Soc. Sci. & Med., Vol. 12, pp. 31 to 37. Pergamon Press 1978. Printed in Great Britain.

NOTES FROM THE CANCER UNDERGROUND: PARTICIPATION IN THE LAETRILE MOVEMENT*

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Abstract—The most active component of the "cancer underground" is the Laetrile movement which has developed around a controversial and officially condemned anti-cancer drug. In this paper we examine the social context of the Laetrile movement and report findings from questionnaires completed by 252 participants at a Cancer Control Society symposium where national leaders of the Laetrile movement spoke. The Laetrile movement is characterized by a unique ideology: a blend of belief in the overriding importance of nutrition, opposition to orthodox medicine, officially denounced health beliefs, and right-wing politics. Our data show that people who participate in the Laetrile movement have attitude and behaviors consistent with that ideology: they believed in the efficacy of vitamins in preventing and treating disease, negatively evaluated M.D.s, regularly shopped at health food stores, and disapproved of the fluoridation of public water supplies. We speculate that the Laetrile movement will become increasingly active and popular unless and until orthodox medicine can effectively control and treat cancer.

For over 20 years a battle has been waged in the United States between those who believe that Laetrile controls cancer and those who claim that it is a hoax. Recently this battle has intensified. In the past year 19 people were indicted for conspiracy to smuggle Laetrile; several cancer patients won court decisions over the right to import Laetrile; a U.S. Congressman, who had practiced medicine before his election and used Laetrile for cancer treatment, was sued by the widow of a deceased cancer patient; and several states including Alaska, Indiana, Washington and Florida legalized the use of Laetrile in cancer treatment. At present nearly a dozen other states are considering such legislation. Recently the National Cancer Institute, reversing its position, announced that it is considering a formal test of Laetrile on humans. We have previously studied the nature of the scientific controversy surrounding Laetrile [1]. In this paper we explore participation in the Laetrile movement and construct multiple-regression models for both participation in pro-Laetrile organizations and use of Laetrile.

THE LAETRILE CONTROVERSY

In opposition to orthodox medicine, an extensive and varied "cancer underground" has developed [2]. The Laetrile movement is currently the most active and widespread element in that underground. Also known as amygdalin and Vitamin B-17 [3], Laetrile may be taken by injection, tablet, or by simply eating raw foods such as apricot kernels where it is found in high concentration. According to the *Physician's Handbook of Vitamin B-17 Therapy* [4], cancer may be effectively controlled by taking 3 g of Laetrile per day. Within 3 weeks, Laetrile, complemented by a megavitamin diet, is purported to control or eliminate cancer. Approximately 10 raw apricot kernels per day are said to prevent cancer.

Such claims have not gone unchallenged. Helene Brown, an officer of the California division of the American Cancer Society, is quoted [5] as saying "Laetrile is goddamned quackery. It's also a big business." Robert Eyerly [6], chairman of the Committee on Unproven Methods of Cancer Treatment of the American Cancer Society, has stated that "the use of Laetrile rather than known, effective cancer treatments is the cruelest of all frauds"; and according to the American Medical Association [7], "Many American cancer patients, driven by fear, have become victims of the Laetrile hoax". The most recent and complete animal tests have failed to establish the efficacy of amygdalin as an anti-cancer agent [8–10].

Norman [11] has estimated that 20,000 Americans are regularly using Laetrile. While this figure is frequently cited, the basis for it seems elusive. The core organizations in the Laetrile movement—the Cancer Control Society, the Committee for Freedom of Choice in Cancer Therapy, and the International Association of Cancer Victims and Friends—claim a combined membership of over 40,000. Peripheral organizations in the Laetrile movement have still larger memberships. They include a number of health and nutrition oriented organizations that occasionally promote Laetrile in their meetings or publications. Perhaps the most interesting of these peripheral organizations is the John Birch Society. *American Opinion*, published by John Birch Society founder Robert Welch, has attacked government attempts to prevent the use of Laetrile in cancer treatment [12]. John Birch Society bookstores generally sell pro-Laetrile pamphlets and books and as the *New York Times* [13] recently reported, virtually all of the officers of The Committee for Freedom of Choice in Cancer Therapy are Birch members. Michael Culbert is quoted by Holles [14] as saying "There are a lot of us Birchers in the Laetrile movement because the

