“Sound Science” or Sounds like Science?

Doubt is Their Product
How Industry’s Assault on Science Threatens Your Health

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Have you asked yourself...

"What's The Best Aspirin I Can Give My Child?"

Thousands of doctors answer by specifying

"St. Joseph Aspirin For Children"

Doctors know this specialized tablet is right in every way for your child. Each contains 1/4 grain (34 regular adult dose), the preferred standard of accurate dosage measure. You never have to cut or break tablets to give St. Joseph Aspirin For Children just as the doctor orders. Your own doctor will tell you it's made to best fit your child's needs. Children like its pure orange flavor, take it willingly. That's why it usually acts faster to speed relief. Buy the large economy size today.

Give him the aspirin recommended 4 to 1 over any other by Children's Doctors in a national survey... among those who named a particular brand

A slight ache in head... and heart
A head cold, Arthritis, muscle strain from a little fever... and be fully restored by the adult world. Fortunately, there is a way to relieve this boy's distress...
Tobacco’s Campaign to Manufacture Uncertainty

“Doubt is our product, since it is the best means of competing with the ‘body of fact’ that exists in the minds of the general public. It is also the means of establishing controversy.”

-Brown & Williamson Document No. 332506, 1969
Cancer Personality Pattern Is Reported To Begin in Childhood

New evidence of a personality pattern common to male lung cancer patients has been reported by a Scottish psychologist. The pattern begins in childhood and does not appear to be related to smoking habits.

In a previous study, Dr. David M. Klassen of the University of Glasgow and an associate reported that male lung cancer patients have a significantly diminished outlet for emotional discharge. In addition, they said, such patients tend to bottle up or repress

Verdict: 'Unproved'

Lung Specialist Cites 28 Reasons For Doubting Cigarette-Cancer Link

Although much has been written about possible causal relations of cigarette smoking to lung cancer, there is a good deal of evidence which does not fit this hypothesis, according to a California pulmonary specialist. In a review article digested below, he summarizes 28 reasons for his believing that cigarette smoking is not an important etiological agent in lung cancer, and that the real causes are unknown.

Test Results: Smoking Fails To Raise Cholesterol Levels

There has been a virtual flood of literature 'associating' cigarette smoking with lung cancer," according to Dr. Lesly Hyde, chief of pulmonary disease service, Veterans Administrat-
Reports on Tobacco and Health Research

Vol. 7 No. 1

March-April 1964

There is diversity of opinion regarding tobacco use and health. Charges against tobacco are widely publicized, but less attention is given to materials which indicate that differing opinions exist. This publication reports some of these materials.

(Continued on page 2)


'Lung Cancer Rare in Bald Men'

A relatively low incidence of lung cancer among bald men has been reported by two New Orleans physicians.* In contrast, the study supported earlier findings that baldness is associated with "increased susceptibility to heart disease."

Drs. Morton Brown and Howard A. Buechner studied 225 control patients and 186 lung cancer patients at the New Orleans Veterans Administration Hospital over a two-year period. Among white male patients (controls), the general incidence of baldness was found to be 41 percent, as opposed to 25 percent among Negro controls. Among the lung cancer patients, however, only 11 percent of the whites were bald, and only 10 percent of the Negroes, the investigators report.

The highest incidence of baldness among the lung cancer patients was 16 percent in the group aged 60-70 years. In contrast, the incidence of baldness among the controls in this age group was 58 percent.

Of the 40 heart patients also included in the study, Dr. Brown adds, 62 percent were bald. Of 117 patients with obstructive emphysema, on the other hand, only 32 percent were bald.

No differences in baldness were found between smokers and non-smokers in the study. Dr. Brown noted.

Case Histories

The following pages contain case histories detailing Hill and Knowlton's work on selected environmental, and occupational health issues:

- Siting a Municipal Waste Incinerator
- Vinyl Chloride and Cancer
- Asbestos and Human Health
- Dioxin and Public Health
- Fluorocarbons and Ozone Depletion
- Saccharin and the FDA
- Toxic Wastes Threaten Major Manufacturing Facility
- Groundwater Contamination Harms Company Reputation
Fluorocarbons and Ozone Depletion

Problem/Situation

Scientific allegations that fluorocarbons released from aerosol spray cans were a threat to the earth’s ozone layer had become a cause celebre in the media and government. Despite the fact that there was no real scientific proof of the charges, and that it would be years before facts could be assembled, the media fastened on the threat of increased skin cancer and the doomsday aspects of the story. Public concern and fear about the future caused fluorocarbon users to look to alternatives. Hill and Knowlton was asked by Du Pont to help calm fears, get better reporting of the issues, and gain up to two or three years before the government took action to ban fluorocarbons.
The Nobel Prize in Chemistry 1995

"for their work in atmospheric chemistry, particularly concerning the formation and decomposition of ozone"

Paul J. Crutzen  Mario J. Molina  F. Sherwood Rowland
“The scientific debate remains open. Voters believe that there is no consensus about global warming within the scientific community. Should the public come to believe that the scientific issues are settled, their view about global warming will change accordingly. Therefore, you need to continue to make the lack of scientific certainty a primary issue in the debate...”

