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Diet/Cancer Product Ad Seminar Consensus: It's Okay When Limited To Categories Of Foods

Can dietary changes make an impact on cancer incidence? Millions of Americans think so and are acting accordingly, and NCI is committing hundreds of million of dollars in various diet related studies. NCI also is allowing its name to be used in product advertising which suggests certain food groups and types of diets as possibly reducing cancer

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In Brief

New Arizona Cancer Center Building Dedicated; Free Copies of FY 1988 Bypass Budget Available

ARIZONA CANCER Center's new, 81,000 square foot building was dedicated Oct. 26. The building, which houses administrative and outreach offices, medical and radiation oncology research labs and a multidisciplinary oncology clinic, was constructed with $1.72 million in NCI construction grants, $10.7 million in donations and $3 million in bonded indebtedness which will be paid off with donations. It is connected directly with the Univ. of Arizona College of Medicine and Medical Center. . . . **COPIES** of NCI's FY 1988 Bypass Budget, which presents a superb justification for the $1.7 billion it requests along with details of how that money will be used in helping meet the year 2000 goals, are available free. Write to NCI, Office of Cancer Communications, Bldg 31 Rm 10A18, Bethesda, MD 20892. . . . **THREE YEAR** smoking cessation project, funded by a $3.5 million grant, has been started by the Illinois Cancer Council. It is four cooperative research projects using different methods to study selected target groups. . . . **GERALD MURPHY**, professor of urologic oncology at SUNY (Buffalo) and former national president of the American Cancer Society, has been named a life member of the New York State Div. of ACS. . . . **GRANT TAYLOR**, professor emeritus of pediatrics at M.D. Anderson Hospital & Tumor Institute, has received the Sidney Kaliski Award from the Texas Pediatric Society. . . . **NATIONAL LIBRARY** of Medicine will celebrate the 150th year of its founding Nov. 18. NLM, which operates the extremely useful computerized data base, MEDLARS, includes more than 3.5 million books, journals, photographs, technical reports and audiovisual materials. It was established in 1836 in an office near the White House, is now housed in 432,000 square feet of buildings on the NIH campus.

Product Avertising Okay If Limited To Categories, Seminar Concludes

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risk. That advertising, for Kellogg's All Bran, has resulted in a big increase in sales of the product, as well as increases for high fiber cereal produced by other companies. All Bran sales went up 40 percent in the fourth quarter of 1984, right after the program began, and NCI has received over 60,000 calls in response to the Kellog message.

Does the scientific information available on diet and nutrition justify the claims being made for high fiber foods, or any other groups of food and nutrients? A symposium held in Washington recently, sponsored by the American Institute for Cancer Research, attempted to address that question. After a day and a half of discussions by some of the country's leading scientists in the field, Conference Cochairman Colin Campbell said, "There seems to be a reasonable consensus opposing specific product advertising, or at least, where one product is advertised, (the message) should emphasize that that product is only one of many" (offering a specific health benefit).

Campbell is professor of nutritional biochemistry at Cornell Univ. and served on the National Academy of Sciences panel on Diet, Nutrition and Cancer which produced the 1982 report recommending a limit of dietary fat to 30% of caloric intake; an emphasis on consumption of fruits, vegetables and whole grain cereals; a limit on consumption of salt cured and smoked foods; avoiding foods contaminated with chemical carcinogens and those with mutagens when they can be identified; and alcoholic beverages in moderate quantity only.

Eat More Plants

Campbell also is senior science advisor for AICR and is chairman of its grant review panel.

Campbell noted in his opening remarks that the NAS recommendations, and those later by the American Cancer Society and others, "all encourage an increased consumption of plant products. There is consistency between diets recommending avoidance of the various chronic diseases, i.e, there is no obvious evidence of risk trade offs between diseases. And although there are generic recommendations on broad food groups, a larger number of the recomendations are directed to very specific kinds of information, both on nutrient identity and on nutrient quantity.