* This is a revised version of a paper presented at the 1976 annual convention of the Association of Voluntary Action Scholars. We would like to thank Steven Severin, Beti Thompson, Yvonne Vissing, Gary Tibble, Roger Nemeth, and Sandra Van Antwerp for their assistance in this research. Also, we wish to thank Stanley S. Robin for his comments on an earlier draft of this paper.

John Birch Society has the guts to fight for what it believes in."

The present literature on the Laetrile movement is largely confined to accounts by journalists who have typically focused on description of the leaders of the movement along with an occasional interview of a cancer patient who is taking Laetrile. The picture which emerges from this literature is that leaders of the Laetrile movement are a fascinating amalgam of health food advocates, opponents of traditional medicine, religious fundamentalists, and political ultraconservatives. It should be stressed, however, that some of the leaders of the movement do have strong establishment credentials. For example, one of the leading advocates of Laetrile is Dr. Dean Burk, retired head of the Cytochemistry Section of the National Cancer Institute.

Almost nothing has been reported about the characteristics of persons taking Laetrile other than the charge that they are gullible individuals who are falling for a quack cancer cure. Thus we do not know if they share the political, religious, or medical attitudes attributed to leaders of the Laetrile movement. The present research was conducted in order to gain some understanding of the characteristics of participants in the movement.

DATA

The data for this paper were obtained from questionnaires administered at a "Cancer Control Symposium" held in Kalamazoo, Michigan on 4 April, 1976, under the sponsorship of the Cancer Control Society. This symposium was advertised throughout southwest Michigan and attracted approximately 400–450 participants who purchased the $4 tickets. The program, which was held in a university auditorium, included a showing of the filmstrip "*World Without Cancer*" and several speakers including two national leaders of the Laetrile movement, Dr. John Richardson and G. Edward Griffin.

The content of the program ranged wide and included not only the history, theory and practice of Laetrile but also persistent and consistent criticism of orthodox medicine. One of the speakers, a physician from Indiana, stressed the fact that local physicians had refused to attend a professional symposium on Laetrile which had been scheduled for the morning. Some of the speakers were blatantly political, making references to the "federal boot" and attempting to portray a world-wide conspiracy against Laetrile. Perhaps to heighten notions of conspiracy, underscore a sense of persecution by the "establishment", and to generate further interest in the meeting, one of the speakers asked any federal agents in the audience to stand and identify themselves.

Throughout the program the audience seemed attentive, even demonstrative. There was wide participation in the question and answer period; after speakers left the podium, crowds generally gathered informally for further questioning. Political advertisements and campaign buttons, particularly for George Wallace (the symposium occurred one month before the presidential primary in Michigan), were prominent. "Patriotic" motifs and buttons with right-wing political slogans were also in evidence. Pro-Laetrile literature was available in the lobby, including a book of Laetrile-rich recipes with the intriguing title *The Little Cyanide Cookbook* [15].

After the speakers had finished and during the question and answer period, the symposium moderator requested the cooperation of the audience in completing the questionnaires. By this time the symposium had been running for over 4 hr and many members of the audience had left. We have no data on people who left early; they may have been less interested or involved in the movement or they may have become tired or had other commitments. Of those remaining, very few refused to complete the questionnaire; and 252 useable questionnaires were obtained.

It should be emphasized that these data must be viewed as exploratory. Clearly we do not have a sample; the respondents were a self-selected group. However, given the absence of data about participants in the Laetrile movement and the difficulty in gaining access to people who often fear prosecution or harassment, these data can contribute toward an understanding of participants.

FINDINGS

Almost all of the participants at this meeting were white. The audience was mostly female (60%) and middle-aged (the mean age was 44 years old). The group was highly educated: 61% has some college experience and 15% had done post-graduate collegiate work. On the other hand, the group was characterized by lower occupational prestige (74% scored between 1 and 50 on the 1960 Hodge–Siegel–Rossi scale). Finally, although the symposium was held in a metropolitan area, the audience was predominantly rural (see Appendix).

