If the science is irrefutable, attack the scientist

Tobacco’s defenders have explained that smoking does not cause lung cancer; rather, smoking is associated with lung cancer because individuals who inherit a genetic tendency to develop lung cancer also inherit a genetic craving for tobacco. Having nearly dealt with the “cancer controversy” it is time for the tobacco industry to help us understand the quickly mounting evidence that cigarette advertising promotes smoking among children.

The study by Huang et al in this issue is the fourth to document that the RJ Reynolds Tobacco Company’s Camel cartoon advertisements are astoundingly effective in reaching children.1 While cigarette manufacturers conduct comparative testing of advertisements on teenagers,2 Huang’s team has done so in the interest of public health. They found Camel cartoon advertisements were more popular than all others. This popularity helps explain why Camel advertisements are far more effective at influencing children than adults.3

Evidence indicates that children are adversely influenced by efforts to promote tobacco. The tobacco industry exposes children to such a barrage of cigarette advertisements that, by the age of 6, children are able to match identity profiles with the abstract imagery associated with various cigarette brands.4,5 The favourable and often unrealistic images children hold of smoking derive from cigarette advertising.6,7 Also apparent is a dose–response relation, with those children who are most heavily exposed to cigarette advertising having the most favourable attitudes toward smoking and the greatest likelihood of using tobacco.4,7,10

Of course the tobacco industry denies that their multibillion dollar efforts to promote tobacco target children.11 It offers imaginative explanations for the scientific facts. The reason adolescent smoking correlates so well with exposure to advertising is that children notice the advertisements after they start smoking. The reason that Marlboro cigarettes have been the overwhelming favourite among American teenagers is not because it is the most heavily advertised brand, or because of the cowboy theme: it is because Marlboro cigarettes are the most popular cigarette among adults, and teenagers copy their elders. Finally, the positive images that children get from cigarette advertising are not the cause of their smoking but rather the result: children who smoke study cigarette advertisements in search of a rationalisation for their irrational behaviour. Hence they come to believe, only after they have started, that smoking will make them look tough, cool, or thin.

It appears to be time once again to stir the creative juices since a flurry of new studies have demolished these arguments.

Fischer et al have shown that by the age of 3 years children are able to match the Camel cartoon logo with a picture of a cigarette, proving that children’s familiarity with cigarette advertising precedes their smoking by many years and is not a result of it.12

Several studies now show that adult example cannot account for brand selection among children. Three published surveys have documented that Camel’s share of the underage market rose from 0.5% before the introduction of the Camel cartoon advertisements in 1988 to between 21.7% and 32.8% in 1990 and 1991.13,14 It is clear that cartoon advertising, and not adult example, changed the behaviour of teenage smokers since it is estimated that Camel’s share of the adult market remained at 3–4% during these years.15

The study by Huang et al makes it clear that Marlboro’s longstanding popularity among teens is related to the appeal of its advertising. While white teenagers found the Marlboro cowboy theme to be appealing, black teenagers found it to be unappealing. This is reflected in a 1989 survey showing that while 71% of the white teenage smokers preferred Marlboro, only 9% of the black teenagers did so.14 Further evidence of the effects of advertising on brand selection by teenagers is provided by Pierce et al, whose study showed that brand preference patterns for both Marlboro and Camel indicate that teenagers smoke the brands they perceive to be the most advertised, regardless of adult brand preferences.15

Finally it has been established that favourable attitudes towards smoking precede rather than follow the initiation of smoking. Non-smoking children who believe that smoking will make them more attractive were eight times more likely to express an intention to smoke in the next year.9 Interestingly, Pierce’s group found the highest awareness of the Camel cartoon advertisements to be among children who had never smoked but who were contemplating it.13

Thus it is now clear that children thoroughly absorb the message of tobacco advertisements long before they are capable of lighting a cigarette. Tobacco advertising contributes to the development of unrealistic favourable attitudes towards smoking among non-smoking children, and these attitudes in turn lead to the onset of smoking. Once children have been induced to smoke, their behaviour is further moulded with regard to brand selection. Once again, science confirms the obvious.

The RJ Reynolds Tobacco Company is exploring a novel approach to dealing with the scientific studies incriminating their cartoon Camel. They have accused the investigators of conducting fraudulent research, of creating data, of fraudulently manipulating data, and of suppressing data that were not supportive of their theories.16-19 When asked why they had subpoenaed the
names and addresses of the children involved as confidential research subjects, a company spokesperson cited examples of fraudulent studies and implied that they had to confirm that the subjects had actually participated in the studies. 20

Although RJ Reynolds was unable to obtain the names of the research subjects, it did obtain my pilot study data. Despite my sworn testimony as to the limitations of this tiny data set, RJ Reynolds has launched its accusations of fraud based on a clear misrepresentation of my work. Previously undisclosed data I presented to RJ Reynolds in a deposition were reported in an editorial in the Washington Times several days later, 21 presumably passed to the paper by the company. Readers should recognize RJ Reynolds' actions as just the latest twist in the industry's longstanding strategy of creating "controversies" where none exists in order to postpone meaningful regulation of its activities.

There is no excuse for delay. The scientific evidence supports a complete ban on the advertising and promotion of tobacco in the interests of protecting children.

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15 PM keeps cig lead. Advertising Age 1990 Dec 3: 56.
16 RJ Reynolds Tobacco Company memo to all field sales personnel, 18 August 1992.
17 RJ Reynolds document: "Key findings from Dr DiFranza's discovery documents and subsequent interviews with the media." Undated.