"My question is this," Campbell continued. "If science policy makers are willing to be so definitive by naming specific nutrients and foods and identifying very specific levels of intake that are intended to prevent adverse health responses, then how can they complain when marketing people and consumers want to do the same? In effect, it is this specificity of information which has been so misleading in the marketplace. Quite frankly, it makes little or no difference that words of caution were introduced into the text of the various reports to the effect that nutrients must be consumed in the form of food or that the specific levels of intake are only statistical probabilities. This qualifying information is not put on food lables. And to my knowledge, nor does it become part of regulatory language. . .

"One could question the specificity of quantitating daily cholesterol consumption, not that I disagree with the recommendation for a low cholesterol diet, but rather that such specific numbers suggest too much certainty. Why are cabbages highlighted as the first guideline of the American Cancer Society? Are cabbages really to be preferred over spinach or carrots or beans or potatoes? In those same ACS guidelines, why are vitamins A and C highlighted as if they possessed magic? Does the added word of caution about the potential toxicity of 'high dose' vitamin A supplements mean that low dose supplements are okay? On the various guidelines on fat, do people believe that, if we get down to 29% dietary fat, we are better off than when we are at 31% How can the American Heart Assn. decide that 8% saturated fat, by calories, in the diet is better than its previously published 10%? Surely, the scientific evidence does not make that distinction. Wouldn't a generic recommendation to lower total fat intake accomplish about the same thing, thus leaving the scientific evidence less abused?

". . . When we critically examine the evidence for single nutrient and single food effects on human cancer risk," Campbell continued, "we find that there is simply no acceptable evidence to support such claims. In contrast, a very strong case can be made for the generic contribution of a varied plant enriched diet to lower cancer risk. The generic evidence is reliable, the specific is not. That suggests that there are virtually infinite combinations of kinds and amounts of

plant foods associated with lower cancer risk with little or no evidence on which one is better. I doubt than any is. . .

"Even though I am still of the opinion that there is no evidence for single nutrients and single foods. . . I must concede two points. First, we do not yet know that single nutrients and single foods don't work in large heterogenous populations. Thus, testing their efficacy as NCI is presently doing, is a worthwhile exploration, although I would strongly caution about the consequences of an occasional and statistically significant result on the basis of chance alone, either for or against the hypothesis.

"My second concession is this. I am not surprised at the emerging interest to advertise individual foods or substituent fractions thereof to reduce cancer risk, because science policy documents have been driving home that message on specificity for four decades. However, I return to the dilemma. Why continue on with a marketplace practice founded either on no scientific evidence or, at the very least, on the shifting sands of scientific evidence?"

Campbell had two suggestions: "We need to figure out a way to stop including unsupported and definitive biological information in health policy statements. Rarely do we have such irrefutable evidence on single agents, nor should we expect biology to work in such simplistic ways."

Second, "We need a generic set of guidelines based on ample, reliable evidence and generous scientific support. In the case of cancer avoidance as well as avoidance of other chronic degenerative diseases, it could mean two simple recommendations: (a) consume a diet enriched in plant products, minimally cooked and with a minimum of added oils, and (b) balance caloric intake with caloric expenditure. . . These guidelines would do all that is needed to satisfy those who are more enthusiastic for the traditional detail. Cholesterol would be down; fat would be low; vitamin C would be higher; protein would be lower; caloric density would be lower; carotenoids would be higher; and dietary fiber would be higher, among other goodies. How can we wish for more?

"Next, let marketing people claim, if they wish, that their product fits that broad category of disease inhibiting plant food products. Claims for individual foods within that group suggesting a competitive advantage over other plant products within that same group would not be permitted."

Rosalyn Franta, vice president of quality and nutrition for the Kellogg Co., pointed out that the firm was founded by W.K. Kellogg in 1906 because he firmly believed in the health benefits of grain type cereals over the heavy meat and fat laden breakfasts of those times. Kellogg corn flakes was the first of his products which now includes the Kellogg All Bran heavily promoted for its fiber content, with NCI's blessing.

"Many government and public health agencies have already put forward dietary recommendations for Americans," Franta said. "Delivering these dietary recommendations to consumers frequently involves providing product information and public education programs, administered in conjunction with professional and government organizations. Two years ago, Kellogg began a cooperative effort with the National Cancer Institute. Our product, Kellog's All Bran, has been around since 1916 and can be included as an appropriate part of a high fiber, low fat diet. What could be more natural than to consider a joint effort--NCI wanted the American public to put more fiber and less fat into their diet, and of course we would like the American public to select All Bran as one of the food products to help accomplish that change in diet.