The act of attending a 4-hr Cancer Control Symposium was, in itself, an expression of curiosity and probable interest in the movement. One third of our respondents reported that they "belong to or attend meetings of a group interested in Laetrile". An additional 58% had not but were interested in future participation. Only 9% expressed no further interest in the movement. In a random sample of the United States population, it is likely that few people would be found who regularly took Laetrile. But 43% of our respondents answered "yes" to the question: "Do you regularly take Vitamin B-17 (apricot kernels, tablets, etc.) as part of a diet to prevent cancer?"

Table 1 presents some zero-order correlates of our two dependent variables: participation or membership in pro-Laetrile organizations which we will refer to as organizational participation and the use of Laetrile. We had expected that the saliency of cancer might be a precipitating factor for joining the Laetrile movement. But our two epidemiological measures of cancer saliency (incidence and death in the respondent's immediate family) were poor predictors of either dependent variable. Our attitudinal indicator of saliency, "fear of cancer", showed a moderate negative correlation with organizational participation and use. However, the causality is probably reversed: presumably people who attend meetings or who take Vitamin B-17 feel protected from cancer and thus fear it less.

Table 1. Zero order correlations of organizational participation and use of Laetrile by salience of cancer, personal health practices, effectiveness of health professionals and evaluation of nutrition

Independent variables	Organizational participation	Use of Laetrile
Salience of cancer		
Incidence in immediate family	0.03	0.08
Death in immediate family	0.13	0.02
Fear of cancer	−0.22	−0.18
Personal health practices		
State of own health	0.13	0.00
Smoke cigarettes	−0.17	−0.13
Effectiveness of health professionals		
Importance of regular check-ups	−0.10	−0.14
M.D.s prevent disease	−0.12	−0.13
M.D.s treat disease	−0.12	−0.07
Chiropractors prevent disease	0.09	0.11
Chiropractors treat disease	0.13	0.19
Evaluation of nutrition		
Take vitamins regularly	0.18	0.31
Vitamins prevent disease	0.21	0.23
Vitamins treat disease	0.28	0.32
Regularly shop at health food stores	0.23	0.36
Disapproval of fluoridation	0.42	0.32

We suspected that people might be attracted to the Laetrile movement if their own health were failing. The data show that this is probably not true: the state of the respondent's perceived health showed a low correlation with organizational participation and none at all with Laetrile use. Cigarette smoking, so prominently linked with cancer, was negatively correlated with both dependent variables, perhaps suggesting a consistent set of health practices.

In order to be interested in an underground cancer organization, respondents could be expected to have deviant medical views. We therefore expected organizational participation and use of Laetrile to be related to negative evaluation of the efficacy of orthodox medicine. The data show this to be true; the correlations offered for evidence are low to moderate, but all are in the predicted direction. The regular medical check-up is the cornerstone of orthodox prophylaxis. Yet the data show a tendency for people involved in the Laetrile movement to reject, or at least to minimize, its importance. Medical doctors themselves fare no better: people interested in Laetrile are likely to give M.D.s a negative evaluation for their ability to prevent or treat disease. Chiropractic medicine, on the other hand, is officially condemned by orthodox medicine. As expected, our respondents hold more positive views of the effectiveness of chiropractors than they do toward M.D.s.

Proponents of Laetrile theorize that cancer is a vitamin deficiency disease. Thus we expected that an interest in food supplements would be correlated with Laetrile use. The data support this expectation: all correlations are in the expected direction and moderate. Thus people who are active in the Laetrile movement are likely to take vitamins regularly and to believe that they are effective in the prevention and treatment of disease. Respondents in the Laetrile movement are also likely to shop regularly at health food stores. This is expected since the health food store is a social, economic, and ideological focal point for the health counterculture. Finally we found that opposition to fluoridation was coupled to Laetrile use. Opposition to fluoridation has been a favorite cause of both health and right-wing movements. The sizeable correlation is consistent with our notion that conservative politics and/or a concern about food additives are strong factors throughout the Laetrile movement.

