



12-1981

Monthly Planet, 1981, December

Jim Springer
Western Washington University

Huxley College of the Environment, Western Washington University

Follow this and additional works at: <https://cedar.wwu.edu/planet>



Part of the [Environmental Sciences Commons](#), [Higher Education Commons](#), and the [Journalism Studies Commons](#)

Recommended Citation

Springer, Jim and Huxley College of the Environment, Western Washington University, "Monthly Planet, 1981, December" (1981). *The Planet*. 111.
<https://cedar.wwu.edu/planet/111>

This Book is brought to you for free and open access by the Western Student Publications at Western CEDAR. It has been accepted for inclusion in The Planet by an authorized administrator of Western CEDAR. For more information, please contact westerncedar@wwu.edu.

Monthly



Planet

December VOLUME 3 NUMBER 2

A PUBLICATION OF THE ASSOCIATED STUDENTS ENVIRONMENTAL CENTER WESTERN WASHINGTON UNIVERSITY

Herbs for Health

by Valerie Smith

With the advent of modern medicine in a culture which hails science and technology as a panacea to nearly all our problems, medicinal herbs of folklore have been scoffed at and considered ineffectual in comparison to the array of synthetic drugs formulated to relieve our every ill. But the rising cost of medical care and commercial drugs, plus the realization by many people, that nature is a treasure of healthful secrets, has succeeded in focusing attention on herbs for healing.

The application of scientific methods in a study of herbs to determine their therapeutic value has led to the realization that nature is a storehouse of preventative, symptomatic and curative medicines. Science has yet to delve into a serious study of many wild plants used for generations in the healing and relief of ailments.

Northwest Indian folklore suggests a vast array of wild plants to be used for anything from a sore throat to kidney ailments. A multi-purpose plant common to the folklore of many regions is comfrey. The whole plant can be mashed and heated to make a hot poultice and applied externally to reduce swelling and relieve pain from insect bites, broken bones, sprains, bruises and severe cuts. The root of the comfrey plant can be boiled in water or wine then eaten for relief of ulcers, diarrhea and indigestion. Comfrey tea can be drank to relieve coughing and nasal congestion. Scientific experimentation has revealed allantoin as the healing agent in comfrey—a cell proliferant contained in both the leaves and the root of the plant.

A favorite pain killer among several Northwest Indian tribes is yarrow leaves. Mashed and warmed

leaves, applied externally to the source of pain, will purportedly relieve pain within minutes. Application of the water used for brewing the leaves serves as a disinfectant in cleansing wounds. Yarrow may assist in healing too. Ingestion of the tea may prove useful in relieving congestion, coughs, sore throat and fever.

Onions evidently have several beneficial characteristics. They have anti-bacterial properties due to a substance called allinin. This makes them effective against typhoid fever and cholera, as well as fungus infection of the skin, like athlete's foot. Drinking the juice of onions soaked for several hours in sugar is reportedly the finest cough syrup available.

A root not so commonly used here in the Northwest, but receiving more attention lately, is ginseng. Ginseng is used widely in Asia as a panacea. The root is sweet and the tea is reported to have an invigorating effect. Chinese folklore has hailed ginseng root as a fertility drug and an aphrodisiac, as well being useful in treating skin disorders and indigestion. Chemical analysis of the root has revealed various vitamins and minerals, as well as medically active constituents labeled saponins by chemists. Drugs derived from ginseng root have been shown to strengthen and tone the system, increase the body's resistance to stress, soothe gastrointestinal irritations and increase physical and mental capacity for work. Research continues around the world to discover more about the saponins and their possible usefulness in drugs.

Medicinal herbs are slowly finding a place in American medicine as research substantiates their value. In places like China, traditional medicine based on herbs and acupuncture is combined with



Western treatments and is practiced by the "barefoot doctors" who are trained by physicians to treat common ailments of the rural poor.

It is unknown exactly why herbs like comfrey, yarrow, onion or ginseng root are useful medicines, but generations of use appear to be validation enough for many people who would like to be free of the expense and side-effects of many drugs.