"There are two primary messages being communicated by the advertising. The first message is that the National Cancer Institute reports that a high fiber, low fat diet may reduce the risk of some kinds of cancer. This message is backed by solid research at NCI and a broad spectrum of scientists, both in the United States and Canada, as well as overseas.

"The second message is that All Bran is a high fiber cereal and can be included in a high fiber, low fat diet. Additionally, NCI's dietary recommendations are summarized on package back panels (which includes the statement that) other food sources of fiber such as fruits and vegetables can be included as part of a high fiber, low fat diet. The NCI address is also provided for those consumers who would like more information."

Franta contended that this effort by Kellog brings "important dietary information to American consumers. The statements are factual."

Kellog filed a petition with FDA last year proposing guidelines for health messages on product packages: That such statements be

generally recognized as valid by experts; be made only in the context of a diet and refer only to a food that is an appropriate component of that diet; specify the dietary properties or ingredients which make that food an appropriate component of the diet; not be false or misleading."

The symposium included presentations on the vast body of evidence supporting the relationship of diet to cancer incidence.

Roswell Boutwell, professor of oncology at the Univ. of Wisconsin and a member of the National Cancer Advisory Board, discussed data from animal studies. "In the 1940s, we found remarkable correlation between diet and cancer, but most scientists were not listening. We were very frustrated."

Boutwell cited studies which showed animals on high fat diets had significantly higher incidences of cancer, as did animals on high calorie diets. His conclusions:

"It is clear that increased risk of cancer and decreased life span are associated with overeating and obesity, both in experimental animals and in human populations. Excess caloric consumption in the form of either carbohydrate or fat enhances the risk of cancer; normal body weight maintained by moderate restriction of a diet that provides 40 percent of calories in the form of fat does not increase the risk of cancer in experimental animals.

"Caloric restriction, to the degree that obesity is prevented, is probably the most easily adopted and generally effective inhibitor of cancer information that may be safely recommended. In spite of the body of knowledge that has accumulated since 1940, a recommendation for practical application has been overlooked. With the current recognition of the beneficial effects of exercise and control of body weight, the public is likely to be receptive to the fact that an additional benefit of appropriate limitation of total food consumption is a reduced risk of cancer. This point should be strongly emphasized in recommendations to the public."

Elaine Lanza, program director in the Diet & Cancer Branch of NCI's Div. of Cancer Prevention & Control, said that findings from 41 separate epidemiologic studies support the hypothesis that dietary fiber offers protection against colon cancer. More definitive data could be obtained from a well controlled randomized trial, she said, but that could cost over $100 million. An alternative would be to compare progression of colonic polyps in individuals consuming either high or low fiber diets. There are two such studies ongoing now, and NCI is also sponsoring research on the analysis of fiber in foods and the physiochemical effects of fiber in humans.

"While it will take many years to obtain more conclusive data on fiber and colon carcinogenesis," Lanza said, "the current NCI recommendation on dietary fiber appears to be both prudent and moderate. The recommendation to double current intake, which is considered to be approximately 11 grams per day, to a minimum of 20 grams per day with a maximum of 35 grams per day can be easily obtained from eating two to three servings of fruits and vegetables each day, plus substituting some whole grain products for refined bakery products."

Jon Story, professor of nutritional physiology at Purdue Univ., after his presentation on dietary fiber, was asked if there is enough evidence for a marketer of a whole grain product to advertise it as a cancer preventer.

"I'm not sure," he said. "I would recommend eating more fiber, but on the basis of overall health, not just to protect against colon cancer. I have mixed feelings. I think there is a relationship, but to recommend a specific food for a specific disease is not something I would do."

Low Fat Breast Cancer Trial

Peter Greenwald, director of NCI's Div. of Cancer Prevention & Control, said the massive trial to determine if a low fat diet reduces the risk of breast cancer eventually will involve 30,000 women and cost about $100 million over 10 years. "To do a study like that in colon cancer may not be feasible."