Expanding our analysis from zero-order correlations, we next construct multiple regression models to show why people become involved in the Laetrile movement and who actually uses Laetrile. First we examine the predictive power of demographic, contextual, and attitudinal variables; then we build combined models to isolate the best predictor variables [16].

Table 2 presents a series of step-wise multiple regressions which were used to determine the best predictors of participation in pro-Laetrile organizations. Only one demographic variable, "age", explained an appreciable amount of variation of the dependent variable. Among our respondents, older people, rather than younger people, were more likely to participate in Laetrile organizations. After age explained 5% of the variance in participation, no other demographic variable added as much as an additional 1%, our statistical cut-off point.

Contextual variables were stronger predictors. The best contextual predictor of participation was: "When did you first hear about Laetrile?" The longer respondents had known about the drug, the greater the likelihood ($r = 0.27$) of their organizational participation. After "length of awareness", the next best contextual predictor was "regularly shop at health food stores", which explained an additional 3% of the variance in participation. Finally the occurrence of a cancer death in the immediate family added a final 2% to the mode. In sum, contextual variables explained 13% of the variation in organizational participation.

Attitudinal variables were the best group of predic-

Table 2. Stepwise multiple regression: demographic, contextual, and attitudinal variables as predictors of organizational participation

Independent variables	R	R^2	R^2 change
Demographic			
Age	0.22	0.05	—
Contextual			
Length of awareness of Laetrile	0.27	0.08	—
Regularly shop at health food stores	0.34	0.11	0.03
Cancer death in family	0.36	0.13	0.02
Attitudinal			
Disapproval of fluoridation	0.42	0.18	—
Efficacy of Laetrile	0.50	0.25	0.07
Vitamins treat disease	0.51	0.26	0.01
Combined model			
Disapproval of fluoridation	0.42	0.18	—
Efficacy of Laetrile	0.50	0.25	0.07
Age	0.52	0.27	0.02
Vitamins treat disease	0.53	0.28	0.01

tors. "Disapproval of fluoridation" explained 18% of the variance in participation and was thus the best predictor of any independent variable. That finding emphasizes the political nature of the participation act and will be elaborated on in the discussion. "Belief in the efficacy of Laetrile" added an additional 7% of explained variance followed by "Belief that vitamins are effective in treating disease" which added a final 1%. In all, attitudinal variables accounted for 26% of the variance in organizational participation.

In sum, demographic variables explained only 5% of the variance in organizational participation, whereas contextual and attitudinal variables accounted respectively for 13 and 26% of the variation in the dependent variable. Combining variables from all three categories, we find that the two best attitudinal variables, "disapproval of fluoridation: and "belief in the efficacy of Laetrile", are in the summary model and together explain 25% of the variance in organizational participation. "Age" enters the model next, explaining an additional 2% of the variance, followed by a third attitudinal variable, "belief that vitamins treat disease", which adds a final 1%. In all, attitudinal variables dominate a combined model which accounts for 28% of the variation in participation in pro-Laetrile organizations.

A series of step-wise multiple regressions (see Table 3) were also performed with regular use of Laetrile as the dependent variable. As with "organizational participation", age is the only demographic variables that explains more than 1% of the variance in Laetrile use; in our sample older people are slightly more likely than younger people to take Laetrile.

The contextual variables proved to be stronger predictors. The best predictor of Vitamin B17 usage was membership or regular attendance at meetings of pro-Laetrile groups, which explained 21% of the variance of the dependent variable. Cross-tabulation of this variable with B17 usage indicated a strong linear relationship. Three quarters (76.6%) of those who answered yes to the question "Do you belong to or attend meetings of a group interested in Laetrile?" regularly took some form of B17; nearly a third (29.2%) of those who answered "No, but I am interested in belonging or attending" to the above question took some form of Laetrile; and only 14.3% of those who simply answered no to this question took B_{17}. The question: "Do you regularly shop at a health