Information on many kinds of medicinal plants can be found at Wonderland Teas in Bellingham, or in various books and articles under the subject heading "Botany-medical." Decide for yourself if herbs are good for what ails you—try some herbal cures. *



Smoke Damage

by Michael Willis



If you don't have a cigarette habit you may feel immune to the ill effects of cigarettes. But cigarette smoking could be clouding your life in a number of ways.

The adverse effects of smoking act on the physical, economical and emotional aspects of nonsmokers as well as smokers. Just how harmful is exposure to cigarette smoke? As early as 1967 researchers reported that the smoke from an idling cigarette is twice as concentrated in tar and nicotine as smoke inhaled from smoking. Another study analyzed a number of smoke-filled taverns in Cleveland. This survey found that during an eight hour shift a nonsmoking bartender inhaled the equivalent of 36 cigarettes. Many similarly employed individuals may be unaware of this health hazard.

Among the most harmful tobacco products are nitrogen, hydrogen cyanide, tar and nicotine, and carbon monoxide. Carbon monoxide restricts the blood's oxygen carrying capability. It can reach dangerous levels in a poorly ventilated smoke-filled room. Nicotine, a known carcinogen, is extremely addictive and poisonous. It is marketed as an insecticide called Blackleaf 40.

A smoker's environment is as expensive as it is unhealthy. Large amounts of tobacco related dollars are spent in the United States each year. Taxpayers, nonsmokers and smokers alike, help support the American tobacco industry. 35 million federal tax dollars were paid in direct subsidies to the tobacco industry in 1977. Health care is another area where tobacco demands a price. In Massachusetts, \$370 million dollars is spent on the treatment of illnesses caused by tobacco each year. Much of the health care costs are absorbed by the taxpayers in the state, only a third of which are smokers. The distribution of medical costs associated with tobacco use could be achieved by legislation that adds a health tax to each package of cigarettes sold. Numerous expenditures, including cancer research, antismoking campaigns, and inflated hospital costs, send our tax dollars up in smoke.

Children who are exposed to cigarette smoke in the home also suffer consequences. 18 years of exposure to a smoky environment could have the same influence on the cardiovascular and respiratory systems as five years of heavy smoking. In some cases children experience the effects of smoking before they are born. On the average babies born to mothers that smoke weigh less at birth. Nonsmoking adults usually have the ability to avoid the smoking environment, but babies do not.

This type of environment is becoming easier to avoid due, in part, to an increased awareness of the ill effects of smoking and a decrease in the number of smokers. In 1978, the Federal Trade Commission reported that only 33% of all adults in the United States smoke cigarettes. This number is the lowest since 1950.

Much effort is being made to help this minority enjoy smoking

without disturbing the rest of the population. Legislation is being passed in many states that gives smokers designated seating areas in restaurants, libraries, and colleges. Other laws totally ban smoking where nonsmoker exposure would be unavoidable. Public systems such as buses, trains, hospitals and theaters are protected by no-smoking laws in several states.

Other ways that are being devised to help reduce smoke pollution from cigarettes are inventions called "smoke reducers". One such invention totally encloses the cigarette, relights it after each puff and traps ashes and smoke. The only smoke that escapes into the atmosphere would be that exhaled by the cigarette smoker. This smoke would be minimally toxic since most of the harmful substances would be filtered through the smokers lungs.

Lungs are a big issue when it comes to cigarette smoking. The annual cancer risk is 1 per 800 for smokers. For nonsmokers in an enclosed room with a smoker, the risk is 1 per 100,000. An adult nonsmoker who is aware of this information and is concerned about health can work to minimize his or her exposure to cigarette smoke. On the other hand, being exposed to someone who is trying to quit smoking, or someone who would become more relaxed if he or she did smoke, might be more uncomfortable than breathing the smoke polluted air. In a 1978 experiment, nicotine was shown to relieve stress and suppress aggressive behavior in animals and man. The next time smoke gets in your eyes, suppress your aggressive thoughts and kindly encourage your offender to move to another space—or else!