The breast cancer study is limited to women between age 45 and 69 with family histories of breast cancer. The women are randomized to either their normal diets or to the "20 per cent fat" diet (20% of calories from fat). So far, Greenwald said, women in the study are "happy" to get the 20% diet. He does not believe compliance will be a problem. Concern that the control group will voluntarily reduce fat intake has caused NCI to take that into consideration in the study design, and Greenwald does not believe that that reduction would be sufficient to confound the results.

In any case, the diets "will be monitored

and we will know what happens. We can't control for everything. We are confident the study will answer the key question--if you bring dietary fat down, will it decrease the cancer rate?"

NCI is not completely committed to carrying out the full study. A vanguard group is being studied at selected centers, and the results will be presented next year to the DCPC Board of Scientific Counselors and the National Cancer Advisory Board for advice on whether to proceed.

Edward Scarbrough, acting deputy director of FDA's Office of Nutrition & Food Studies, said that FDA is in the process of formulating regulatory policies appropriate for the proper use of health claims on food labeling. "The agency is convinced that potential public health benefits from a new initiative in this area will outweigh possible risks foreseen in this new venture. Yet, FDA is approaching this issue deliberately and cautiously because the fundamental problem remains how to permit valid, appropriate health claims without allowing misleading or outright fraudulent claims."

Sen. Orrin Hatch, chairman of the Labor & Human Resources Committee, had been scheduled as a speaker at the symposium. When he couldn't make it because of an impending vote on the Senate floor, his health staff chief, Douglas Campbell, spoke instead.

Congress "should not get in the way" of private sector efforts to promote eating for good health, Campbell said. FDA and Federal Trade Commission have regulatory powers over package labeling and advertising, respectively, and Congress "should monitor those efforts but not get involved. It is important to get information to families on foods that will help maintain good health and prevent cancer. The best way is to let the food industry do responsible advertising."

David Rose, chief of the Div. of Nutrition & Endocrinology at the American Health Foundation, discussed evidence on dietary fats. He noted that epidemiological studies, much of which is of an indirect nature and based on international comparisons, support a role for dietary fats in the etiology of cancers of the breast, uterus, prostate, colon, pancreas and possibly ovary.

"While past investigations have focused on the amount of fat consumed, it is now becoming clear that the type of fat may be imporant in modifying cancer risk. Both epidemiological studies in Greenland, and investigations which utilize animal feeding experiments, suggest that marine oils reduce breast cancer risk, an observation which may also apply to colon cancer. Other researchers are currently obtaining that high olive oil consumption does not adversely affect cancer risk and may indeed also be protective.

"It is important when seeking to interpret epidemiological and experimental results," Rose continued, "that the biological plausibility of an observation be kept in mind. This is best achieved when epidemiological and clinical laboratory studies are combined, an approach which is usually referred to as 'biochemical epidemiology.' This has been an underutilized research area in the past, but the results obtained thus far indicate that dietary fats and oils most likely affect the development of breast, endometrial, prostate and ovarian cancers by altering hormone levels and their biological effects, and the production of prostaglandins. In the case of colon cancer, alterations in intestinal bacterial content and bile acid metabolism may be responsible. With the recent encouragement provided by the National Cancer Institute, rapid progress is likely in the whole area of biochemical epidemiology."

"Protection of the integrity of the scientific data base is absolutely essential," Campbell said in his wrap up of the symposium.

"In my view, animal data can't be used to substantiate health claims. We don't have dose response relationships, and even if we do, they can't be extrapolated to humans. Responses in human trials of some sort are required.

"On the high fiber fad," Campbell continued, "I question the Kellog ad. The emphasis to high fiber is straight off. The evidence seems to be based on what NCI said. That come from the National Academy of Sciences report. The report had a lot of conservatism on that point. We didn't really know much. In my point of view, there is considerable slippage between the report and the ad."

Kellog's Franta responded, "The message we are carrying is NCI's diet recommendations as presented at the press conference in March, 1984. That was based on the entire body of evidence, not just the NAS report."

NCI's Lanza pointed out that Kellog is "taking NCI's entire message, not just on fiber but on fruit, vegetables, fat."