Table 3. Stepwise multiple regression: demographic, contextual and attitudinal variables as predictors of use of Laetrile

Independent variables	R	R^2	R^2 change
Demographic			
Age	0.17	0.03	—
Contextual			
Organizational participation	0.45	0.21	—
Regularly shop at health food stores	0.52	0.27	0.06
Take vitamins regularly	0.54	0.29	0.02
Length of awareness of Laetrile	0.55	0.30	0.01
Attitudinal			
Vitamins treat disease	0.32	0.11	—
Disapproval of fluoridation	0.40	0.16	0.05
Efficacy of Laetrile	0.42	0.18	0.02
Combined Model			
Organizational participation	0.45	0.21	—
Regularly shop at health food stores	0.52	0.27	0.06
Take vitamins regularly	0.54	0.29	0.02
Vitamins treat disease	0.55	0.31	0.02

food store?" added an additional 7% to the model. The regular use of vitamins added an additional 2% to the model, and a final 1% was added by the length of time a person was aware of Laetrile.

The most effective attitudinal variable was: "Do you thank that vitamins are effective in treating disease?" which explained 11% of the variance in amygdalin use. Disapproval of fluoridation added an additional 5%, while the question: "Do you believe that Laetrile controls cancer?" adds a final 2% to the regression model.

In sum, demographic variables explain only 3% of the variance in amygdalin use, whereas contextual and attitudinal variables accounted respectively for 30 and 18% of the variation in the dependent variable. When the variables from all three categories are combined, the best predictors of Laetrile use are three contextual variables (organizational participation, regular patronage of health food stores, and regular consumption of vitamins), followed by the first attitudinal variable (belief in the effectiveness of vitamins in the treatment of disease). The total model accounts for 31% of the variation in Laetrile usage.

DISCUSSION

What are the social factors which influence people to participate in the Laetrile movement and perhaps ultimately take Vitamin B_{17}? In the broadest sense the goals of the Laetrile movement are consistent with, and strongly reinforced by, dominant American values. Long life and good health are preeminent values of the Judeo-Christian tradition. The battle to ward off disease and debilitation is constant, energetic and life-long. Within Western medicine, specialists in age-specific and disease-specific medicine lead the battle against illness. Americans are so dependent on professionals for their good health, according to Illich [17], that they have "medicalized" their lives. Not only clinical problems, but social and cultural as well, are interpreted within the medical model, a phenomena which Illich terms "cultural and social iatrogenesis".

Within recent years, however, an alternate ideology of self-help medicine has become popular. Largely led by people without formal medical training, the new creed emphasizes the maintenance of health rather than the treatment of disease. The new popularity of health and organic food attests to the vigor and broad popular base of the movement. People are told that proper foods, and particularly vitamins, minerals and herbs will maintain good health and decrease their dependence on orthodox medicine. The health efficacy of various vitamins is emphasized, the most prominent and publicized example being Linus Pauling's [18] claim that Vitamin C is an effective substance in the prevention and treatment of the common cold. More recently Pauling has advocated the use of Vitamin C in dealing with other diseases including heart disease and cancer. Pauling has, in fact, created and organized the new health discipline of orthomolecular medicine, which he defines [19] as "the preservation of good health and the treatment of disease by varying the concentrations in the human body of substances that are normally present in the body and are required for health". Various researchers have recently claimed success with orthomolecular strategies, and articles in the new *Journal of Orthomolecular Medicine* purport that schizophrenia can be controlled and reversed by dietary supplements.

Although it may not be historically or professionally related to the broader health food or organic phenomenon, the Laetrile movement is consonant with its goals. Proponents of Vitamin B_{17} explicitly reject the theoretical and clinical claims of orthodox medicine, and alternately espouse their own view of health and cancer [20]. Most advocates of Laetrile theorize that cancer is, quite simply, a vitamin deficiency disease, analogous to scurvy or rickets. In public speeches Dr. John Richardson, a leading Laetrile proponent, now calls cancer "fulminating avitaminosis". According to this theory, cancer is a degenerative disease which can be treated specifically by replacement of the missing nutritional factor.