NORTHERN LIGHTS BOOKSTORE
Across from Jimbo's
112 Grand Ave., Bellingham, Wa. 98225
(206) 676-9544
Monday - Thursday + Saturday:
9:30 - 5:30
Friday: 9:30 - 8:00 pm
Sunday: closed

Waste Law Debated

by Janet Senior

When you think of the Pacific Northwest, you probably envision clear blue water, green trees, tall mountains and lots of liquid sunshine. But our Ecotopia may be beginning to slowly sink into a mire of chemical waste. Intensive industrial development and inadequate disposal practices are causing dangerous groundwater pollution problems around the state. Tacoma's Commencement Bay and Spokane's underground aquifer (its only water source) are becoming increasingly contaminated with chlorinated organics, pesticides and heavy metals. EPA studies show PCB levels in Puget Sound are among the highest in the country.

In response to Congressional mandates aimed at controlling this waste problem, The Washington Dept. of Ecology is now in the process of revising our state's hazardous waste regulations. Although Washington has had a hazardous waste management program on the books since 1978, department policymakers are now under extreme pressure from waste generating industries to revise those regulations to more closely resemble less stringent but more recent EPA requirements. These industries are using familiar claims of political expediency and economic hardship to push through revisions that will greatly weaken the efficiency and effectiveness of our existing waste management program.

The existing program emphasizes that the cost and responsibility for waste management rightly belongs to the generating industries. Testing to determine the hazard of a given waste stream is mandatory. These waste stream

are then divided into an innovative two-tiered classification, extremely hazardous and dangerous, according to quantity, toxicity, and persistence in the environment. Separate management programs have been developed for the two categories. Regulatory exclusion of small quantities is allowed but only to the following limits: -extremely hazardous-1 lb. per week -dangerous-100 lbs per week Below these limits, small amounts can be taken to ordinary landfills.

The compromise now written into the regulatory proposal now circulating is a considerable weakening of the original program. Local testing is no longer mandatory. Hazard is determined by a relatively arbitrary listing published by EPA. This absolves the generator from the responsibility and cost of determining the toxic constituents in his/her waste stream, possibly leaving it in the hands of the taxpayer. DOE's two-tiered system is replaced by EPA's one-tiered system, so all wastes are managed under the same program irrespective of the degree of hazard. Categorical exemptions have been accepted for some waste products including fly ash which often contains heavy metals. Industry is not even satisfied with these concessions and seeks to further weaken Washington's program by raising the quantity exclusions up to 2200 lbs per week and eliminating regulation of dangerous waste mixtures (waste streams not otherwise designated as dangerous but that demonstrate characteristics such as toxicity, persistence and carcinogenicity). Passage of the industry proposal would allow 25-50% more waste products to be disposed of in regular landfills adding significantly to our existing groundwater



*We are totally dedicated
to helping each individual
realize his/her full potential
physically, mentally & spiritually.*

1111 High Street 671-3194
Bellingham, Wa 98225

contamination problem.

Environmentally concerned citizens around the state reject these concessions which increase the threat to human health and environmental quality. But our voice has not been heard above the loud rhetoric of big business. Many believe that not only should DOE return to its original program, but a stricter program should be developed to include the following provisions:

1. Increased budget and staff to monitor and enforce regulation.
2. Price incentives to encourage environmentally sound non-landfill technologies such as recycling, incineration, and chemical detoxification.
3. Elimination of exclusion for small amounts with the idea that all wastes should be managed. Small quantities of persistent, toxic chemicals can quickly accumulate to become a significant threat.
4. Testing to assure that all carcinogenic, teratogenic and mutagenic wastes are designated extremely hazardous.

continued on page six



A.S. RECYCLE CENTER

- Paper (All Kinds)
- Cardboard
- Aluminum and Metal Cans
- Refillable Beer Bottles
- Glass
- 2 Liter Plastic Pop Bottles
- Used Motor Oil

* OPEN 7 DAYS A
WEEK ; DAWN
TILL DUSK
* 519 21ST ST
(SOUTH EDGE
UNIV. CAMPUS)



Radio and the Community

by Bill Miller

In the past couple of decades broadcast media have undergone a startling transformation. They have become a significant aspect of the social and political environment, reaching into homes, work places, cars...not only to entertain but to provide news and information. Given the importance of the "airwaves" in society, the question arises: How can this valuable and limited national resource best be utilized?

The rationale of the Federal Communications Commission is that the channels belong to the public and should be used for the public's benefit. It holds that a variety of private operators are likely to perform this function more successfully than the government. The holder of the radio or television license is expected to broadcast in the "public interest." The opportunity for profit is intended to serve as a lure to make private operators serve the public.

