Population-Level Data

(1 of 1

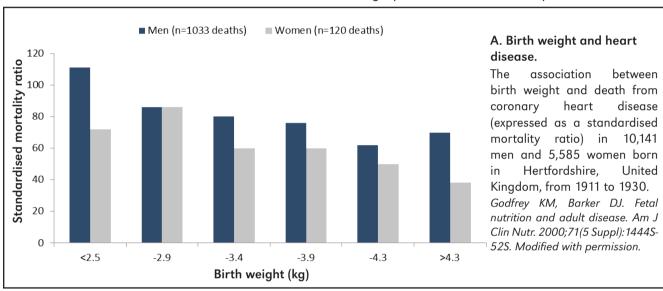
Over the last thirty years, medical research scientists and doctors have made observations on the development of the global NCD epidemic. This has generated questions about what is driving the epidemic and the need to search for evidence.

Professors David Barker and Clive Osmond developed a hypothesis that there was a relationship between infant mortality rates and heart disease in adults.

1. In three sentences, summarise the key evidence found by Professors David Barker and Clive Osmond (see pages 9–11 of the reading "Children Programmed for Obesity").

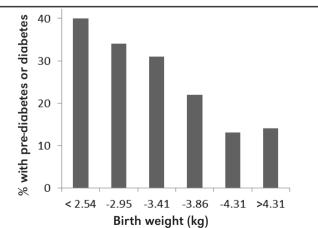


Barker and his team collected data about a range of health indicators. Graph A, 'Birth weight and heart disease' contains data that explored the association between birth weight and death from coronary heart disease in the Hertfordshire cohort. Use the information in graphs A and B to answer questions below.



- 2. Describe the pattern shown in the graph above (a) for men (b) for women.
- 3. How does this pattern compare with the patterns that they observed for diabetes?
- 4. Given what you know about the risk factors for heart disease and diabetes, what associations, apart from birth weight, do you think the scientists might have investigated?

Think about what other data they may have collected about the people. What other trends would you expect they may have seen linked to disease risk?



B. Birth weight and diabetes risk

Birth weight versus type 2 diabetes risk at age 60–70 years for men born in Hertfordshire, UK (1911–1930).

Godfrey KM, Barker DJ. Fetal nutrition and adult disease. Am J Clin Nutr. 2000;71(5 Suppl): 1444S-52S. Modified with permission.