Another factor which may influence people to participate in the Laetrile movement is the unique nature of cancer. Deaths from cancer are at an all-time high and increasing rapidly [21]. Cancer is now the second leading cause of death in the United States, and one in every four persons contracts the disease. Once cancer is contracted, an individual's long-range health prospects are poor. When medical researchers speak of curing cancer, they do not mean the complete remission and permanant absence of symptomatology; rather they measure the five-year survival rate. Even so, the current five-year survival rate for all forms of cancer is only 40%, a figure that has shown relatively little improvement in the last five years [22].

With these survival rates, and the long and debilitating course of the disease, cancer may be a disease with a unique social as well as clinical symptomatology. The particularly devastating characteristics of cancer have prompted a number of researches into socio-psychological patterns of help-seeking for this disease. Goldsen *et al.* [23] suggested that patterns of help-seeking for cancer are the same as for other diseases. Other researchers, [24, 25], however, have challenged the notion of non-differentiation of response: cancer appears to evoke a greater amount of fear than other diseases and, thus, a different pattern of response. Bard [26], in a study of patients who had made medical or surgical recoveries from cancer, found that severe psychological impairment or disability often resulted. The great public concern with cancer has prompted a prominent physician [27], to label this phenomenon as cancerophobia and to describe it as "a disease as serious to society as cancer is to the individual—and morally more devastating".

Try as they might, Americans cannot avoid experience with cancer. Every adult inevitably watches people, even from his or her immediate family, die of cancer. The initial appeal of the Laetrile movement may come out of this context. Those terrified of cancer are provided with a certain means of preventing it. Those dying of cancer are promised a reprieve through a simple and painless treatment without the expense and side effects of "atomic cocktails", chemotherapy, and radical surgery.

There are literally hundreds of testimonials of mira-

culous cures. It is purported that terminal cancer patients, beyond the reach of modern medicine, take Laetrile and recover, or at least delay death and make it less painful [28–30]. Such statements must have a powerful appeal to the cancerophobic citizen or to the patient with cancer, and may be the specific stimulus that triggers initial interest in the Laetrile movement.

Given the nature of cancer and the reactions it evokes, it is not surprising that the Laetrile movement has provided a comprehensive *ideology* to explain the nature of cancer. Such an ideology is necessary, according to Geertz [31], "...to render otherwise incomprehensible situations meaningful, to so construe them as to make it possible to act purposely within them". Or, as John Marx [32] has written, ideologies represent shared cultural meanings that enable purposeful social action in the fact of uncertain or incomplete command of reality. The less a problem is understood empirically, the greater is the likelihood of an ideological interpretation.

The Laetrile movement is characterized by a unique ideology: a blend of belief in the overriding importance of nutrition, opposition to orthodox medicine, acceptance of officially condemned health beliefs, and right-wing politics. Ultra-conservative politics has been the trademark of the leadership of the Laetrile movement. John Richardson, the first physician to be prosecuted for treating cancer patients with Laetrile, was an active member of the John Birch Society. Today the Birch Society often distributes pro-Laetrile literature and has been deeply involved in the Committee for Freedom of Choice in Cancer Therapy. The Committee claims that the U.S. Government, along with multi-national corporations, is trying to suppress and sabotage the Laetrile movement for financial reasons. According to Stewart Jones [33], writing about the reaction of orthodox medicine to the Laetrile movement:

> Scientific rationale and clinical results are not factors influencing the acceptance of a promising prophylaxis and control of cancer except in an inverse way. The more promising such a method appears, the more strenuously do the beneficiaries of the entrenched cancer industry and their agents rationalize, malign, exaggerate and otherwise obfuscate against the facts about the proposed method.

Thus, the Laetrile case becomes one of many attempts, according to the Committee, to stamp out personal freedom.

