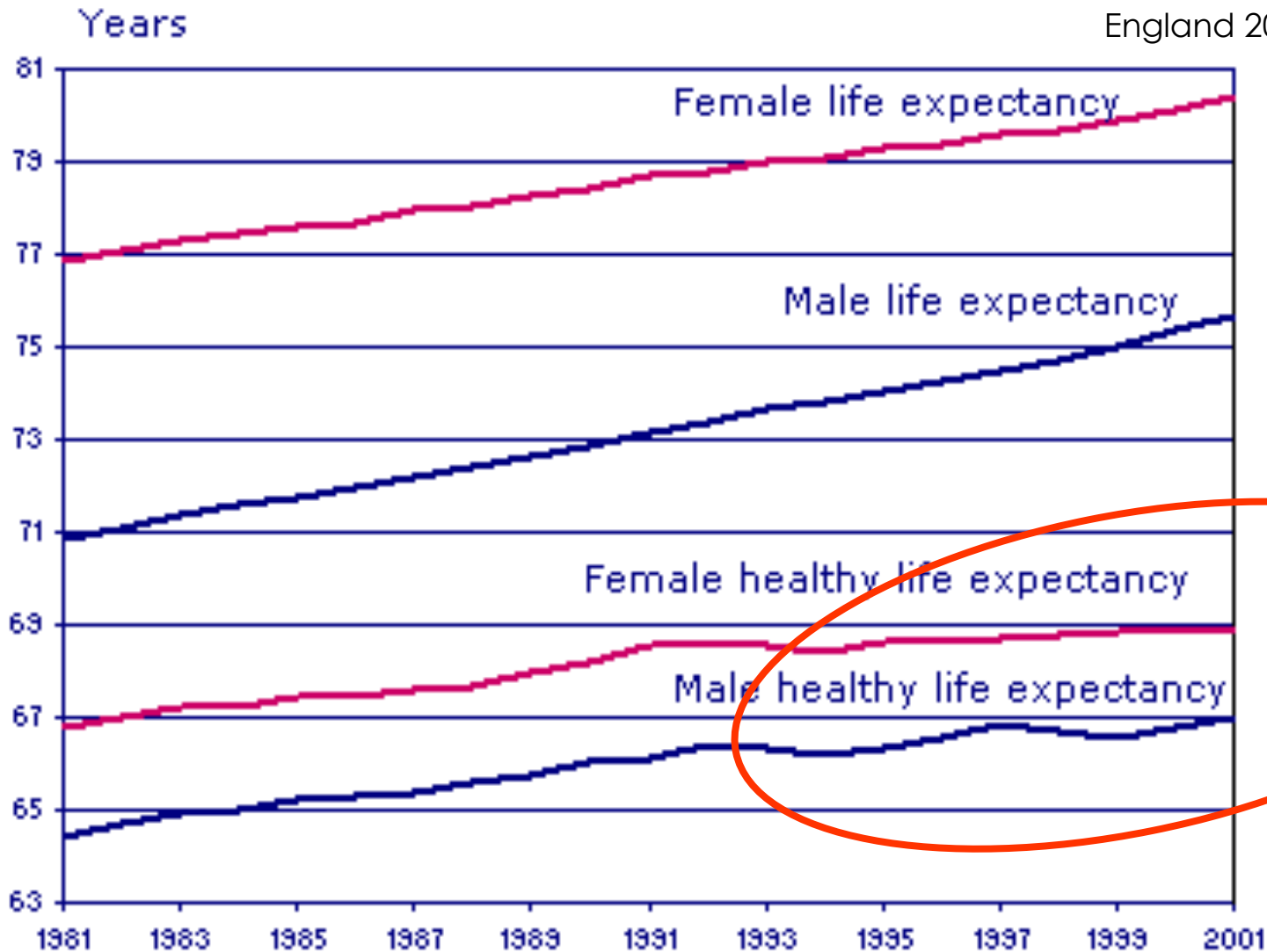


Coronary heart disease

FOR OUR PROJECT WE LOOKED AT HOW CHD LEVELS HAVE CHANGED OVER THE YEARS, AND INVESTIGATED WHY THIS HAS HAPPENED BY LOOKING AT THE CAUSES OF CORONARY HEART DISEASE