AICR Reaches For Respect, Gets It With Symposium, More Research $$$

When the American Institute for Cancer Research was established in 1981, it was greeted with something less than universal enthusiasm.

The founders included principals of a Northern Virginia direct mail firm and former NCI staff member J. Dan Recer. Its avowed purpose was to raise money to fund research and education on diet, nutrition and their relationship to cancer.

Skeptics included the American Cancer Society, which contended that use of "American" and "Institute" in the name was misleading. Society executives felt that contributors to AICR may have thought they were contributing either to ACS or the National Cancer Institute and that the new organization was cashing in on long established good names.

The fact that a mail house was involved, that the primary funding source was direct mail appeals, and that those appeals seemed to be heaviest during April, when ACS has traditionally carried out its fund raising with the help of hundreds of thousands of volunteers and their door to door efforts, did nothing to assuage ACS antagonism.

Columnist Sylvia Porter fanned the controversy by reporting problems AICR had with the Better Business Bureau, which found that the nonprofit organization was not meeting certain BBB standards. The primary complaint was that the percentage of money raised which was going into research and education programs was too low.

Porter at that time also took on another nonprofit organization, the National Foundation for Cancer Research, located in Bethesda, which also raises money through direct mail appeals.

Recer, who worked at universities in Youngstown and Long Island after leaving NCI in the late 1970s, assumed the position of president of AICR after it got off the ground, the job he now holds. He has worked hard to overcome the problems with BBB, IRS, various local jurisdictions skeptical about fund raising, and to establish the scientific integrity of AICR. The symposium on diet and cancer and product advertising (see previous article) went a long way toward that latter objective.

Recer, who holds a PhD in education, joined NCI's Div. of Cancer Control & Rehabilitation (now Div. of Cancer Prevention & Control), after working in the now defunct Regional Medical Programs. Later, he moved over to the Div. of Cancer Etiology where he worked with that division's then deputy director, Gio Gori, who headed NCI's Diet & Cancer Program.

AICR expects to gross $16 million in 1986, and Recer said that more than 60 percent of that will go into the research and education programs. "We may get that to 70 percent." Direct mail is an expensive way to raise money, and it does not seem likely the percentage will ever get much higher than that as long as AICR depends so heavily on that method.

Recer's primary role is that of a fund raiser, and he is working on other types of contributions, such as "charitable remainder trusts", bequests, wills and endowments.

What does AICR do with its money? In 1985, with an income of $11.3 million, it awarded $2.7 million in research grants and spent $3.3 million on public education. That latter category includes for the most part production and distribution of more than a dozen booklets and brochures on diet information. More than a million copies of the dietary guidelines were sent out, along with 1.2 million copies of AICR's quarterly newsletter. Every contributor gets one issue of the newsletter and a list of publications. Those who contribute $10 or more get a year's subscription to the newsletter. Publications are sent free to those who request them.

Grants are awarded through a peer review process. A 16 member grant review panel is chaired by Colin Campbell, professor of nutritional biochemistry at Cornell Univ., who is AICR's senior science advisor. Other panel members are Johnnie Hayes, Bowman Gray; Thomas Slaga, Univ. of Texas System Cancer Center; David Kritchevsky, Wistar Institute; Michael Kazarinoff, Cornell; Adrianne Rogers, Boston Univ. Medical Center; Hisashi Shinozuka, Univ. of Pittsburgh; Alfred Merrill, Emory School of Medicine; Carmia Borek, Columbia Univ.; Ryland Webb, Virginia Tech; Steven Hecht, American Health Foundation; Robert Hoffman, Univ. of California (San Diego); Thomas Dao, Roswell Park Memorial Institute; Janardan Reddy, Northwestern Univ. Medical School; John Groopman, Boston Univ.; and Marie Foegh, Georgetown Univ. Medical Center.

When additional expertise is needed, and when a member of the review panel submits a

grant, ad hoc reviewers are brought in.

Grants are awarded twice a year. For applications and guidelines, contact Grace Deebo, Grants Manager, AICR, 500 N. Washington St., #100, Falls Church, VA 22046, phone 703-237-0159.