Many people, however, question the extent to which private operators do or can serve the public. Most of the country's 8,800 radio stations are hard core commercial operations whose formats are largely determined by market research, as broadcasters seek audiences attractive to their advertisers. The result is most often little diversity in musical programming, as the station uses the lowest common denominator to attract the largest audience. News and information programming is also subject to extremely keen competition with fortunes turning on a difference of a point or two in the ratings.

Consequently, network and commercial news programs are limited, as broadcasters tend to cover similar news and align themselves with the majority view in order to get shares in the market. Thus, critics say conventional media fails in its role as a meaningful forum for free and public debate.

I recently discussed some of these issues with Gale Thompson and Michael Karn, the station manager and program director of KUGS.

Question: How would you distinguish KUGS or other community radio from commercial radio?

Gale: I think one of the main differences is the working environ-

ment. At a commercial radio station only people who are highly trained and high-paid have any involvement. At KUGS we have about 75 people per week come through to do programming and work here. You can't participate that way in print media or television.

Q: So there is more access...

Michaël: Yes. The environment of the community radio station is different than the commercial station because they exist for a different reason. They exist as a communications media primarily, and as an opportunity for people to be able to do radio that is person to person. Commercial stations exist, by and large, to make money for their owners. They're big business and they go to whatever format will make the most money. They don't care about the listeners they may have left behind.

Q: KUGS bills itself as an alternative, non-commercial, community radio station. What does that mean?

MK: Well it means, like Gail said, we're a place where people can walk in, say hello, leave us an announcement to read, or if they want to know more about radio, we'll teach them. We can provide people they can learn from and facilities they can use.

We provide a place for people to do programs ranging from music and entertainment programs to such things as having a local group doing local poetry every week. We have a person doing a show on the Third World every week. They wanted to do it and KUGS was the only place in town that would let them.

Balanced against that, you'll find that community stations come and go and the technical side of things isn't so good. They're famous for their long spaces of dead air and all sorts of other things listeners have to put up with. All of them have problems of personnel and a lot of conflict about what the best kind of programming is and what best serves the needs of the community. But that's all part of the flux that makes community radio democratic expression.

Q: How does KUGS see itself as a forum for minority as well as majority viewpoints?

MK: KUGS approaches that by not trying to reflect one particular viewpoint. We try to get program-



and try to have local programs reflecting diverse opinions.

"Radio Internationale," for instance, deals with international news. There are no restrictions on the people who do the program. They read news and information from around the world and from a wide variety of sources not generally available.

Air producers and announcers have more freedom of speech than they would have on other stations. We give them control over the program they're doing. There are limits with what were allowed to do by the FCC, but other than that, especially in terms of the political or social content of a program, it's up to the people doing the program.

We also get on tape programs like "In Black America," and the "Mexican-American Experience." We would like to do other minority programs, if we could get the people to do them and if they are available. Gail does a program on women's issues.

GT: As if they were a minority! I'm not the only one who does the show. I've gotten three or four women involved so far. It's really a collective training experience. We play some serious tapes that relate to women's issues. Last night we played a tape on women writers that have won the Nobel Prize. We do women's poetry sometimes and we play women's music—all types of music that women compose and perform. We're really open to announcements about local organizations or activities that have interest to women. And we hope to start working on interviewing women in unusual or non-traditional occupations. That's underway.

Q: Can you give me some examples of programs KUGS offers that show the diversity in viewpoint that is available as contrasted with standard network news.

MK: Well, this morning we had a program on environmental issues



produced by the United Nations. It was a full half-hour with world leaders on environmental concerns.

We have locally produced programs. There was an interview Monday night on Spectrum—our locally produced public affairs program—with a wandering poet who speaks out for Amnesty International. The other night there was an interview with people around Bellingham on their opinions of the Reagan budget cuts. "Consider the Alternatives" deals with issues of the nuclear arms race, labor issues, and other types of issues that are important—and where we need to think about alternatives.

All our music reflects that sort of diversity. People play all sorts of music from different cultures. We play more blues, R&B, jazz, than any other station around.

