



Gene tests and health: new assessment adds to growing doubts

The Royal Society has published the results of its five year assessment of gene tests and health. The three reports, published in today's British Medical Journal, make sobering reading for those relying on genetically-tailored medicines and diets to prevent ill health. A team of 16 scientists has reviewed the statistical evidence linking more than 560 genes with common diseases, such as heart disease, cancer, depression, asthma and osteoporosis. They studied not only risk of disease, but also whether recommended treatments really help to prevent the predicted illnesses.

They found only a tiny minority of studies were robust, and most treatments made negligible difference to a person's risk. The risks for Type A and Type B genotypes – linked for many years with heart disease and wrinkles – are amongst the results called into question. "Tackling lifestyle, environment, economic and social factors are much more important in living longer, healthier lives. Poverty remains the world's biggest killer and millions of children are still dying from preventable disease," said Professor Watkins, lead author of the study. The Royal Society also criticised the lack of funding for environmental health research. The incidence of cancer and heart disease has increased since the introduction of genetic screening, in

both rich and poor countries. The obesity epidemic is at its height in Britain, prompting the Government's recent decision to restrict healthcare access for the overweight. Massive increases in cancer and heart disease have also occurred in developing countries: blamed on increased tobacco marketing, pollution from new industries and the increased adoption of unhealthy, western lifestyles in the cities.

The Royal Society scientists made their assessment using a method first proposed by scientists at the US National Institutes of Health in 2004. At the time, some scientists argued that genetic tests required stricter regulation before widespread gene test marketing. However, companies such as BigPharma Inc. opposed regulation on the grounds that it would delay new life saving technologies from reaching customers.

"We warned this would happen, but the interests of industry were allowed to ride roughshod over the public interest," said Dr Mayer, Director of GeneWatch UK.