Almost 200 applications were received this year, and 18 percent were funded. Priority scores are assigned, "and we fund from the best scores down until we run out of money," Recer said.

Grants funded in the fall cycle this year:

James Betschart, Children's Hospital of Pittsburgh, $98,512, two years, hormonal growth factor modulation of diet induced hepatic carcinogenesis.

Howard Glauert, Univ. of Kentucky, $52,496, one year, dietary antioxidants and peroxisome proliferator induced hepatocarcinogenesis.

Henry Thompson, Univ. of New Hampshire, $33,091, one year, aerobic work and breast cancer prevention.

Paul Newberne, Boston Univ. School of Medicine, $41,690, one year, esophageal cancer: effects of riboflavin.

William Chance, Univ. of Cincinnati Medical Center, $97,029, two years, antimetabolite therapy of tumor bearing rats receiving total lparental nutrition.

Barry Markaverich, Baylor College of Medicine, $110,000, two years, bioflavonoid inhibition of carcinogenesis.

Edward Bresnick, Eppley Institute, $92,944, two years, chemoprevention of cancer by cabbage extracts.

Johannes Everse, Texas Tech Univ. Health Science Center, $105,005, two years, effect of nutrients on macrophage activation.

Recer insists AICR operates with modest overhead, completely in the open, and has met all requirements for nonprofit status and fund raising regulations wherever asked.

His annual salary is $70,000, plus $350 per month car allowance "and a very modest retirement benefit." AICR contracts with the founders for direct mail services at below maarket rates. Board meetings are open to the public, and the books are audited by Price Waterhouse.

Recer said AICR is not trying to cut itself in on contributions going to ACS or anyone else. "Americans give two percent of their income to charity, one percent to religion and one percent to everything else. I want a piece of the 98 percent not now going to charity."

Gallo Finds Another Human Virus, This Time A Herpese Like Virus

Robert Gallo and his colleagues have done it again.

The first to identify a human cancer virus, the first to isolate the virus that causes AIDS, they have now isolated a new human herpes like virus from the white blood cells of six patients. The new double stranded DNA virus has been named human B-cell lymphotrophic virus (HBLV) for its ability to infect and eventually kill human B cells in culture.

The patients had either lymphomas or other disorders of the immune system. Although two were also infected with the HTLV-3/LAV virus, four were not, indicating that the new virus is not exclusively associated with acquired immune deficiency syndrome.

"We are confident that this is a new DNA virus and a member of the human herpes virus family, but different from each of the five known human herpes viruses," said Gallo, who is chief of the Laboratory of Tumor Cell Biology in NCI's Div. of Cancer Treatment. "We do not yet know whether the new virus is a human pathogen, but all of the known human herpses viruses cause disease, and we expect that it will be true of HBLV as well."

Distinct From Other Herpes Viruses

The findings were published in the Oct. 31 issue of "Science." The virus was isolated in Gallo's labo by Zaki Salahuddin with the assistance of Dharam Ablashi of NCI's Laboratory of Molecular & Cellular Biology, and by Peter Biberfeld of Karolinskia Institute in Stockholm. Steven Josephs and Flossie Wong-Staal contributed to the molecular analysis and Bernard Kramarsky of Electro-Nucleonics Inc. performed the electron microscopy.

They were assisted by two clinical investigators--Mark Kaplan of North Shore Univ. Hospital in Manhasset, Long Island; and Gregory Halligan of St. Christopher's Hospital, Philadelphia.

Biologically, immunologically, and genetically, HBLV is clearly distinct from other herpes viruses such as Epstein-Barr virus, human cytomegalovirus, herpes simplex type 1 and type 2, and varicella zoster virus, Gallo said.

Gallo stressed that this new discovery does not in any way change the concept that AIDS is caused by HTLV-3/LAV and is not a casually transmitted disease.

New Publications

"Journal of Cancer Program Management," edited by Lee Mortenson and Eileen Cahill. The journal of the Assn. of Community Cancer Centers. ACCC membership dues cover general and delegate member subscriptions; $40 per year to other individuals, $60 per year to institutions and libraries. ACCC, 11600 Nebel St., Suite 201, Rockville, MD 20852.

