PRESS RELEASE

OPEN HEART

Historic US and UK dietary advice on fats "should not have been introduced"

1977 (US) and 1983 (UK) recommendations not backed up by trial data

[Evidence from randomised controlled trials did not support the introduction of dietary fat guidelines in 1977 and 1983: a systematic review and meta-analysis Doi 10.1136/openhrt-2014-000196]

[Editorial: The evidence base for fat guidelines: a balanced diet doi 10.1136/openhrt-2014-000229]

National dietary advice on fat consumption issued to millions of US and UK citizens in 1977 and 1983, to cut coronary heart disease incidence, lacked any solid trial evidence to back it up, and "should not have been introduced," concludes research published in the online journal ***Open Heart.***

Both sets of dietary guidelines recommended reducing overall dietary fat consumption to 30% of total energy intake, and specifically, saturated fat to 10% of total energy intake. Both acknowledged that the evidence was not conclusive.

In the absence of any analysis of the evidence used to corroborate the dietary recommendations, the researchers carried out a systematic review and meta-analysis of the randomised control trial data that would have been available to the US and UK regulatory committees at the time.

After a comprehensive search of research databases, they found six relevant trials, covering seven different dietary interventions, spanning an average of five years, and involving 2467 men.

All the trials had been published before 1983 and had looked at the relationship between dietary fat, serum cholesterol, and the development of coronary heart disease.

Five out of the six did not consider either the overall or saturated fat recommendations. And all but one focused on secondary rather than primary prevention.

The pooled data revealed a total of 740 deaths from all causes, and 423 from coronary heart disease.

There was no difference in deaths from all causes between the 'treatment' and comparison groups, with 370 deaths in both. And there was no significant difference in deaths from coronary heart disease, with 207 in the 'treatment' groups and 216 in the comparison groups.

The falls in serum cholesterol were significantly greater in the 'treatment' groups, but this did not seem to have any impact on the death rates from all causes or from coronary heart disease, the analysis showed.

The researchers highlight several caveats in the evidence available at the time: no women were included; no trial tested the dietary recommendations; no trial concluded that dietary guidelines should be drawn up.

"It seems incomprehensible that dietary advice was introduced for 220 million Americans and 56 million UK citizens, given the contrary results from a small number of unhealthy men," write the researchers.

They go on to say: "The results of the present meta-analysis support the hypothesis that the available [randomised controlled trials] did not support the introduction of dietary fat recommendations in order to reduce [coronary heart disease] risk or related mortality."

And they conclude: “Dietary advice not merely needs review; it should not have been introduced.”

But in a linked editorial, Rahul Bahl, of the Royal Berkshire NHS Foundation Trust, sounds a note of caution.

The most up to date review of the evidence also concluded that the evidence on which current dietary guidance is based was “very limited,” but this doesn’t mean that the risk factor identified is not a true risk factor, he says.

There is epidemiological and ecological evidence suggesting a link between dietary fat and heart disease, added to which public policies generally don’t require randomised controlled trial evidence, he adds.

“There is certainly a strong argument that an overreliance in public health on saturated fat as the main dietary villain for cardiovascular disease has distracted from the risks posed by other nutrients, such as carbohydrates,” he writes.

“Yet replacing one caricature with another does not feel like a solution,” he insists.

Contacts:
Research:
Zoe Harcombe, Institute of Clinical Exercise and Health Science, University of the West of Scotland, Hamilton, Scotland, UK.
Tel: +44 (0) 7970 960 922
Email: zoe.harcombe@uws.ac.uk
Or
Dr James DiNicolantonio, Saint Luke’s Mid America Heart Institute, Kansas City, Missouri, USA.
Tel: + 1 607 738 8853
Email: jjdinicol@gmail.com
Editorial:
Dr Rahul Bahl, Department of Cardiology Royal Berkshire NHS Foundation Trust, Reading, UK.
Tel: + 44 (0) 118 901 9054
Email: rahulbahl2004@hotmail.com