Programs like "Third World on the Move" deal with the political side of these issues and they come out in every way...free speech and addressing the issue of minorities and the rest of the world. It's part of our mission I guess.

Q: So you see KUGS as contributing somehow to social change.

MR: I think so, because we're creating an environment of information, entertainment, and involvement that we hope will awaken people to possibilities. We're opening up windows inside people's heads about what is going on everywhere and exploring all the possibilities of living. I think that contributes to a viable sort of dynamic in the society. *



Blank high in a bare tree
'Gainst a grey and sodden sky
Last leaf of autumn

--Ernst Gayden



by David Clarke

I first met Joe Meeker in 1964 when he was chairman of English at the University of Alaska. 6'4" tall and as strong as a bull, he was full of tales of his adventures as a ranger in McKinley National Park. In addition to being a great outdoorsman he was, and is, an avid student of comparative literature and of the environmental and ecological models contained therein.

He taught me that we damage the environment for three reasons: we don't know who we are, we don't know what nature is, and we are hag-ridden by an archaic literary imagery which is divorced from reality.

His subsequent study and close friendship with Paul Shepard and Konrad Lorenz have greatly deepened these insights. We need to be educated to know who we are, and this is to be accomplished not by association with domestic plants and which are already degenerate and therefore miseducate us, but by unspoiled plants and animals in their natural habitats. We need to study and popularize the recent developments in biology, ecology, and related sciences, which are rapidly building up for us detailed and accurate models of nature and ourselves. And we need to do literary ecology, for this makes us aware of the unexamined models of nature and ourselves which nature has bequeathed to us. If we do these things, we may become aware of the mismatch between the old models and the natural reality of which we are a part. Thus, at the eleventh hour, we may come to see the age-old folly of our ways.

A tragic picture gradually emerges. Humans are animals and part of the natural order, but when they abandoned hunting and gathering and took up manipulation of natural processes for strictly human ends they began the destruction both of the natural environment and of themselves. For human conceptualization, recording itself in philosophy and literature, has for the most part conceived of humanity as separate from and superior to the natural order, and able to live in essential disregard of it. Thus "the origins of environmental crisis lie deep in human

The Comedy of Survival: Search for an Environmental Ethic, by Joseph Meeker.

cultural traditions at levels of human mentality which have remained virtually unchanged for several thousand years."

And our images have great power. The world, under human manipulation, and even at great damage to itself, tends to assume whatever form the human mind gives it in imagination. Yet "an environmental ethic," Joe tells us, "requires that human behavior be modified to agree with the ecology of the world, not that the world be rearranged to suit human desires."

The more intimately we may observe the natural order—not as farmers but as our leisured and organically whole hunter-gatherer ancestors may have observed it—the more we may come to love it and feel ourselves one with it. "He who really loves the world shapes himself to please it." *

Professor Clarke is a faculty member at Huxley College.

THE PLANET STAFF

Editor: Jim Springer
Writers: Valerie Smith, Bill Miller, Michael Willis
Advertising: Gary Caves
Art: Arlene Luzmar, Deanna Hofman
Calligraphy: Becky McConnaughey
Adviser: Ernst Gayden

LET IT SNOW

TONY'S
Coffee
& Teas

Visit our Coffee House

For espressodrinks, pastries,
current event discussions,
poetry readings and music.

Tues, Wed and Thurs evenings
1101 Harris Ave. in Old Fairhaven
733-6319

Freeze!

by Chris Burke

Europeans in Bonn, London and Amsterdam have been in the news lately demonstrating against the US-USSR nuclear arms build-up. The activities of the Nuclear Arms Freeze Coalition in Bellingham and across the country demonstrates that there is a similar feeling here at home.

The arms freeze group, active in at least 47 states, has held a few small rallies, such as the one several weeks ago in Seattle, but the group's main emphasis has been the gathering of signatures in support of "The Call to Halt the Arms Race." "The Call" seeks to introduce a three month freeze on the production, testing and deployment of nuclear weapons, by both the US and the USSR.

The Call was developed in 1978 in Boston by Randall Forsberg in conjunction with several arms control groups and lobbyists after a special United Nations session on disarmament.

Although the Call initially addresses only the US and the USSR, it is hoped that it would eventually include all nuclear nations.