"Caring for the Terminally Ill Patient at Home," edited by Barrie Cassileth. Published by the Univ. of Pennsylvania Cancer Center with grants from the American Cancer Society Philadelphia Div. and Care Plus Inc., a home health care company. Free to families of terminally ill patients anywhere. Call Care Plus, 215-643-2217.

"I'm A Patient, Too," by Albert Fay Hill. Subtitled, "CanSurmount: The Dynamic Cancer-Patient Support Program." Nick Lyons Books, 31 W. 21st St., New York 10010, phone 212-620-9580, $8.95 paperback.

"QuitSmart," a stop smoking kit consisting of a patient manual, self hypnosis tape and instruction guide for the health professional. Developed by Robert Shipley, director of the Duke Univ. Quit Smoking Clinic. JB Press, PO Box 4843-M, Duke Station, Durham, NC 27706, $12.95 plus $1.50 shipping.

"Indoor Air Quality Environmental Information Handbook," by the U.S. Dept. of Energy. Includes data on impact of radon. National Technical Information Service, Springfield, VA 22161, $22.95 plus $3 shipping.

Following are available from Raven Press, 1140 Avenue of the Americas, New York 10036, phone 212-575-0335:

"Herpes and Papilloma Viruses: Their Role in Carcinogenesis of the Lower Genital Tract," $70.

"Diet and Prevention of Coronary Heart Disease and Cancer," $59.

"Experimental Approaches to Multifactorial Interactions in Tumor Development," edited by George Klein, $65.

"Biological Regulation of Cell Proliferation," edited by R. Baserga, P. Foa, D. Metcalf and E.E. Poli, $52.

"Randomized Trials in Cancer: A Critical Review by Sites," edited by Maurice Slevin and Maurice Staquet, $99.

RFPs Available

Requests for proposals described here pertain to contracts planned for award by the National Cancer Institute unless otherwise noted. NCI listings will show the phone number of the Contracting Officer or Contract Specialist who will respond to questions. Address requests for NCI RFPs, citing the RFP number, to the individual named, the Blair building room number shown, National Cancer Institute, NIH, Bethesda MD 20892. Proposals may be hand delivered to the Blair building, 8300 Colesville Rd., Silver Spring MD, but the U.S. Postal Service will not deliver there. RFP announcements from other agencies will include the complete mailing address at the end of each.

RFP NCI-CN-75401-41

Title: Biomedical computer support for the prevention and control program
Deadline: Jan. 8

This competitive acquisition is a 100% set aside for small business (average annual receipts for preceding three fiscal years not exceeding $7 million).

The primary purpose of this contract is to provide analytical and computer oriented support to Div. of Cancer Prevention & Control activities involving computer systems development and maintenance, computing programming related to statistical analyses and operations research, data management for cancer control research, and other information processing.

A preproposal conference will be held within two weeks of the RFP issue date and a "reading room" containing reference materials pertinent to this procurement will be made available.

Offerors must demonstrate the ability to be available within a 24 hour notice for meetings and for receipt and delivery of data, reports and documents to the Blair Building in Silver Spring, MD. A five year contract is anticipated.

This announcement represents recompetition of a contract curently being performed by Information Management Services Inc.
Contract Specialist: Susan Hoffman
RCB Blair Bldg Rm 2A-07
301-427-8745

RFP NCI-CN-75405-43

Title: Support contract for public health agency initiative
Deadline: Approximately Dec. 7

This competitive acquisition is a 100% set aside for small business (average annual receipts for preceding three fiscal years not exceeding $3.5 million).

Primary purpose of this contract is to provide technical and logistical support for the Cancer Control Applications Branch to obtain an increase in the quantity and quality of cancer prevention and control activities in state and local health departments.

A preproposal conference will be scheduled prior to receipt of proposals. Offerors must demonstrate the ability to be available within 24 hours notice for meetings and for receipt and delivery of reports and materials to the Blair Building in Silver Spring, MD. A five year contract is anticipated.
Contract Specialist: Diana Wheeler
RCB Blair Bldg Rm 2A-07
301-427-8745

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