Conspiratorial views may have important social functions in both right-wing [34] and left-wing [35] political groups. The Laetrile movement glories in conspiracy. John Richardson, speaking at the Cancer Control Symposium from which these data were drawn, addressed the audience as "fellow members of the vitamin-nutrition underground". Richardson's self-proclaimed deviance (he facetiously referred to himself as a quack), coupled with his clashes with the law, project an image of dangerous, but heroic, activity.

It is to this movement—ultraconservative, conspiratorial and officially condemned—that thousands of Americans are currently attracted. Our data show that three constellations of variables are correlated with participation in the movement and regular prophylactic use of Laetrile: (1) rejection of orthodox medicine, (2) involvement in the health food counter-culture, and (3) the holding of conspiratorial world views. These three factors, rather than having a causal sequence, are probably interactive and iterative in promoting activity in the Laetrile movement.

The prestige of American physicians has been, and continues to be, extremely high. They are generally viewed as having vast knowledge not only of medical issues, but para-medical and social issues as well. Their prestige clearly transcends their occupation and makes them potential community leaders—in short: people to be listened to. Yet our data show that participants in the Laetrile movement have probably rejected, or at least have doubts, about the wisdom and efficacy of orthodox medicine. Thus people in the Laetrile movement are likely to minimize the value of regular medical checkups, officially recommended by the American Medical Association, and a key part of orthodox prophylaxis.

Furthermore, people interested in Laetrile are likely to doubt the ability of medical doctors to prevent or treat disease. Chiropractic medicine—officially condemned by orthodox medical organizations—is viewed in a more positive light by participants in the Laetrile movement. They are likely to credit chiropractors with skill at preventing and treating diseases.

Orthodox medicine has taken no strong role in shaping the American diet. There are lip-service appeals to avoid junk foods and recommendations concerning balanced diets. But these concerns are generally peripheral to the physicians' primary work of treating disease. More germane to the Laetrile movement, the medical orthodoxy has been hostile to the organic or health food movement.

It seems clear that health food stores are not merely another place to purchase food. Instead, they are counter-culture establishments where underground literature is obtained, "health" events are publicized, and health advice is obtained from the staff. The health food store is undoubtedly one place where people learn about the Laetrile movement. Certainly books advocating Laetrile are on sale at most health food stores, and our data show a strong correlation between shopping at health food stores and participating in the Laetrile movement.

The Laetrile advocate rejects orthodox medicine and supplants it with the trophoblastic theory of cancer [36] and a vitamin-nutrition methodology—all part of, or at least consistent with, the broader health food movement. What remains is to supply an ideology which will explain the contempt and obfuscation of the political amd medical community. Ultraconservative ideology, particularly the John Birch version, may supply the missing link. Therein, the Laetrile movement is suppressed, even persecuted, by an international conspiracy. One by one, it is purported, our freedoms are taken away from us.

In summary, we find the participant in the Laetrile movement adhering to a well developed and consistent ideology: conspirational, health-food oriented and specifically rejecting orthodox medicine. If it could be shown that Laetrile does, in fact, control cancer, the implications of that decision—political, economic, and ideological as well as medical—would be far-reaching and profound. Regardless of the evi-

dence, though, the Laetrile movement will not self-destruct or disappear in the near future. Rather we suspect that the movement, and indeed the entire anti-cancer underground, will become increasingly active and popular until orthodox medicine can legitimately claim far greater success in treating or controlling cancer.

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APPENDIX: SOCIAL CHARACTERISTICS OF SYMPOSIUM PARTICIPANTS

Sex	%	*N*
Male	39.8	97
Female	60.2	147
Total	100.0	244
Age		
⩽19	3.3	8
20–29	21.8	52
30–39	15.9	38
40–49	15.1	36
50–59	28.0	67
60–69	13.0	31
⩾70	2.9	7
Total	100.0	239
Education		
Less than high school graduate	12.7	30
High school graduate	25.7	61
Some college	30.0	71
College graduate	16.0	38
Post graduate work	15.6	37
Total	100.0	237
Residence		
Rural	40.3	96
Small city (<50,000)	24.8	59
Medium city (50,000–250,000)	22.3	53
Large city suburb	10.5	25
Large city (>250,000)	2.1	5
Total	100.0	238