Managing conflicts in nutrition research: a historical perspective

History shows that pooling money into an 'independent' research fund doesn't work.

Marion Nestle charts failed attempts and corporate take-overs over the years.

Whenever I talk about the conflicts of interest induced by food-industry funding of nutrition research, the first suggestion I invariably hear for solving the problem is to pool contributions into a common research fund administered by an independent third party. In theory, this method should protect researchers from feelings of obligation to any one donor company, and prevent the wellestablished unconscious, unintentional, and unrecognised tendencies to produce study results favourable to the funder.^{1,2} But history is instructive; it demonstrates that the idea works better in theory than practice.

In 1942, Dr. Karl Compton, president of the Massachusetts Institute of Technology, announced that he had agreed to head the board of trustees of a newly formed Nutrition Foundation, established through donations from fifteen leading food manufacturers, including Campbell's Soup, General Foods, Quaker Oats and United Fruit. The foundation's purpose was to create a strong and independent programme to support basic nutrition research to improve the food, diet, and health of the American public, and applied food science research to help food companies with technical problems and product development. By "strong," Compton meant adequately funded. The initial food industry members would commit \$10,000 a year to the foundation for five years. By 1947, 54 food, beverage and supplement companies were making annual contributions of \$500 or more.

"Independent" meant separation of the funding from the science. The foundation appointed a scientific advisory committee to review applications and award grants, but its decisions had to be approved by the board of trustees. Because the board included food industry representatives, this requirement allowed the board to control the research agenda, even though its approval process appeared pro forma.

In his 1979 history of the foundation, Dr. Charles Glen King, who headed the scientific advisory committee, said "the work of this committee and its rapport with the trustees were of such a quality that no grant recommendation to the board of trustees was denied or restricted in any way during my 21 years of experience as Director or President."³

However, this statement also raises questions about independence. If members wanted to remain on the committee, and if the foundation wanted donations to continue, everyone would need to meet the trustees' and donors' spoken or unspoken expectations. Gifts create obligations.

Dr. King repeatedly emphasises the independence of the scientific committee. "It is a great satisfaction to report the fact that in no instance during 21 years of service did a member of this committee or the Board of Trustees suggest undertaking any grant or other activity that would work selfishly in the particular interest of his own organisation or against any other worthy organisation."

Despite these protestations, some nutrition scientists must have been dubious about the claims of independence. King quotes an unnamed member of a nutrition society: "Of course you will have to scratch the back of your member companies occasionally and do

little favours according to their interest!" King insisted that the foundation was not run that way. Its charter specified that "no founder or sustaining member of The Nutrition Foundation, Inc., shall refer to his membership in this corporation in his advertisement of his products; or make any other commercial reference to said membership." King's history quotes a speech given to the foundation's trustees in 1972 by its then-president, William Darby: "The Nutrition Foundation... will not become a lobbying agency and must remain scientifically detached in debates affecting any particular segment of the food industry."

But scepticism should have been in order. Grant recipients thanked the foundation for funding in their published papers, and the foundation made sure that donors got something in return. It established an industry advisory committee to keep member companies apprised of the foundation's work, giving them early information about study results, and providing them with informal access to leading nutrition scientists. There also were tax advantages.

Because the foundation's funding model required repeated commitments from participating companies, it created ongoing pressures to please. Such pressures became more pronounced when the foundation expanded its activities beyond awarding research grants. The foundation published its own journal, *Nutrition Reviews* (which still exists), but gradually took on additional missions. It helped establish similar foundations in other countries, gave awards, published books, funded conferences and entered

into partnerships with other nutrition organisations. Its financial needs expanded accordingly.

Pressures to please might explain why reporters viewed foundation officials as spokesmen for the food industry on matters of nutrition and health. Examples include:

1962: Charles Glen King told a reporter that Rachel Carson's just-published book, *Silent Spring*, was "bordering on hysteria." The article identified King as the head of a "research-sponsoring organisation largely supported by the food industry."

1967: Horace L. Sipple, then executive director of the foundation, suggested that mothers could fix their families "hot dogs and malted milks or even pizza for breakfast. It's better than nothing at all," he said."

1974: The foundation's president, William Darby, denounced academics concerned about the hazards of agricultural chemicals for their "McCarthyite" attack on the pesticide industry.

1982: Dr. Darby, identified by a reporter as president of a foundation "whose trustees include top officers of corporations in the food field such as Oscar Mayer, Coca-Cola, General Foods, Swanson and Nabisco," said of recently published dietary guidelines, "I don't think we should look at food-stuffs as being dangerous things...If we cut down on animal products such as lean red meats we remove one of our best sources of protein, B vitamins and iron."

But times were changing. Government research funding, which had increased rapidly after the end of World War II, now targeted cancer, heart disease, and other chronic conditions rather than vitamins. Most large food companies closed their basic research units and shifted resources to product development and marketing. Through mergers and acquisitions, the food industry consolidated. All of this left fewer companies to contribute to the foundation's work, and its financial situation deteriorated.

In 1985, the foundation merged into the International Life Sciences Institute (ILSI), a group organised in 1978 by Coca-Cola and other food companies to promote research, but for a specific purpose: to demonstrate

the safety of caffeine, food additives, and other chemical substances in foods. Although ILSI now supports research on a much broader range of topics, continues to publish *Nutrition Reviews*, and describes itself as "a nonprofit, worldwide organisation whose mission is to provide science that improves human health and well-being and safeguards the environment," it is widely recognised as a front group for the food industry. The moral: it takes more than pooling funds from food companies to maintain research independence.

"Anything short of a mandatory levy is a compromise that allows industry funding to bias the research, induces conflicts of interest, and leads to erosion of trust in nutrition science."

A more recent example of pooled funds is the nonprofit Foundation for the National Institutes of Health (FNIH), authorised by Congress to collect funds from private donors to support research and education.4 In 2016, the FNIH distributed more than \$55 million dollars, mostly for research partnerships. This money comes from hundreds of donors, ranging from grateful patients to large corporations, listed by the size of their contributions: \$250 to more than \$2,500,000. Here too, lines blur. FNIH actively seeks donors for specific projects and permits donors to specify areas for research.

This earmarking was evident form a front-page story in the New York Times about how five alcoholic-beverage companies had pledged \$67.7 million to the FNIH for a study to determine whether one drink a day prevents heart attacks. This may sound like science but the funders, the size of their donation, and the research question raised red flags. I'm quoted in the article: "Research shows that industry-sponsored research almost invariably favours the interests of the industry sponsor, even when investigators believe

they are immune from such influence."
But the director of NIH's alcohol institute
NIH assured the reporter, "the trial will be
immune from industry influence."⁵

I can think of only one possibility that might actually work: an industry-wide research funding programme paid for by a tax or levy. Contributions would be mandatory, not voluntary, thereby eliminating the need to please donors.6 This idea, in theory, would require all food, beverage, and supplement companies with sales over some set level to pay a fee in proportion to revenues, perhaps along the lines of the USDA's industry "checkoff" programmes. A government agency or foundation could collect the funds and administer them in much the same way as such institutions currently administer grants. A system like this has its own sources of bias, but these would not be commercially driven.

But in practice? I score its political feasibility at zero. Food companies do not like taxes and invariably oppose them, and the U.S. tax code or Congress are unlikely to permit something like this. But anything short of a mandatory levy is a compromise that allows industry funding to bias the research, induces conflicts of interest, and leads to erosion of trust in nutrition science.

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