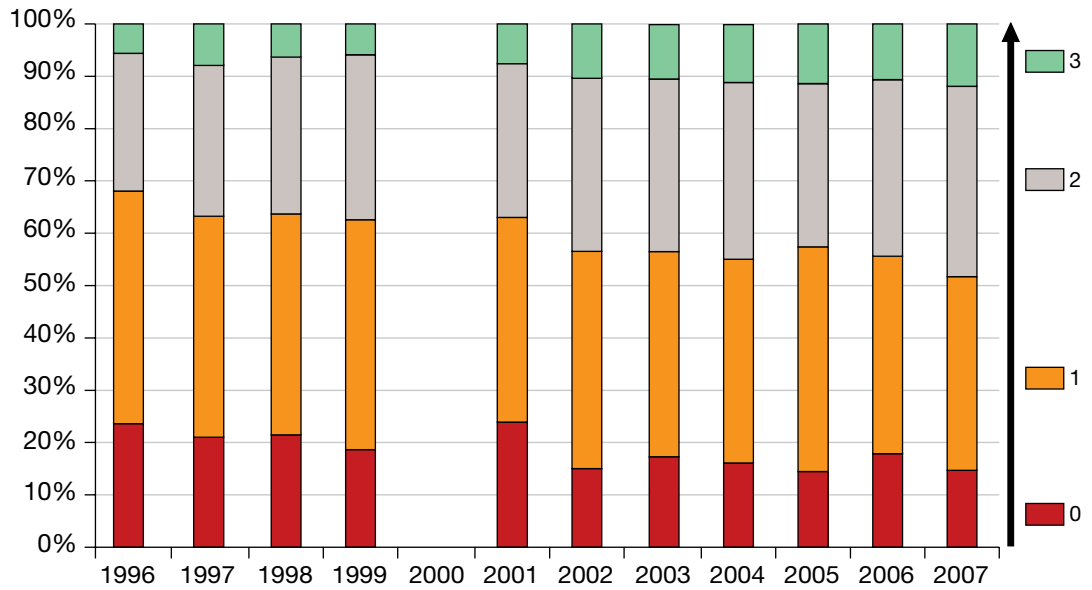
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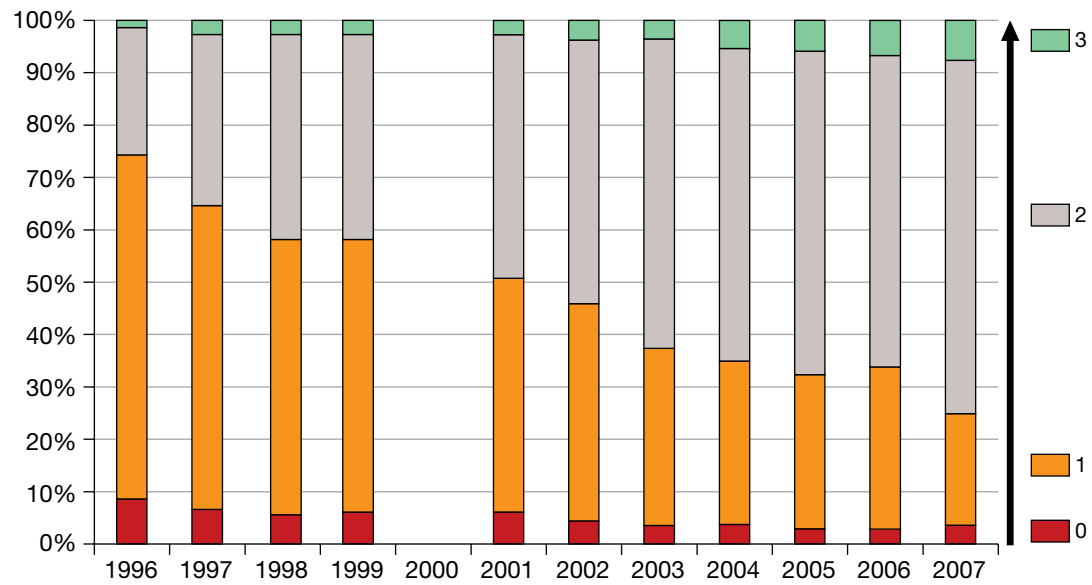
Summary health scores for adults in Scotland, 1996 to 2007

A higher score indicates better behaviour, knowledge or motivation.

Health behaviour



Health knowledge



Health motivation

