

Home health tests are 'genetic horoscopes'

WASHINGTON DC

Picture this: two people, eager to prevent future ailments, order genetic tests over the Internet. The results are sobering — risks of osteoporosis, heart disease, diabetes and more. Affiliated companies then offer nutritional supplements to stave off these predicted sicknesses — but the pills turn out to be little more than multivitamins, offered with a hefty dose of misleading medical advice.

Fortunately, these two people are fictitious, part of an investigation conducted by the US Government Accountability Office (GAO). The inquiry found that 'nutrigenetic' tests, combining diet advice with genetics testing, are at best ambiguous and at worst dangerous.

On 27 July, the Senate special committee on ageing conducted a very public grilling of company representatives and federal regulators. Participants heard that the GAO had surreptitiously tested four companies that offer

home genetic testing to consumers. Three of the four testified: Genelex, based in Seattle, Washington; Sciona of Boulder, Colorado; and Suracell of Montclair, New Jersey.

Investigators posed as 14 consumers but used the DNA from just two people, a 48-year-old man and a 9-month-old girl. Despite this, the test 'results' were contradictory and warned of risks for various conditions. "It's clear they went way out ahead of the science," says Alan Guttmacher, deputy director of the US National Human Genome Research Institute in Bethesda, Maryland.

Two of the companies disagree. Howard Coleman, chief executive of Genelex, claimed at the hearing that the investigation's results were made specious by the 14 differing 'lifestyle questionnaires' that the investigators submitted along with the DNA samples.

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The cost of at-home genetic tests in the study ranged from \$89 to \$395. Some are tantamount to "genetic horoscopes", said Thomas Hamilton, director of the survey and certification group at the US government's Center for Medicaid and State Operations. Unlike other witnesses, however, he argued that more regulation is not needed.

The Food and Drug Administration (FDA) also monitors some such tests because they count as medical 'devices', says Steven Gutman, director of the agency's office for diagnostic devices. The agency is investigating whether some of the tests should have undergone FDA review, he says.

Advocates of testing point out that the dubious nutrigenetic tests are very different to legitimate, reliable at-home tests for diseases such as cystic fibrosis. ■

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