We are living longer

Source: Health Profile of England 2007



We are living longer

Table 1. Trends in life expectancy and healthy life expectancy at birth, 1981 to 2001

Year	Women		Men	
	1981	2001	1981	2001
Life expectancy	76.8	80.4	70.9	75.7
General HLE	66.7	68.8	64.4	67.0
% life in 'good' or 'fairly good' health	86.9%	85.6%	90.0%	88.5%

Source: www.statistics.gov.uk

Cardiovascular System

- Coronary heart disease most common cause of death in the UK - 105,000 deaths a year
- Every 2 minutes someone has a heart attack in this country
- In about 30% of heart attacks the patient dies before reaching hospital

Rates of CHD

CHD is the most common cause of death in the United Kingdom. It is a major cause of premature death (i.e. before the age of 65 years). 105,000 deaths a year

In 2006 CHD accounted for 30% of premature deaths in men and 22% of premature deaths in women.

CHD is more common in men than in women.

Every 2 minutes someone has a heart attack in this country

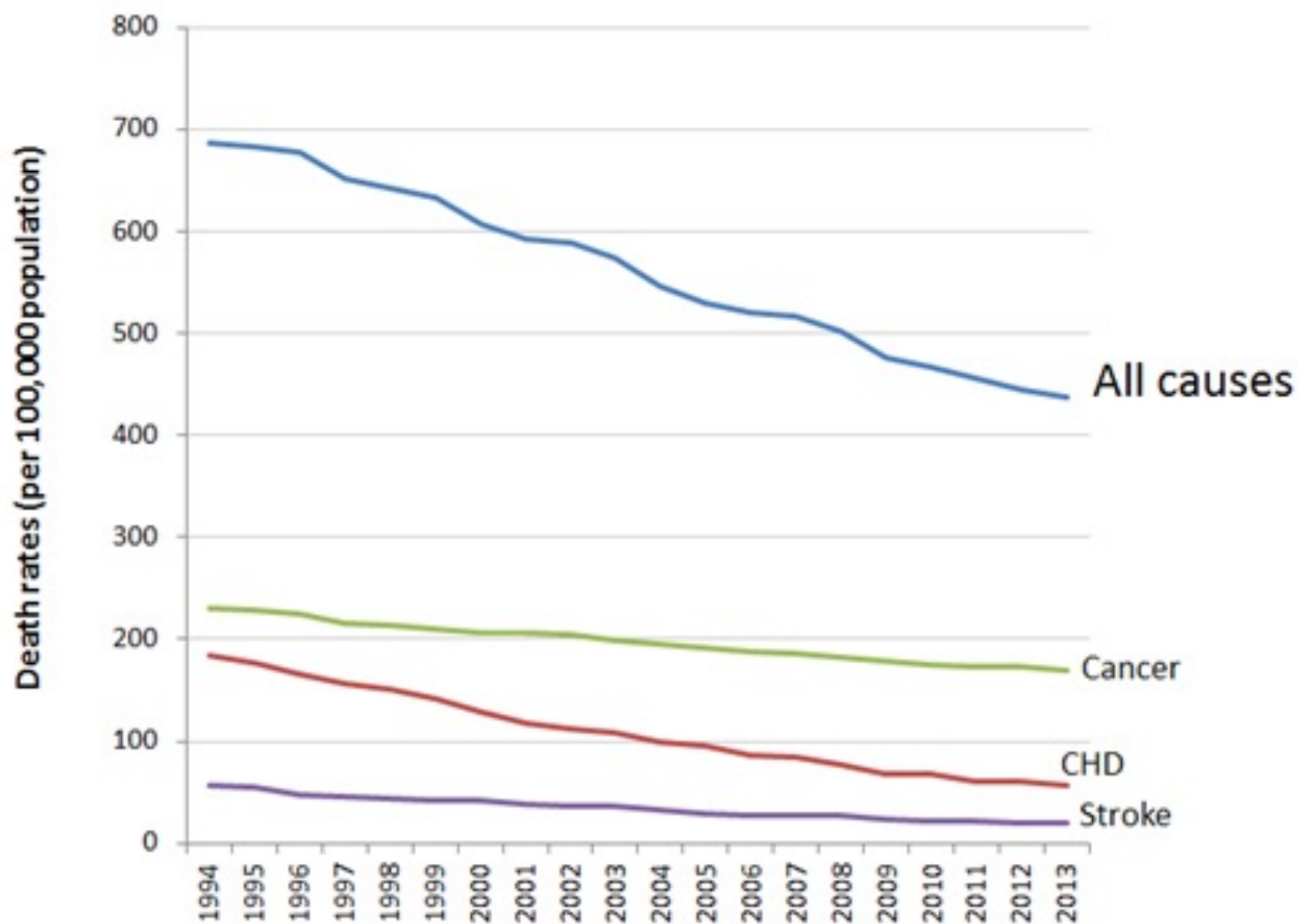
Rates of CHD

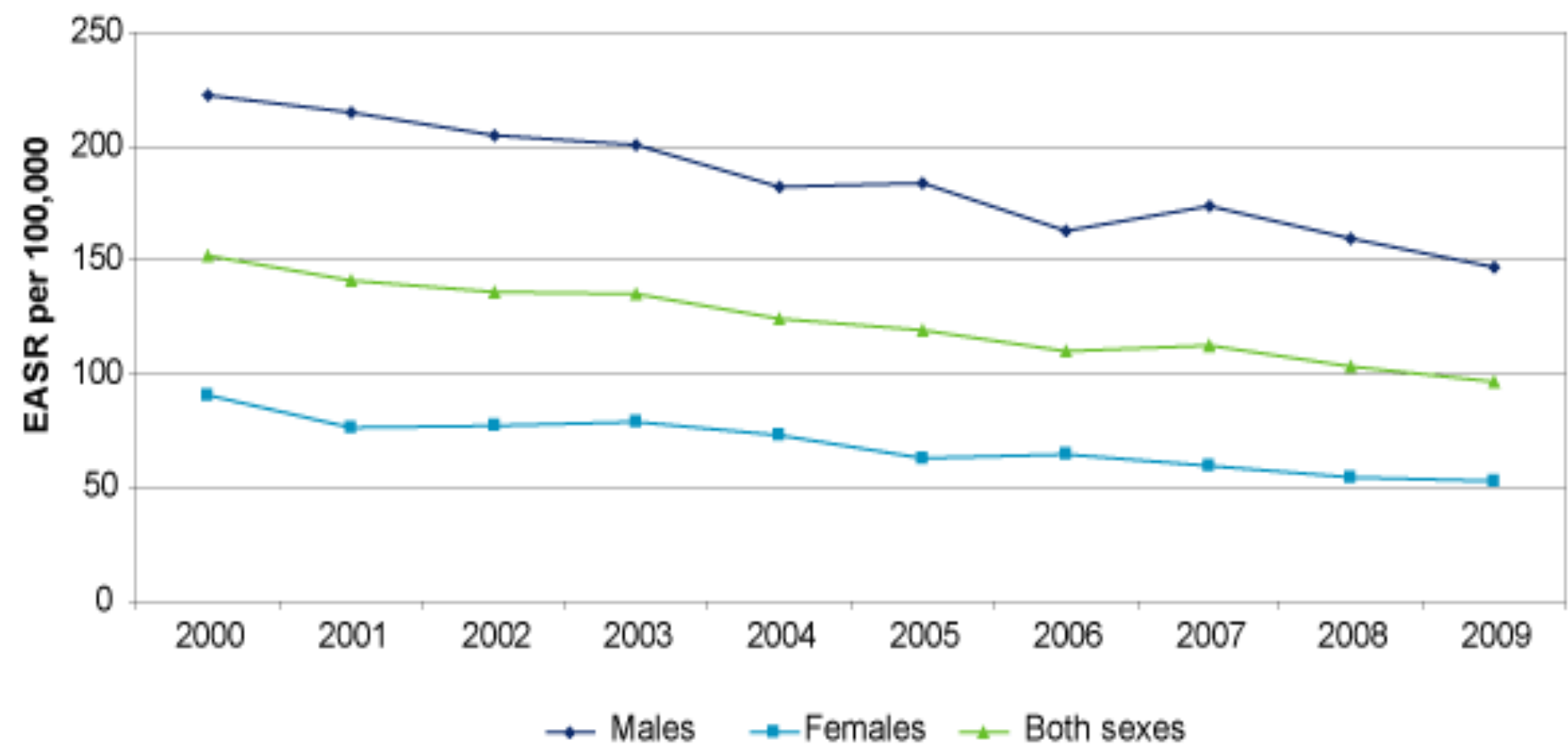
CHD death rates have been falling fast in those aged over 55 years and older.