Call supporters feel that a three month freeze could be the first step in stopping the arms race and a stepping stone to eventual reduction or elimination of nuclear weapons.

The Freeze has already won a large support group nation wide. Many churches, labor unions, health service organizations, and prominent individuals have endorsed the Call.

Locally, the Freeze group has been quite active. Petitioners have been collecting signatures on the Western campus, in Bellingham, and in outlying communities.

Statewide, the group hopes to collect at least 5,000 signatures from each congressional district. These petitions will be presented to the state legislature in March in the hope that the legislators will pass a resolution to halt the nuclear arms race. Similar resolutions have been passed in Massachusetts, New York and Oregon.

On April 25, petitions from all over the country will be presented to the United Nations. These signatures will tell the world that there are many US citizens very concerned about the increasing nuclear stockpiles.



The Good Book

The A.S. Environmental Center has just published a limited edition of the Good for You Cookbook. There are only 300 copies--so hurry and get yours

The A.S. Environmental Center Library has recently acquired additional copies of the World Watch Papers published by the World Watch Institute.

The World Watch Papers are concise treatises of various environmental issues and are an excellent resource for student research. A few of our new additions are:

- Disappearing Species: The Social Challenge
- The Worldwide Loss of Cropland

Our Library also offers an extensive collection of student research and problem series for reference. We are currently conducting a survey for new acquisitions. Stop by ES 518 and give your input.

HAVE A GREAT HOLIDAY!



*Created out of that unlikely past,
Alive within this gentle present,
What charms within the fertile folds
of human minds?
What thoughts about the future?
--embellishments of love,
Conceived in beauty,
Sculpted out of the best we are
With the best we know*

from A Natural Collection

WASTE continued

Policy must reflect our concern for public welfare and more importantly, public health. We can still avoid a Love Canal in Washington State--there is still time for preventative measures. It is so much less expensive to comply with environmentally sound management standards than it is to clean up after the fact. Revision of these regulations is our opportunity to prevent costly mistakes and to provide a model of safe, responsible waste management.

DOE's decision making process is now in the final stages. Public hearings on the proposed regulations have been held in Seattle, Spokane and Yakima during the month of November. Following these hearings, department staff have analyzed public input and revised the regulations as they felt necessary. The regulations will be proposed for adoption at a hearing in early December.

DOE's staff has indicated that opposition to industrial interests has been meek in comparison. Without public outcry, DOE is under extreme pressure to give in to industry demands. Do not be put off by the complexity of regulatory language--read these and other environmental regulations. Make the effort to voice your concern for a balance between economic interest and the necessity of maintaining a clean and healthful environment.

Wonderland Tea and Spice

Bulk Herbs
Black Teas
Tea Blends
Tea Cups
Fresh Ground Spices
Books

1307 Railroad Bellingham, Wa.
733-0517 98225

The Monthly Planet is a biquarterly publication that strives to inform, entertain, and stimulate planetary citizens of all persuasions. Reader participation is invited in all aspects of its publication. Submit any contributions to Jim Springer, c/o the Huxley office, ES 539. The views expressed herein are not necessarily those of the Associated Students or of any advertisers.

PLEASE RECYCLE

Whole Health

by Jim Springer

Modern medicine has been very successful developing drugs, technology, surgical techniques, and cures for many diseases. But the advances of modern medicine have all been made at some cost; all therapeutic measures have side effects, sometimes serious ones. And the use of sophisticated technology may cause patients to feel they don't possess the ability to maintain their own good health. For these reasons and others, many people are turning to wholistic approaches to health maintenance.

What separates traditional medicine from wholistic medicine is a basic difference in attitude toward healing and health maintenance, and type of treatments used. Although there is an increasing awareness among physicians of the influence of stress, diet, and lifestyle on health, traditional medicine focuses on the disease state and on returning the sick or injured person to normal. It is essentially concerned with maintaining physiologic functioning of body cells and systems. Factors that contribute to illness such as level of nutrition, and environmental and emotional stress are often overlooked in the quest to conquer a particular disease.

