THE AMERICAN NUCLEAR PLANT TOBACCO

100,000 Americans die from lung cancer each year because of cigarette smoking. Most people still think that this is because of nicotine...you know...all those ads about lowered tar and nicotine! The real medical danger however, may be from radiation, according to Dr. R. Ravenholt, former director of World Health Surverys at the Center for Disease Control in Atlanta, Georgia.

To protect itself from predators, the tobacco plant leaches heavy metals out of the soil, including polonium-210 and lead-210. The major source of the polonium is phosphate fertilizer, which is used in growing tobacco. According to Dr. Edward Martell, a radiochemist with the National Center for Atmospheric Research, there is enough polonium-210 in tobacco to cause at least 95% of the deaths from lung cancer. A one-and-a-half-pack-a-day smoker receives a dose of 8 rem per year to his/her lungs, or the equivalent of 300 chest x-rays.

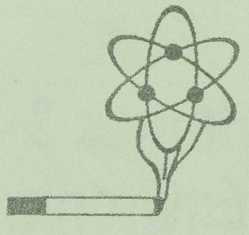
Other scientists have determined that up to 75% of the radioactive particles in the smoke are not absorbed by the smoker but left floating around for others to inhale. This is probably the reason that non-smokers living with smokers also have a higher incidence of lung cancer.

WHAT YOU CAN DO

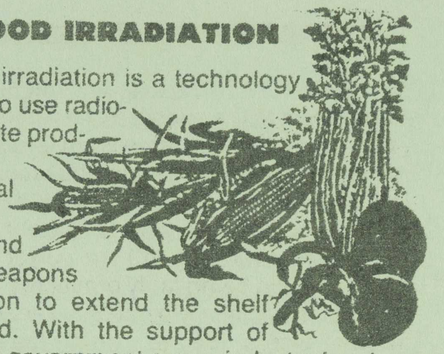
1. Assert your own rights to clean air in your living space. Boycott business places that do not have well ventilated non-smoking areas. Give this flyer to other non-smokers who frequent smokey cafés. Get together and diplomatically approach the owners.

2. For the sake of your smoking friends' health, suggest that they look for cigarettes that are grown without phosphate fertilizer, or even better, **STOP SMOKING!**

SOURCE: NEW ENGLAND JOURNAL OF MEDICINE, 2-11-82.



FOOD IRRADIATION



Food irradiation is a technology designed to use radioactive waste products from commerical nuclear reactors and nuclear weapons construction to extend the shelf life of food. With the support of the federal government a new industry has been forming around this technology.

Supporters of food irradiation have claimed that the new technology is safe and will have many benefits for the public. Yet a 1979 review of 1,227 irradiation studies by the Hungarian government revealed that there were 1,414 negative effects to only 185 positive ones.

Negative effects include the following problems:

1. The depletion or destruction of vitamins A, C, E, K, B1, B2, B3, B6 and folic acid.
2. The creation of new potentially dangerous chemicals called unique radiolytic products.
3. The increased production of Aflatoxin, a highly carcinogenic substance.
4. The destruction of the natural enemies to the dangerous bacteria Botulism, but not the bacteria itself.

One study in India had to be terminated early because the irradiated wheat created symptoms of "pre-leukemia" in the starving children who were part of the experiment.

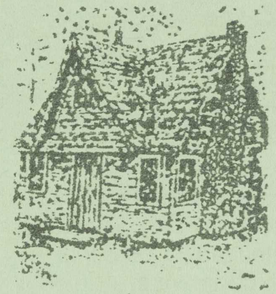
Why is this technology being allowed to emerge when previous administrations have rejected it? Besides the billions of dollars involved that the new industry will bring in at our expense as taxpayers and consumers, the real reason is the 20,000 tons of high-level radioactive waste by-products that have been created by the nuclear industry. The hundreds of irradiation facilities across the country will be the nuclear industry's perfect storage place for part of that waste until they find a safer place for it. The feds are so desperate to get this going that they have even allowed irradiation facilities to have emission levels twenty times higher than commercial nuclear reactors.

Calling the issue of food irradiation a matter of national security, the federal government and the Department of Energy have okayed the irradiation of most basic food items. After 1988 whole foods (irradiated food used as ingredients for other products are excluded from the requirement of labeling) will not have to be labeled except with the Radura, which is the symbol used to denote irradiated food products.

THE RADURA

For more information about food irradiation and what you can do contact:

National Coalition to Stop Food Irradiation
P.O. Box 590488
San Francisco, CA 94159
(415) 566-2734



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RADIOACTIVE RADON IN THE HOME

If you live in a house or apartment, it is important to have it tested for its radon gas level. Radon gas is a naturally occurring radioactive decay by-product that can get trapped and concentrated in enclosed structures. Exposure to radon comes from building materials such as brick, concrete and plaster. Much more dangerous levels of the gas may seep into a building through cracks in the foundation.

The Center for Disease Control in Atlanta estimates that 6 million people in the U.S. are exposed to **serious** levels of radon. The New England Journal of Medicine estimates that 5,000-30,000 fatal lung cancers occur yearly from radon exposure.

Other than the severe radon gas problem in New Jersey and Florida in the U.S., exposure to radon can and does vary from house to house. Buildings that have been fully insulated but not adequately ventilated can also be dangerous. The only secure solution short of testing for radon gas, is to take remedial corrective actions. Inexpensive measures include sealing all basement cracks and openings below ground level. Use of basement fans to vent radon gas before it enters the rest of the house is also advised.

For more information about radon gas in California call or write:

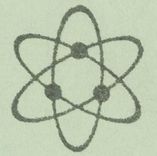
EPA Region 9
215 Fremont Street
San Francisco, CA 94105
(415) 974-8076

Ask for "A Citizen's Guide to Radon" OPA-86-004 and "Radon Reduction Methods" OPA-86-005. Inexpensive test kits (they must be pre-paid) can be purchased for $12 from:

Radon Project
Physics Department
University of Pittsburgh
Pittsburgh, PA 15260

Make checks out to the University of Pittsburgh.

RADON RISK EVALUATION CHART

DOSE pCi/l	DEATHS PER 1000	EXPOSURE	COMPARABLE RISK
200	440-770	1000 times average outdoor level	60x's non-smoker 4 pack a day
100	270-630	100 times average indoor level	20,000 x-ray/year
40	120-380		2 pack a day
20	60-210	100 times average outdoor level	1 pack a day
10	30-120	10 times average indoor level	5x's non-smoker
4	13-50		
2	7-30	10 times average outdoor level	200 x-ray/year
1	3-13	average indoor level	non-smoker risk of lung cancer
.2	1-3	average outdoor level	20 chest x-rays per year

SOURCE: EPA