Between 1997 and 2006, there was a fall of 46% in the CHD death rate for men aged 55 to 64 years in the UK.

In women there was a 53% fall in those aged 55 to 64 years.

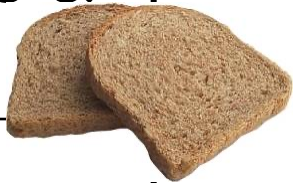
Under 75s age-standardised death rates, Scotland, 1994-2013





Premature heart disease can be prevented

<p>Smoking</p>	<p>Regular physical activity</p>
<p>Fat, particularly saturated fats</p>	<p>Fruit and vegetables</p>
<p>Salt</p>	<p>Fibre - wholegrains & pulses</p>
<p>Alcohol</p>	<p>Oily fish</p>
<p>Maintain healthy body weight</p>	



Coronary heart disease

Coronary heart disease (CHD) is caused by a narrowing of the blood vessels to the heart. This reduces the flow of blood to the heart.

If one of the blood vessels becomes completely blocked, the blood supply to part of the heart stops and is damaged. This is called a heart attack.

If the blood supply to a large part of the heart is stopped it may cause death.

Risk of CHD

The chance of suffering from CHD is affected by many factors. These are called risk factors.

Factors that increase the risk of CHD include being:

- male;
- older;
- a cigarette smoker;
- overweight;
- inactive;
- stressed.

Risk of CHD

Other risk factors for CHD include having:

- a family history of CHD;
- high blood cholesterol level;
- high blood pressure;
- high intake of saturated fats;
- diabetes.

Some factors cannot be changed, such as family history. Other factors can be changed, for example diet or other aspect of lifestyle which are called modifiable risk factors.

Build up of fat

The deposit on blood vessels walls, which reduce the flow of blood, takes years to build up. It is made up of substances, including cholesterol and very small blood clots.

High levels of cholesterol in the blood increase the build up of the deposit.

Blood cholesterol levels

Cholesterol is a type of fat that is essential for the body (not in the diet) in small amounts. It is produced in the liver and some is also obtained from the diet.

Cholesterol is carried around the body in the blood. High levels of cholesterol in blood increase the risk of CHD.

The level of cholesterol in the blood depends partly on genetic factors, but diet is also important.

Cholesterol and the diet

The level of blood cholesterol is affected by the amount and type of fat in the diet.

High intakes of saturated fatty acids, and of total fat, can increase the amount of cholesterol in the blood, and therefore increase the risk of CHD.

Most people are consuming too much saturated fat and need to switch to foods containing unsaturated fat or remove visible fat.



Reducing cholesterol in the diet

Before cholesterol can be deposited on blood vessel walls, it is changed by a chemical reaction called oxidation. Substances called antioxidants can help to prevent this reaction happening and so reduce the amount of deposit formed in the blood vessels.

Examples of antioxidants include vitamins A, C, and E. These are found in fruit and vegetables.

Blood pressure

High blood pressure increases the risk of CHD. Blood pressure tends to be raised in people who:

- are very overweight;
- drink a lot of alcohol;
- take little exercise;
- smoke cigarettes;
- eat a lot of salt.

Considering which of these factors are relevant, and altering them is necessary, can help to reduce blood pressure.

Maintaining a healthy weight

Being very overweight (obese) increases the risk of CHD.

Eating a balanced diet and being physically active is important in maintaining a healthy body weight.

This will also reduce the risk of high blood pressure, which is a risk factor for CHD.

Soluble fibre

Where is it found?

Soluble fibre is a type of dietary fibre (NSP) which is found in foods such as oats, vegetables and beans.



How is it good for heart health?

It has been shown to reduce blood cholesterol levels and therefore may reduce the risk of CHD.

Omega 3 fatty acids

Where is it found?

Oily fish such as salmon, sardines and mackerel.

How is it good for heart health?

Fatty acid found particularly in oily fish reduces clotting. Increased consumption of these foods, therefore, may reduce the risk of CHD.