The wholistic practitioner (some are MDs, some are not), considers a patient as a whole being with a mind as well as a body. The mental, spiritual and environmental influences on health are not ignored. Wholistic medicine is really more a way of life than a method of treatment ill persons. It is based on the assumption that the body knows how to heal itself. The individual only has to allow a state of wellness to emerge. It is each persons responsibility to identify and resolve the life stress and unhealthy habits that negatively affect the mind and body and to integrate the body, mind and spirit into one healthy whole.

In order to accomplish this state of wellness, wholistic medicine offers therapies to stimulate, disperse, and/or balance the flow of energy within the body, to enhance flexibility and relaxation, to promote physical fitness and mental awareness, and to sensitize oneself to the messages conveyed by

physical sensation.

Wholistic medicine might be most easily distinguished from traditional medicine by its readiness to accept almost any natural, non-drug therapy that might work. The specific therapies include acupuncture, acupressure, herbalism, iridology, reflexology, biokinesiology, rolfing, biofeedback, dream therapy, diet analysis, and many others.

Patricia Bianconi is the co-founder of the year and a half old Wholistic Health Center in Bellingham. She sees the role of the wholistic practitioner as complementary to that of regular physicians.

"We try to facilitate the healing community," she says. "We are trying to build up a rapport with physicians."

She says that a lot of good has come out of modern medicine, but in general, treatment of symptoms only is the wrong approach. She rejects the idea that anyone can heal anyone else.

"The person heals from within. The number one thing in wholistic health is that persons take responsibility for their own health."

While no drugs are used at the center, Bianconi says that if they feel a patient has a need for a drug they will refer the person to a physician.

Mental barriers sometimes get in the way of good health, she says, but the key is one simple affirmation: "say aloud 'I give myself permission to heal' and repeat it several times." Doing this helps unlock the body's natural healing ability, she says.

"Unconsciously, we may not really want to get well when we are sick because its nice to get out of work and to have people care for you. When you get well you lose an excuse to be treated nicely." But if you consciously want to get better, give yourself permission to, she says.

Another difference between wholistic medicine and traditional (or alleopathic) medicine is that "we slow down enough to show we care." "The wholistic approach is caring—we take time with the people who come in."

No machines are used in the center now, but Bianconi says that they will soon have a machine to

test muscles, and will be getting a biofeedback monitor.

"We don't discount modern technology. We incorporate whatever will facilitate healing."

Bianconi gave her views on a variety of other topics:

—X-rays are overused but are useful for some situations, such as in the case of broken bones.

—Vitamin supplements are needed by most everyone because a good diet is not enough. Environmental stresses don't allow us to digest food well enough. Vitamin information is handed out at the center, but nothing is prescribed.

—For contraception, listen to your body and use whatever works for you. She doesn't like the pill, but for some people it may be okay if stress from fear of pregnancy is very great.

—She is against abortion from a spiritual standpoint, but does not oppose it from a health standpoint.

—Coffee is good for enemas, but not anything else. "If caffeine were introduced to the market today you would have to have a prescription for it."

—Alcohol, marijuana, and other drugs shut down the energy centers of the nervous system and cause unbalance in the whole system.

—Business at the center is very good. She is optimistic that the center will continue to thrive and possibly grow into a large complex. The center has a staff of 10, including a regular MD who recently joined.

The success of the center and of other wholistic practitioners in the area indicates that the demand for an alternative to traditional health care is strong. While the demand is not rooted in a complete rejection of standard medicine, it is indicative of deficiencies. Ideally we would not have the need for two separate approaches to health care, but for now, the schism between wholistic and reductionistic medicine remains. We need to gain a clear knowledge of the strengths and weaknesses of each approach, and merge the best qualities of both into an effective and humane system of health care. *



OLD TOWN CAFE
316 W. Holly St
Breakfast & Lunch All Day
Mon-Fri 7-3
Sat 7-2, Sun 8-2
Something to Please Everybody

The Genetic Effects of Nuclear War

by Dr. John Erickson

We are returning to awareness of the grim finality of a nuclear war and to awareness of the likelihood that one might, in fact, occur. Opinions vary regarding the prospects for survival. At one extreme are those who speak of a "limited nuclear war", seemingly with a notion not only of the survival of life as we know it but also of some ill-defined sort of "winning". At the opposite extreme are those who speak of oblivion, noting that *Homo sapiens* has now "progressed" to the capability of destroying the species along with all (or most?) life on the planet. Between the extremes are those who speak of a war that destroys the modern way of life. The survivors would be those who are able to adapt to a primitive lifestyle without the machines, communication and trade of modern society.