(emphasis in original)
Product Defense: The Enronization of Science

- Scientists hired to defend products in regulatory and legal arenas

- Their value is their ability to influence regulation and litigation, *not* to provide valid science

- Produce science of questionable value
Marketing “Product Defense”

ASBESTOS, TOBACCO, PHARMACEUTICALS - WE’RE ALL NEXT!

- Scare science
- The loss of presumptive innocence
- Where will the liability end?

Presented by
Mr. Joseph Huggard
The Weinberg Group LLC
18 June 2003
Case Studies

SUPPORT TO DRUG MANUFACTURERS

The Food and Drug Administration proposed cancellation of a registered new drug. Cancellation requires an administrative hearing. THE WEINBERG GROUP was retained by two manufacturers of the drug under attack, to define strategy for the administrative hearing, identify the experts to be used in the continued support of the drug; assist in the preparation of the experts for written testimony, analysis of the testimony of experts for the Food and Drug Administration, and preparation for oral cross-examinations and preparation of the summary brief. This led to an extensive process with a written appeal from the first decision to the Commissioner and leading to 10 additional years of sales prior to the ultimate cancellation of the drug.
The Funding Effect

- The close correlation between the results desired by a study’s sponsors and the results reported

- Identified in studies of numerous classes of pharmaceuticals
Commentary

An Extensive New Literature Concerning Low-Dose Effects of Bisphenol A Shows the Need for a New Risk Assessment

Frederick S. vom Saal1 and Claude Hughes2,3

1Division of Biological Sciences, University of Missouri, Columbia, Missouri, USA; 2Department of Medical and Scientific Services, Quintiles, Research Triangle Park, North Carolina, USA; 3Department of Biology, East Carolina University, Greenville, North Carolina, USA

Table 1. Biased outcome due to source of funding in low-dose in vivo BPA research as of December 2004.

<table>
<thead>
<tr>
<th>Source of funding</th>
<th>All studies</th>
<th>CD-SD rat studies</th>
<th>All studies except CD-SD rats</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Harm</td>
<td>No harm</td>
<td>Harm</td>
</tr>
<tr>
<td>Government</td>
<td>94 (90.4)</td>
<td>10 (9.6)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Chemical corporations</td>
<td>0 (0)</td>
<td>11 (100)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

Values shown are no. (%).
Volume 2  Number 1  April, 2000

A new journal of key scientific studies focused on the safety of bisphenol A, an important industrial intermediate used to manufacture polycarbonate plastics, epoxy coatings and other products.

The Bisphenol A Global Industry Group
Can We Trust the Advice of Conflicted Scientists?

Or, Does Conflict of Interest Significantly Affect Scientific Judgment?
A Natural Experiment: Development of Knowledge about Toxicity of Vioxx
Whose Interpretation was Correct?

- FDA approved Vioxx in May 1999

- Results of early several imperfect studies lent themselves to conflicting interpretation, with independent experts and Merck scientists in disagreement

- Eventually, the truth is reached through double blind placebo trial ("gold standard")
What did the Independent Experts Say?

In August 2001, JAMA publishes review of Vioxx trial by three scientists not associated with Merck:

- Patients taking Vioxx had 2.4 times the risk of cardiovascular event, compared with those taking naproxen.

The Response of Merck’s Conflicted Scientists: “It’s the Aleve, not Vioxx”

- In Oct. 2001, Merck-affiliated scientists blame Aleve: “Differences observed between rofecoxib and naproxen are likely the result of the antiplatelet effects of the latter agent.”

- Dec. 2001: “We believe that the analysis of [the independent scientists] provides no substantive support for their conclusions.”

The High Cost of Getting it Wrong

September 2004: Merck withdraws Vioxx after a placebo trial shows that Vioxx increases risk of heart attacks.

By then, an estimated 105 million people had taken the drug worldwide.

FDA scientists estimate Vioxx caused between 88,000 and 140,000 heart attacks in US alone.

It is difficult to get a man to understand something when his salary depends upon his not understanding it.

- Upton Sinclair, 1936
What Can Be Done?

- Require full disclosure of all health and safety data
- Require full disclosure of sponsor involvement in and control of studies to regulatory agencies
What else?

- Eliminate Conflicts of Interest: “Managing” Conflicts is Not Enough
  - ban employees of product defense firms from science advisory committees

- Promote institutional structures that protect research independence, integrity and transparency
For More Information

- The Project on Scientific Knowledge and Public Policy:
  www.DefendingScience.org

- The Pump Handle Blog:
  http://thepumphandle.wordpress.com