The basic nuclear bomb is the "atom bomb", in which fission of uranium or plutonium releases (along with tremendous energy) radiation, most significantly gamma rays and neutrons. A hydrogen bomb has a fission bomb at its center, then a layer of hydrogen which undergoes fission to release additional energy and radiation. This is where the "neutron bomb", or Enhanced Radiation Weapon stops. A typical hydrogen bomb has an additional layer of uranium which adds explosive force and radiation but reduces the energy of the neutrons emitted to the "thermal" type which are slower, less energetic.

Only a part of the radiation comes from the explosion. The remainder comes later from fallout of secondary radioactive products. If the bomb bursts on the ground the fallout particles will sift down within the first few days, forming an elliptical pattern downwind. In the case of an airburst much of the fallout rises into the high troposphere and falls over a period of two weeks to a month with the rain. This is called "latitudinal fallout" because it falls around the earth in the approximate latitude of its origin. This is because air movements on the planet tend to be compartmentalized. In a war between the US and the USSR, most of the

fallout would occur from 30 to 60 degrees north latitude, with no preference to site of origin or target. The remainder of the radioactive material from an airburst, principally of small particle size, rises into the stratosphere. This gradually falls back to earth, over a period from months to many years.

Ionizing radiation causes mutation, chromosome breakage and errors in the assortment of chromosomes, in direct proportion to the dosage. Recent reworking of the data from the Hiroshima and Nagasaki bombings suggests that most of the effects were from gamma rays. The contribution of neutrons was probably small. With the neutron bomb there would be a substantial increment of effects from neutrons.

A portion of the spontaneous mutation rate is due to naturally occurring radiation. About 100 mrem occurs in nature, and somewhat less than this is incurred through medical and dental procedures. Handling of uranium and plutonium in bomb making, nuclear power generation and other uses adds an increment (barring major accidents) of about 0.5 mrem per year—less than 1% of the naturally occurring dose—as projected to the year 2000.

A comprehensive attack or all-out nuclear war, would produce two and a half times the spontaneous mutation rate in the US. On a worldwide basis the effect is relatively less severe, about 3.7 million genetic defects. This is a very large figure, and represents a large component of genetic load added to the human burden, but it is, after all, less than one per thousand of the present world population of 4.5 billion. (To be sure, the incidence per thousand survivors of the war would be somewhat higher!)

One's first reaction might well be that the added genetic load of a nuclear war would be minor, compared to the immediate effects, death and injury, and the destruction of property, communication, health care and social system. There are several considerations, however, which might alter this perspective.

—Genetic damage has a quality of permanence. The most severe dominant mutants, to be sure, appear

only once, if the individual does not thrive to reproduce. But most mutations would add to the burden of humanity for a very long time.

It should be emphasized that (older Science Fiction notwithstanding) mutations produced by nuclear bombs and fallout differ only in quantity, not quality, from the spontaneous ones. Thus we would see an increase of the genetic diseases we already know too well: cystic fibrosis, Tay-Sachs disease, sickle cell anemia, phenylketonuria, etc.

—In the first generation or two following a war the effect of at least some mutant genes would be more severe than in today's society. These are the mutants that increase susceptibility to disease. In an era of limited medical care and poorer nutrition and shelter, mutants that are trivial today would lead to suffering.

—If populations in the warring nations are reduced by half, then the genetic makeup of the survivors must expand with them if today's numbers of people are ever to be restored. Thus an amplification of genetic effects.

—Small isolated populations would promote not only an increased chance of homozygosity for newly-induced mutations, but also for those now in the population. That is, the members of such a group would note the rather striking numbers of persons afflicted by one or more hereditary diseases. This effect has been noted in certain highly inbred ethnic and regional populations.

—The problem of increased mutational load is to be afflicted upon our future descendants. Thus the moral aspects of the thing differ: death and destruction are to be visited upon the generations who failed to stop the production and use of the bombs, but genetic defects are the lot of generations far removed from whatever degree of complicity we all share in the imminent event. *

Dr. Erickson is a member of the biology faculty at Western.

